DRAFT ENVIRONMENTAL IMPACT REPORT / ENVIRONMENTAL ASSESSMENT

West Valley Connector Project

sbcta
San Bernardino County Transportation Authority

OmniTrans
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June 2019

SCH No. 2016031071

West Valley Connector Project

In the Counties of Los Angeles and San Bernardino
and the Cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana

DRAFT ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL ASSESSMENT

Pursuant to
National Environmental Policy Act (42 U.S.C. §4332) 49 U.S.C. Chapter 53, 16 U.S.C. §470, 23 CFR Part 771, 23 CFR Part 450, and Executive Order 12898; and
California Environmental Quality Act, PRC 21000 *et seq.;* and the State of California CEQA Guidelines, California Administrative Code, 15000 *et seq.*

by the

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL TRANSIT ADMINISTRATION

and

SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY

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This Draft Environmental Impact Report/Environmental Assessment (EIR/EA) is being circulated for public review beginning June24, 2019, and ending August 8, 2019. The documents can be viewed at the following public libraries:

- Fontana Lewis Library, 8437 Sierra Avenue, Fontana, CA 92335
- Ovitt Family Community Library, 215 E. C Street, Ontario, CA 91764
- Pomona Public Library, 625 S. Garey Avenue, Pomona, CA 91766

- Law Library for San Bernardino County, 8409 Utica Avenue, Rancho Cucamonga, CA 91730
- Rancho Cucamonga Public Library, 12505 Cultural Center Drive, Rancho Cucamonga, CA 91739

The document can also be viewed online at the following link: http://www.gosbcta.com/sbcta/plans-projects/projects-rail-WestValleyConnector.html.

Comments on the Draft EIR/EA shall be sent to the above contacted persons no later than August 8, 2019.

ABSTRACT: The West Valley Connector Project (the WVC Project or the proposed project) is a proposed 35-mile-long transit improvement project that would connect the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. The proposed project includes up to 60 station platforms at 33 locations/major intersections and associated improvements. A new operation and maintenance facility for light maintenance activities would be constructed. The proposed project would be constructed in two phases, including Phase I/Milliken Alignment, from the Pomona Regional Transit Center to Victoria Gardens in Rancho Cucamonga and Phase II/Haven Alignment, from Ontario International Airport to Kaiser Permanente Medical Center in Fontana. Phase I is scheduled for operation in early 2023. Construction of Phase II/Haven Alignment is scheduled to occur after the completion of Phase I when funding is available. Stations would be “rapid bus” style stations designed for fast boarding. One of the project alternatives also contemplates an approximately 3.5 miles of exclusive bus rapid transit (BRT) lanes. Transit Signal Priority (TSP) and other transportation systems management improvements, such as queue jump lanes, would be included. Project impacts resulting from operation and construction of the proposed project are summarized in Tables S-4 and S-5. Operational impacts would be few and minor, although some right-of-way acquisition (primarily partial acquisitions) would be required. Other issues that are resolvable through design features or mitigation incorporated as part of the proposed project include: historic architectural resources, visual and aesthetics, traffic and transportation, water quality, land use, and Section 4(f) resources. Proposed mitigation measures include a Real Estate Acquisition Plan, a Relocation Assistance Program, adherence to Federal Transit Administration (FTA) acquisition laws, safety and security measures at stations, a Worker Health and Safety Plan, archaeological monitoring during ground-disturbance activities, a Traffic Control Plan (TCP), and implementation of construction best management practices.

SUMMARY

The San Bernardino County Transportation Authority (SBCTA), in cooperation with the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana (see Figures S-1 and S-2), proposes construction of the West Valley Connector Project (the WVC Project or the proposed project), a 35-mile-long bus rapid transit (BRT) project that would decrease travel times and improve the existing public transit system within the corridor.

The proposed project includes up to 60 station platforms at 33 locations/major intersections and associated improvements. A new operation and maintenance (O&M) facility for light maintenance activities would be constructed. The proposed project would be constructed in two phases, including Phase I/Milliken Alignment, from the Pomona Regional Transit Center to Victoria Gardens in Rancho Cucamonga and Phase II/Haven Alignment, from Ontario International Airport to Kaiser Permanente Medical Center in Fontana. Phase I is scheduled for operation in early 2023. Construction of Phase II/Haven Alignment is scheduled to occur after the completion of Phase I when funding is available. Stations would be “rapid bus” style stations designed for fast boarding. One of the project alternatives also contemplates an approximately 3.5 miles of exclusive BRT lanes. Transit Signal Priority (TSP) and other transportation systems management improvements, such as queue jump lanes, would be included.

The proposed project is subject to State and federal environmental review requirements because it involves the use of federal funds administered by the Federal Transit Administration (FTA); therefore, the joint documentation has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act of 1969 (NEPA). SBCTA is the lead agency under CEQA; FTA is the lead federal agency under NEPA.

This Draft Environmental Impact Report (EIR) and Environmental Assessment (EA) was prepared by SBCTA, in cooperation with FTA, to evaluate environmental impacts associated with implementation of the proposed project and address appropriate and feasible mitigation measures and alternatives to the proposed project that would reduce or eliminate potential impacts.

1.1 Regional Planning Context

In 2004, SBCTA, in coordination with Omnitrans, undertook a system-wide transit corridor planning study to identify major transit corridors within its service area that have potential for the development of major fixed-route transit investments. The study determined that the existing local bus routes do not have operating speeds capable of competing well with the automobile in capturing choice riders who are making medium- to

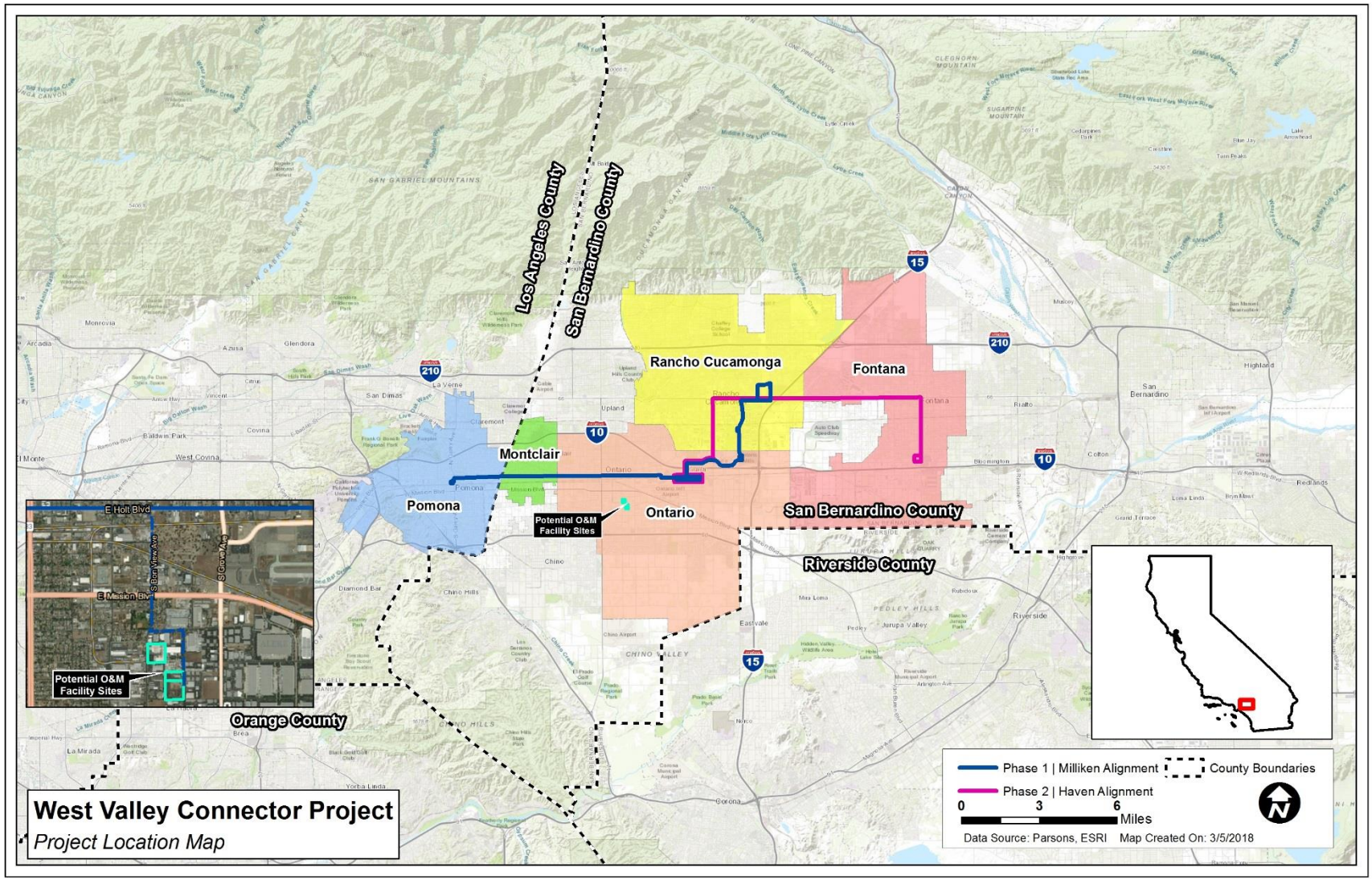

Figure S-1 Project Location Map

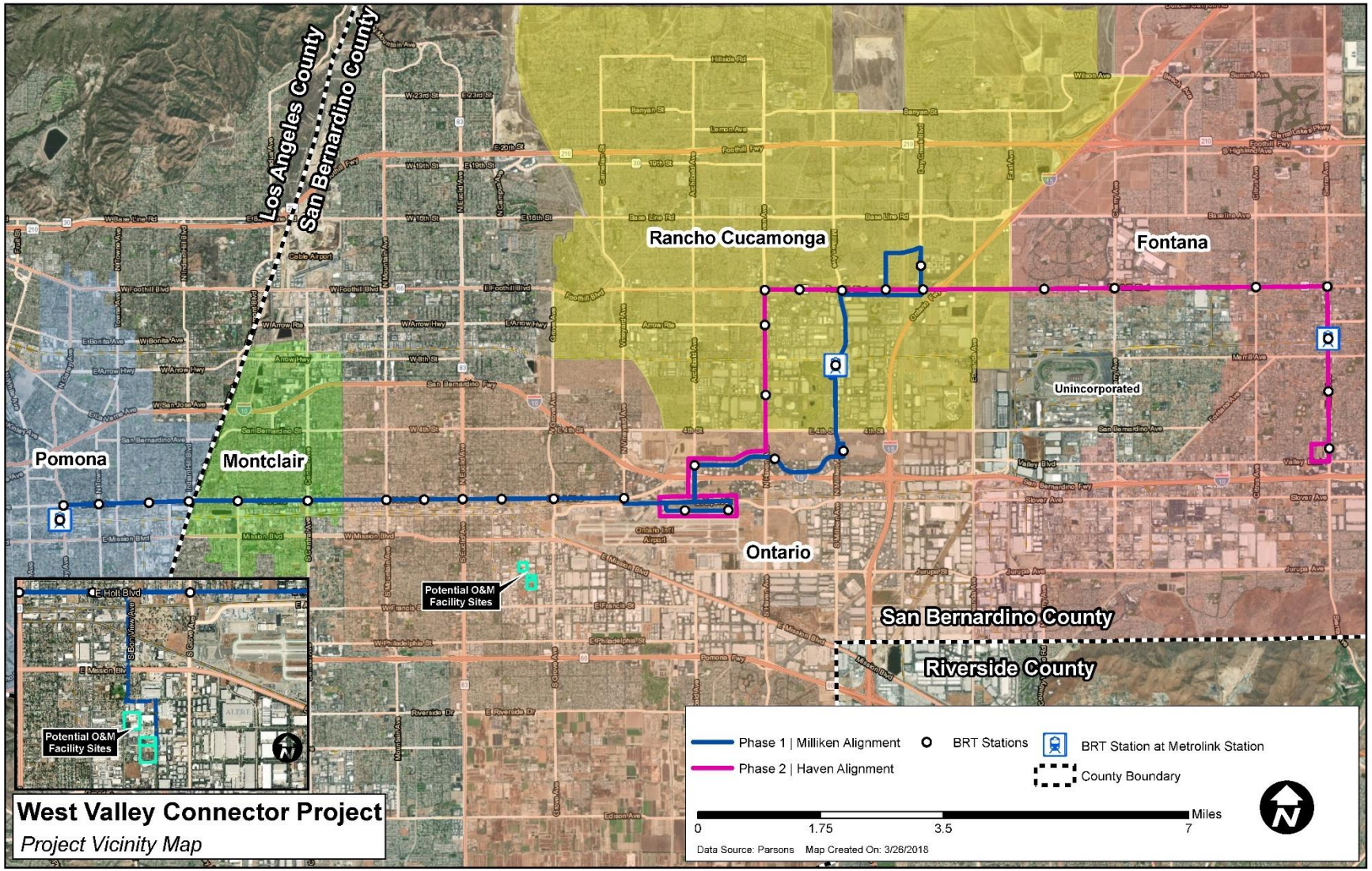

Figure S-2 Project Vicinity Map

long-distance trips. The Omnitrans *System-Wide Transit Corridors Plan for the San Bernardino Valley* (2004) identified 10 key travel corridors that would be appropriate for higher transit service levels. The introduction of premium transit modes and services in these corridors in the future was recommended by the Plan to allow SBCTA/Omnitrans to achieve better market penetration, while also positively influencing the livability of communities in its service area. The introduction of faster, more frequent, and direct transit service in the form of BRT would allow SBCTA/ Omnitrans to better serve traveling and transit to the marketplace to promote business and employment.

The Omnitrans *System-Wide Plan* and *San Bernardino County Long Range Transit Plan* (SANBAG [presently SCBTA], 2009) determined that, based on the level and character of transit demand, the most appropriate technology for premium transit service in the 10 major corridors is BRT. The WVC Project would provide premium transit service in portions of 4 of the 10 major corridors along Holt Boulevard, Haven Avenue, Foothill Boulevard, and Sierra Avenue.

In 2014, Omnitrans commissioned an Omnitrans WVC Alternatives Analysis (AA) Report that was completed for the Corridor, a newly identified transit corridor that includes portions of the Route 61/Holt Boulevard, Route 66/Foothill Boulevard, and Sierra Avenue transit corridors. The purpose of the AA was to evaluate alternatives for the introduction of premium transit service along the Holt Boulevard/Foothill Boulevard/Sierra Avenue corridor between the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana; and to identify the alternatives that best serve local transportation needs. The WVC Project was identified during development of the range of alternatives detailed in the AA and serves a wider range of major destinations/activity centers than any of the individual corridors alone. The purpose of the WVC Project AA is to evaluate alternatives for the introduction of premium transit services along the Holt Boulevard/Foothill Boulevard Corridor between the City of Pomona in Los Angeles County and the cities of Montclair, Ontario, Rancho Cucamonga, and Fontana in San Bernardino County; and to identify the alternatives that best serve local transportation needs. The WVC corridor was identified during development of the range of alternatives detailed in the report and serves a wider range of major destinations/activity centers than either of the individual corridors alone.

1.2 Purpose and Need

The purpose of the proposed project is to improve corridor mobility and transit efficiency in the western San Bernardino Valley from the city of Pomona, in Los Angeles County, to the city of Fontana, in San Bernardino County, with an enhanced, state-of-the-art BRT system (i.e., the system that includes off-board fare vending, all-door boarding, TSP, optimized operating plans, and stations that consist of a branded shelter/canopy, security cameras, benches, lighting, and

variable message signs). The proposed project would address the growing traffic congestion and travel demands of the nearly one million people that would be added to Los Angeles and San Bernardino County by 2040 per Southern California Association of Governments' (SCAG) 2106 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) growth forecast. Improved rapid transit along the project corridor would help Omnitrans/SBCTA achieve its long-range goals to cost effectively enhance lifeline mobility and accessibility, improve transit operations, increase ridership, support economic growth and redevelopment, conserve nonrenewable resources, and improve corridor safety.

Recognizing the importance of the WVC transit corridor, SBCTA proposes a project that is designed to achieve the following:

- Improve transit service by better accommodating existing high bus ridership.
- Improve ridership by providing a viable and competitive transit alternative to the automobile.
- Improve efficiency of transit service delivery while lowering Omnitrans' operating costs per rider.
- Support local and regional planning goals to organize development along transit corridors and around transit stations.

The project purpose stated above would respond to the following needs:

- **Current and future population and employment conditions establish a need for higher-quality transit service.** The proposed project corridor is primarily an inter-City route that serves densely populated neighborhoods with a high percentage of transit patrons that are minority, low-income, and/or transit dependent. The project corridor includes a current high level of employment and several key activity centers. Regionally, the Inland Empire leads the six-county southern California region in growth.
- **Current and future transportation conditions establish a need for an improved transit system.** The current standard bus service has several deficiencies that do not make transit an attractive alternative to the auto, particularly in terms of corridor travel time. Current and future travel demand is expected to accompany the projected growth in population and employment, further increasing the need for an improved transit system.
- **Transit-related opportunities exist in the project area.** Current transit access to employment and intermodal centers is considered inadequate to meet current and future needs. High-quality, reliable rapid transit service is needed to deliver riders to these multiple destinations; the proposed action would provide such a service. The proposed action alignment passes through potential redevelopment and TOD areas and would help foster their potential for development.

1.3 Proposed Project

The proposed project is a 35-mile-long BRT corridor that traverses the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. The proposed project consists of two phases (see Figure S-3). Phase I would construct the "Milliken Alignment," from the Pomona Regional Transit Center (downtown Pomona Metrolink station) to Victoria Gardens in Rancho Cucamonga. Phase II would construct the "Haven Alignment," from Ontario International Airport to Kaiser Permanente Medical Center in Fontana. The Phase I Milliken Alignment would begin construction in early 2022 and is proposed to have 10-minute peak and 15-minute off-peak headways. Phase II is intended to be constructed immediately following completion of Phase I, depending on the availability of funding.

Phase I/Milliken Alignment

Phase I of the project would construct the 19-mile Milliken Alignment, from the eastern boundary limit in Pomona to Victoria Gardens in Rancho Cucamonga. In Pomona, the alignment starts from the Pomona Regional Transit Center station, along Holt Avenue and into Montclair.

In Montclair, the alignment runs on Holt Boulevard between Mills Avenue and Benson Avenue and into Ontario.

In Ontario, the alignment continues on Holt Boulevard, starting from Benson Avenue, and then continues to Vineyard Avenue and into Ontario International Airport (loop through Terminal Way). From the airport, it heads north on Archibald Avenue to Inland Empire Boulevard and turns right to go east on Inland Empire Boulevard.

On Inland Empire Boulevard, the alignment goes straight into Ontario Mills (loop through Mills Circle), and then heads north on Milliken Avenue into Rancho Cucamonga.

In Rancho Cucamonga, the alignment makes a loop into the Rancho Cucamonga Metrolink Station off Milliken Avenue and then continues up Milliken Avenue and turns east onto Foothill Boulevard.

The alignment continues east on Foothill Boulevard, turns north onto Day Creek Boulevard, and then terminates with a layover at Victoria Gardens at Main Street. From Victoria Gardens, the bus line begins a return route by continuing north on Day Creek Boulevard, turns west onto Church Street, turns south onto Rochester Avenue, and then turns west back onto Foothill Boulevard.

Phase II/Haven Alignment

Phase II of the project would construct the 16-mile Haven Alignment, from Ontario International Airport to Kaiser Permanente Medical Center in Fontana. In Ontario, the alignment makes a loop through Terminal Way at Ontario International Airport. From the airport, it heads north on Archibald Avenue to Inland Empire Boulevard and turns right to go east on Inland Empire Boulevard.

From Inland Empire Boulevard, the alignment turns left to go north up Haven Avenue into Rancho Cucamonga, then turns right to travel east onto Foothill Boulevard and into Fontana.

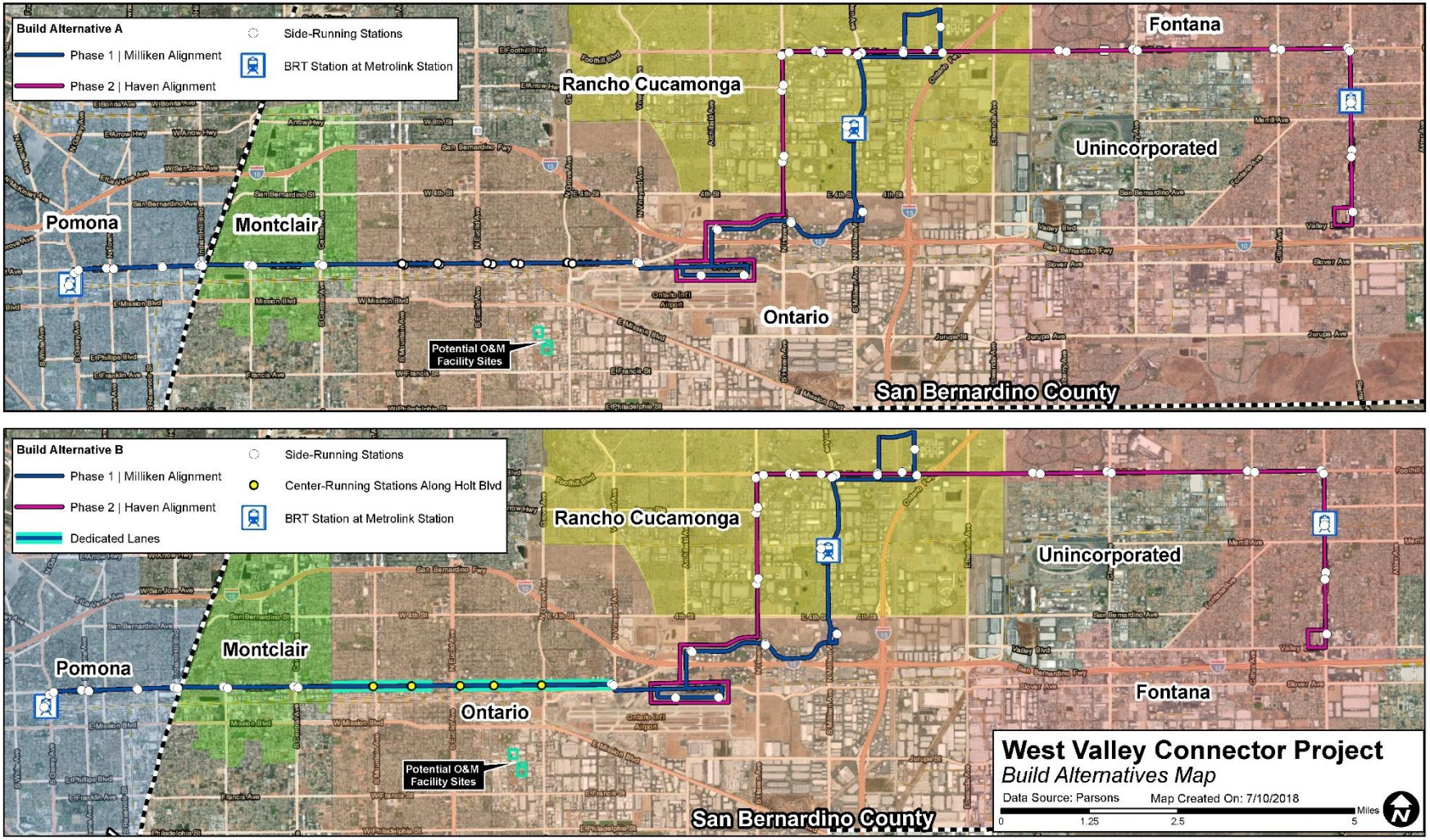

Figure S-3 Build Alternative Map

In Fontana, the alignment continues east on Foothill Boulevard until turning south onto Sierra Avenue. The alignment follows Sierra Avenue, including a stop at the Fontana Metrolink Station, and then continues until turning west onto Marygold Avenue, where the bus line would begin a turn-around movement by heading south onto Juniper Avenue, east onto Valley Boulevard, and north back onto Sierra Avenue to Kaiser Permanente Medical Center before heading northward for the return trip.

1.4 Alternatives

Several alternatives were considered during the project development phase of the project. A No Build Alternative and two build alternatives (Alternatives A and B) are being analyzed in this EIR/EA.

No Build Alternative

The No Build Alternative proposes no improvements to the existing local bus services. Under the No Build Alternative, the existing local bus service on Routes 61 and 66 would maintain current service of 15-minute headways (total of four buses per hour in each direction).

Build Alternatives

All design features of both build alternatives are the same, with the exception of the following (see Figure S-3):

Alternative A – Rapid line with no dedicated bus-only lanes

Alternative A would include the 35-mile-long BRT corridor, which is comprised of the Phase I/Milliken Alignment, Phase II/ Haven Alignment, and 60 side-running stations at up to 33 locations/major intersections. The BRT buses would operate entirely in the mixed-flow lanes. Figure S-4 depicts a typical cross section of the Alternative A corridor along Holt Boulevard. The right-of-way (ROW) limits and travel lane width vary in other segments of the corridor. Implementation of Alternative A would require a partial acquisition of land along the corridor to support roadway reconfiguration and station construction, resulting in a minor partial acquisition of some parcels adjacent to the existing roadway. The design will be refined during the final engineering phase to avoid partial parcel acquisitions to the extent practicable. In addition, some temporary construction easements (TCEs) would be required to support the construction activities along the corridor, especially around the proposed bus stations.

Alternative B – Full BRT with 3.5 miles of dedicated bus-only lanes in Ontario

Alternative B would include the full 35-mile-long BRT corridor, which is comprised of the Phase I/Milliken Alignment, Phase II/ Haven Alignment, 3.5 miles of dedicated bus-only lanes, and five center-running stations and 50 side-running stations at up to 33 locations/major intersections. The 3.5-mile-long segment of dedicated lanes would include two mixed-flow lanes and one transit lane in each direction and five center-running stations (see Figure S-3). A typical cross section of the 3.5-mile-long dedicated lanes along Holt Boulevard is shown in Figure S-5. To accommodate the

dedicated lanes, roadway widening, and additional utilities, such as electrical and fiber-optic lines, would require a combination of permanent ROW acquisition and TCEs. Similar to Alternative A, a partial acquisition of land along the corridor would be required to accommodate roadway reconfiguration and station construction, resulting in a minor partial acquisition of some parcels adjacent to the existing roadway. The design refinement will be done during the final engineering design to avoid the partial acquisition of any parcel to the extent possible.

For details of these requirements per station, please see Chapter 2.

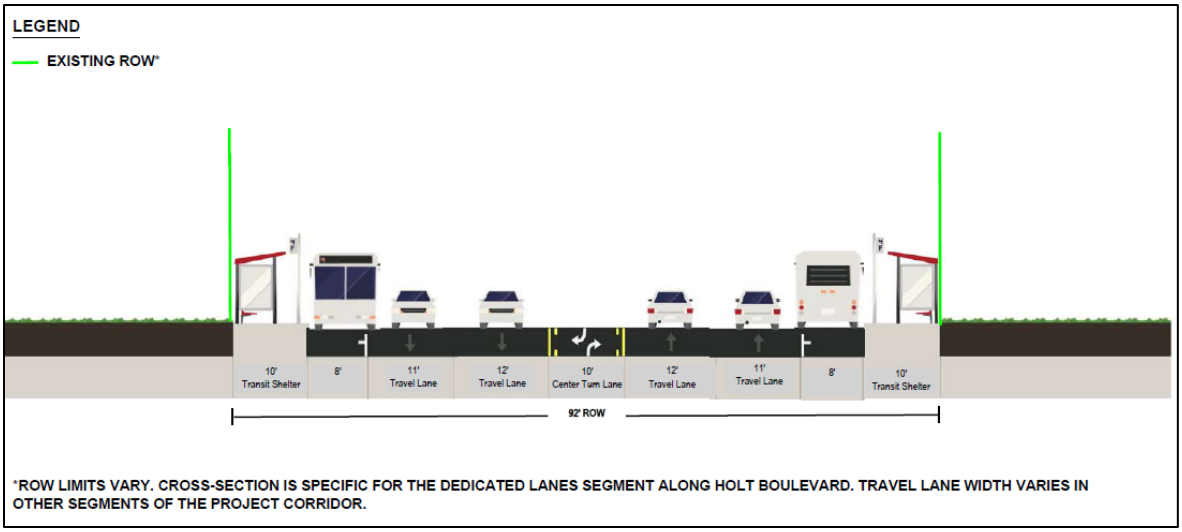

Figure S-4 Typical Cross Section for Alternative A along Holt Boulevard

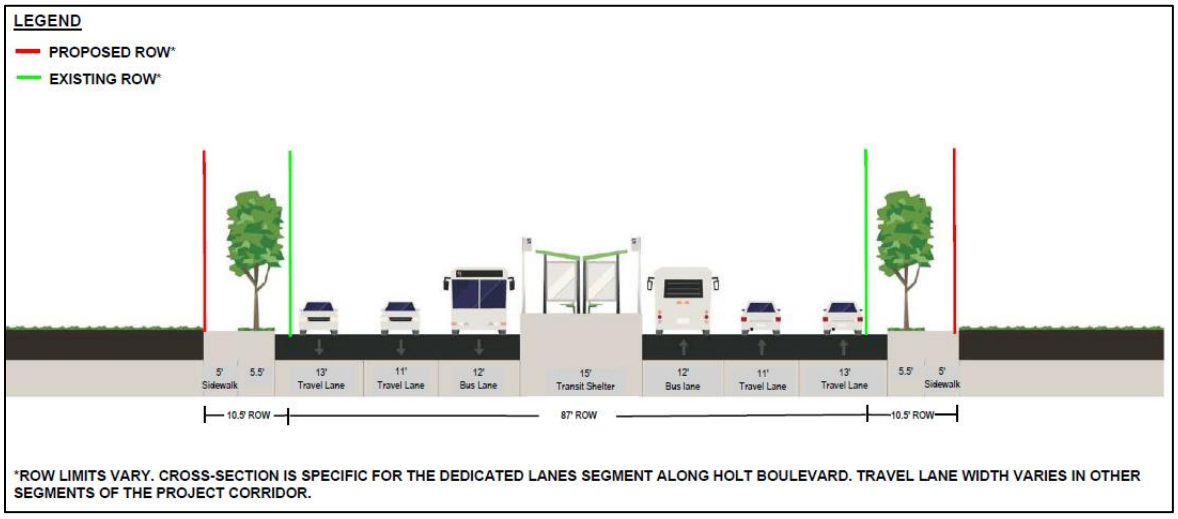

Figure S-5 Typical Cross Section of Dedicated Lanes Segment for Alternative B along Holt Boulevard

1.5 Bus Rapid Transit Stations

BRT stations at 33 locations/major intersections and associated improvements are proposed to be located approximately 0.5 to 1 mile apart to facilitate higher operating speeds by reducing dwell time (see Figures S-3 for station locations). Table S-1 lists the BRT stations to be constructed as part of the Phase I/Milliken Alignment. Note that under Alternative A, all 21 stations would be side-running stations. Under Alternative B, five center-running platform stations are proposed as follows:

- Holt Boulevard/Mountain Avenue
- Holt Boulevard/San Antonio Avenue
- Holt Boulevard/Euclid Avenue
- Holt Boulevard/Campus Avenue
- Holt Boulevard/Grove Avenue

As part of the Phase II/Haven Alignment, an additional 12 side-running stations would be constructed for both build alternatives, as listed in Table S-2.

Table S-1 Stations along Phase I/Milliken Alignment

Pomona
- Pomona Regional Transit Center Station
- Holt Avenue/Garey Avenue
- Holt Avenue/Towne Avenue
- Holt Avenue/Clark Avenue
- Holt Avenue/Indian Hill Boulevard

Montclair
- Holt Boulevard/Ramona Avenue
- Holt Boulevard/Central Avenue

Table S-1 Stations along Phase I/Milliken Alignment

Ontario
- Holt Boulevard/Mountain Avenue*
- Holt Boulevard/San Antonio Avenue*
- Holt Boulevard/Euclid Avenue*
- Holt Boulevard/Campus Avenue*
- Holt Boulevard/Grove Avenue*
- Holt Boulevard/Vineyard Avenue
- Ontario International Airport
- Inland Empire Boulevard/Archibald Way
- Inland Empire Boulevard/Porsche Way
- Ontario Mills

Rancho Cucamonga
- Rancho Cucamonga Metrolink Station
- Foothill Boulevard/Milliken Avenue
- Foothill Boulevard/Rochester Avenue
- Victoria Gardens between North and South Main Street

Note: * denotes the center-running stations to be constructed under Alternative B.

Table S-2 Additional Stations to be Constructed as Part of Phase II/Haven Alignment

Rancho Cucamonga
- Haven Avenue/6th Street
- Haven Avenue/Arrow Route
- Haven Avenue/Foothill Boulevard
- Foothill Boulevard/Spruce Avenue
- Foothill Boulevard/Day Creek Boulevard

Fontana
- Foothill Boulevard/Mulberry Avenue
- Foothill Boulevard/Cherry Avenue
- Foothill Boulevard/Citrus Avenue
- Foothill Boulevard/Sierra Avenue
- Fontana Metrolink Station
- Sierra Avenue/Randall Avenue
- Sierra Avenue/Kaiser Permanente

Side-Running Stations

Side-running stations would typically be located on the far side of an intersection to facilitate transit priority and to avoid a stopped bus from blocking those turning right from the corridor. Where curb cuts for driveways and other conditions do not provide enough space along the curbside for both the San Bernardino Valley Express (sbX) and the local bus on the far side of the intersection, the local buses would be located on the near side of the intersection.

In the side-running condition, stations may include new or improved shelters with passenger amenities, or only an sbX-branded pylon with signature light. Proposed shelters would be approximately 18 feet in length and a width that would fit a 10-foot-wide-minimum sidewalk. Passenger amenities at the side platform stations would include benches, bicycle racks, trash receptacles, variable message signs, security cameras, and lighting integrated with the shelter. There would be no fare collection equipment on the sidewalks or shelters when the available ROW is less than 10 feet, and the passengers may pay the fee on the bus. Side-running stations would also include various passenger amenities.

Center-Running Platform Stations

Five center-running platform stations are proposed to be constructed as part of the Phase I/Milliken Alignment (in Ontario) under Alternative B.

The center-running platform stations would be located in the center of the street ROW on a raised platform with an end-block crossing. Access would be provided by crosswalks at intersections and Americans with Disabilities Act (ADA)-compliant ramps to the station platforms. Center-running platforms would be placed as close to the intersection as possible while still maintaining left-turn pockets, where required.

In the optimum center-running platform configuration, the platform would accommodate a canopy with its seating area, passenger amenities, fare equipment, and a ramp to comply with relevant accessibility requirements and provide clearance in front of ticket vending machines. Stations would include passenger amenities that can be assembled and laid out to suit the functionality of the station and fit with the surrounding land uses.

1.6 sbX Bus Operations

The proposed project would be operated by Omnitrans and require 18 buses during the Phase I operation and increase to 27 buses for the combined Phase I and Phase II operation to serve the designed headways and have sufficient spare vehicles.

Under Alternative A, sbX buses would operate entirely in mixed-flow lanes along the proposed 35 miles of the Phase I and Phase II alignments. For Alternative B, sbX buses would operate in mixed-flow lanes similar to Alternative A, except

where dedicated bus-only lanes (3.5 miles) are proposed along Holt Boulevard, between Benson Avenue and Vine Avenue and between Euclid Avenue and Vineyard Avenue, in Ontario.

sbX Operations at Signalized Intersections

The project corridor would need to integrate sbX buses and other vehicular traffic movements. Traffic signals would be reconfigured at each appropriate intersection to provide TSP operation.

Signal modifications would include upgrades to signal controllers and software to accommodate the transit priority treatment at intersections. Presignals and queue jumpers would be used where appropriate to prevent traffic from stopping or blocking the exclusive lanes.

Headways and Service Hours

sbX buses would generally operate from 6:00 a.m. to 8:00 p.m. with peak headways for 4 hours and off-peak headways for 10 hours per day for a total span of service of 14 hours per day, Monday through Friday. Service hours may change depending upon funding availability. From the Pomona Metrolink Transit Center station to Inland Empire Boulevard, the sbX buses would operate on 10-minute peak headways and 15-minute off-peak headways. Additional service hours, including weekend service, may be added if additional operating funds become available in the future.

1.7 Operations and Maintenance

Fleet Composition

The proposed project's fleet would be comprised of 60-foot-long articulated compressed natural gas (CNG) propulsion buses. sbX buses would hold approximately 96 passengers at maximum capacity with up to 8 bicycles on board. Today, the average local bus operating speeds are only 12 to 15 miles per hour (mph), and they are getting slower as corridor congestion worsens. In calculating run times, it was assumed that the average dwell time at stations would be 30 seconds (peak service), and average overall speed would be 18 mph.

Maintenance Requirements and Associated Facilities

Omnitrans operates and maintains its bus fleets out of two major facilities: East Valley Vehicle Maintenance Facility (EVVMF) and West Valley Vehicle Maintenance Facility (WVVMF). EVVMF is a Level III facility capable of full maintenance of buses, and WVVMF is a Level II facility suitable for light maintenance. Neither facility has sufficient capacity to accommodate the additional maintenance and storage requirements of the bus fleet associated with the proposed WVC Project. The new facility would be designed and constructed to provide Level I service maintenance with a capacity to be upgraded to provide Level II service maintenance. Heavy repair functions and administrative

functions would remain exclusively with the EVVMF in San Bernardino.

Conceptually, the new O&M facility would be built on an approximate 5-acre site. The Level I facility would include a parking area, bus washing area, fueling area, and a personnel and storage building. As needs arise, the facility could be upgraded to provide Level II service, which would include the addition of a maintenance shop and a larger administrative building. Landscaping and irrigation would be provided to enhance the comfort of employees and the appearance of the facility, and to help screen maintenance facilities and operations from offsite viewpoints within the community.

Three sites are being considered for placement of the new O&M facility. All are owned by the City of Ontario and are located in the industrial zoned area, slightly more than 1 mile from the proposed BRT corridor alignment on Holt Boulevard:

- Site 1: 1516 S. Cucamonga Avenue, Ontario. If selected, the O&M facility would be built at the bottom portion of the parcel, encompassing an area of approximately 6.0 acres.
- Site 2: 1440 S. Cucamonga Avenue, Ontario. If selected, the O&M facility would utilize the entire parcel, encompassing an area of approximately 4.8 acres.
- Site 3: 1333 S. Bon View Avenue, Ontario. If selected, the O&M facility would be built at the bottom portion of the parcel, encompassing an area of approximately 6.6 acres.

Construction of the new O&M facility is scheduled to be completed by the time the Phase I/Milliken Alignment is complete.

1.8 Implementation Schedule

Construction of the Phase I/Milliken Alignment is scheduled to start in early 2022 and to complete in late 2023. Operation is planned to begin in late 2023. Construction of the O&M facility is scheduled to start in early 2023 and to begin operation at the same time as the Phase I/Milliken Alignment.

Construction of the Phase II/Haven Alignment is scheduled to occur after completion of the Phase I/Milliken Alignment pending funding availability.

1.9 Locally Preferred Alternative

SBCTA has identified Alternative B as the Locally Preferred Alternative (LPA) for the proposed project. This alternative was added in May 2017 by the SBCTA Board in cooperation with the five stakeholder cities. Each of the cities agreed on Alternative B as meeting the needs of premium transit service within their jurisdiction.

Selection of the final Preferred Alternative will be done after the Draft EIR/EA has been circulated and all public comments have been considered by SBCTA and FTA.

1.10 Uses of this Document

This joint EIR/EA is being circulated as a Draft EIR/EA to the public and agencies for review and comment for a period of 45 days. During this period, comments from the public, organizations, and governmental agencies, including Tribal governments, regarding environmental issues raised in the EIR, and on the EIR's accuracy and completeness, may be submitted to SBCTA. After receiving comments from the public and reviewing agencies, a Final EIR will be prepared.

The Final EIR will include responses to comments received on the Draft EIR/EA during the formal public review period and will identify the LPA and Environmentally Superior Alternative. Selection of an LPA is required under NEPA. CEQA requires that the EIR identify the Environmentally Superior Alternative among all those considered, but it does not require an agency select it going forward.

After the Final EIR is circulated, if the SBCTA Board decides to approve the project, a Notice of Determination will be published for compliance with CEQA. If impacts cannot be mitigated below a level of significance based on the threshold established by local jurisdictions pursuant to CEQA, SBCTA will prepare a Statement of Overriding Considerations.

An EA is prepared when Federal actions are not categorically excluded and the significance of the environmental impacts under NEPA is not clearly established. FTA has prepared this EA in conjunction with SBCTA and may use proposed mitigation measures to issue a mitigated Finding of No Significant Impact (FONSI). If, at any point in the EA process, FTA determines that the project is likely to be a Federal action that significantly impacts the environment, the EA would be terminated and a Notice of Intent for preparation of an Environmental Impact Statement (EIS) issued.

1.11 Permits and Approvals Needed

Permits and approvals that may be required for construction of the project are listed in Table S-3.

Table S-3 Potential Permits or Approvals

Agency	Approval or Permit
Regional Water Quality Control Board (RWQCB) – Los Angeles and Santa Ana	• National Pollutant Discharge Elimination System (NPDES) Permit • 401 Water Quality Certification • Construction General Permit (CGP) • Dewatering Permit
U.S. Army Corps of Engineers (USACE)	• Section 404 Nationwide Permit for impacts to West Cucamonga Channel
California Department of Fish and Wildlife (CDFW)	• 1602 Streambed Alteration Agreement for impacts to West Cucamonga Channel

Table S-3 Potential Permits or Approvals

Agency	Approval or Permit
San Bernardino County Flood Control District	• Permit to access West Cucamonga Channel during construction
City of Ontario	• Project Approvals – Approval for alternative street design – Approval of WVC Project Master Cooperative Agreement • Permanent Encroachment of Station Improvements – Permanent encroachments into City ROW • Street Improvement, Structural Station Improvement, and Landscape Plans – Plan approval by Public Works Engineering Division, Building Division, Planning, and Parks & Recreation • Tree Removal – Tree Removal Permit from the Planning Division, pursuant to Ontario Municipal Code Section 10-2.06 for removal of Parkway Trees; to remove a parkway tree, it must meet criteria set forth by the City • Development Permits – Development Permit – Other applicable permits and requirements (NPDES, Water Quality Management Plan, and Stormwater Pollution Prevention Plan [SWPPP]) also needed
City of Pomona, Montclair, Rancho Cucamonga, and Fontana	• Various permits regarding tree removal, street improvements, signalization, signage, parking, and construction activities

1.12 Summary of Environmental Impacts and Measures

This Draft EIR/EA has analyzed long- and short-term (i.e., construction) impacts of various environmental resources as presented in Chapters 3, 4, and 5. Proposed avoidance, mitigation, and minimization measures have been identified for the project's alternatives as summarized in Tables S-4 (Long-Term Impacts) and S-5 (Short-Term Impacts).

1.13 Environmental Effects Determination

NEPA Analysis

Based on the analysis of the proposed project on various environmental resources with respect to context and intensity of impacts, pursuant to NEPA, and as summarized in Tables S-4 and S-5, the proposed project would not result in adverse effects to the environment with incorporation of standard measures and mitigation measures. Specifically, the impact to air quality is localized and short term in nature; the future traffic conditions

would generally be the same as under the no-build scenario; and there would be no adverse effects on National Register-eligible or listed historic properties.

Although the traffic condition at a few intersections along the corridor and the proposed O&M facility sites would be degraded slightly, the project would introduce a new transit line designed to move a higher volume of people more efficiently than lower-volume passenger vehicles, thus providing a more positive short- and long-term effect to the environment.

CEQA Analysis

Based on the thresholds of significance established by the local jurisdictions, pursuant to CEQA, the following impacts would either remain significant with mitigation measures incorporated or that no mitigation measures are available to mitigate them to the level of less than significant:

- Air quality impacts during construction (Alternative B).
- By the year 2040, with mitigation incorporated, traffic conditions at four intersections along the corridor would remain significant under Alternative A, and five intersections would remain significant under Alternative B:
  - # 2 Rochester Avenue/Foothill Boulevard (Alternatives A and B)
  - # 77 Citrus Avenue/Foothill Boulevard (Alternatives A and B)
  - #93 Haven Avenue/Arrow Route (Alternatives A and B)
  - #119 Haven Avenue/Foothill Boulevard (Alternatives A and B)
  - #121 Euclid Avenue/Holt Boulevard (Alternative B only)
- By the year 2040, with mitigation incorporated, traffic conditions at up to two intersections near the proposed O&M facility sites would remain significant under Alternatives A and B:
  - # 2 Campus Avenue/ Belmont Street
  - #4 Bon View Avenue/ Belmont Street
- Implementation of Alternative B would require a full acquisition of seven properties locally designated as historical resources by the City of Ontario.

Table S-4 Summary of Long-Term, Operational Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
Traffic and Transportation Chapter 3	*Bus and Rail Transit Service* Total transit ridership would continue to increase, but not transit mode shares. The existing public transportation system would not be able to provide travel benefits to attract commuters. *Vehicular Traffic* Normal traffic growth and congestion is expected. Increase of Level of Service (LOS) D or better to LOS E at up to 17 intersections by 2040. *Parking* No impact. *Pedestrian and Bicycle Facilities* No impact.	<u>BRT Corridor</u> *Bus and Rail Transit Service* Would entice commuters and other automobile users to switch to transit modes. *Vehicular Traffic* Worsen traffic condition based on LOS and delay when compared to the no-build condition at up to 11 intersections by 2040. *Parking* On-street parking near side-running stations could be impacted as a result of bus operation. Impact is not considered substantial. Parking demand would be reduced due to increased transit use. *Pedestrian and Bicycle Facilities* No impact. Would improve pedestrian and bicycle facilities near the proposed stations. <u>O&M Facility</u> *Bus and Rail Transit Service* No impact. *Vehicular Traffic* Worsen traffic condition based on LOS and delay when compared to the no-build condition at two intersections by 2040 for Sites 1 and 2 and three intersections by 2040. *Parking* No impact. *Pedestrian and Bicycle Facilities* No impact. **Environmental Effects Determination** • NEPA: Similar traffic conditions under both build and no-build conditions with slight degrade in the traffic conditions at a few intersections. The project would provide the benefit by introducing a new transit line designed to move a higher volume people more efficiently than lower-volume passenger vehicles. • CEQA: No mitigation is available to mitigate 4 out of 11 affected intersections along the corridor and 2 intersections near the proposed O&M facility site in 2040. The impact is considered significant and unavoidable.	<u>BRT Corridor</u> *Bus and Rail Transit Service* Would entice commuters and other automobile users to switch to transit modes. *Vehicular Traffic* Worsen traffic condition based on LOS and delay when compared to the no-build condition at up to 12 intersections by 2040. *Parking* On-street parking near side-running stations could be impacted as a result of bus operation. Impact is not considered substantial. On-street parking removed along Holt Boulevard and at some station areas. Parking demand would be reduced due to increased transit use. *Pedestrian and Bicycle Facilities* No impact. Would improve pedestrian and bicycle facilities near the proposed stations. <u>O&M Facility</u> *Bus and Rail Transit Service* No impact. *Vehicular Traffic* Worsen traffic condition based on LOS and delay when compared to the no-build condition at two intersections by 2040 for Sites 1 and 2 and three intersections by 2040. *Parking* No impact. *Pedestrian and Bicycle Facilities* No impact. **Environmental Effects Determination** • NEPA: Similar traffic conditions under both build and no-build conditions with slight degrade in the traffic conditions at a few intersections. The project would provide the benefit by introducing a new transit line designed to move a higher volume people more efficiently than lower-volume passenger vehicles. • CEQA: No mitigation is available to mitigate 5 out of 12 affected intersections along the corridor in 2040 and 2 intersections near the proposed O&M facility site in 2040. The impact is considered significant and unavoidable.	*Vehicular Traffic* **TRA-1:** The proposed BRT project design would incorporate the following improvement measures to enhance sbX Operations and sbX Operations at Signalized Intersections: • Reconstruction of curb and gutters will only be required for the segment where dedicated bus-only lanes are proposed. • Vehicular lanes where the sbX operates in dedicated bus-only lanes will feature concrete roadways, painted, or striped to visually separate the exclusive lanes from the mixed flow lanes. • Concrete pads will be placed at all station locations for the sbX vehicles. • Wherever possible for exclusive lanes, the bus signals and the adjacent existing intersection signals will be integrated to create one signalized intersection controlling automobiles and buses. • Intersection crossings will be controlled with signals, and pedestrians will be allocated standard crossing time. • Left-turn movements for vehicular traffic from mixed-flow lanes crossing exclusive lanes on the project alignment will require separate signal phases with red arrows when transit vehicles are crossing intersections. • The signal modifications may also include “active” No-Right-Turn indications and “Bus Coming” signs to prevent right turns across the exclusive lanes. • Signal modifications will include upgrades to signal controllers and software to accommodate the transit priority treatment at intersections. • Presignals and queue cutters will be used to prevent traffic from stopping or blocking the exclusive lanes. **TRA-2:** The following improvement measures would be carried out at the following affected intersections for both BRT Alternatives A and B, and O&M facility site locations 1, 2, or 3: • Garey Avenue/Holt Avenue: Restripe eastbound Holt Avenue approach to add a dedicated right-turn lane (by 2023). • Towne Avenue/Holt Avenue: Modify the traffic signal to include protected plus permitted phasing at the northbound and southbound Towne Avenue approaches (by 2040). • East End Avenue/Holt Avenue: Restripe the eastbound Holt Avenue right-turn lane to a shared through/right-turn lane (by 2040). • Day Creek Boulevard/Foothill Boulevard: Restripe the third northbound through lane to a shared through/right-turn lane (by 2023). • Sierra Avenue/Foothill Boulevard: Modify the traffic signal to include protected plus permitted phasing at the eastbound and westbound Foothill Boulevard approaches (by 2023). • Sierra Avenue/San Bernardino Avenue: Modify the traffic signal to include protected plus permitted phasing at the eastbound and westbound San Bernardino Avenue approaches (by 2040). • Sierra Avenue/Marygold Avenue: Modify and restripe the eastbound Marygold Avenue shared through/right lane to a right-turn lane with a dedicated eastbound through lane (by 2040). • Juniper Avenue/Valley Boulevard: Restripe the westbound Valley Boulevard approach to add a dedicated right-turn lane (by 2040). • Grove Avenue/Mission Boulevard: Modify the traffic signal to include a right-turn overlap phase at the westbound Mission Boulevard approach (by 2040). No avoidance, minimization, and/or mitigation measures are necessary for project operational impacts to parking, bicycle, or pedestrian facilities.

Table S-4 Summary of Long-Term, Operational Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
Aesthetics and Visual Resources Section 4.1	No impact.	BRT Corridor Would introduce new stations, lighting, and other permanent sbX visual elements. In addition, would require removal/replacement of approximately 62 trees to construct side-running stations. Would be consistent with existing urban visual character of the corridor. O&M Facility Would include facilities to provide servicing and inspection, washing and fueling, interior cleaning, fare collection, light maintenance of buses. Not considered substantial for viewer groups. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	BRT Corridor Similar to Alternative A. In addition, would alter the current visual setting in some areas (e.g., Holt Boulevard, between Benson Avenue and Vineyard Avenue), including removal/replacement of landscaping and approximately 406 trees (364 trees within the roadway widening segment to construct the center-running stations and bus-only dedicated lanes and 42 trees to construct the side-running stations), pavement widening, and reduced building setbacks; not considered substantial adverse effect to viewer groups. O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	**Alternatives A and B** **AV-1:** Conduct a final tree survey for all trees that will be impacted by the project. Complete survey prior to final design efforts and minimize tree removal to the greatest extent possible. **AV-2:** All lighting at the stations shall include shielding and directionality to limit the extent of glare created at these locations. **AV-3:** Install replacement trees at a ratio and size required by either the tree or landscape ordinance, or the landscape development guidelines for the portion of the project developed in each of the corridor cities. If no requirement exists, install replacement trees at a 1:1 ratio with a minimum size of 36-inch box for street trees and 24-inch box for any other project trees. **AV-4:** Meet any currently established City requirements for streetscape design for the various roadways within the project area that are disturbed by the project construction and work with the community stakeholders to ensure implementation. Relevant goals and policies include Policy 6D.P24 of the Pomona General Plan, Policy CD3-6 of the Ontario General Plan, Policy CM-1.5 of the Rancho Cucamonga General Plan, and Goal #4.1 of the Fontana General Plan, all of which require transit developments to provide elements such as landscaping to enhance the aesthetics, functionality, and sustainability of streetscapes. **AV-5:** Develop and implement an Art-in-Transit strategy and incorporate artwork into relevant center- and side-running BRT station designs. **Alternative B only** **AV-6:** Between Euclid and Sultana avenues, minimize the number of tree removals to the extent possible. **AV-7:** Within the Holt Boulevard/Euclid Avenue intersection, ensure any work complies with requirements of the historic designations of the roadway regarding landscape and other contributing factors. **AV-8:** For the O&M facility, provide streetscape planting, including trees, as well as incorporating screening along the street.
Air Quality Section 4.2	No impact.	BRT Corridor & O&M Facility The project would not result in adverse effects to mobile source air toxic (MSAT) emissions; nor would it cause a particulate matter (PM) or carbon monoxide (CO) hot-spot within the project corridor. Regional reactive organic gas (ROG), CO, and nitrogen oxide (NOX) emissions would decrease, while particulate matter less than 10 microns in diameter (PM_{10}) and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) would slightly increase. Total vehicle miles traveled (VMT) in the project area would decrease slightly compared to the No Build Alternative. **Environmental Effects Determination** • NEPA: No adverse effect. • CEQA: Less than significant impact.	BRT Corridor & O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: No adverse effect. • CEQA: Less than significant impact.	No minimization, avoidance, or mitigation measures are required during project operations.

Table S-4 Summary of Long-Term, Operational Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
Biological Resources Section 4.3	No impact.	<u>BRT Corridor</u> No impact. <u>O&M Facility</u> No impact. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	<u>BRT Corridor</u> Permanent impacts of approximately 1.1 acres of Disturbed/Ruderal habitat. This vegetation is highly disturbed and is not suitable habitat for any sensitive species including burrowing owl. At the West Cucamonga Channel, Alternative B would potentially have a temporary impact to 0.2 acre under the jurisdiction of USACE and the RWQCB and 0.2 acre under the jurisdiction of CDFW. <u>O&M Facility</u> No impact. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	**BR-1:** Burrowing Owl Protection. To ensure that any BUOW that may occupy the site in the future are not affected by the construction activities, pre-construction BUOW surveys will be required within 7 to 10 days prior to any ground disturbing activities in the areas identified as potential BUOW habitat. If any of the preconstruction surveys determine that BUOW are present, one or more of the following mitigation measures may be required: (1) avoidance of active nests and surrounding buffer areas during construction activities: (2) passive relocation of individual owls; (3) active relocation of individual owls; and (4) preservation of on-site habitat with long-term conservation value for the owl. **BR-2:** Nesting Birds Protection. Avoid disturbance of any nests protected by the MBTA. If tree and shrub removal activities are scheduled to occur during the breeding season (February 1 through August 31), then SBCTA will implement the following measures to avoid potential adverse effects on birds covered by the MBTA: • No more than 1 week prior to construction, a qualified wildlife biologist will conduct preconstruction survey of all potential nesting habitat within 500 feet of construction activities where access is available. • If active nests are found during preconstruction surveys, then the project proponent will create a no-disturbance buffer [acceptable in size to CDFW] around active raptor nests and nests of other special-status birds during the breeding season, or until it is determined that all young have fledged. Typical buffers include 500 feet for raptors and 250 feet for other nesting birds. The size of these buffer zones and types of construction activities restricted in these areas may be further modified during coordination and in consultation with CDFW, and it will be based on existing noise and human disturbance levels at the project site. Nests initiated during construction are presumed to be unaffected, and no buffer would be necessary; however, the “take” (e.g., mortality, severe disturbance to) of any individual birds will be prohibited. If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, then no further mitigation is required. Trees and shrubs within the construction footprint that have been determined to be unoccupied by birds covered by the MBTA or that are located outside the no-disturbance buffer for active nests may be removed. **BR-3:** Coastal Sage Scrub Protection. During final design, the Project Engineer will coordinate with a qualified biologist to delineate all ESAs within the project footprint and immediately surrounding areas. ESAs are not identified as temporarily or permanently impacted in the environmental document. Prior to clearing vegetation or construction within or adjacent to ESAs, the Contractor will install highly visible barriers (e.g., orange construction fencing) adjacent to the project impact area to designate ESAs to be preserved in place. No grading or fill activity of any type will be permitted within these ESAs. In addition, no construction activities, materials, or equipment will be allowed within the ESAs. All construction equipment will be operated in a manner to prevent accidental damage to nearby ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within the ESAs. Silt fence barriers will be installed at the ESA boundaries to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned grading activities. A qualified biologist will supervise the placement of ESA fencing. **BR-4:** Delhi Sands Flower-Loving Fly Protection. In the event that design plans change and would impact undeveloped and/or open space areas, a habitat assessment shall be conducted to determine whether the impacted area is suitable to support DSF. If the findings of the habitat assessment indicate that the area could support DSF, a presence/ absence survey for the DSF should be conducted.

Table S-4 Summary of Long-Term, Operational Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
Cultural and Paleontological Resources Section 4.4	No impact.	No operational impacts to archaeological resources, historic architectural resources, and paleontological resources. **Environmental Effects Determination** • NEPA: No adverse effect. • CEQA: No impact.	Same as Alternative A. **Environmental Effects Determination** • NEPA: No adverse effects. • CEQA: No impact.	No minimization, avoidance, or mitigation measures are required during project operations.
Geology, Soils, Seismicity Section 4.5	No impact.	<u>BRT Corridor and O&M Facility</u> Side-running stations and O&M facility are located in seismically sensitive area, impact from seismic activities could occur. **Environmental Effects Determination** • NEPA: No adverse effect with standard condition incorporated. • CEQA: Less than significant impact with standard condition incorporated.	<u>BRT Corridor and O&M Facility</u> Side- and center-running stations and O&M facility are located in seismically sensitive area, impact from seismic activities could occur. **Environmental Effects Determination** • NEPA: No adverse effects with standard condition incorporated. • CEQA: Less than significant impact with standard condition incorporated.	**GSS-1:** Station platforms and structures at the O&M facility shall be designed to withstand ground motion in accordance with City, State, and geotechnical industry standards and guidelines.
Hazardous Waste/ Materials Section 4.6	No impact.	<u>BRT Corridor & O&M Facility</u> No hazardous materials or hazardous waste is expected to be stored at station locations. The O&M facility for light maintenance of buses would be located in the industrial zoned land use, no impacts from the facility operation are anticipated. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	<u>BRT Corridor & O&M Facility</u> Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	No minimization, avoidance, or mitigation measures are required during project operations.
Hydrology, Water Quality, and Floodplains Section 4.7	No impact.	*Water Quality* <u>BRT Corridor</u> Alternative A would not require any road widening; therefore, there would be no increase in impervious surface areas. Runoff would be directed to project design features that would include water quality control measures. No substantial changes to hydraulic conveyance capacity are anticipated. <u>O&M Facility</u> Two of the potential sites for the O&M Facility would have the following increases in impervious surface area: • Site 1: 8.56 acres	*Water Quality* <u>BRT Corridor</u> Alternative B would require road widening. The impervious surface area would increase by 1.81 acres. Runoff would be directed to project design features that would include water quality control measures. No substantial changes to hydraulic conveyance capacity are anticipated. Not considered a substantial adverse impact. <u>O&M Facility</u> Same as Alternative A.	**WQ-1:** All construction of the side-running stations under both Alternatives A and B shall be undertaken within the existing impervious areas along the proposed corridor, resulting in no additional impervious areas. **WQ-2:** Additional stormwater runoff from the new impervious area along the 3.5-mile dedicated lane segment under Alternative B shall be treated at the infiltration basin to be constructed as part of the proposed Alternative B project. **WQ-3:** Additional stormwater runoff from the new impervious area created by the proposed O&M facility under either Build Alternative shall be treated at the on-site infiltration basins to be constructed as part of the proposed project. **FP-1:** Implement recommended best management practices (BMPs) as identified in the Storm Water Data Report prepared for this project. **FP-2:** Develop a contingency plan for unforeseen discovery of underground contaminants in the SWPPP.

Table S-4 Summary of Long-Term, Operational Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
		• Site 3: 0.47 acres • Site 2 would not have an increase in impervious surface area. Increased storm water runoff from the selected site would be contained on-site by conveying surface flows to engineered infiltration zones. No substantial changes to hydraulic conveyance capacity are anticipated. Not considered a substantial adverse impact. *Groundwater* <u>BRT Corridor and O&M Facility</u> No impact. *Floodplain* <u>BRT Corridor and O&M Facility</u> No impact. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	*Groundwater* <u>BRT Corridor and O&M Facility</u> No impact. *Floodplain* <u>BRT Corridor</u> Alternative B would result in 0.67 acre of temporary impacts to the West Cucamonga Channel. Not considered a substantial adverse impact. <u>O&M Facility</u> Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	**FP-3:** Provide adequate conveyance capacity at bridge crossings to ensure no net increase in velocity. A more detailed hydraulic analysis shall be completed to assess existing and post-hydraulic conditions.
Land Use and Planning Section 4.8	Inconsistent with many regional and local land use planning goals and policies related to transit use and multimodal transportation.	<u>BRT Corridor</u> Project would not physically divide an established community, result in street closures, or substantially restrict vehicular or pedestrian access to existing streets. Project would be consistent with existing land use and zoning plans. No full parcel acquisitions or displacements would be required. A partial acquisition of land along the corridor of less than 0.1 acre would be required, resulting in a minor partial acquisition of some parcels adjacent to the existing roadway. Some temporary construction easements (TCEs) of approximately 0.1 acre in total would be required to support the construction activities along the corridor, especially around the proposed bus stations. <u>O&M Facility</u> The O&M facility would be located in an industrial zoned area. No impact on land use is anticipated.	<u>BRT Corridor</u> Project would not physically divide an established community, result in street closures, or substantially restrict vehicular or pedestrian access to existing streets. Project would be consistent with existing land use and zoning plans. Project would result in approximately 10 acres of temporary impacts and requires acquisition of approximately 5 acres of land to be permanently converted to a transportation use as a result of 3.5-mile dedicated lane construction. Impacted land uses are as follows: *Single-Family Residential:* Temporary: 0.22 Acre, Permanent: 0.43 Acre *Multi-Family Residential:* Temporary: 0.35 Acre, Permanent: 0.19 Acre *Mobile Homes and Trailer Parks:* Temporary: 0.07 Acre, Permanent: 0.08 Acre *Mixed Residential:* Temporary: 0.05 Acre Permanent: 0.09 Acre, *General Office:* Temporary: 1.94 Acres: Permanent: 0.77 Acre,	No avoidance, minimization, and/or mitigation measures are required under Land Use and Planning. Mitigation measures for acquisition impacts are summarized in Section 4.12 below.

Table S-4 Summary of Long-Term, Operational Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
		Environmental Effects Determination • NEPA: No adverse effect. • CEQA: No impact.	*Commercial and Services:* Temporary: 5.02 Acres, Permanent: 1.80 Acres *Public and Special Use Facilities:* Temporary: 0.15 Acre, Permanent: 0.22 Acre *Industrial:* Temporary: 0.45 Acre, Permanent: 0.21 Acre *Transportation, Communications, and Utilities:* Temporary: 0.23 Acre, Permanent: 0.18 Acre *Agriculture:* Temporary: 0.05 Acre Permanent: 0.04 Acre *Vacant:"* Temporary: 1.69 Acres, Permanent: 1.38 Acres Similar to Alternative A, a partial acquisition of land along the corridor of less than 0.1 acre would be required, resulting in a minor partial acquisition of some parcels adjacent to the existing roadway. Some TCEs of approximately 0.1 acre would be required to support the construction activities along the corridor, especially around the proposed bus stations. O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: No adverse effect. • CEQA: No impact.	
Noise and Vibration Section 4.9	No impact.	BRT Corridor The project would result in a less than 1-decibel (dB) increase in the overall noise level at screened portions of the proposed BRT alignment. This would not modify the existing noise environment in any appreciable manner. O&M Facility The O&M facility would be located in an industrial zoned area. Only light maintenance would be performed at the new facility. No noise impact from O&M facility during project operation is anticipated. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	BRT Corridor Same as Alternative A. O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	**NOI-1:** To avoid noise impacts from the public address (PA) systems, the noise level from the PA system at the station on Foothill Boulevard should not exceed 74 dBA at 10 feet in the direction of the residential land uses and the noise level of the PA system at the station on Sierra Avenue should not exceed 71 dBA at 10 feet in the direction of the residential land use. No minimization, avoidance, or mitigation measures are required to mitigate vibration impacts during project operations.

Table S-4 Summary of Long-Term, Operational Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
Energy Section 4.10	No impact.	BRT Corridor The project would result in less gasoline consumption compared to the No Build Alternative. O&M Facility The O&M Facility would consume electricity and natural gas; however, the amounts would have no effect on regional or local supplies. **Environmental Effects Determination** • NEPA: No adverse effect. • CEQA: Less than significant impact.	BRT Corridor Same as Alternative A. O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: No adverse effect. • CEQA: Less than significant impact.	No minimization, avoidance, or mitigation measures are required during project operations.
Demographics and Neighborhoods Section 4.11	No impact.	BRT Corridor No businesses or residences would be acquired. Environmental justice populations would not be disproportionately impacted. O&M Facility Operation of a O&M facility would have no effect on environmental justice. The O&M facility would be located in an industrial zoned area where its operations would not affect residential areas or other sensitive receptors.	BRT Corridor The road widening segment under Alternative B would impact Census Tracts 15.01, 15.03, and 16, which includes low income and minority populations. Impacts to these three census tracts would primarily entail acquisition of commercial properties; however, these impacts would not have disproportionately high or adverse impacts to minority or low-income populations. O&M Facility Same as Alternative A.	With implementation of the following measures, no additional minimization, avoidance, or mitigation measures are required. • Measures TRA-1 and TRA-2 in Chapter 3 (Traffic and Transportation) • Measures AV-2, AV-4, AV-5, AV-6, AV-7, and AV-8 presented in Section 4.1.8 (Aesthetic and Visual Resources) • Measure ACQ-2 in Section 4.12 (Acquisitions and Displacements) • Measures SS-1 through SS-5 presented in Section 4.14 (Safety and Security) • Measures CI-TRA-3 and CI-TRA-4 in Chapter 5 (Construction Period Impacts)
Acquisitions and Displacements Section 4.12	No impact.	BRT Corridor A partial acquisition of land along the corridor would be required, resulting in a minor partial acquisition of some parcels adjacent to the existing roadway. Some TCEs would be required to support the construction activities along the corridor, especially around the proposed bus stations. No displacements would occur. O&M Facility No acquisitions or displacements would be required. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	BRT Corridor Implementation of 3.5-mile-long dedicated lane would require full acquisition of 37 parcels, which includes 14 residential and 53 commercial and 8 industrial/ manufacturing business properties and partial acquisition of 168 parcels. A partial acquisition of land along the corridor would be required, resulting in a minor partial acquisition of some parcels adjacent to the existing roadway. Some TCEs would be required to support the construction activities along the corridor, especially around the proposed bus stations. O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated, except for seven	Alternative B only: **ACQ-1:** A Real Estate Acquisition Management Plan (RAMP) shall be developed adhering to the requirements pertaining to land acquisition for projects funded by FTA as prescribed in Volume 49 Code of Federal Regulations (CFR) Part 24, Uniform Relocation Assistance and Real Property Acquisition Policies Act for Federal and Federally Assisted Programs, and the California Relocation Assistance Act, 1970. All real property acquired for the project will be appraised to determine fair market value. Just compensation, which shall not be less than the approved appraisal, will be made to each displaced property owner. Displacees who have met eligibility requirements will be provided relocation assistance payments and advisory assistance in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. The RAMP will address the need to have relocation specialists who have prior experience working with people who may have special needs, especially the elderly, disabled, and low-income population groups. It will also specify that one or more of the relocation specialists be fluent in Spanish. Additionally, the plan will address coordinating with the local Section 8 Housing Authority on the availability of vouchers and other options for displaced low-income households who may face immediate financial hardships. The RAMP will address in advance of potential relocations of minority-owned businesses, the need to coordinate with organizations such as the Inland Empire Region of the California Hispanic Chamber of Commerce, Asian Business Association – Inland Empire, and the Black Chamber of Commerce of the Inland Empire, to identify resources that may be of help to such businesses. The potential application of property lease-back options to allow small businesses to continue to function as long as feasible after acquisition will also be explored in the RAMP.

Table S-4 Summary of Long-Term, Operational Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
			properties determined to be historical resources under CEQA, which are significant and unavoidable.	**ACQ-2:** Transportation for displaced persons to inspect potential relocation housing will be offered at no-cost should they be unable to use their own means of transportation. This offer shall be extended to senior citizens, disabled people, and any transit-dependent individuals or households. See CI-CR-7 under Cultural and Paleontological Resources.
Public Services and Utilities Section 4.13	No impact.	BRT Corridor Would require partial relocation of existing utilities in several areas along the corridor; no long-term disruptions in service are expected. O&M Facility No impacts from the O&M facility is anticipated. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect. • CEQA: Less than significant impact.	BRT Corridor Same as Alternative A. O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect. • CEQA: Less than significant impact.	No minimization, avoidance, or mitigation measures are required. Utility relocations will be addressed in final design.
Safety and Security Section 4.14	No impact.	BRT Corridor Pedestrian safety concerns associated with mixed-flow operations would be the same as existing conditions. Motorist safety would be the same as existing conditions operating in mixed-flow lanes. Motorist crossings at signalized intersections would be the same as existing conditions and would not result in an adverse impact. SBCTA would apply safety and security procedures to all sbX stations, resulting in no adverse effect. O&M Facility The O&M facility would be located in an industrial zoned area, no substantial impacts on pedestrian safety are anticipated due to low volumes of buses and cars entering and exiting the facility. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated • CEQA: Less than significant impact with mitigation incorporated	BRT Corridor Pedestrian safety concerns associated with mixed-flow operations would be the same as existing conditions. In the exclusive lanes section, pedestrians would access the center-running stations from existing signalized intersections. Each crosswalk would be clearly marked and equipped with safety features. Motorist safety would be the same as existing conditions operating in mixed-flow lanes. Motorist crossings at signalized intersections would be the same as existing conditions and would not result in an adverse impact. In the exclusive lanes segment, conflicts could occur if private vehicles turn left across the center exclusive bus lane. Following standard operational practices in mixed-flow traffic, and providing signal warnings, pavement separations, and signals would minimize the potential for adverse effects. SBCTA would apply safety and security procedures to all sbX stations, resulting in no adverse effect. No substantial impacts on pedestrian safety are anticipated due to low volumes of buses and cars entering and exiting the facility. O&M Facility Same as Alternative A.	**SS-1:** All stations and parking facilities shall be equipped with monitoring equipment and/or be monitored by SBCTA security personnel on a regular basis. **SS-2:** SBCTA shall implement a security plan that includes in-vehicle and station surveillance by SBCTA security or other local jurisdiction security personnel. **SS-3:** All stations shall be lit to standards that avoid shadows, and all pedestrian pathways leading to/from sidewalks and parking facilities shall be well illuminated. **SS-4:** SBCTA shall coordinate and consult with Pomona Police Department (PD), Montclair PD, Ontario PD, Rancho Cucamonga PD, Fontana PD, County of San Bernardino Sheriff's Department, and County of Los Angeles Sheriff's Department to develop safety and security plans for the alignment, parking facilities, and station areas. **SS-5:** The station design shall not include design elements that obstruct visibility or observation, nor provide discrete locations favorable to crime; pedestrian access at stations shall be ground-level with clear sight lines. **SS-6:** From Motorist safety, "SBCTA shall engage the public with educational campaigns to make the public aware of changes in roadway conditions." **SS-7:** Before reaching the intersection, private automobile drivers shall be warned by presignals of approaching intersections that cross exclusive lanes. The exclusive lane shall be painted or striped to separate it visually from the general purpose roadway or other additional safety devices (e.g., colored textured concrete, pavers, or embedded lights) may be placed to help alert motorists to the presence of the center exclusive lane. **SS-8:** Platforms shall be well-lit and include amenities such as canopies, seating, and trash receptacles. The platforms will also include some or all of the following safety and security equipment: security cameras, light fixtures, public address (PA) system, and emergency telephones.

Table S-4 Summary of Long-Term, Operational Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
			Environmental Effects Determination • NEPA: Less than substantial adverse effect with mitigation incorporated • CEQA: Less than significant impact with mitigation incorporated	
Parks and Recreation Section 4.15	No impact.	<u>BRT Corridor and O&M Facility</u> No impact.	<u>BRT Corridor and O&M Facility</u> No impact.	No minimization, avoidance, or mitigation measures are required during project operations.
Section 4(f) Chapter 8	No impact.	<u>BRT Corridor</u> Alternative A would result in the direct use of one National Register of Historic Places (NRHP)-eligible or listed properties (the Southern Pacific Railroad Depot) and the temporary use of two NRHP-eligible or listed properties (the Southern Pacific Railroad Depot and Route 66). No adverse effects from the use of these properties are anticipated and a *de minimis* finding is recommended. <u>O&M Facility</u> No impact. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated.	<u>BRT Corridor</u> Alternative B would result in the direct use of four NRHP-eligible or listed properties (A.C Moorhead House, Jacob Lerch House, Grinder Haven, and the Southern Pacific Railroad Depot) and the temporary use of six NRHP-eligible or listed properties (A.C. Moorhead House, Jacob Lerch House, Vince's Spaghetti, The Grinder Haven, the Southern Pacific Railroad Depot, and Route 66. No adverse effects from the use of these properties are anticipated and a *de minimis* finding is recommended. <u>O&M Facility</u> No impact. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated.	With implementation of minimization, avoidance, and mitigation measures outlined under Visual and Noise and Vibration, (see respective sections in Chapters 4 and 5), no additional minimization, avoidance, or mitigation measures are required during project operations. Specific measures to minimize harm to six properties to affected by either Alternatives A or B are as follows: • A.C. Moorhead House: The affected area of the historic property consists of the two driveways, the front lawn, and landscaping. The two driveways will be reconstructed, and turf grass and landscaping will be replaced. Original landscaping on the property will be retained. Alterations to the property will adhere to the Secretary of the Interior's Standards (SOIS) for the Treatment of Historic Properties (36 CFR 68). The Standards provide guidance for making alterations to historic resources, including related landscape features and the building's site and environment. The historic character of the property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property will be avoided. The new work will protect the historic integrity of the property and its environment. Project features will not be close to the historic building, and they will not damage or destroy any character-defining materials or features associated with the historic property. • Jacob Lerch House: The affected area of the historic property consists of a sliver portion, which is currently lawn. Turf grass will be replaced in areas to match pre-project conditions in consultation with the property owner during and at the completion of construction. Original landscaping on the property will be retained. Alterations to the property will adhere to the SOIS for the Treatment of Historic Properties (36 CFR 68). The Standards provide guidance for making alterations to historic resources, including related landscape features and the building's site and environment. The historic character of the property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided. The new work will protect the historic integrity of the property and its environment. Project features will not be close to the historic building, and they will not damage or destroy character-defining materials or features associated with the historic property. • Vince's Spaghetti: The affected area of the historic property consists of a small sliver involving two driveways and two parking lots for purposes of reconstructing the driveways and the sidewalk on the southern end of Holt Boulevard. A historic neon sign near the edge of the easternmost driveway will be retained. The driveways will be reconstructed to pre-project conditions in consultation with the property owner during and at the completion of construction. The new work will adhere to the SOIS for the Treatment of Historic Properties (36 CFR 68) to protect the historic integrity of the property and its environment. • The Grinder Haven: The affected area of the historic property consists of both driveways from Holt Boulevard and a portion of an asphalt parking lot. The sliver portion necessitated by the project will not affect character-defining features of the historic property. A historic neon sign near the edge of the property, between the two driveways, will be retained. Alterations to the property will adhere to the SOIS for the Treatment of Historic Properties (36 CFR 68). The Standards provide guidance for making alterations to historic resources, including related landscape features and the building's site and environment. The historic character of the property shall be retained and preserved. The alteration of features that characterize a property shall be avoided. The new work

Table S-4 Summary of Long-Term, Operational Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
				will protect the historic integrity of the property and its environment. Project features will not damage or destroy character-defining materials or features associated with the historic property. • National Old Trails/Route 66: The affected area of the historic linear property consists of small pavement areas needed to construct bus pads. Alterations to the property will adhere to the SOIS for the Treatment of Historic Properties (36 CFR 68). The Standards provide guidance for making alterations to historic resources, including related landscape features and the building's site and environment. The historic character of the property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property will be avoided. The new work will protect the historic integrity of the property and its environment. Project features will not damage or destroy any character-defining materials or features associated with the historic property. • Southern Pacific Railroad Depot: The affected area of the historic property consists of a small area currently used as a parking lot, sidewalks, and landscaping; the project proposes a new bus pad, sbX platform, and sidewalks with ramps. The existing sidewalks will be connected to the new sidewalks to match pre-project conditions. Any disturbed turf grass and landscaping not used by the project will be replaced to match pre-project conditions in consultation with the property owner during and at the completion of construction. Alterations to the property will adhere to the SOIS for the Treatment of Historic Properties (36 CFR 68). The Standards provide guidance for making alterations to historic resources, including related landscape features and the building's site and environment. The historic character of the property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property will be avoided. The new work will protect the historic integrity of the property and its environment. Project features will not damage or destroy any character-defining materials or features associated with the historic property.
Global Climate Change Section 4.18	No impact.	<u>BRT Corridor & O&M Facility</u> The proposed project would not result in an adverse effect related to greenhouse gas emissions. The proposed project is a mass transit system that is consistent with State and regional policies to reduce long-term greenhouse gas emissions. No adverse effects have been identified.	<u>BRT Corridor& O&M Facility</u> Same as Alternative A.	No minimization, avoidance, or mitigation measures are required during project operations.

Table S-5 Summary of Short-Term, Temporary Construction Phase Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
Aesthetics and Visual Resources Sections 5.2.1 and 5.3.1.	No impact.	BRT Corridor & O&M Facility Construction activity (equipment and lighting) would be noticeable to area residents and others in the vicinity. Impacts would be short term and are a common feature of the urban environment. No adverse impacts are anticipated. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect. • CEQA: Less than significant impact.	BRT Corridor & O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect. • CEQA: Less than significant impact.	No avoidance, minimization, or mitigation measures are required.
Air Quality Sections 5.2.2 and 5.3.2	No impact.	BRT Corridor & O&M Facility During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by construction-related activities. Construction activities would be temporary in nature and would not require more than 5 years to complete. With mitigation measures incorporated, impacts to air quality would be minimized. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated on regional construction and localized construction emissions.	BRT Corridor & O&M Facility Similar to Alternative A; however, the level of fugitive dust emissions would be higher than that of Alternative A. With mitigation measures incorporated, impacts to air quality would be minimized but not to the level of less than significant pursuant to CEQA for PM_{10} and $PM_{2.5}$. Impacts to air quality during construction with mitigation incorporated are not considered adverse pursuant to NEPA because they are short term, localized, and limited to fugitive dust emissions. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated on regional construction emissions. • CEQA: Short-term unavoidable significant impacts on localized construction emissions (PM_{10} and $PM_{2.5}$).	**CI-AQ-1:** Apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a “no visible dust” criterion either at the point of emission or at the ROW line as required by the South Coast Air Quality Management District (SCAQMD). **CI-AQ-2:** Spread soil binder on any unpaved roads used for construction purposes and all project construction parking areas. **CI-AQ-3:** Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment as provided in California Code of Regulations (CCR) Title 17, Section 93114. **CI-AQ-4:** Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation as needed to minimize construction impacts to existing communities. **CI-AQ-5:** Locate equipment and material storage sites at least 500 feet from the sensitive receptors. Keep construction areas clean and orderly. **CI-AQ-6:** Extended idling, material storage, and equipment maintenance should be prohibited within 500 feet of sensitive air receptors, to the extent feasible. **CI-AQ-7:** The project shall not allow track-out to extend 25 feet or more from the point of origin from an active operation. Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic. Notwithstanding the preceding, all track-out from an active operation shall be removed after each workday or evening shift. **CI-AQ-8:** Cover all transported loads of soils and wet materials prior to transport, or provide adequate freeboard (space from the top of the material to the top of the truck) to minimize emission of dust (PM) during transportation. **CI-AQ-9:** Promptly and regularly remove dust and mud that are deposited on paved, public roads due to construction activity and traffic to decrease PM. **CI-AQ-10:** Route and schedule construction traffic to avoid peak travel times as much as possible to reduce congestion and related air quality impacts caused by idling vehicles along local roads. **CI-AQ-11:** Rule 401 – Visible Emissions: Contractors shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminants for a period or periods aggregating more than 3 minutes in any 1 hour that are as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer’s view to a degree equal to or greater than smoke. **CI-AQ-12:** Contractors shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endangers the comfort, repose, health, or

Table S-5 Summary of Short-Term, Temporary Construction Phase Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
				safety of any such persons or the public; or that cause or have a natural tendency to cause injury or damage to business or property. **CI-AQ-13:** Contractors shall control fugitive dust in accordance with Rule 403 using the best available control measures to reduce dust so it does not remain visible in the atmosphere beyond the property line of the project. The dust control plan shall describe all applicable dust control measures to be implemented at the project; and shall describe types of dust suppressant, surface treatments and other measures to be utilized at the construction sites to comply with the Rule. The relevant specifics of Rule 403 are as follows: • No person shall cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that the dust remains visible in the atmosphere beyond the property line of the emission source; or the dust emission exceeds 20 percent opacity, if the dust emission is the result of movement of a motorized vehicle. • No person shall conduct active operations without utilizing the applicable best available control measures included in Table 1 of Rule 403 to minimize fugitive dust emissions from each fugitive dust source type within the active operation. • No person shall cause or allow PM_{10} levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other EPA-approved equivalent methods for PM_{10} monitoring. • No person shall conduct an active operation with a disturbed surface area of 5 or more acres or with a daily import or export of 100 cubic yards or more of bulk material without utilizing approved control measure/measures at each vehicle egress from the site to a paved public road. **CI-AQ-14:** Contractors shall not cause or allow PM_{10} levels to exceed 50 $\mu g/m^3$ when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume samplers reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized
Biological Resources Sections 5.2.3 and 5.3.3	No impact.	BRT Corridor Project impacts to nesting birds would be limited to the removal of trees and shrubs within the Biological Study Area (BSA) and exclusion of swallows from any nests. The BSA includes the project footprint plus a 500-foot buffer. O&M Facility Some ornamental trees may be removed; however, no substantial impacts to biological resources. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	BRT Corridor Same as Alternative A. In addition, a total of 0.8 acre of Disturbed/Ruderal habitat is anticipated to be temporarily impacted by Alternative B. The proposed project is located in an urban environment. This vegetation is highly disturbed and is not suitable habitat for any sensitive species, including burrowing owl. Temporary impacts of 0.2 acre to West Cucamonga Channel for new sidewalk and landscaping associated with the dedicated lanes segment. The channel is concrete-lined. No channel widening or vegetation removal is proposed. O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated.	**CI-BR-1:** During final design, the Project Engineer will coordinate with a qualified biologist to delineate all Environmentally Sensitive Areas (ESA) within the project footprint and immediately surrounding areas. **CI-BR-2:** Prior to clearing vegetation or construction within or adjacent to ESAs, the Contractor will install highly visible barriers (e.g., orange construction fencing) adjacent to the project footprint to designate ESAs to be preserved in place. No grading or fill activity of any type will be permitted within these ESAs. In addition, no construction activities, materials, or equipment will be allowed within the ESAs. All construction equipment will be operated in a manner to prevent accidental damage to nearby ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within the ESAs. Silt fence barriers will be installed at the ESA boundaries to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned grading activities. A qualified biologist will supervise the placement of ESA fencing. **CI-BR-3:** Prior to the completion of construction, the Contractor will hydroseed temporarily impacted vegetation communities with appropriate native plant species. Plant species used in the seeding shall be determined in coordination with a qualified biologist. **CI-BR-4:** Avoid disturbance of any nests protected by the Migratory Bird Treaty Act (MBTA). Alternatively, tree and shrub removal activities can be scheduled to occur during the non-breeding season (September 1 through January 31). **CI-BR-5 (BR-2):** Avoid disturbance of any nests protected by the MBTA. If tree and shrub removal acitivities are scheduled to occur during the breeding season (February 1 through August 31), then SBCTA will implement the following measures to avoid potential adverse effects on birds covered by the MBTA:

Table S-5 Summary of Short-Term, Temporary Construction Phase Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
			• CEQA: Less than significant impact with mitigation incorporated.	• No more than 1 week prior to construction, a qualified wildlife biologist will conduct a preconstruction survey of all potential nesting habitat within 500 feet of construction activities where access is available. • If active nests are found during preconstruction surveys, then the project proponent will create a no-distrubance buffer [acceptable in size to CDFW] around active raptor nests and nests of other special-status birds during the breeding season, or until it is determinated that all young have fledged. Typical buffers include 500 feet for raptors and 250 feet for other nesting birds. The size of these buffer zones and types of construction activities restricted in these areas may be further modified during coordination and in consultation with CDFW, and it will be based on existing noise and human disturbance levels at the project site. Nests initiated during construction are presumed to be unaffected, and no buffer would be necessary; however, the "take" (e.g., mortality, severe disturbance to) of any individual birds will be prohibited. If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, then no further mitigation is required.
Cultural and Paleontological Resources Sections 5.2.4 and 5.3.4	No impact.	BRT Corridor Archaeological Resources: No archaeological cultural resources were encountered during the surveys; however, if cultural resources are discovered at the jobsite, all work activities shall stop within a 100-foot radius of the discovery, the discovery area shall be protected, and the Resident Engineer shall be notified. See CI-CR-1, -2, and -3. Historic Architectural Resources: Temporary impacts to one NRHP listed property. See CI-CR-4 and -5. Paleontological Resources: There is a potential to impact paleontological resources if deep ground excavation activities are required during construction. See CI-CR-6. O&M Facility No impacts to Archaeological, Historic or Paleontological resources. **Environmental Effects Determination** • NEPA: Less than substantial adverse effects to archaeological resources, historic architectural resources, and paleontological resources during construction with mitigation incorporated. • CEQA: Less than significant impacts to archaeological resources, historic architectural resources, and paleontological resources during construction with mitigation incorporated.	BRT Corridor Archaeological Resources: Same as Alternative A. Historic Architectural Resources: Partial acquisition and/or temporary impacts to six NRHP eligible or listed properties. See CI-CR-4 and -5. Seven (7) full and 11 partial acquisitions of locally historic architectural significant properties. See CI-CR-7. Paleontological Resources: Same as Alternative A. O&M Facility No impacts to Archaeological, Historic or Paleontological resources. **Environmental Effects Determination** • NEPA: Less than substantial adverse effects to archaeological resources and paleontological resources during construction with mitigation incorporated. • CEQA: Less than significant impacts to archaeological resources and paleontological resources during construction with mitigation incorporated. Significant and unavoidable impacts to seven historic architectural resources designated by the City of Ontario.	**CI-CR-1:** Archaeological and Native American monitoring shall be limited to any project-related, ground-disturbing construction activities (e.g., grading, excavation, drilling) that may affect previously undisturbed sediments anticipated within the Holt Avenue Corridor to be between 3 feet and 5 feet below the existing ground surface where electrical and communication utilities have been placed, and up to 20 feet below ground surface in areas in which the sewer main is located. Project activities involving utility relocation and establishment of storm drain laterals along Holt Avenue may involve previously undisturbed sentiments as would construction activities associated with the proposed O&M facility in Ontario. Archaeological monitoring, when applicable, shall be conducted by a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology. Tribal monitor(s) shall be retained and compensated and are required to be approved by the consulting Tribal Government(s) and are listed under the NAHC's Tribal Contact list for the area of the project location. That list of individuals, however, would need to be provided to SBCTA for review and final selection. A Cultural Resources Monitoring and Mitigation Plan (CRMMP) shall be finalized prior to the start of ground-disturbing activities outlining the roles and responsibilities of the monitors, describing the protocols and procedures for monitoring, identifying locations or construction activities requiring monitoring, and defining the procedures for the recordation and treatment of new finds. No information regarding the discovery of human remains shall be publicized. **CI-CR-2:** If previously unidentified cultural materials are unearthed during construction, work shall be halted within 100 feet of the find and the area clearly delineated as a restricted area by flagging and/or fencing, until the resource can be fully documented and evaluated by a qualified archaeologisgt meeting the Secretary of Interior's Professional Qualification Standards. All discoveries shall be treated as significant until a formal evaluation can be made. If the cultural materials are determined to be Native American in origin, additional consultation with the appropriate Tribe(s) will be conducted, and whose representative(s) will be permitted to perform a site visit when the archaeologist makes their assessment on the resource, so as to provide Tribal input. If it is determined by SBCTA's qualified archaeologist that an inadvertently discovered archaeological resource constitutes a historical resource or a unique archaeological resource as defined by CEQA, an appropriate time allotment and sufficient funding to allow for implementation of avoidance measures or other appropriate mitigation shall be available. Avoidance and preservation in place is the preferred manner of mitigation. As identified in CEQA Section 21083.2(b), preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. SBCTA, the lead agency under CEQA, shall determine if avoidance and preservation in place is feasible. If it is determined that data recovery through excavation is the only feasible mitigation available, then a Cultural Resources Treatment Plan that provides for the adequate recovery of the

Table S-5 Summary of Short-Term, Temporary Construction Phase Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
				scientifically consequential information contained in the archaeological resource will be prepared by a qualified archaeologist in consultation with the appropriate Tribal representatives. The qualified archaeologist(s) will consult with appropriate Native American Tribal representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond that which is scientifically important, are considered.. **CI-CR-3:** If human remains are encountered during ground-disturbing activities, work shall be halted wthin 100 feet of the find, and the area clearly delineated as a restricted area by flagging and/or fencing, or other suitable approaches, and protected by posting a monitor or construction worker to ensure no additional disturbance occurs. If the human remains cannot be fully assessed, documented, and housed on the same day, the area will be secured by posting a guard onsite outside of working hours or by covering the discovery area with muslin cloth and heavy metal plates (if the human remains are found below grade) or with other impervious material, or by making other provisions commonly accepted by professional archaeologists to prevent damage or vandalism to the remains. The San Bernardino or Los Angeles County Coroner shall be contacted within 24 hours of discovery of human remains in compliance with CEQA Guidelines Section 15064.5(e), Califonria Health and Safety Code Section 7050.5(b), and Public Resources Code (PRC) 5097.98. Work will continue to be diverted while the County Coroner determines whether the remains are Native American. If the remains are determined to be Native American, the County Coroner will contact the Native American Heritage Commission (NAHC), which will designate a Most Likely Descendant (MLD) to offer guidance on the appropriate and respectful treatment and disposition of the remains per California PRC 5097.98. Human remains and any associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation with the MLD has taken place and a plan of action has been developed. If an MLD cannot be identified, or the MLD fails to make a recommendation regarding the treatment of the remains within 48 hours after being granted access to the project area to examine the remains, SBCTA, in coordination with FTA, shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. After the appropriate actions are taken, as outlined above, the excavation work associated with project construction, may resume. **CI-CR-4:** SBCTA will include an environmentally sensitive buffer in the plans and specifications to alert contractors to avoid character-defining features of each built environment historic property. Should any proposed project activities change in a manner that would be expected to cause an impact to character-defining features of the resource, SBCTA will be responsible for consulting with FTA and SHPO to develop and apply appropriate treatment measures under the Secretary of the Interior's Standards for the Treatment of Historic Properties, as determined by a qualified Architectural Historian (as defined at 36 CFR 61). No project construction work will occur within 50 feet of any of the character-defining features of the specific historic property in question until agreement has been reached among consulting parties under Section 106. **CI-CR-5:** Alterations to each of the historic properties will adhere to the Secretary of the Interior's Standards (SOIS) for the Treatment of Historic Properties (36 CFR 68). The Standards provide guidance for making alterations to historic resources, including related landscape features and the building's site and environment. The historic character of each property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a historic property will be avoided. The new work will protect the historic integrity of each historic property and its environment. BMPs will be incorporated to minimize short-term, temporary noise and vibration impacts to each of the following historic properties, with the exception of the National Old Trails Road/Route 66 (see Mitigation Measure CI-NC-2). These include provisions for vibration monitoring by the contractor and having a plan in place before construction begins for the use of alternative equipment and techniques when established thresholds may be exceeded. In addition to the common measures

Table S-5 Summary of Short-Term, Temporary Construction Phase Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
				stated above that will applied to the historic properties, additional property-specific measures to minimize harm to these properties are specified below. Southern Pacific Railroad Depot (100 W. Commercial Street, Pomona) The existing sidewalks at the railroad station property will be connected to the new sidewalk area so as to match pre-project conditions. Any disturbed turf grass and landscaping not used by the project will be replaced to match pre-project conditions in consultation with the property owner, the City of Pomona, during and at the completion of construction. National Old Trails Road/Historic Route 66 (Rancho Cucamonga; Fontana) The affected area of the historic linear property consists of small pavement areas needed to construct bus pads. The removal of historic materials or alteration of features and spaces that characterize a property will be avoided. The new work will protect the historic integrity of the property and its environment. Vince's Spaghetti (1206 W. Holt Boulevard, Ontario) A historic neon sign near the edge of the easternmost driveway will be retained. The driveways will be reconstructed to pre-project conditions in consultation with the property owner during and at the completion of construction. The new work will protect the historic integrity of the property and its environment. Temporarily disturbed surface areas will be returned to pre-project conditions once construction is completed; therefore, the visual changes associated with the project are considered minor, and the project will not substantially alter or destroy any primary views of the historic property. A.C. Moorhead House (961 W. Holt Boulevard, Ontario) The affected area of the historic property consists of the two driveway areas, the front lawn, and landscaping. The two driveways will be reconstructed, and turf grass and landscaping will be replaced. Original landscaping on the property will be retained. The new work will protect the historic integrity of the property and its environment. The Grinder Haven (724 W. Holt Boulevard, Ontario) A historic neon sign near the edge of the property, between the two driveways, will be retained. The new work will protect the historic integrity of the property and its environment. Project features will not damage or destroy character-defining materials or features associated with the historic property, or substantially alter or destroy any primary views of the historic property. Access to The Grinder Haven will be maintained at all times during project construction. No impacts to parking spaces within the lot are anticipated. The historic neon sign may be relocated as a result of the driveway improvements but would be re-established in close proximity and with the same street orientation as present. Jacob Lerch House (541 E. Holt Boulevard, Ontario) The affected area of the historic property consists of a sliver portion, which is currently lawn. Turf grass will be replaced in areas to match pre-project conditions in consultation with the property owner during and at the completion of construction. Original landscaping on the property will be retained. The new work will protect the historic integrity of the property and its environment. Project features will not be close to the historic residential building, and they will not damage or destroy character-defining materials or any features associated with the historic property, or substantially alter or destroy any primary views of the historic property. **CI-CR-6:** Prepare and implement a Paleontological Monitoring Plan (PMP), which will include the following: • Workers Environmental Awareness Program (WEAP). The WEAP shall be presented to all construction personnel prior to the start of ground-disturbing activities. • Periodic paleontological spot checks shall be conducted by a qualified paleontologist in any location along the alignment where excavation exceeds depths of 5 feet into the younger Quaternary deposits to check for the presence of older, more paleontologically sensitive geologic units

Table S-5 Summary of Short-Term, Temporary Construction Phase Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
				(including older Quaternary alluvium). The specific locations where excavation will exceed the 5-foot threshold will be determined once final construction plans are available, and will be included in the PMP. If paleontologically sensitive geologic units are observed during spot checking, full-time monitoring shall be implemented during excavations into the sensitive sediments. The 5-foot depth at which spot checking shall be triggered will initially be implemented, but it shall be modified as needed by the qualified paleontologists, in consultation with SBCTA and FTA, based on the sediment types, depths, and distributions observed during monitoring during the life of the project. • If unanticipated paleontological resources are discovered during project-related activities, work must be halted within 100 feet of the discovery until it can be evaluated by a qualified paleontologist. • Upon completion of ground-disturbing activities, a Paleontological Monitoring Report (PMR) shall be prepared and submitted to SBCTA, FTA, and the fossil repository. **CI-CR-7:** One or more of the following activities will be implemented to mitigate impacts on the City of Ontario's locally designated historical resources if Alternative B is selected and the historical resources cannot be avoided or relocated: preparing a contextual history of Holt Boulevard, with a focus on its historic resources; preparing photographic documentation of the California Register of Historic Resources (CRHR)-eligible buildings to be demolished; installing plaques in cases where historic buildings are removed; developing short videos consisting of oral interviews of persons associated with the area's history for the City of Ontario to post on their website; and installing historical information kiosks located at sbX bus stops.
Geology, Soils, Seismicity Sections 5.2.5 and 5.3.5	No impact.	BRT Corridor & O&M Facility Project construction would not affect the regional geologic or seismic conditions. The minor grading, cut, and fill activities required to construct the project would not change the overall soil characteristics of the region or local area. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	BRT Corridor & O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	**CI-GSS-1:** During construction, the appropriate level of inspections and tests shall be performed by a third-party contractor to confirm soil and subsurface conditions within the corridor. **CI-GSS-2:** Final grading and construction plans shall be reviewed by a qualified geotechnical contractor to confirm that geotechnical recommendations outlined in the *Preliminary Geotechnical Report* were applied to the design and that no additional recommendations are required.
Hazardous Waste Sections 5.2.6 and 5.3.6	No impact.	BRT Corridor Handling of hazardous materials, including fuels and motor oils, paints, cleaners, degreasers, and insulating materials. Potential to encounter hazardous substances from residual soil contamination during excavation activities. O&M Facility Demolished structures may contain asbestos-containing materials (ACM) and lead-based paint (LBP). **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated.	BRT Corridor Same as Alternative A. In addition, demolished structures may contain asbestos-containing materials (ACM) and lead-based paint (LBP), and removal of utility poles and transformers may be required. O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	**CI-HAZ-1:** If unexpected groundwater is encountered during construction, groundwater sampling shall be conducted to determine contaminants and contamination levels. If contamination is found, a work plan shall be developed by the project geotechnical engineer to protect the health of construction workers. **CI-HAZ-2:** Limited soil investigation shall be carried out at one of the properties subject to partial acquisition (Black Gold – 1194 E. Holt Boulevard, Ontario, CA) prior to acquisition to determine if the trace of contaminants exists to ensure worker safety. Limited soil investigation would consist of collection of soil samples at 1.5 feet below ground surface (bgs) and 2.5 feet bgs from at least two (2) soil borings within the proposed construction area of this property. The soil samples should be analyzed for total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, and xylene (BTEX), and Methyl tert-butyl ether (MTBE) by an accredited laboratory. The recommendation for a limited soil investigation is subject to review of the final design and SBCTA approval. **CI-HAZ-3:** A survey shall be conducted to screen for ACM and LBP prior to demolition of aboveground structures. If ACMs are found, then the Contractor shall comply with SCAQMD Rule 1403 notification and removal process activities at the project site during construction. In addition, disposal of ACMs will comply with local, State, and federal requirements.

Table S-5 Summary of Short-Term, Temporary Construction Phase Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
		• CEQA: Less than significant impact with mitigation incorporated.		**CI-HAZ-4:** Any hazardous materials or wastes encountered before or during the demolition stage of the project shall be disposed of according to current regulatory guidelines. **CI-HAZ-5:** A worker health and safety plan (HSP) that meets the provisions of CCR Title 22, Section 5192, shall be developed by the project Contractor. HSP procedures will address the identification, excavation, handling, and disposal of hazardous wastes and materials that may be found in construction areas. **CI-HAZ-6:** A Soil Management Plan shall be developed by the project Contractor that includes soil management requirements if contaminated media is encountered. **CI-HAZ-7:** If the utility poles that contain creosote-treated wood are removed during the project, the poles shall be managed as treated wood waste (TWW) in accordance with Department of Toxic Substances Control (DTSC) Alternative Management Standards for TWW. **CI-HAZ-8:** Overhead transformers along Holt Boulevard may contain polychlorinated biphenyls (PCBs). If alteration is required, it shall be managed in accordance with the current regulatory requirement.
Hydrology, Water Quality, and Floodplains Sections 5.2.7 and 5.3.7	No impact.	BRT Corridor & O&M Facility Potential soil erosion and runoff pollutants during excavation, grading, paving, and other construction activities. Potential dewatering activities. Floodplain encroachment at West Cucamonga Channel would occur where the existing culvert crosses under Holt Boulevard. No impacts to floodplains are anticipated. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	BRT Corridor & O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	**CI-WQ-C1:** The Contractor shall implement erosion control BMPs during construction, including: • Limitation of construction access routes and stabilization of cleared access points; • Stabilization of cleared excavated areas by providing vegetative buffer strips and plastic coverings, and applying ground base on areas to be paved; • Protection of adjacent properties by installing sediment barriers or filters, or vegetative buffer strips; • Stabilization and prevention of sediments from surface runoff from discharging into storm drain outlets; and • Use of sediment control and filtration to remove sediment from water generated by dewatering, if required. **CI-WQ-C2:** The Contractor shall follow the guidelines and regulations established by the CGP for Discharges Associated with Construction Activities, Order No. 2009-0009-DWQ, amended by Order 2010-0014-DWQ and Order 2012-0006-DWQ (CGP). In addition, an SWPPP will be prepared and implemented, which will identify BMPs to minimize erosion and ensure the proper handling and storage of materials that may have the potential to affect water quality. During construction, materials will be stored properly in upland locations to avoid affecting the receiving waters. The SWPPP will also include a Construction Site Monitoring Program, which will be based on the project's risk level to ensure that the implemented BMPs are effective and prevent any discharge that will result in exceeding any water quality standard. Implementation of BMPs will include the following measures to reduce potential construction-related events that could impact water quality: • Implementation of proper vehicle and equipment cleaning, fueling, and maintenance practices; • Control and prevention of the discharge of all potential pollutants (e.g., petroleum products, solid wastes, construction chemicals); and • Implementation of federal, State, and local policies regarding hazardous materials use, storage, and transport and hazardous materials mitigation measures. A contingency plan shall be prepared before construction to address construction-related spills and pollutant discharges. **CI-WQ-C3:** If dewatering is required, the Contractor shall follow the requirements specified in the NPDES permit for discharges to surface water that pose an insignificant *(de minimis)* threat to water quality, from either the Santa Ana RWQCB per Order No. R8-2005-0041 (NPDES No. CAG998001) or the Los Angeles RWQCB under Order No. R4-2013-0095 (NPDES No. CAG994004). **CI-FP-1:** Implement recommended BMPs as identified in the Storm Water Data Report prepared for this project.

Table S-5 Summary of Short-Term, Temporary Construction Phase Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
				CI-FP-2: Include erosion control and water quality protection during in-river construction and post-construction as identified in the Storm Water Data Report prepared for this project. **CI-FP-3:** Limit construction activities between October and May to those actions that can adequately withstand high flows and entrainment of construction materials. The Contractor shall prepare a Rain Event Action Plan (REAP) and discuss high flows mitigation.
Land Use and Planning Sections 5.2.8 and 5.3.8	No impact.	BRT Corridor TCEs would be required throughout the project corridor. Temporary construction impacts may include limited access to buildings, driveways, and sidewalks, and impacts to landscaping, which would be restored after project construction is completed. O&M Facility No TCEs would be required. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	BRT Corridor TCEs would be required throughout the project corridor. Temporary construction impacts may include limited access to buildings, driveways, and sidewalks, and impacts to landscaping, which would be restored after project construction is completed. For the 3.5-mile-long dedicated lane segment, approximately 10.39 acres of land would be temporarily impacted for construction easements. O&M Facility No TCEs would be required. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	See CI-TRA-1 and CI-TRA-2 under Traffic and Transportation.
Traffic and Transportation Sections 5.2.9 and 5.3.9	No impact.	BRT Corridor Construction of side-running stations would result in delays to bicycle and pedestrian traffic near station construction. O&M Facility Construction would be confined to the existing site. Minimal disruption to traffic may occur during transport of construction equipment. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	BRT Corridor Construction activities would require the closure of lanes and result in delays to motor vehicle, bicycle, and pedestrian traffic. Some bus routes would be relocated to nearby locations. O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	**CI-TRA-1:** SBCTA or its contractor shall prepare a Traffic Management Plan (TMP) in cooperation with local municipalities prior to construction. The TMP will outline necessary street closures and detours. If temporary blockage of bicycle lanes is necessary, a bicycle detour lane with barriers or the latest bicycle detour standard per the California Manual on Uniform Traffic Control Devices (MUTCD) or other City-approved standard will be included in the TMP at each station location during construction to ensure no interruption to the bicyclists. Similarly, for pedestrians, a sidewalk detour, rerouting pedestrians to an alternative sidewalk path or a sidewalk diversion, which provides a protected pathway near, but safely away from the station construction, would be included in the TMP, used in accordance with the California MUTCD or other City-approved standard. Signs will be posted to direct bicyclists and pedestrians to intersections where they may cross. **CI-TRA-2:** Business access shall be maintained at all times during construction, and work will be scheduled to avoid unnecessary inconvenience to the public and abutting property owners. Undue delays in construction activities will be avoided to reduce the public's exposure to construction.
Noise and Vibration Sections 5.2.10 and 5.3.10	No impact.	BRT Corridor Temporary increases in noise and vibration would be experienced at some sensitive receptors. O&M Facility No impacts.	BRT Corridor Same as Alternative A. O&M Facility Same as Alternative A.	**CI-NC-1:** The Contractor shall implement the following control measures, as applicable, to minimize noise disturbances at sensitive areas during construction: • All equipment shall have sound-control devices no less effective than those provided on the original equipment. Each internal combustion engine used for any purpose on the job or related to the job shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the jobsite without an appropriate muffler.

Table S-5 Summary of Short-Term, Temporary Construction Phase Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
		Environmental Effects Determination • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	**Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	• Construction methods or equipment that will provide the lowest level of noise impact (e.g., avoid impact pile driving near residences and consider alternative methods that are also suitable for the soil condition) shall be used. • Idling equipment shall be turned off. • Truck loading, unloading, and hauling operations shall be restricted through residential neighborhoods to the greatest possible extent. • Temporary noise barriers shall be used, as necessary and practicable, to protect sensitive receptors against excessive noise from construction activities. • Newer equipment with improved noise muffling shall be used, and all equipment items shall have the manufacturers' recommended noise abatement measures (e.g., mufflers, engine covers, and engine vibration isolators) intact and operational. All construction equipment shall be inspected at periodic intervals to ensure proper maintenance and presence of noise-control devices (e.g., mufflers and shrouding). • Construction activities shall be minimized in residential areas during evening, nighttime, weekend, and holiday periods. Coordination with each city shall occur before construction can be performed in noise-sensitive areas. • Construction lay-down or staging areas shall be selected in industrially zoned districts. If industrially zoned areas are not available, commercially zoned areas may be used, or locations that are at least 200 feet from any noise-sensitive land use (e.g., residences). • Perform noise and vibration monitoring during construction. The Contractor shall perform independent monitoring to check compliance in particularly sensitive areas. Contractors must modify and/or reschedule construction activities if monitoring determines that maximum limits are exceeded at residential land uses. **CI-NC-2:** The Contractor shall implement the following control measures, as applicable, to minimize the potential impacts from construction vibration: • Hours of vibration-intensive activities, such as vibratory rollers, shall be restricted to minimize adverse impacts to the residents (e.g., weekdays during daytime hours only). • When possible, the use of construction equipment that creates high vibration levels, such as vibratory rollers operating within 20 feet of commercial buildings, within 26 feet of residential buildings, and within 36 feet of sensitive land uses, such as historic properties, shall be limited. • Contractors will be required to have a plan in place to use alternative procedures of construction, selecting the proper combination of equipment and techniques to generate the least overall vibration, in those cases where vibration from construction activities would exceed the established thresholds for buildings susceptible to vibration damage. • Conduct a preconstruction building inspection/survey to document the preconstruction condition of building structures that are located within approximately 30 feet of planned construction activities that could generate high vibration levels (e.g., activities associated with vibratory rollers). • Conduct vibration monitoring at nearest buildings (within approximately 30 feet of activity) during vibration-intensive construction activities.

Table S-5 Summary of Short-Term, Temporary Construction Phase Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
Energy Sections 5.2.11 and 5.3.11	No impact.	BRT Corridor & O&M Facility Estimated fossil fuel use during construction is not considered a wasteful or inefficient use of nonrenewable resources because the fuel is being used to construct a mass transit system, which is identified as an efficient method of reducing energy use. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect. • CEQA: Less than significant impact.	BRT Corridor & O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect. • CEQA: Less than significant impact.	No minimization, avoidance, or mitigation measures are required.
Demographics and Neighborhoods Sections 5.2.12 and 5.3.12	No impact.	BRT Corridor Construction-related impacts would generally be minor for a limited duration between 2018 and 2020, and localized as construction moves along the corridor, resulting in inconveniences to motorists, pedestrians, businesses, and residences in the immediate vicinity of the construction activities. O&M Facility No impacts. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	BRT Corridor Same as Alternative A. In addition, the 3.5-mile dedicated lanes segment could result in temporary road closures and detours during construction. O&M Facility No impacts. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	With implementation of the follow measures, no additional minimization, avoidance, or mitigation measures are required. • Measures TRA-1 and TRA-2 in Chapter 3 (Traffic and Transportation) • Measures AV-2, AV-4, AV-5, AV-6, AV-7, and AV-8 presented in Section 4.1.8 (Aesthetic and Visual Resources) • Measures ACQ-1 and ACQ-2 in Section 4.12 (Acquisitions and Displacements) • Measures SS-1 through SS-5 presented in Section 4.14 (Safety and Security) • Measures CI-TRA-1 and CI-TRA-2 in Chapter 5 (Construction Period Impacts)
Acquisitions and Displacements Sections 5.2.13 and 5.3.13	No impact.	BRT Corridor & O&M Facility A partial acquisition of land along the corridor would be required, resulting in a minor partial acquisition of some parcels adjacent to the existing roadway. Some TCEs would be required to support the construction activities along the corridor, especially around the proposed bus stations. No displacements would occur. **Environmental Effects Determination** • NEPA: No adverse effect. • CEQA: No impact.	BRT Corridor & O&M Facility A partial acquisition of land along the corridor would be required, resulting in a minor partial acquisition of some parcels adjacent to the existing roadway. Some TCEs would be required to support the construction activities along the corridor, especially around the proposed bus stations. Implementation of the 3.5-mile-long dedicated lanes would require full acquisition of 37 parcels, which includes 15 residential and 37 commercial business properties. Partial acquisition of 168 parcels. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated.	With implementation of ACQ-1 and ACQ-2, no other minimization, avoidance, or mitigation measures are required.

Table S-5 Summary of Short-Term, Temporary Construction Phase Impacts and Proposed Avoidance, Minimization, and/or Mitigation Measures for the Project Alternatives

Impact Category / Section in EIR/EA	No Build Alternative	Build Alternative A	Build Alternative B	Avoidance, Minimization, and/or Mitigation Measures
			• CEQA: Less than significant impact with mitigation incorporated, except for seven properties determined to be historical resources under CEQA, which are significant and unavoidable.	
Public Services and Utilities Sections 5.2.14 and 5.3.14	No impact.	BRT Corridor & O&M Facility Public Services: Construction activities could affect access to community facilities and services during construction. Disruptions would be related primarily to operation of construction equipment in the area, partial and/or complete lane closures, noise and vibration, light and glare, and fugitive dust emissions Utilities: Relocation of some utilities in some areas of the corridor is required; following standard procedural controls, impacts to utilities during construction would not be substantial. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	BRT Corridor & O&M Facility Public Services: Same as Alternative A. Additionally, a TCE would be required from the U.S. Post Office at 1555 E. Holt Boulevard in Ontario that would affect driveway access. Utilities: Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with mitigation incorporated. • CEQA: Less than significant impact with mitigation incorporated.	**CI-PS-1:** Contractor shall coordinate with the traffic departments of the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana and with all corridor emergency service providers in developing detour routes and other traffic handling plans to be used during the construction period. **CI-PS-2:** Contractor shall provide advance notice of all construction-related street closures and detours to the affected local jurisdictions, community groups, emergency service providers, and motorists.
Safety and Security Sections 5.2.15 and 5.3.15	No impact.	BRT Corridor & O&M Facility With adherence to SBCTA' System Safety Management Plan (SSMP), TMP, and Occupational Safety, and Health Act (OSHA) regulations, safety impacts are not expected to be adverse. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with standard conditions incorporated. • CEQA: Less than significant impact with standard conditions incorporated.	BRT Corridor & O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: Less than substantial adverse effect with standard conditions incorporated. • CEQA: Less than significant impact with standard conditions incorporated.	With implementation of standard conditions, no minimization, avoidance, or mitigation measures are required.
Parks and Recreation Sections 5.2.16 and 5.3.16	No impact.	BRT Corridor & O&M Facility No impact. Access to all parks and recreational features would be maintained during the construction period. **Environmental Effects Determination** • NEPA: No adverse effect. • CEQA: No impact.	BRT Corridor & O&M Facility Same as Alternative A. **Environmental Effects Determination** • NEPA: No adverse effect. • CEQA: No impact.	No minimization, avoidance, or mitigation measures are required.

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TABLE OF CONTENTS

TABLE OF CONTENTS

APPENDICES

TECHNICAL REPORTS AND OUTREACH SUMMARY REPORTS (UNDER SEPARATE COVER)

Air Quality Study: West Valley Connector Project – (TAHA, April 2018)

Archaeological Survey Report: West Valley Connector Project (Parsons, July 2018)

Biological Study Report: West Valley Connector Project (Parsons, April 2018)

Community Impact Report: West Valley Connector Project (Parsons, April 2018)

Draft Relocation Impact Report: West Valley Connector Project (OPC, April 2018)

Energy Study: West Valley Connector Project – (TAHA, April 2018)

Greenhouse Gas Study: West Valley Connector Project – (TAHA, April 2018)

Historic Property Survey Report: West Valley Connector Project (Parsons, July 2018)

Historical Resources Evaluation Report: West Valley Connector Project (Parsons, July 2018)

Initial Site Assessment: West Valley Connector Project, Cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana (Group Delta, April 2018)

Initial Site Assessment Addendum: West Valley Connector Project, Cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana (Group Delta, April 2018)

Noise and Vibration Technical Report: West Valley Connector Project (Parsons, April 2018)

Paleontological Identification Report and Evaluation Report: West Valley Connector Project (Paleo Solutions, Inc., April 2018)

Section 4(f) Evaluation: West Valley Connector Project (Parsons, April 2018)

Traffic Operations Analysis Report: West Valley Connector Project (Parsons, April 2018)

Operations and Maintenance Facility Traffic Analysis: West Valley Connector Project (Parsons, April 2018)

Visual Impact Assessment: West Valley Connector Project (Parsons, April 2018)

Water Quality Report: West Valley Connector Project (Parsons, April 2018)

West Valley Connector Bus Rapid Transit Project Public Outreach Summary Report - Environmental Review Process – Scoping (Parsons and Arellano, May 2016)

West Valley Connector Project – Floodplain Evaluation Report (Parsons, March 2019)

West Valley Connector Project Public Outreach Summary Report - Holt Boulevard Focused Outreach Meetings - June 13-15, 2017 (Parsons and Arellano, July 2017)

LIST OF FIGURES

LIST OF TABLES

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CHAPTER 1 –
PURPOSE OF AND NEED FOR TRANSPORTATION IMPROVEMENTS

1.0 PURPOSE OF AND NEED FOR TRANSPORTATION IMPROVEMENTS

1.1 Introduction

The San Bernardino County Transportation Authority (SBCTA), [originally San Bernardino Associated Government or SANBAG], in cooperation with the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana, proposes construction of the proposed West Valley Connector (WVC) Project, a 35-mile-long Bus Rapid Transit (BRT) project that will decrease travel times and improve the existing public transit system within the corridor. The proposed project would include the placement of BRT stations at up to 33 locations/major intersections spaced 0.5 to 1 mile apart. Transit Signal Priority (TSP) applications and queue jump lanes would also be used at selected intersections to further facilitate faster and more reliable bus operations.

Omnitrans and SANBAG executed Memorandum of Understanding (MOU) 15-1001289 in October 2015 to outline future project management costs for Omnitrans to assist SANBAG in receiving Federal Transit Administration (FTA) for future projects. In January 2017, SBCTA entered into a cooperative agreement with Omnitrans designating SBCTA as the lead agency for the proposed WVC Project. SBCTA intends to construct the WVC, which would then be operated by Omnitrans. SBCTA has the authority to allocate FTA funds; however, it cannot have the ability to receive funds directly from FTA. Omnitrans is the direct FTA grantee for the San Bernardino Valley. As a result, SBCTA and Omnitrans have developed a successful direct recipient/subrecipient working relationship to deliver projects with FTA funds. The current relationship allows the delivery of FTA-funded projects that meet FTA requirements without duplicating staff, assuring the best use of limited public funds available.

1.1.1 Planning Background

Omnitrans is the major public transportation provider in the San Bernardino Valley, with a service area of approximately 456 square miles, serving 15 municipalities and many unincorporated areas of San Bernardino County. Omnitrans' mission is to provide the San Bernardino Valley with comprehensive public mass transportation services that maximize customer use, comfort, safety, and satisfaction, while efficiently using financial and other resources, in an environmentally sensitive manner.

In 2004, Omnitrans developed the Omnitrans System-Wide Plan that identified major transit corridors for potential improved service and in 2010 updated the plan (see Figure 1-1). SBCTA, the County Transportation Commission, included the corridors from

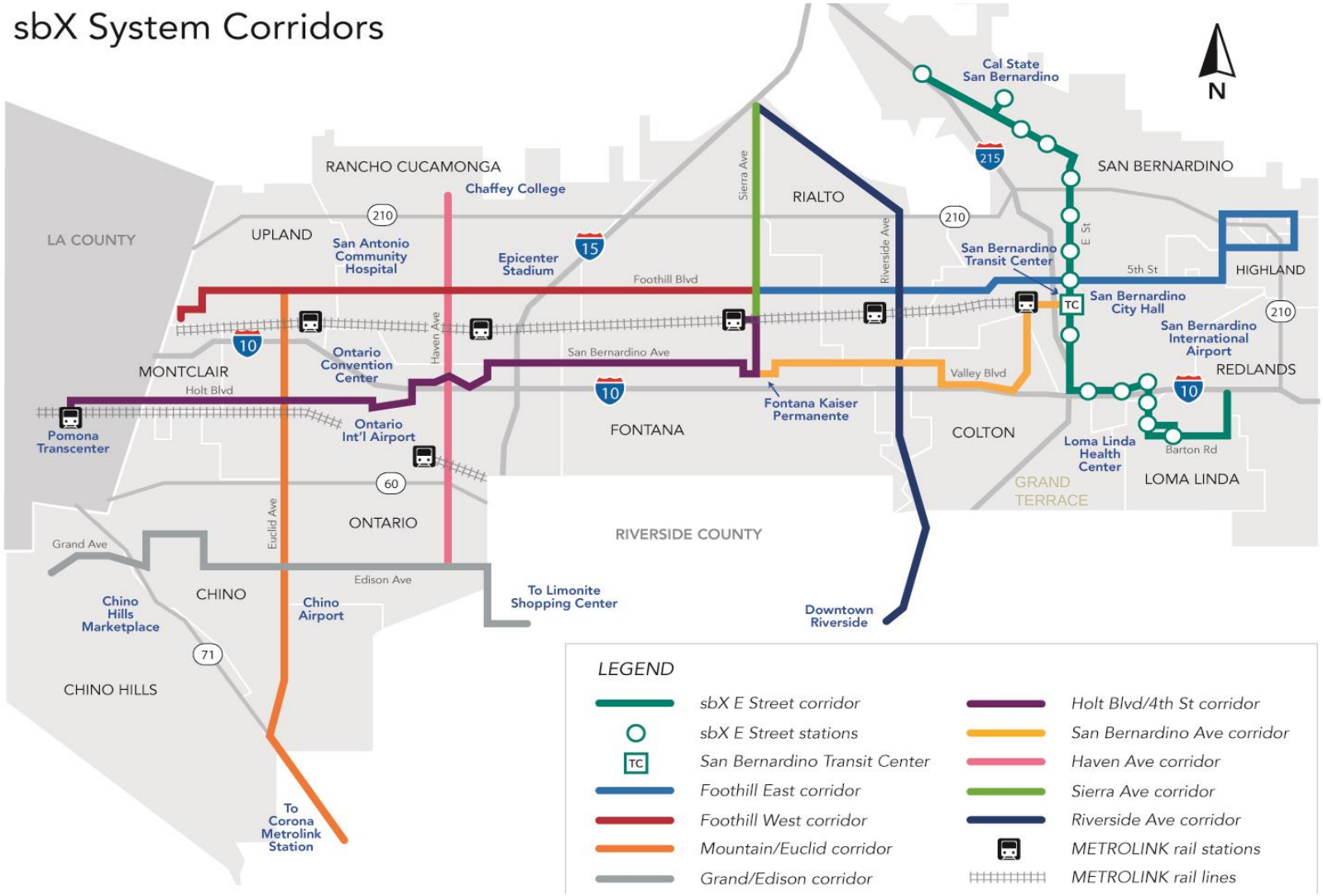

Figure 1-1 Omnitrans System-Wide Bus Rapid Transit Plan

the Systemwide Plan in its own San Bernardino County Long Range Transit Plan in 2010. The corridors were also included as strategic corridors in the 2012 Regional Transportation Plan (RTP)/ Sustainable Communities Strategy (SCS) produced by the Southern California Association of Governments (SCAG), the region's Metropolitan Planning Organization.

The Omnitrans System-wide Plan and SBCTA Long Range Transit Plan (SBCTA, 2009) determined that, based on the level and character of transit demand, the most appropriate technology for premium transit service in the 10 major corridors is BRT. The proposed WVC Project would provide premium transit service in portions of 4 of the 10 major corridors along Holt Boulevard, Haven Avenue, Foothill Boulevard, and Sierra Avenue.

The Omnitrans Board of Directors approved a "brand" for the system as the San Bernardino Valley Express (sbX) bus rapid transit system. These sbX BRT corridors would provide:

- Distinct sbX branding, including station pylons and station design, line designations, and distinct marketing
- Frequent, limited-stop service with station spacing approximately 0.5 to 1 mile
- A range of transit and roadway improvements including:
  - Dedicated lanes
  - TSP
  - Queue jump lanes
- Specialized transit stations with level boarding, park-and-ride lots (where applicable), and kit-of-parts (amenities) providing a range of passenger amenities
- Nonmotorized transportation improvements including:
  - Bike racks and lockers
  - Pedestrian and bicycle network improvements
- Specialized low-floor 6-foot articulated vehicles, fueled with compressed natural gas (CNG)
- Substantial investment in Intelligent Transportation System (ITS) technology including:
  - NexTrip bus arrival and departure information signage
  - Off-board fare collection
- Global positioning system (GPS) vehicle tracking
- On-board monitoring
- Closed-circuit television (CCTV) security cameras

Since adoption of the Omnitrans System-wide Plan, Omnitrans has begun operation of the first sbX corridor – the Green Line on the E Street corridor – serving the cities of San Bernardino and Loma Linda. A 15.7-mile-long BRT corridor, it began revenue operation in April 2014 and includes 16 specialized transit stations, 5.4 miles of BRT center-running dedicated lanes, 10.3 miles of BRT operating in mixed-flow lanes, specialized 60-foot vehicles, TSP and ITS technology, and all the amenities listed above. Omnitrans used a $75 million Small Starts grant and other FTA funding,

along with local funds, to support development of the E Street BRT corridor project.

1.1.2 Alternative Analysis Report

In 2014, Omnitrans commissioned an Omnitrans WVC Alternatives Analysis (AA) Report for a newly identified transit corridor that includes portions of the Holt Boulevard/Route 61 and West Foothill Boulevard/Route 66 transit corridors. The purpose of the WVC AA Report is to evaluate alternatives for the introduction of premium transit services along the Holt Boulevard/Foothill Boulevard Corridor between the City of Pomona in Los Angeles County and the cities of Montclair, Ontario, Rancho Cucamonga, and Fontana in San Bernardino County; and to identify the alternatives that best serve local transportation needs. The WVC corridor was identified during development of the range of alternatives detailed in the report and serves a wider range of major destinations/activity centers than either of the individual corridors alone.

Omnitrans originally initiated an AA for the Holt Boulevard/Route 61 corridor to determine the best way to implement improvements to Omnitrans' highest-ridership route – Route 61. The WVC AA evaluated and screened alternative alignments, transit modes and technologies, and station locations. The AA process began in February 2013 and was funded through a Section 5339 AA planning grant under the previous transportation funding legislation – Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

While a formal, stand-alone AA process is no longer required in the revised New/ Small Starts program under the current transportation funding legislation, Moving Ahead for Progress in the 21st Century (MAP-21), Omnitrans followed a traditional AA approach to document the key elements and decisions that led to a preferred set of improvements for the corridor.

Omnitrans' Route 61 runs east-west and serves the west portion of Omnitrans service area, including the communities of Fontana, Ontario, Rancho Cucamonga, and Montclair in San Bernardino County, and the City of Pomona in Los Angeles County. The corridor location is shown in Figure 1-2.

During the AA study, multiple alternatives were developed via a multi-tier screening process in conjunction with project stakeholders and local jurisdictions, as detailed in later sections of this report. As a result of this process, route alignment alternatives were developed, and relevant local plans and studies were reviewed and analyzed. One study, the Integrated Transit and Land Use Planning for the Foothill Boulevard/5th Street Transit Corridor, considered improvements along Omnitrans' Route 66 on West Foothill Boulevard, as shown in Figure 1-3. Based on input from Omnitrans and the other stakeholders over the course of the WVC AA study, multiple hybrid alignment alternatives were developed, including

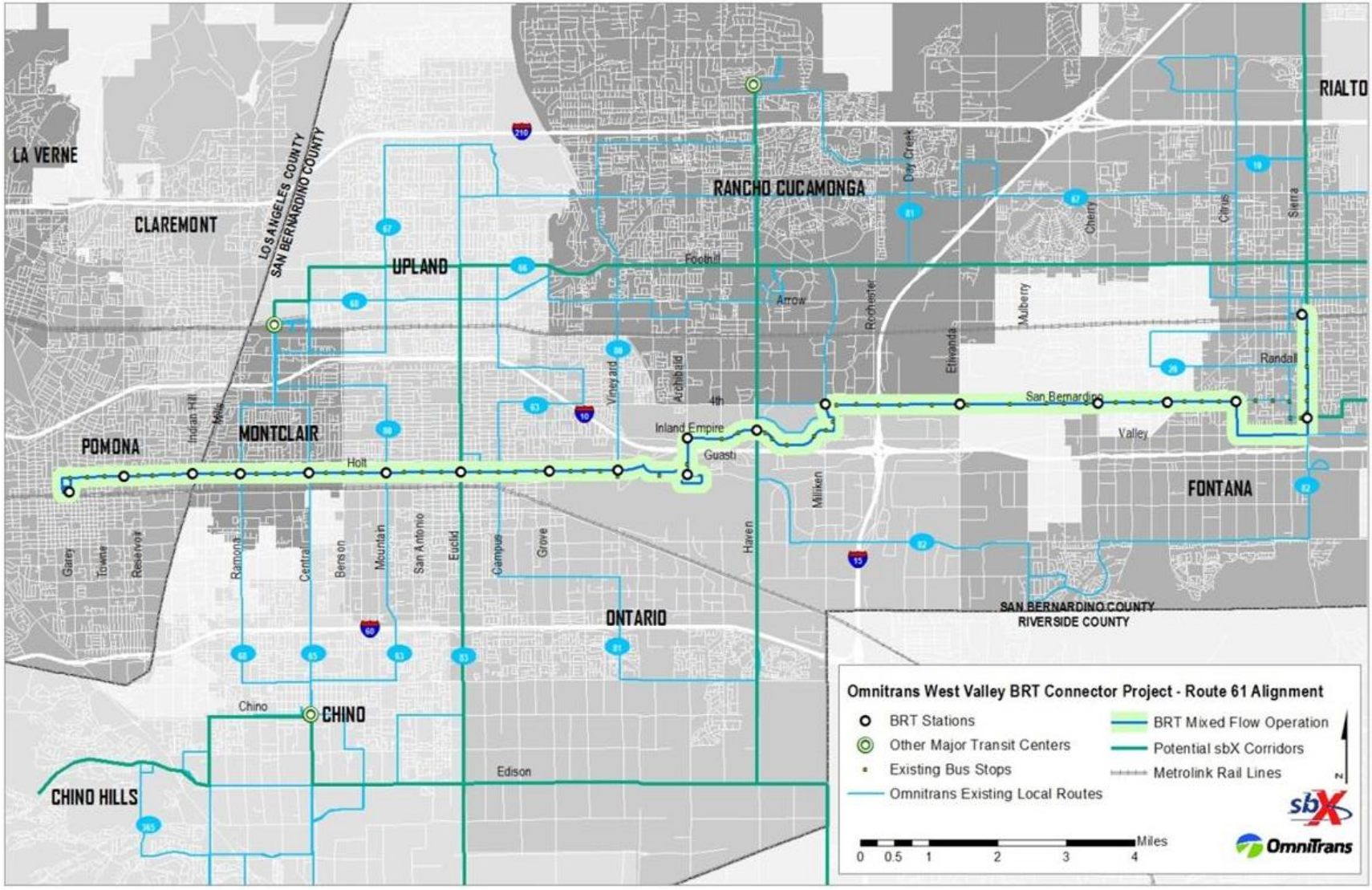

Figure 1-2 Omnitrans Route 61

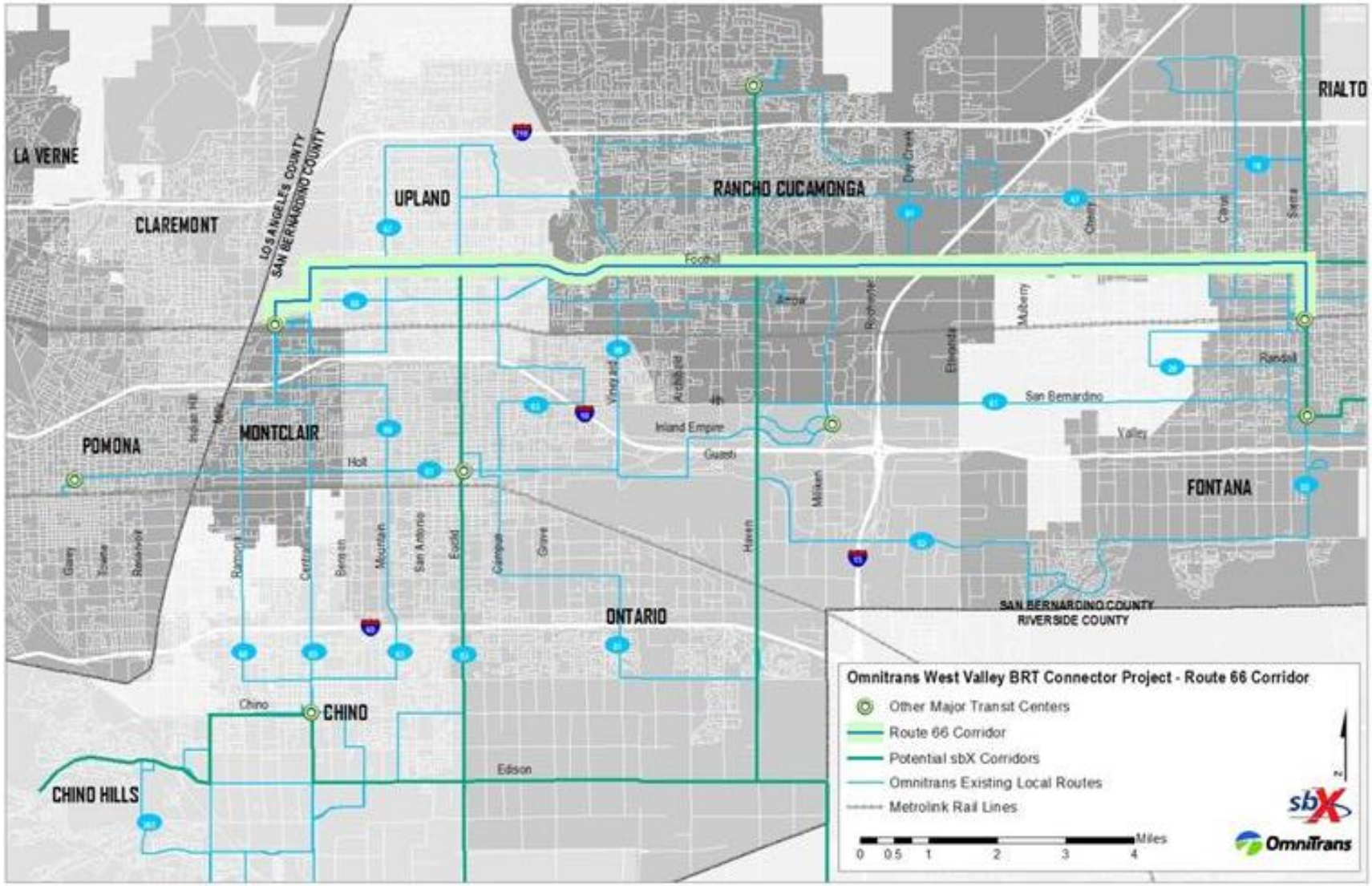

Figure 1-3 Route 66 serving Foothill Boulevard in the West Valley

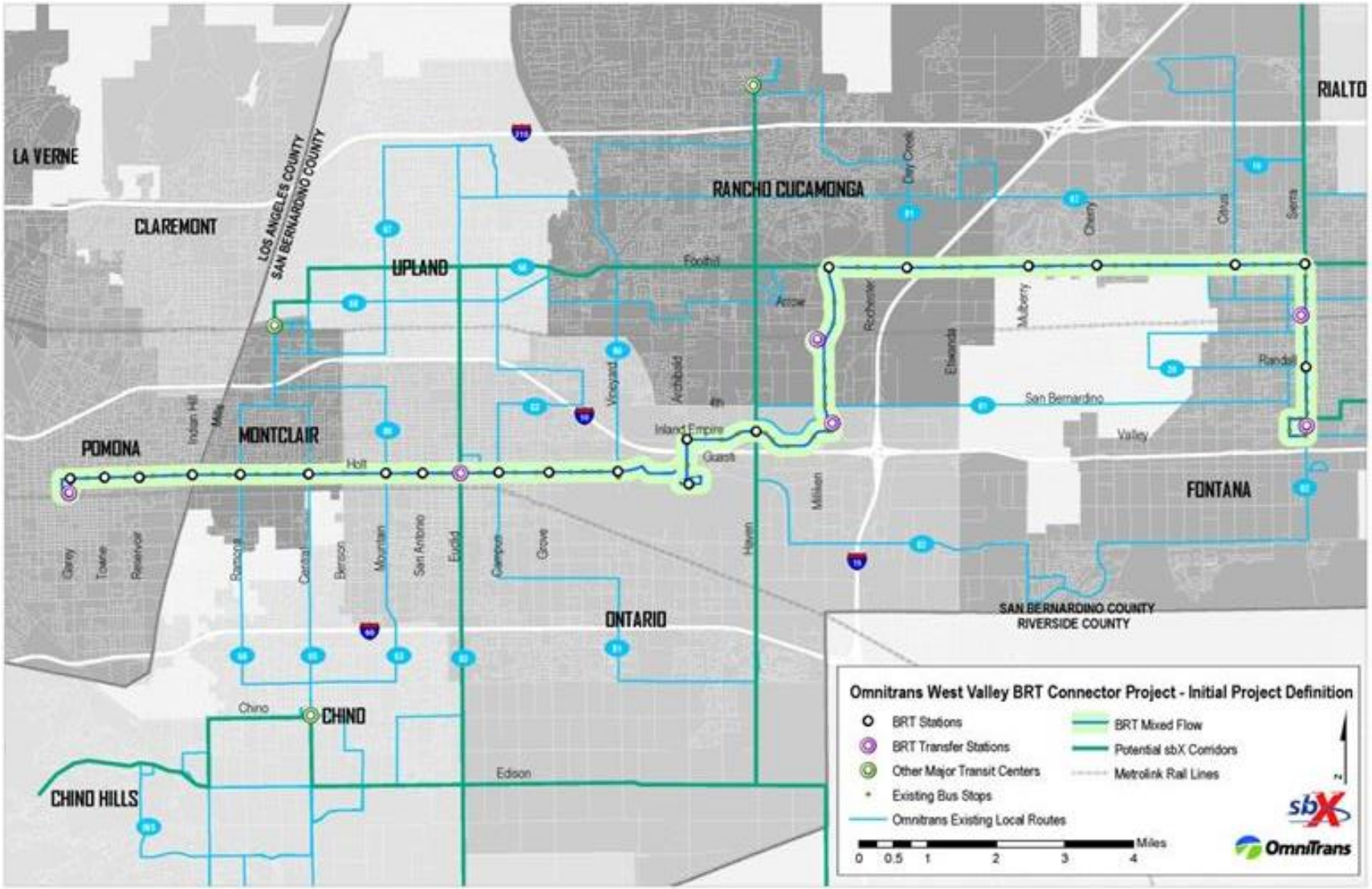

Figure 1-4 West Valley Connector Alignment

portions of Route 61 and a portion of Route 66 on Foothill Boulevard. This hybrid alignment is referred to as the WVC corridor, as shown in Figure 1-4.

The final WVC AA was approved by the Omnitrans Board of Directors in April 2015.

1.2 Transportation Decision Making

It is noteworthy that when Omnitrans began development of the proposed WVC Project, it was originally envisioned that the proposed project would be implemented as a rapid or express service. Omnitrans was initially taking the California Environmental Quality Act (CEQA) lead agency. Since the proposed project transitioned to a large BRT capital project, SBCTA staff recommended and the Board eventually approved that the proposed project be transferred to SBCTA for implementation. Omnitrans remains a strong project partner with a focus on providing the necessary input for service implementation.

This Draft Environmental Impact Report (EIR) and Environmental Assessment (EA) was prepared by SBCTA in cooperation with FTA to evaluate the significant or potentially significant environmental impacts associated with implementation of the proposed project and address appropriate and feasible mitigation measures and alternatives to the proposed project that would reduce or eliminate those impacts. The proposed project is subject to State and federal environmental review requirements because it involves the use of federal funds administered by FTA; therefore, the project joint documentation has been prepared in compliance with CEQA and the National Environmental Policy Act (NEPA). SBCTA is the lead agency under CEQA, and FTA is the lead agency under NEPA.

Several planning initiatives concerning corridor transit issues preceded preparation of this draft environmental document. FTA uses the term planning and environment linkage (PEL) to refer to the process of encouraging transportation decision makers to use and rely on earlier analyses, studies, decisions, or other information developed during the transportation planning horizon. These become the foundation for the project development and environmental review phase of transportation projects. The federal transportation planning regulations published in the *Federal Register* Vol. 81, No. 103 (May 27, 2016) recognize the statutory authority for coordinating the planning and environmental products and allows studies less than 5 years old to bridge the two phases. Problems and solutions primarily identified in the transportation planning phase, such as the alternatives analysis discussed in detail in Chapter 2, and in consideration of environmental, community, and economic goals and objectives, may be carried forward into project development and the NEPA phase as part of the project's evolution. Integrating the planning and environmental processes helps create more unified, effective, and publicly

supported transportation decisions and aims to reduce the duplication of studies and the need to continually revisit decisions that were already adhering to the principles of NEPA, thereby lowering costs and shortening critical timelines for delivering the project to the public. Similarly, CEQA allows incorporation by reference for all or portions of another document that is a matter of public record or is generally available to the public (14 *California Code of Regulations* [CCR] § 15150). A graphic illustration of the PEL is shown in Figure 1-5.

Though the regulatory processes of CEQA and NEPA encourage preparation of joint state-federal environmental documents such as this combined Draft EIR/EA, an important distinction exists between the two laws in how significance is determined. Some impacts determined to be significant under CEQA as part of an EIR may not be deemed significant under NEPA as part of the EA. NEPA is concerned with the potential significance of the project based on context and intensity, whereas CEQA requires the lead agency to identify each potential significant impact on a resource resulting from a project and present ways to mitigate each significant impact in an EIR. The EA has been developed to meet the requirements of NEPA. It also recommends mitigation measures for any identified adverse impacts. Preparation of an EA is required for all actions in which the overall significance of the environmental impact is not clearly established. An EA will result either in a Finding of No Significant Impact (FONSI) requiring no further environmental evaluation or in identification of potentially significant impacts requiring preparation of an Environmental Impact Statement (EIS).

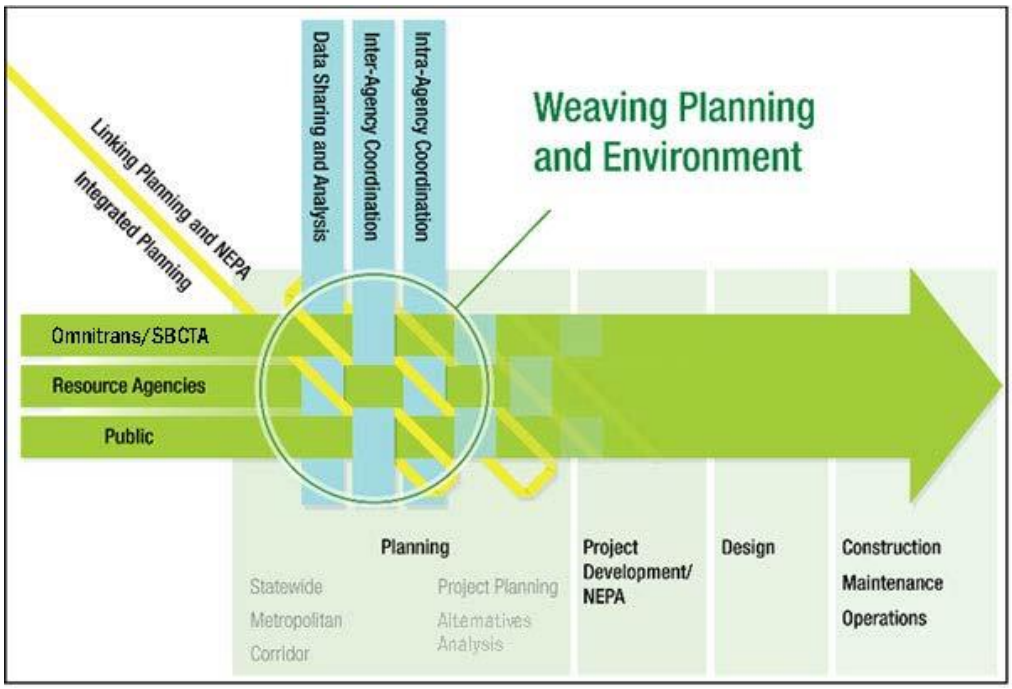

Figure 1-5 FTA Planning and Environmental Linkage Process

This joint EIR/EA will be circulated as a Draft EIR/EA to the public and agencies for review and comment for a period of 45 days. During this period, comments from the public, organizations, and governmental agencies, including Tribal governments, regarding environmental issues in the EIR/EA and on the accuracy and completeness of the EIR/EA may be submitted to SBCTA or FTA. After receiving comments from the public and reviewing agencies, a Final EIR/EA will be prepared. The sponsoring agency, SBCTA, may prepare additional environmental and/or engineering studies to address comments. The Final EIR/EA will include responses to comments received on the Draft EIR/EA during the formal public review period, and it will identify the Preferred Alternative. After the Final EIR/EA is circulated, if the SBCTA Board decides to approve the project, a Notice of Determination will be published for compliance with CEQA. If impacts cannot be mitigated below a level of significance, SBCTA will also prepare a Statement of Overriding Considerations. FTA has prepared this EA in conjunction with SBCTA and may use proposed mitigation measures to issue a mitigated FONSI. If, at any point in the EA process, FTA determines that the project is likely to be a Federal action that significantly impacts the environment, the EA would be terminated and a Notice of Intent for preparation of an environmental impact statement (EIS) issued.

1.3 Purpose of the Proposed Project

The purpose of the proposed project is to improve corridor mobility and transit efficiency in the western San Bernardino Valley from the City of Pomona, in Los Angeles County, to the City of Fontana, in San Bernardino County, with an enhanced, state-of-the-art BRT system (i.e., the system that includes off-board fare vending, all-door boarding, TSP, optimized operating plans, and stations that consist of a branded shelter/canopy, security cameras, benches, lighting, and variable message signs). The proposed project would address the growing traffic congestion and travel demands of the nearly one million people that would be added to Los Angeles and San Bernardino counties by 2040 per SCAG 2016 RTP/SCS growth forecast. Improved rapid transit along the project corridor would help Omnitrans/SBCTA achieve its long-range goals to cost effectively enhance lifeline mobility and accessibility, improve transit operations, increase ridership, support economic growth and redevelopment, conserve nonrenewable resources, and improve corridor safety.

Recognizing the importance of the WVC transit corridor, SBCTA proposes a project that is designed to achieve the following:

- **Improve transit service by better accommodating existing high bus ridership.** The proposed project would improve transit service for current riders, including individuals living below the poverty level and transit-

dependent populations, with higher frequency, reduced travel times, and more reliable service, along with improved security, cleanliness, and comfort.

- **Provide branded rapid transit service.** Creating a system that conveys uniqueness, high-quality service, and a strong sense of permanency would help establish an identity for the entire project corridor. This new mode of service can then translate into multiple benefits, including fostering transit-oriented redevelopment and revitalization, encouraging mode shift from automobiles to transit, and promoting "smart growth" in the San Bernardino Valley.
- **Improve transit in high ridership areas**. According to the WVC AA, the project corridor accommodates a large travel market, approximately 9,600 daily riders (2014). The proposed project corridor, because of its high potential demand, is used by 3 of Omnitrans' 10 most heavily used bus routes; the corridor contains some of the highest employment and residential densities in the San Bernardino Valley. The proposed project would provide the high transit ridership in the area an alternative that is more competitive with the automobile and increases transit travel speed.
- **Improve mobility of transit-dependent populations.** Omnitrans' 2010 *System-wide Transit Corridors Plan for the San Bernardino Valley* provides demographic information by corridor. The proportions of individuals and families living below the poverty level within the project study area are approximately 20 and 17 percent, respectively, which is higher than the proportion of individuals and families living below the poverty level in Los Angeles and San Bernardino counties, and the cities of Montclair, Ontario, Rancho Cucamonga, and Fontana. Approximately 6 percent of households in the project corridor have no automobile. A high proportion of individuals living below the poverty level and low auto ownership are strong indicators of transit dependency. Transit investment in the project corridor would contribute to improved mobility and better access to jobs for transit-dependent persons.
- **Improve ridership by providing a viable and competitive transit alternative to the automobile.** The proposed project would attract new riders by offering improved transit service and facilities, and transit travel times more competitive with auto travel than existing bus service.
- **Reduce auto use and congestion.** According to the WVC AA, the proposed project is forecast to substantially increase transit use in the study corridor. Shifting from non-transit to transit mode would potentially reduce, or at least slow down, the growth of auto traffic in an increasingly congested area. This would improve the efficiency of the local roadway network and reduce the

need for parking. Shifting from automobile travel to transit travel would potentially result in reduced air emissions and safer driving conditions, plus energy savings. These changes would improve the livability of the local communities.

- **Improve the speed and reliability of bus transit.** Although the current Omnitrans routes within the project corridor have been planned and refined to work well together, frequent stops and slow, sometimes uneven, operations in congested conditions increase the likelihood of missed connections or protracted waiting times. Decreasing travel time and reducing the number of stops by means of the proposed project would create a stronger sense of reliability.
- **Improve efficiency of transit service delivery while lowering Omnitrans' operating costs per rider.** The proposed project would improve fleet speed and service efficiency by reducing delays from running in mixed-flow traffic and during slow boarding and descending of passengers. The investment in exclusive bus-only lanes, stations, and multi-door boarding means that the improvement in travel time and reliability would continue to provide a high-quality transit alternative with less service degradation due to increased traffic congestion and increased ridership boardings compared to a typical local mixed-flow service.
- **Better serve major travel markets.** The proposed project would improve access to important employment, educational, retail, commercial, and entertainment centers. These include Ontario Convention Center, Ontario Mills, Victoria Gardens, Chaffey College Fontana Campus, and Kaiser Permanente Medical Center. Investment in high-quality transit vehicles and attractive stations would help transit capture a larger share of this market.
- **Support local and regional planning goals to organize development along transit corridors and around transit stations.** Providing BRT infrastructure using dedicated transit lanes, branded service, and highly visible transit stations offers a strong sense of permanence that can help all five cities attract investment in transit-oriented development (TOD) and reinforce local planning objectives. Building on strong existing transit-supportive use patterns, the proposed project would provide nodes for concentrations of jobs, services, and residences and a high level of access for individuals traveling to and from these locations. TOD concepts can be targeted to specific areas that have the best potential to transform the surrounding land-use patterns that reinforce the use of transit.

1.4 Need

The project purpose stated above would respond to the following needs.

1.4.1 Current and Future Population and Employment

Current and future population and employment conditions within the proposed project corridor establish a need for higher-quality transit service and provide the market to ensure the success of that service. Specific conditions are described in the following subsections.

Current and Future Population and Employment Statistics

The proposed project corridor primarily serves densely populated neighborhoods within the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. According to the U.S. Census (2014 American Community Survey), the total population in all five cities that the project traverses is 727,244 people. More than one-third (approximately 36 percent) of the total population of these five cities resides within the project corridor study area.

The proposed project corridor is located within Los Angeles County and San Bernardino County. According to statistics from SCAG's 2016 RTP/SCS, growth forecasts of employment within Los Angeles County and San Bernardino County are projected to be high. SCAG data project an increase in population for Los Angeles County from approximately 10,326,200 in 2020 to approximately 11,514,800 in 2040. For San Bernardino County, SCAG data project an increase in employment from approximately 2,197,400 in 2020 to 2,731,300 in 2040. These are a 12 and 24 percent increase in projected employment over that time for Los Angeles County and San Bernardino County, respectively. Of these, the population increases in the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana from 2020 to 2040 are estimated at 18, 13, 31, 17, and 37 percent, respectively (please refer to Table 4.11-1 in Chapter 4 for the population and employment forecast data).

Impacts and benefits of transportation projects result from the physical placement of transportation-related infrastructure and facilities, and from their ability to improve or impede access to neighborhoods. Based on the FTA Circular 4703.1, *Environmental Justice Policy Guidance for Federal Transit Administration Recipients* (Circular), a high percentage of transit patrons are minority, low-income, and/or transit-dependent (see Section 4.11, Demographics and Neighborhoods, for more information related to environmental justice). U.S. Census statistics show approximately 17 percent of families and 20 percent of individuals within the project study area live below the poverty line, and approximately 6 percent of households have no automobile.

These statistics indicate a strong demand for transit that needs to be accommodated. By providing high-quality, reliable, comfortable, and secure BRT service, the proposed project would increase ridership by increasing access to corridor jobs, education, and service markets.

Major Employers and Trip Generators

During the past several decades, the SCAG region, including Orange, Imperial, Riverside, San Bernardino, Los Angeles, and Ventura counties, has been one of the fastest-growing regions in the nation. As mentioned in the previous subsection, population growth from 2020 to 2040 within the five cities covering the proposed project corridor is estimated to range from the low of 13 percent in Montclair to the high of 37 percent in Fontana. The employment growth within these five cities for the same period is estimated to range from the low of 9 percent in Montclair to the high of 36 percent in Ontario (refer to Table 4.11-1 in Chapter 4 for the population and employment forecast data). As discussed in SCAG's 2016-2040 RTP/SCS, SCAG's vision for growth in the region involves close integration between transportation and land use planning to avoid the haphazard distribution of projects that leads to isolated communities without easy access to public transportation and other key destinations. SCAG's vision of integrated transportation and land use hopes to guide growth in a sustainable manner that simultaneously enhances mobility and quality of life.

The proposed project corridor has a strong market for transit. It currently generates the highest transit ridership in Omnitrans' service area. Route 61 and Route 66 are two of Omnitrans' highest total ridership routes, together accounting for 20 percent of Omnitrans' total system-wide daily ridership. The combined ridership for Route 61 and Route 66 in 2015 was approximately 8,200 daily, with a projected ridership of 8,600 in 2020 and 10,500 in 2040.

In addition, the corridor is home to several important employment, educational, and activity centers, such as Kaiser Permanente Medical Center, Victoria Gardens, Ontario Mills, Ontario International Airport, and three Metrolink stations, where public transit demand by workers, shoppers, students, visitors, and others is concentrated. The proposed project corridor also includes Victoria Gardens as a potential destination to be connected to Ontario Mills, Ontario International Airport, and Kaiser Permanente Medical Center, and it provides new direct connections between three Metrolink stations.

1.4.2 Current and Future Transportation Conditions

A traffic operations analysis was conducted as part of the 2014 WVC AA project. That traffic study analyzed the 2014 traffic condition as the existing condition and 2035 as the future condition. Additional traffic operations analysis was conducted in support of this EIR/EA preparation (*Traffic Operations Analysis Report, 2017)*. The study analyzes existing traffic conditions (2016) compared with the opening year (2020) and horizon year (2040) for the No Build Alternative and Build Alternatives. It is noteworthy that at the time the traffic analysis in support of the EIR/EA was

conducted, the opening year was expected to be in 2020. The project development experienced some delay, and the current opening year is estimated to be 2022 for Phase I/Milliken, followed by construction of Phase II/Haven Avenue when funding is available. Because no significant change in traffic analysis results is anticipated between the year 2020 and 2022, the traffic operations analysis for opening year 2020 is used as the basis of environmental analysis for this EIR/EA. In addition, the analysis in this EIR/EA was performed based on the assumption that Phase I and Phase II alignments would both be in place by the opening year 2020 and horizon year 2040.

More detailed information on traffic operations analysis can be found in Chapter 3 of this EIR/EA.

Existing Traffic Conditions

Traffic operating conditions along the proposed WVC corridor were evaluated at 129 intersections in the *Traffic Operations Analysis Report (2017),* as shown in Figure 3-2 of Chapter 3.

Traffic operations at intersections – or the quality of traffic flows through intersections – is typically described by Level of Service (LOS). LOS is defined in terms of ranges in average delay experienced by the motorist. The greater the average delay, the worse the LOS. The jurisdictions within the study area consider LOS D as the minimum acceptable LOS to be used for all intersections. A significant impact is considered to occur if an intersection that is forecast to operate at LOS D or better in no-build conditions exceeds LOS D under the build alternatives. In addition, a significant impact is considered to occur if the proposed project results in any increase in delay at an intersection forecast to operate at LOS E or F in no-build conditions. The jurisdictions do not have specific significant impact criteria for unsignalized intersections.

Based on existing condition traffic counts, most intersections are currently operating at LOS D or better during peak hours (see Table 3-1 in Chapter 3). The following five intersections are currently operating at LOS E or worse:

- San Antonio Avenue/State Street
- Campus Avenue/State Street
- Grove Avenue/State Street
- Vineyard/Holt Boulevard
- Day Creek Boulevard/Foothill Boulevard

Forecasted Future Traffic Conditions

Traffic forecast was performed for the years 2020 and 2040 under the no-build condition. The results show that by the year 2020, two additional intersections beyond those identified under existing condition are anticipated to further deteriorate and operate at LOS E or worse:

- Sierra Avenue/Foothill Boulevard
- Sierra Avenue/Valley Boulevard

By future year 2040, an additional 19 intersections beyond those identified

under existing condition are anticipated to further deteriorate and operate at LOS E or worse due to projected growth in the area:

- Garey Avenue/Holt Boulevard
- Towne Avenue/Holt Boulevard
- East End Avenue/Holt Boulevard
- Mountain Avenue/Mission Boulevard
- San Antonio Avenue/Holt Boulevard
- Vine Avenue/Holt Boulevard
- Vine Avenue/State Street
- Euclid Avenue/Holt Boulevard
- Campus Avenue/D Street
- Bon View Avenue/State Street
- Grove Avenue/Holt Boulevard
- Vineyard Avenue/Holt Boulevard
- Rochester Avenue/Foothill Boulevard
- Citrus Avenue/Foothill Boulevard
- Sierra Avenue/San Bernardino Avenue
- Sierra Avenue/Marygold Avenue
- Juniper Avenue/Valley Boulevard
- Haven Avenue/Arrow Route
- Haven Avenue/Foothill Boulevard

Because local bus service must compete for space in mixed-flow traffic, it cannot offer a high level of mobility for the many people in the corridor who are dependent on transit for their travel, and it cannot attract more automobile users from getting out of cars and onto buses. Local buses travel in mixed-flow travel lanes with other traffic and stop every few blocks, resulting in slow vehicle travel times. Heavy traffic conditions can also create unreliable and wide variations in travel times for local bus systems.

The WVC corridor is primarily served by Omnitrans Routes 61 and 66. Route 61 operates from 4:20 a.m. to 11:08 p.m., Monday through Friday, with 15-minute headways from 5:45 a.m. to 6:00 p.m., and 30-minute headways before and after. Saturday service is from 5:55 a.m. to 10:04 p.m., and Sunday service is from 6:05 a.m. to 7:49 p.m. but is offered on 15-minute headways throughout both days. Route 66 operates eastbound from 5:06 a.m. to 9:15 p.m. and westbound from 4:19 a.m. to 10:25 p.m., Monday through Friday, with 15-minute headways from 6:24 a.m. to 6:24 p.m., and 30-minute headways before and after. Saturday and Sunday service begins 1 hour later and ends 1.5 hours earlier than weekday service, and it is offered on 30-minute headways throughout both days.

Typical weekday peak-hour travel time on Route 61 is currently 1 hour and 35 minutes eastbound and 1 hour and 30 minutes westbound, for average bus travel speeds of 12.9 and 13.6 miles per hour (mph), respectively. Route 66 typical peak-hour travel time is 1 hour and 12 minutes eastbound and 1 hour westbound. Based on the test drive-through, using a private automobile would result in significant time savings. These deficiencies would be addressed by an improved transit system.

Current and Future Travel Demand

The existing corridor conditions provide an ideal opportunity for successful implementation of a BRT project. The

corridor traverses through some of the most heavily populated areas of San Bernardino Valley. Each day, thousands of commuters use the existing bus system to reach key destinations throughout the corridor.

Increased transit and non-transit travel demand is expected to accompany the projected growth in population and employment in the area. An analysis of existing conditions and projected trip-making patterns, or travel demand, was conducted to determine the major travel patterns and markets for trips with origins/ destinations in the study area.

Improved transit service would provide travelers with an alternative to driving in increasingly congested conditions. Investing in public transit facilities and equipment would help transit capture a larger share of the travel market, thereby reducing reliance on single-occupancy vehicles, improving the efficiency of the local roadway network, reducing the need for roadway expansion, and improving air quality.

1.4.3 Transit-Related Opportunities

A wide variety of land uses exists along the corridor, including low- and medium-density residential, retail and office commercial, institutional, and public uses, as well as key regional destinations. This mixture is highly conducive to transit activity between various destinations along the corridor. Local land use plans and policies along the project corridor are supportive of developing in a way that integrates transit and other multimodal transportation opportunities into the fabric of planned development.

In addition to connecting people with places, the corridor provides a vital link to other transit modes. These include multiple other Omnitrans bus routes, Metrolink commuter rail, and bus routes of other transit providers. The proposed project would provide intermodal transfers to Metrolink stops (at downtown Pomona, Rancho Cucamonga, and Fontana) and Ontario International Airport, as well as other key regional destinations along the corridor; thus, improving the overall effectiveness of the regional public transportation system.

Experience in other parts of southern California and the country has shown that concentrating development near transit, often called TOD or Transit Villages, is an effective way to shift more trips from automobiles to transit, improve air quality, and provide healthy living. TODs can serve as a catalyst for economic development and community improvements, which focus on the new access provided by the transit service.

FTA recognizes the potential positive impacts of the establishment of transit-supportive land uses around transit facilities and evaluates projects based on their ability to generate ridership and economic development through land use changes.

The WVC corridor station areas have excellent potential for TOD in the 0.5-mile station areas around the proposed WVC

stations on Routes 61 and 66 due to the following:

- The WVC corridor has the highest ridership today along the existing bus routes and will connect stations at many major activity centers and downtowns in the western San Bernardino Valley.
- All cities along this corridor have General Plans and Specific Plans that include mixed-use development, with some of the highest densities and intensities in these cities planned in the proposed station areas.
- All cities along this corridor are actively pursuing funding for improvements to creating more walkable environments in these station areas.
- Vacant and underused land in the 0.5-mile walkable areas around stations could be developed for more transit-supportive uses in the station areas.
- Numerous studies and plans are underway and have been completed along the corridor to increase the potential for TOD, to develop implementation mechanisms, and to identify funding for TODs. For example, SBCTA and SCAG completed the *Improvement to Transit Access for Cyclists and Pedestrians* study (2012), which includes pedestrian improvements within 0.5 mile and bicycle improvements within 3 miles of the two Metrolink stations. Recently, SANBAG and SCAG completed the *ARRIVE Corridor Study* (2015), a study of TODs around the San Bernardino County Metrolink stations, which includes the Rancho Cucamonga and Fontana Metrolink stations and two key potential stops for the WVC corridor.

1.5 CEQA Goals and Objectives

In addition to the project purposes described in Section 1.3, the goals and objectives of the proposed project are to:

- Support city/community stakeholder goals and plans
- Respond to population, employment, and travel demand growth
- Implement SBCTA's Long Range Transit Plan for San Bernardino Valley
- Provide premium transit service
- Improve transit amenities and facilities to provide greater passenger comfort and safety.
- Increase transit travel speed and reduce travel time/delay
- Improve mobility and better serve multiple destinations
- Reduce vehicle miles of travel (VMT)
- Minimize negative impacts to traffic operations
- Improve pedestrian and bicycle access to transit
- Facilitate economic development and TOD opportunities

CHAPTER 2 –
ALTERNATIVES CONSIDERED/PROJECT DESCRIPTION

2.0 ALTERNATIVES CONSIDERED/ PROJECT DESCRIPTION

This chapter describes the proposed action and the proposed project alternatives developed to meet the purpose and need of the proposed project, while avoiding or minimizing environmental impacts. Two build alternatives (Alternative A and Alternative B) and a No Build Alternative are being analyzed in the EIR/EA.

2.1 Project Location and Setting

The proposed project is located primarily along Holt Avenue/Boulevard and Foothill Boulevard that would connect the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana in the counties of Los Angeles and San Bernardino, California. The project limits extend from Main Street in the City of Pomona on the west side to Sierra Avenue in the City of Fontana on the east side and Church Street in the City of Rancho Cucamonga on the north side to Ontario International Airport on the south side (see Figures 2-1 and 2-2). The proposed project area is primarily urban, and generalized land uses include low-, medium-, and medium-high-density residential, commercial, industrial, open space and recreation, transportation and utilities, agriculture, vacant, public facilities, airport, educational facilities, and offices.

2.2 Proposed Project

The proposed project is a 35-mile-long BRT corridor that traverses the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana and combines the highest ridership segments of two of Omnitrans' most heavily traveled corridors served by Route 61/Holt Boulevard and Route 66/Foothill Boulevard. The corridor serves a variety of residential, commercial, educational, and civic land uses. The proposed project consists of two phases (see Figure 2-3). Phase I would construct the "Milliken Alignment," from the Pomona Regional Transit Center (downtown Pomona Metrolink station) to Victoria Gardens in Rancho Cucamonga. Phase II would construct the "Haven Alignment," from Ontario International Airport to Kaiser Permanente Medical Center in Fontana. The Phase I Milliken Alignment would begin construction in 2019 and is proposed to have 10-minute peak and 15-minute off-peak headways. Phase II alignment is intended to be constructed immediately following completion of Phase I alignment, depending on the availability of funding.

Phase I/Milliken Alignment

Phase I of the project would construct the 19-mile Milliken Alignment, from the eastern boundary limit in Pomona to Victoria Gardens in Rancho Cucamonga. In Pomona, the alignment starts from the Pomona Regional Transit Center station, travels along Holt Avenue and into Montclair.

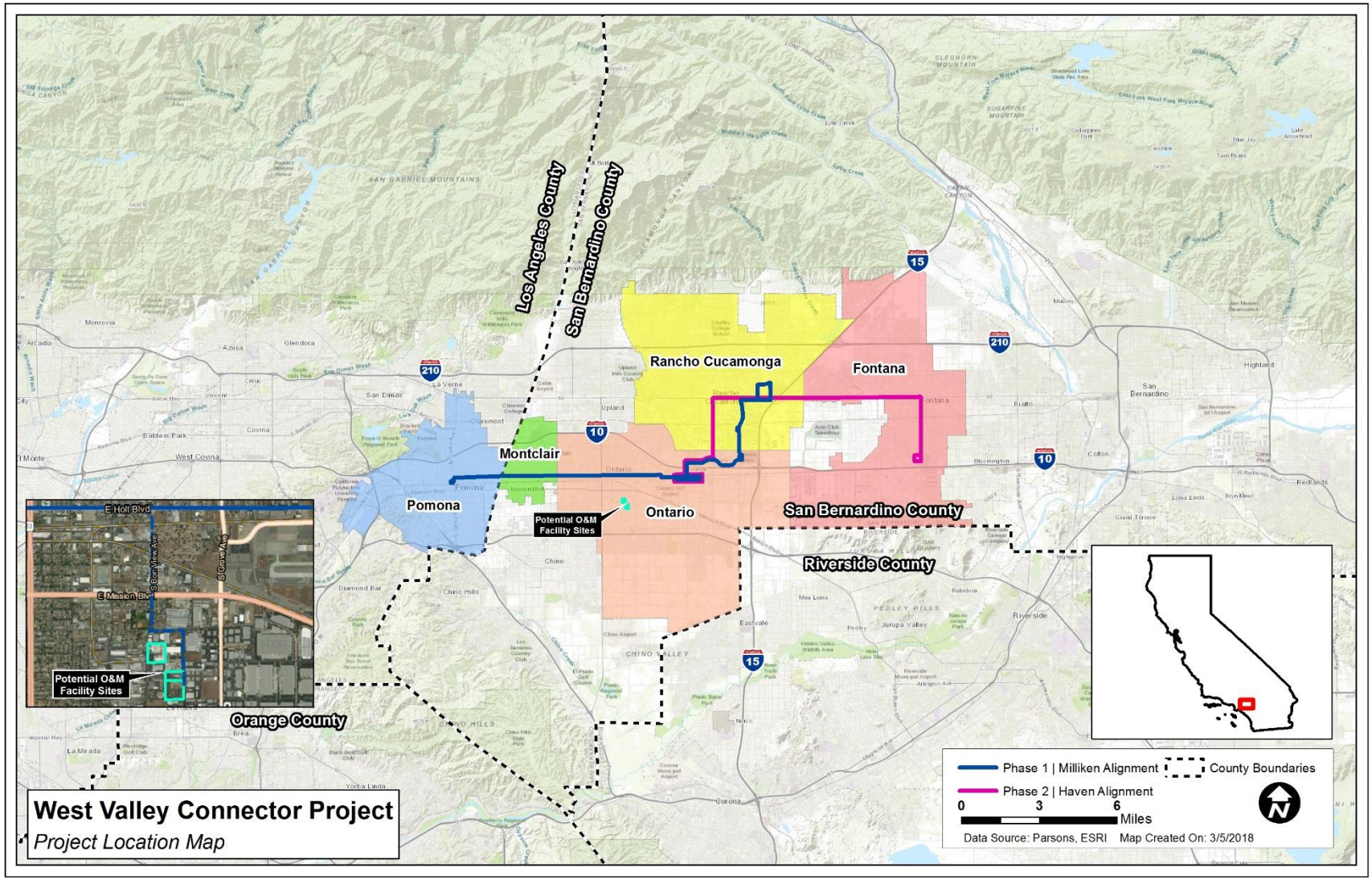

Figure 2-1 Project Location Map

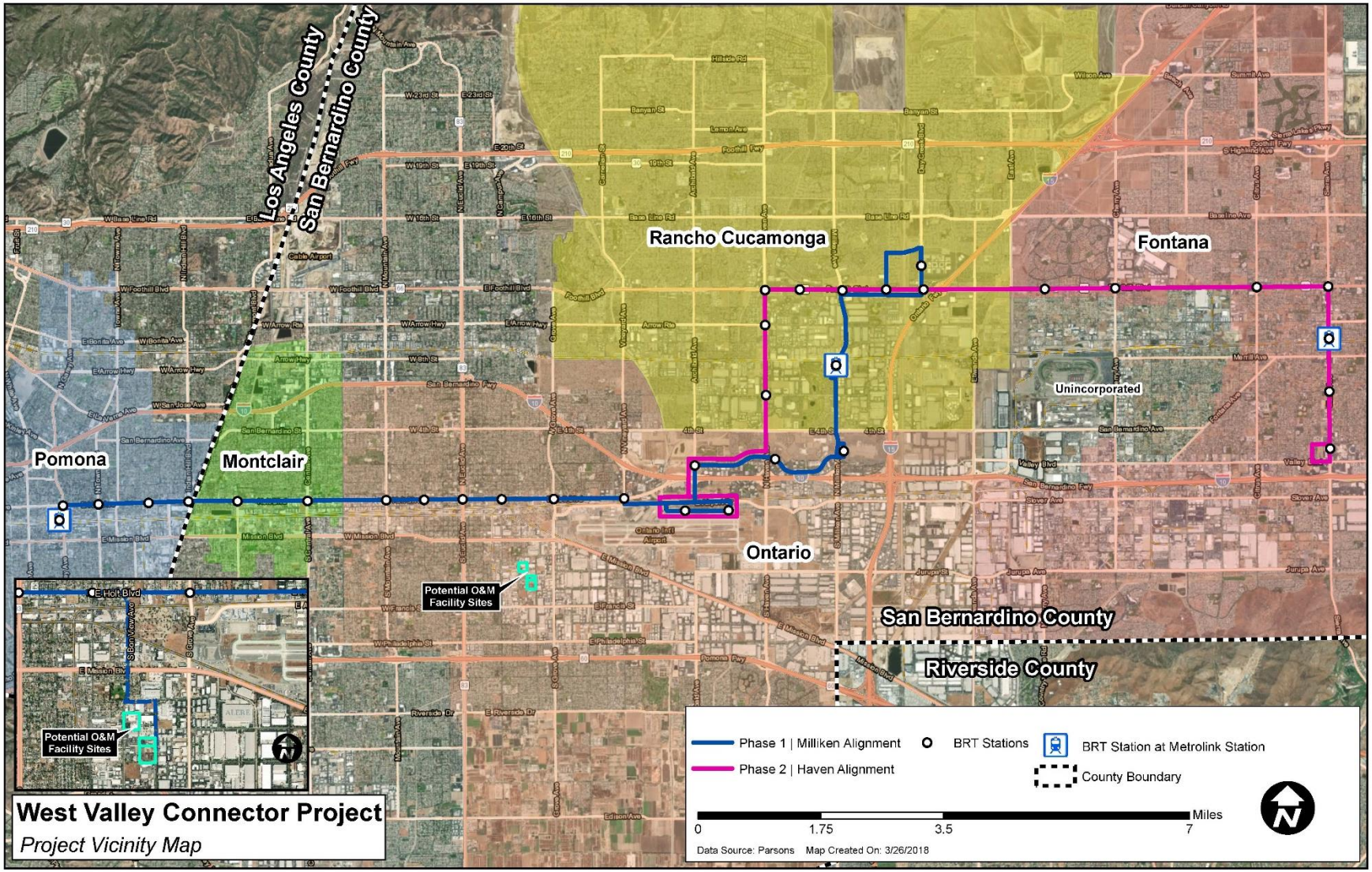

Figure 2-2 Project Vicinity Map

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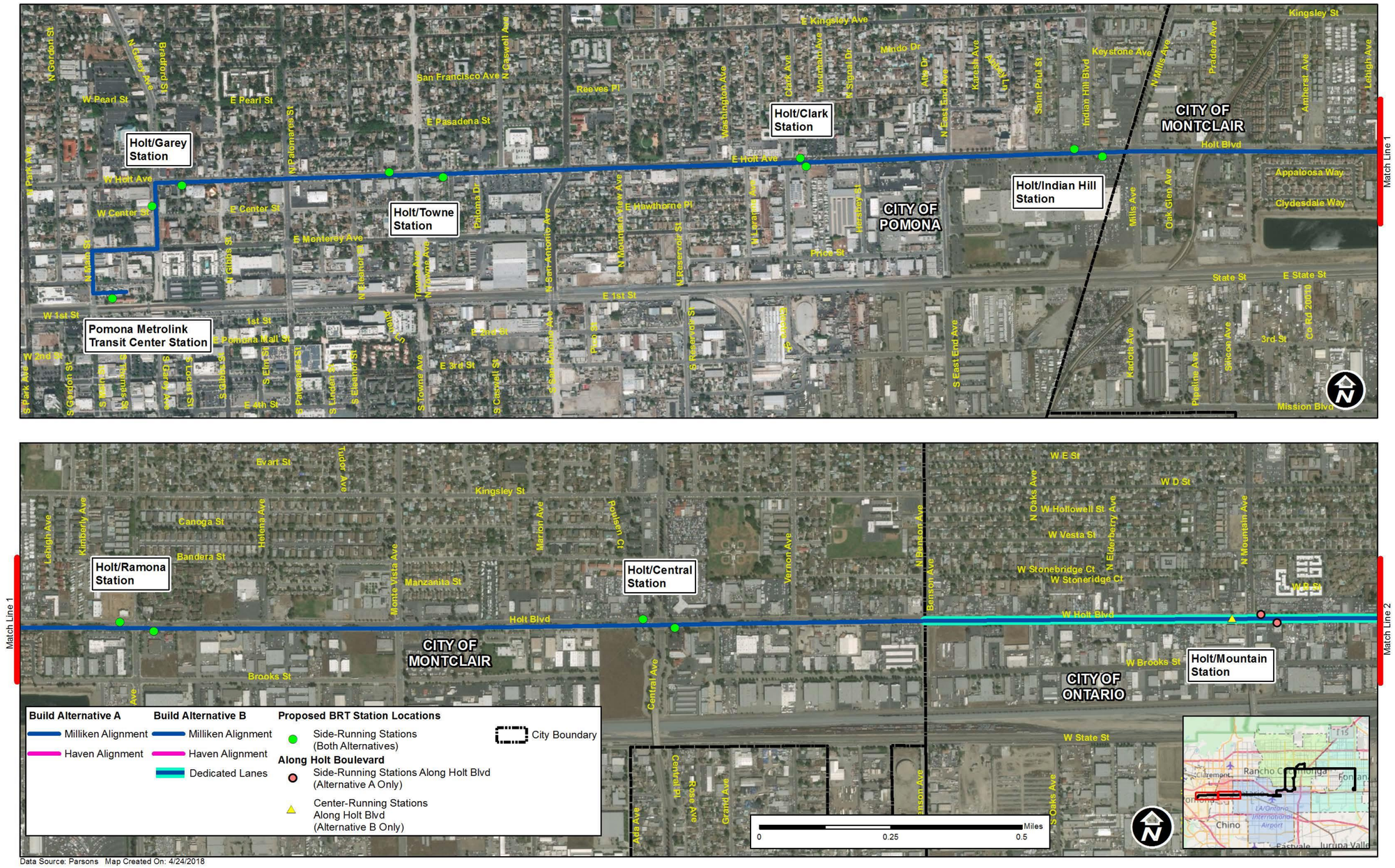

Figure 2-3 Route Alignment Map (Sheet 1 of 6)

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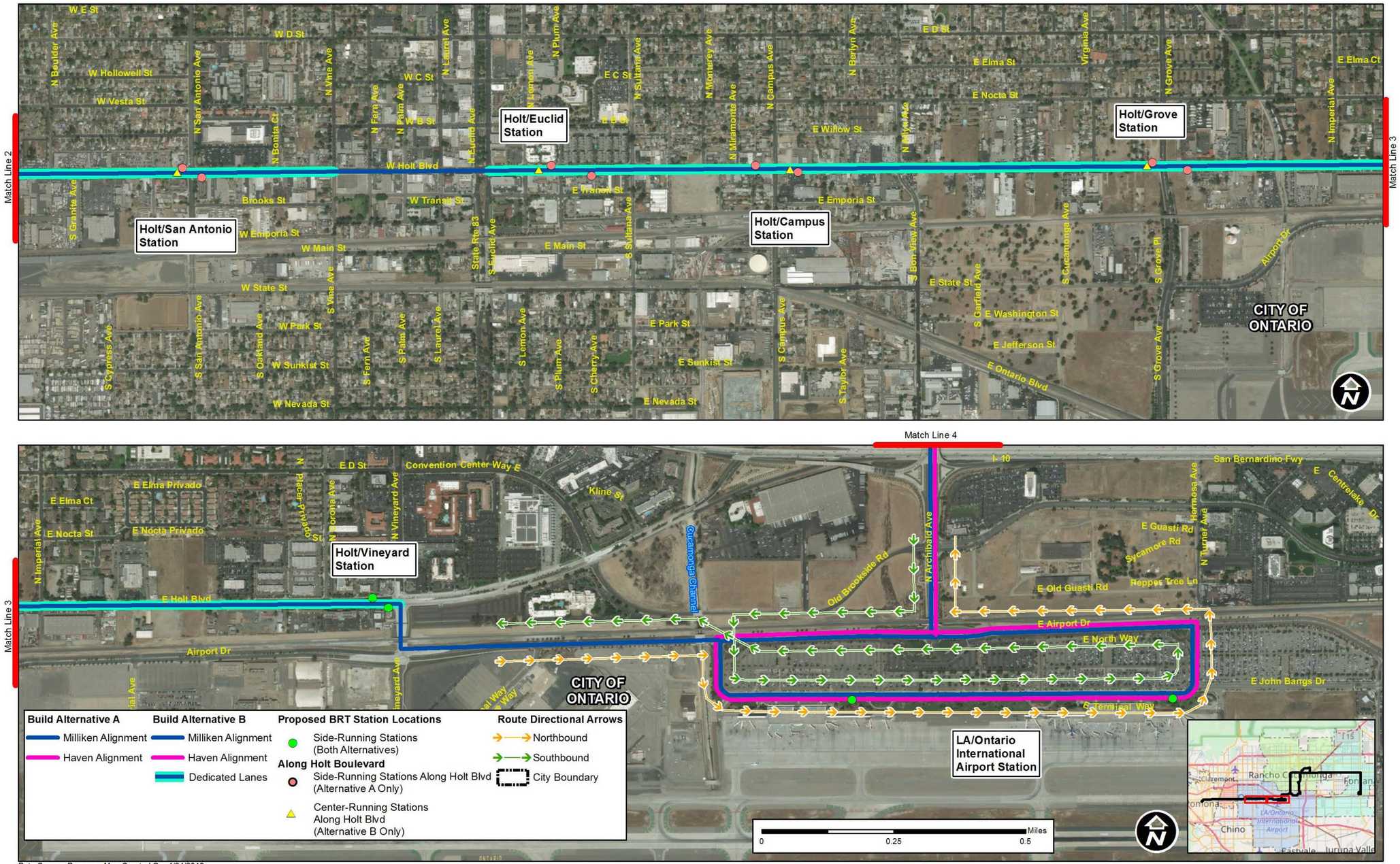

Data Source: Parsons Map Created On: 4/24/2018

Figure 2-3 Route Alignment Map (Sheet 2 of 6)

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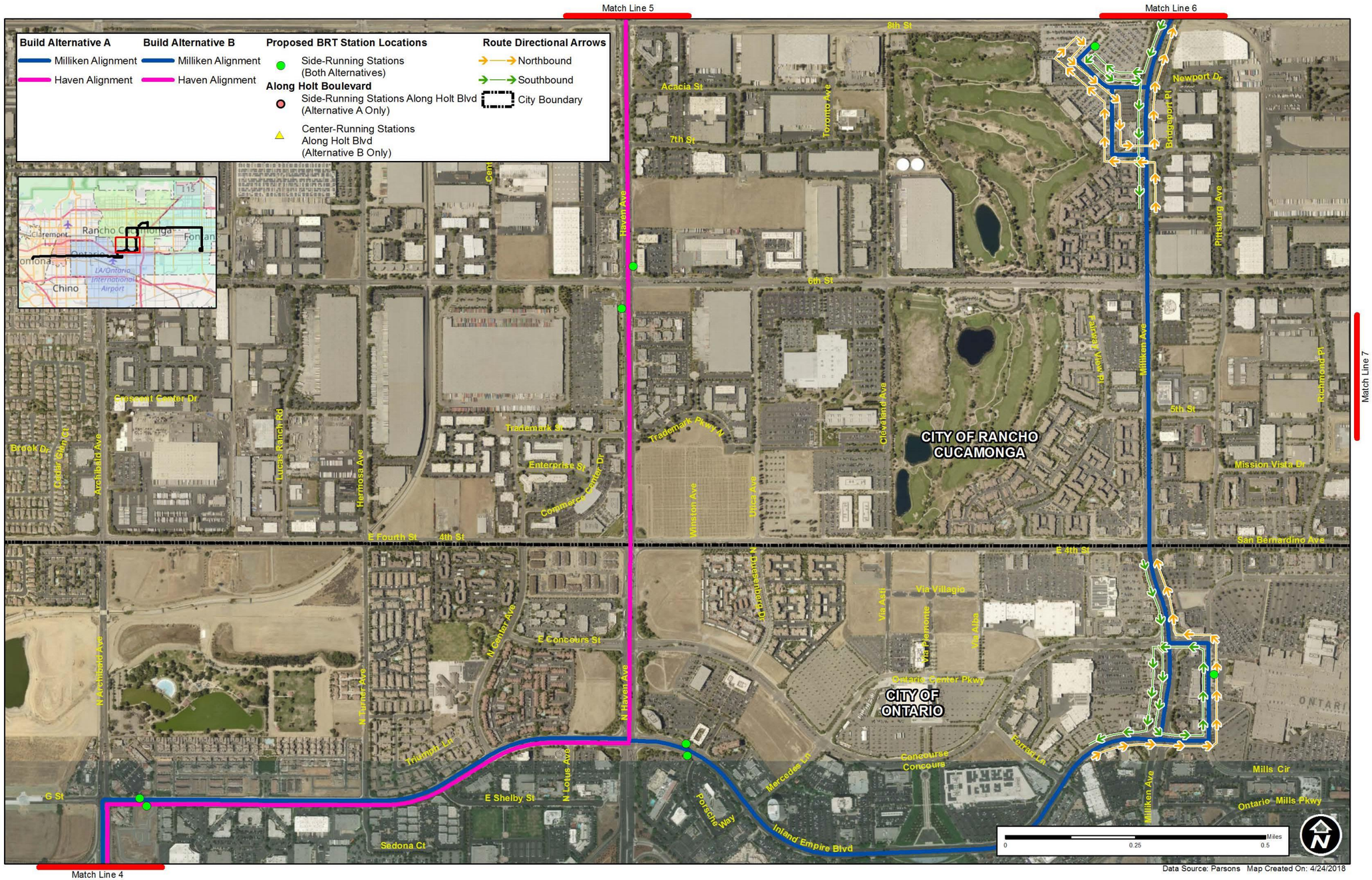

Figure 2-3 Route Alignment Map (Sheet 3 of 6)

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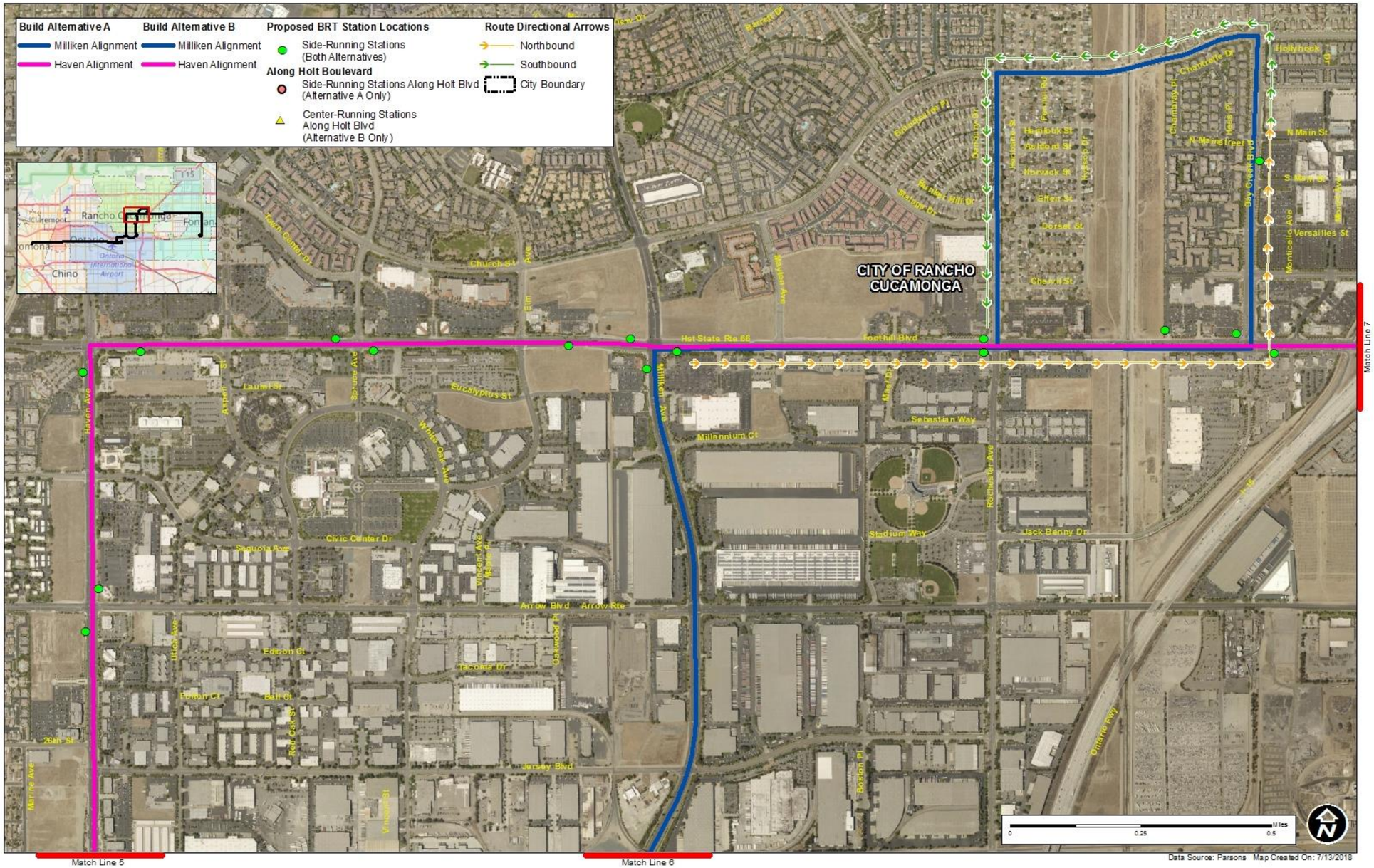

Figure 2-3 Route Alignment Map (Sheet 4 of 6)

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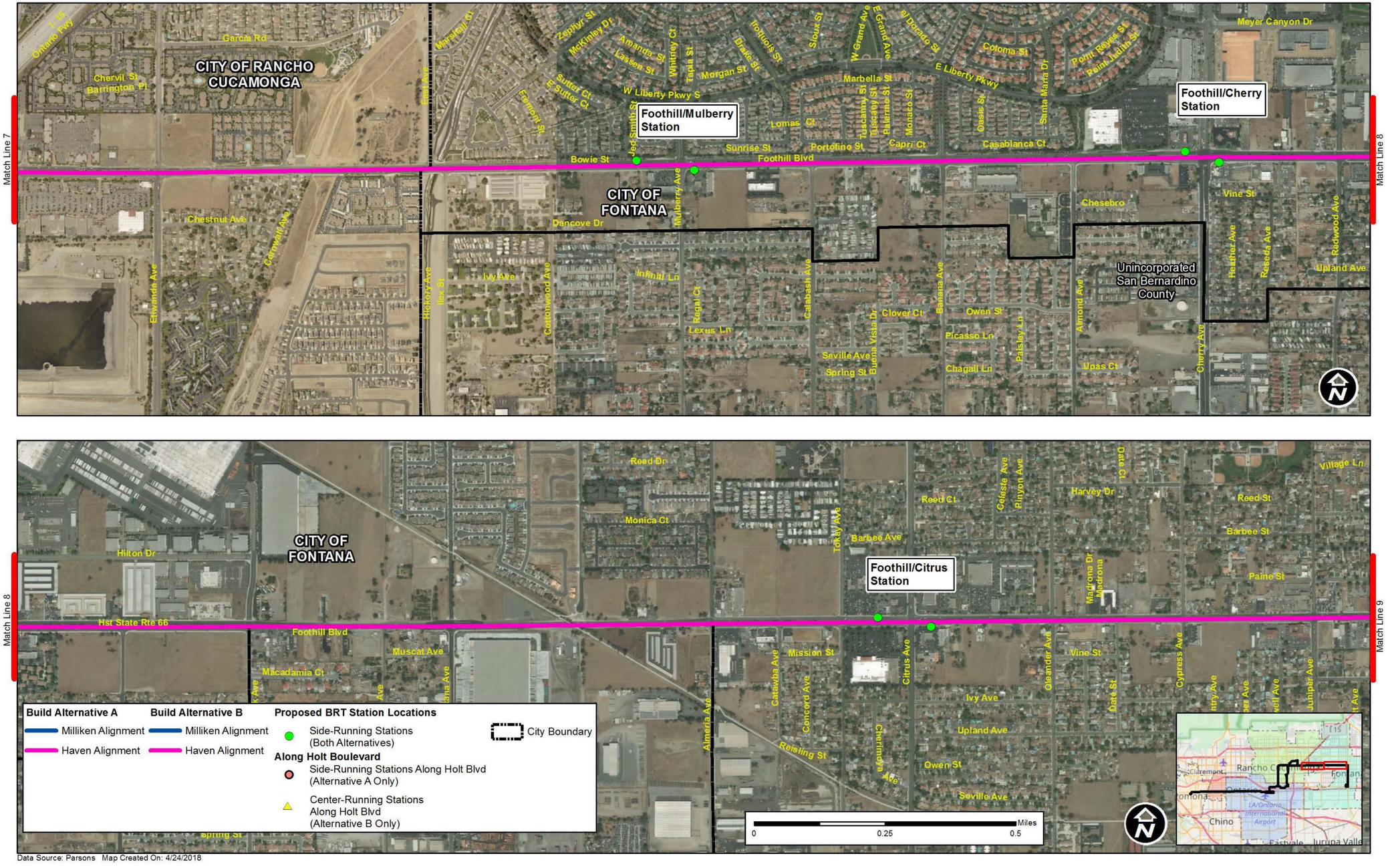

Data Source: Parsons Map Created On: 4/24/2018

Figure 2-3 Route Alignment Map (Sheet 5 of 6)

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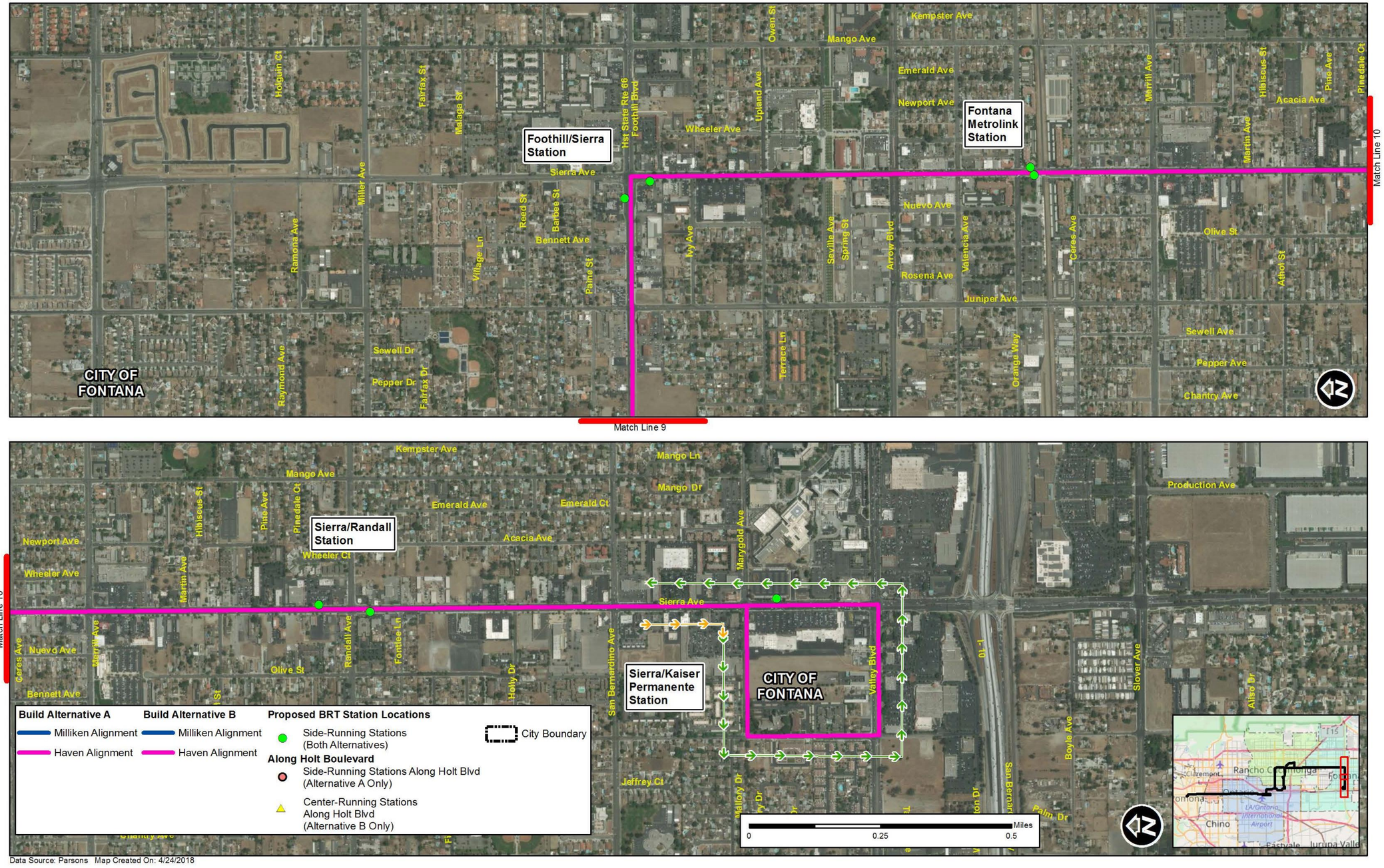

Figure 2-3 Route Alignment Map (Sheet 6 of 6)

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In Montclair, the alignment runs on Holt Boulevard between Mills Avenue and Benson Avenue and into Ontario.

In Ontario, the alignment continues on Holt Boulevard, starting from Benson Avenue, and then continues to Vineyard Avenue and into Ontario International Airport (loop through Terminal Way). From the airport, it heads north on Archibald Avenue to Inland Empire Boulevard and turns right to go east on Inland Empire Boulevard.

On Inland Empire Boulevard, the alignment goes straight into Ontario Mills (loop through Mills Circle), and then heads north on Milliken Avenue into Rancho Cucamonga.

In Rancho Cucamonga, the alignment makes a loop into the Rancho Cucamonga Metrolink Station off Milliken Avenue and then continues up Milliken Avenue and turns east onto Foothill Boulevard.

The alignment continues east on Foothill Boulevard, turns north onto Day Creek Boulevard, and then terminates with a layover at Victoria Gardens at Main Street. From Victoria Gardens, the bus line begins a return route by continuing north on Day Creek Boulevard, turns west onto Church Street, turns south onto Rochester Avenue, and then turns west back onto Foothill Boulevard.

Phase II/Haven Alignment

Phase II of the project would construct the 16-mile Haven Alignment, from Ontario International Airport to Kaiser Permanente Medical Center in Fontana. In Ontario, the alignment makes a loop through Terminal Way at Ontario International Airport. From the airport, it heads north on Archibald Avenue to Inland Empire Boulevard and turns right to go east on Inland Empire Boulevard.

From Inland Empire Boulevard, the alignment turns left to go north up Haven Avenue into Rancho Cucamonga, then turns right to go east onto Foothill Boulevard and into Fontana.

In Fontana, the alignment continues east on Foothill Boulevard until turning south onto Sierra Avenue. The alignment follows Sierra Avenue, including a stop at the Fontana Metrolink Station, and then continues until turning west onto Marygold Avenue, where the bus line would begin a turn-around movement by heading south onto Juniper Avenue, east onto Valley Boulevard, and north back onto Sierra Avenue to Kaiser Permanente Medical Center before heading northward for the return trip.

2.3 Project Alternatives

Many alternatives were studied in the WVC AA, adopted in 2015 as described in Chapter 6, Evaluation of Alternatives. Through the initial screening process, the No Build Alternative and two build alternatives (Alternatives A and B) were identified to be carried forward for further analysis in the EIR/EA because they are the most viable and they meet the purpose and need. Section 2.9 of this chapter describes alternatives that have

been considered but were withdrawn from further consideration.

The following subsections describe the design features of each alternative analyzed in this EIR/EA.

2.3.1 No Build Alternative

The No Build Alternative proposes no improvements to the existing local bus services. Under the No Build Alternative, the existing local bus service on Routes 61 and 66 would maintain current service of 15-minute headways (total of four buses per hour in each direction).

2.3.2 Build Alternatives

All design features of both build alternatives are the same, as described in more detail in Section 2.4, with the exception of the following (see Figure 2-4):

Alternative A – Full BRT with no dedicated bus-only lanes

Alternative A would include the 35-mile-long BRT corridor, which is comprised of the Phase I/Milliken Alignment, Phase II/ Haven Alignment, and 60 side-running stations at up to 33 locations/major intersections. The BRT buses would operate entirely in the mixed-flow lanes. Figure 2-5 depicts a typical cross section of the Alternative A corridor along Holt Boulevard. The right-of-way (ROW) limits and travel lane width vary in other segments of the corridor. Note that some areas of the project corridor would require reconfiguration, relocation, or extension of adjacent driveways, curbs, medians, sidewalks, parking lots, and local bus stops. To accommodate this roadway reconfiguration, a partial acquisition of land along the corridor would be required, resulting in a minor partial acquisition of some parcels adjacent to the existing roadway. The design will be refined during the final engineering phase to avoid partial parcel acquisitions to the extent practicable.

In addition, some temporary construction easements (TCEs) would be required to support the construction activities along the corridor, especially around the proposed bus stations.

Alternative B – Full BRT with 3.5 miles of dedicated bus-only lanes in Ontario

Alternative B would include the full 35-mile-long BRT corridor, which is comprised of the Phase I/Milliken Alignment, Phase II/ Haven Alignment, 3.5 miles of dedicated bus-only lanes, and five center-running stations and 50 side-running stations at up to 33 locations/major intersections. The 3.5-mile-long segment of dedicated lanes would include two mixed-flow lanes and one transit lane in each direction and five center-running stations (see Figure 2-4). A typical cross section of the 3.5-mile-long dedicated lanes along Holt Boulevard is shown in Figure 2-6. To accommodate the dedicated lanes, roadway widening and additional utilities, such as electrical and fiber-optic lines, would require a combination of permanent ROW acquisition and TCEs.

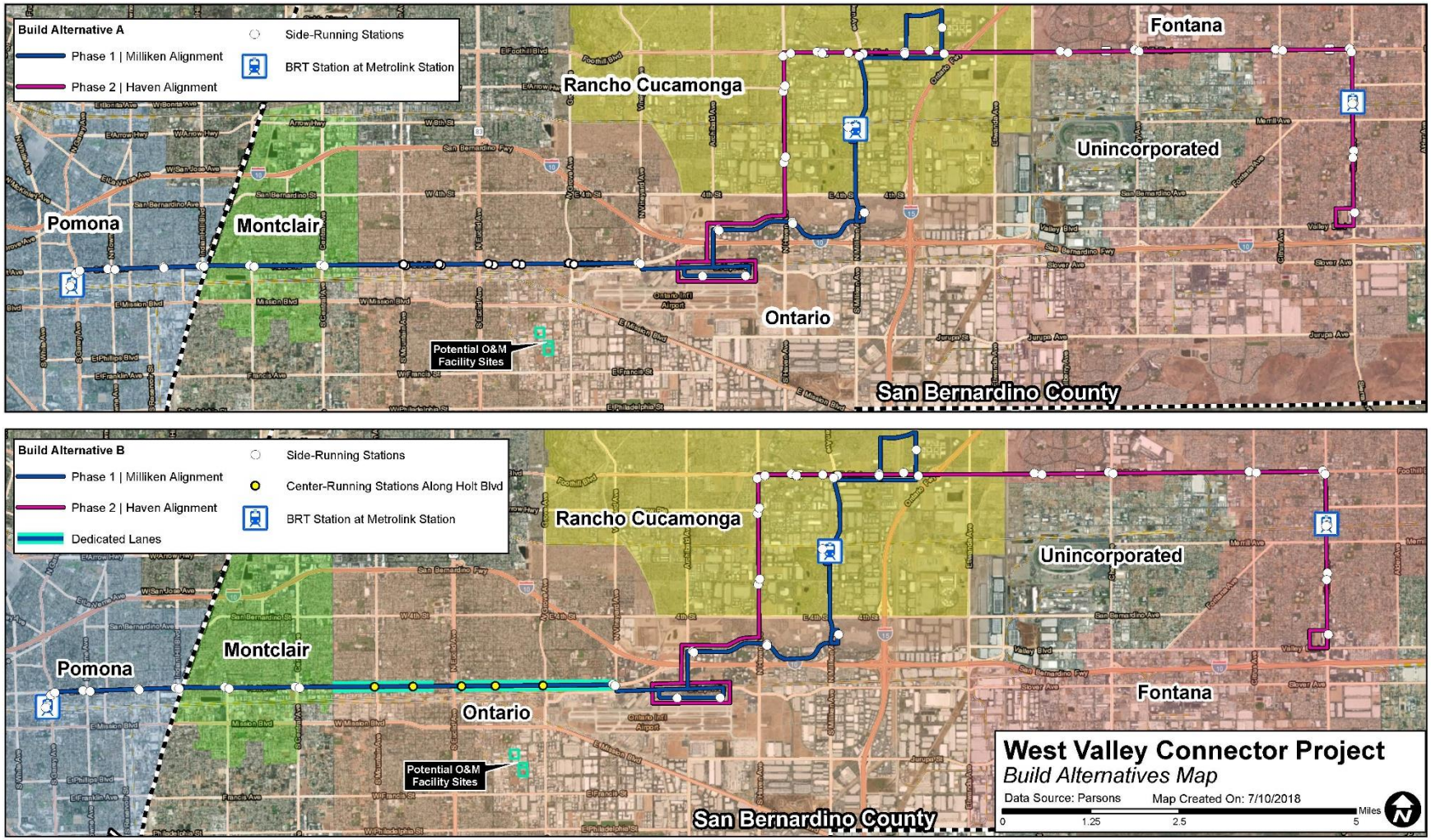

Figure 2-4 Build Alternatives Map

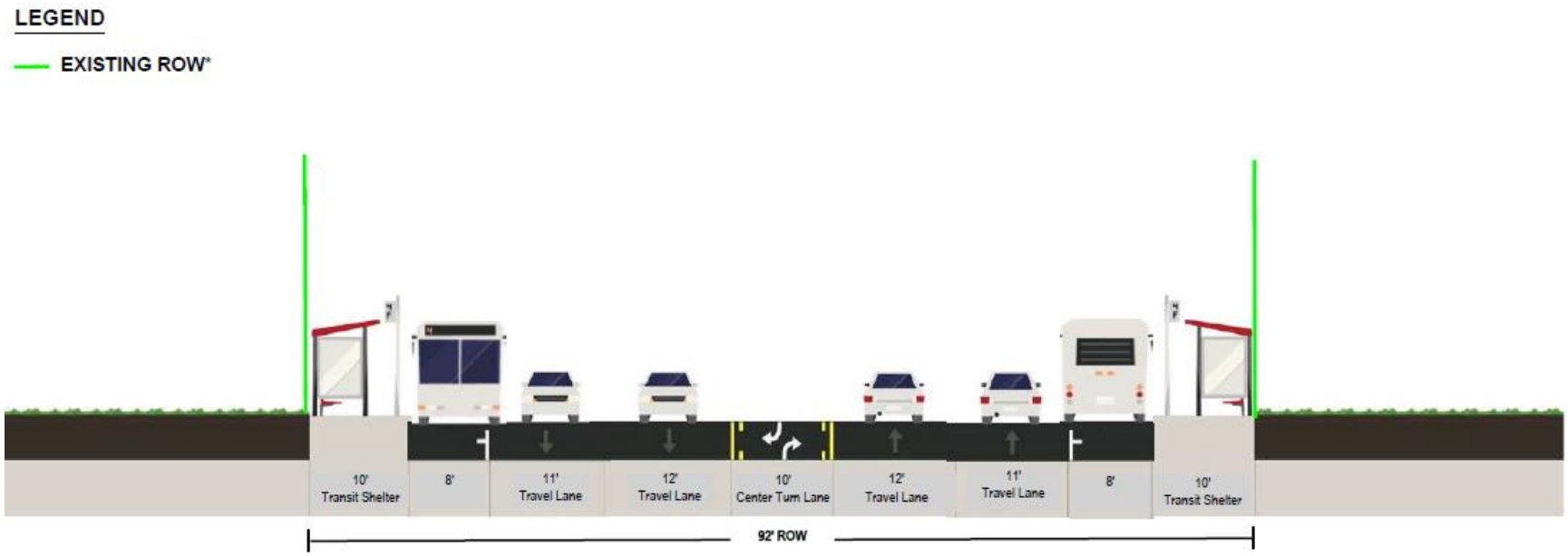

Figure 2-5 Typical Cross Section for Alternative A along Holt Boulevard

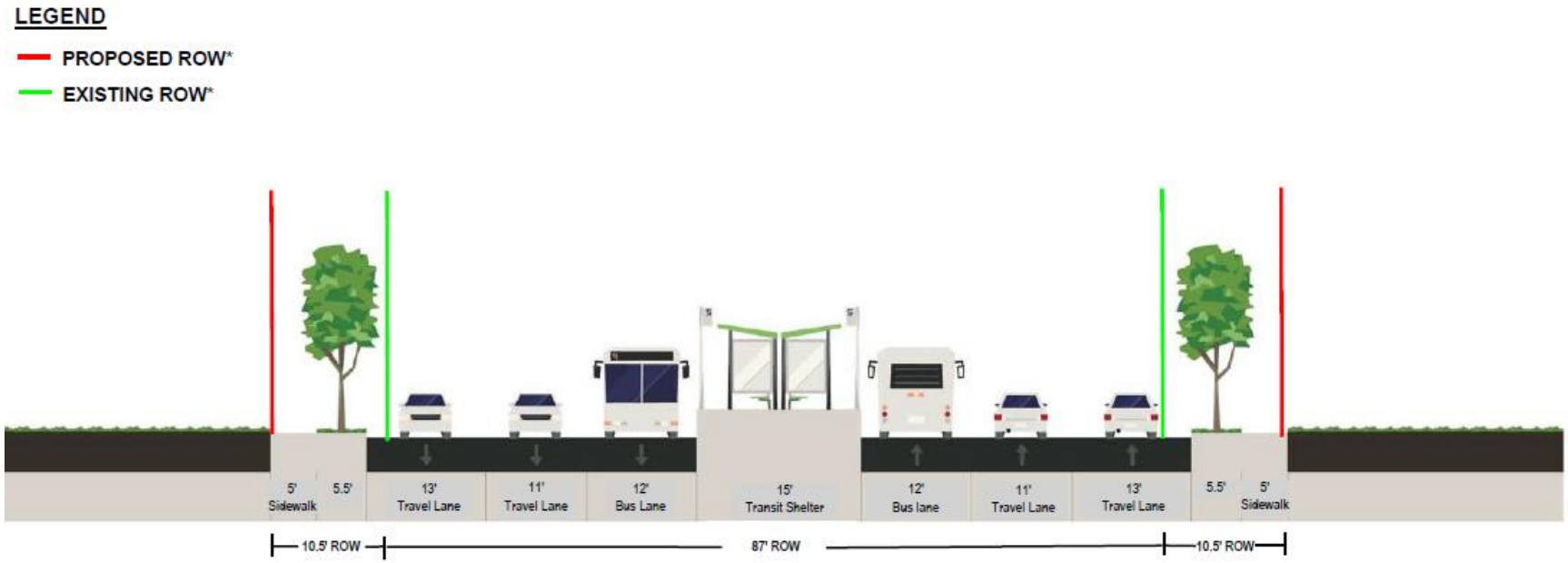

Figure 2-6 Typical Cross Section of Dedicated Lanes Segment for Alternative B along Holt Boulevard

As described under Alternative A, a partial acquisition of land along the corridor would be required, resulting in a minor partial acquisition of some parcels adjacent to the existing roadway to accommodate roadway reconfiguration and station construction. The design refinement will be done during the final engineering design to avoid the partial acquisition of any parcel to the extent possible.

In addition, some TCEs would be required to support the construction activities along the corridor, especially around the proposed bus stations.

2.4 Design Features for Build Alternatives

2.4.1 Bus Rapid Transit Stations

BRT stations at 33 locations/major intersections and associated improvements are proposed to be located approximately 0.5 to 1 mile apart to facilitate higher operating speeds by reducing dwell time (see Figures 2-3 and 2-4 for station locations). Table 2-1 lists the BRT stations to be constructed as part of the Phase I/Milliken Alignment. Note that under Alternative A, all 21 stations would be side-running stations. Under Alternative B, five center platform stations are proposed as follows:

- Holt Boulevard/Mountain Avenue
- Holt Boulevard/San Antonio Avenue
- Holt Boulevard/Euclid Avenue
- Holt Boulevard/Campus Avenue
- Holt Boulevard/Grove Avenue

As part of the Phase II/Haven Alignment, an additional 12 side-running stations would be constructed for both build alternatives, as listed in Table 2-2.

Table 2-1 Stations along Phase I/Milliken Alignment

Pomona
• Pomona Regional Transit Center Station
• Holt Avenue/Garey Avenue
• Holt Avenue/Towne Avenue
• Holt Avenue/Clark Avenue
• Holt Avenue/Indian Hill Boulevard
Montclair
• Holt Boulevard/Ramona Avenue
• Holt Boulevard/Central Avenue
Ontario
• Holt Boulevard/Mountain Avenue*
• Holt Boulevard/San Antonio Avenue*
• Holt Boulevard/Euclid Avenue*
• Holt Boulevard/Campus Avenue*
• Holt Boulevard/Grove Avenue*
• Holt Boulevard/Vineyard Avenue
• Ontario International Airport
• Inland Empire Boulevard/Archibald Way
• Inland Empire Boulevard/Porsche Way
• Ontario Mills
Rancho Cucamonga
• Rancho Cucamonga Metrolink Station
• Foothill Boulevard/Milliken Avenue
• Foothill Boulevard/Rochester Avenue
• Victoria Gardens between North and South Main Street
Note: * denotes the center-running stations to be constructed under Alternative B.

Source: WVC Project Plans 30% Preliminary Engineering Design, 2017.

Table 2-2 Additional Stations to be Constructed as Part of Phase II/Haven Alignment

Rancho Cucamonga
- Haven Avenue/6th Street
- Haven Avenue/Arrow Route
- Haven Avenue/Foothill Boulevard
- Foothill Boulevard/Spruce Avenue
- Foothill Boulevard/Day Creek Boulevard

Fontana
- Foothill Boulevard/Mulberry Avenue
- Foothill Boulevard/Cherry Avenue
- Foothill Boulevard/Citrus Avenue
- Foothill Boulevard/Sierra Avenue
- Fontana Metrolink Station
- Sierra Avenue/Randall Avenue
- Sierra Avenue/Kaiser Permanente

Source: WVC Project Plans 30% Preliminary Engineering Design, 2017.

In Rancho Cucamonga, two optional far-side stations on Foothill Boulevard, located northwest and southeast of the intersection of Foothill Boulevard/ Etiwanda Avenue, are potential station locations for future consideration under both Alternatives A and B. Coordination between the City of Rancho Cucamonga and SBCTA would be required to obtain environmental clearance for these two stations at a later time.

2.4.2 Typical Station Plan Layouts

The project traverses an urban corridor, and BRT stations would be located to create a comfortable, efficient transit place that fits into the community fabric. Several of the proposed BRT stations would use existing local bus stations, which would reduce the ROW need. Many factors would determine the station plan layout for most stops, and the exact position, dimensions, and access points would be subject to change, pending final engineering and coordination with the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana.

Typical station layout designs for the center- and side-running stations are proposed as depicted in Figures 2-7 through 2-12.

Side-Running Stations

Side-running stations would typically be located on the far side of an intersection to facilitate transit priority and to avoid a stopped bus from blocking those turning right from the corridor. Where curb cuts for driveways and other conditions do not provide enough space along the curbside for both the sbX and the local bus on the far side of the intersection, the local buses would be located on the near side of the intersection.

In the side-running condition, stations may include new or improved shelters with passenger amenities, or only an sbX-branded pylon with signature light. Proposed shelters would be approximately 18 feet in length and a width that would fit a 10-foot-wide-minimum sidewalk. Passenger amenities at the side platform stations would include benches, bicycle racks, trash receptacles, variable message signs, security cameras, and lighting integrated with the shelter. There would be no fare collection equipment on the sidewalks or shelters when the available ROW is less than

10 feet, and the passengers may pay the fee on the bus. Side-running stations would also include a "kit-of-parts" or various amenities.

For all stations in Rancho Cucamonga, only an sbX-branded pylon with signature light is proposed. Should shelters be implemented in the future, coordination between the City of Rancho Cucamonga and SBCTA would be required to environmentally clear the shelters at a later time.

Passenger amenities may include some or all of the following:

- sbX-branded pylons with signature lights that act as a beacon to help patrons identify sbX BRT stations
- Benches
- Trash receptacles
- Bicycle racks
- NexTrip electronic signage (variable message signs [e-signs] to display real-time bus arrival information)
- Security features such as cameras and light fixtures
- Shelters/canopies with wind screens
- Public art at select stop locations
- Solar panels
- Stand-alone map/schedule/advertising illuminated display cases (two-sided)
- Pedestrian wayfinding signage
- Emergency telephones
- Public address system
- Ticket vending machines at select locations
- Landscaping, including deciduous and evergreen trees, shrubs, vines, and groundcover where possible, and irrigation systems

Center-Running Platform Stations

As indicated in Section 2.4.2, five center-running platform stations are proposed to be constructed as part of the Phase I/ Milliken Alignment (in Ontario) under Alternative B.

The center-running platform stations would be located in the center of the street ROW on a raised platform with an end-block crossing. Access would be provided by crosswalks at intersections and Americans with Disabilities Act (ADA)-compliant ramps to the station platforms. Center-running platforms would be placed as close to the intersection as possible while still maintaining left-turn pockets, where required.

In the optimum center-running platform configuration, the platform would accommodate a canopy with its seating area, passenger amenities, fare equipment, and a ramp to comply with relevant accessibility requirements and provide clearance in front of ticket vending machines. Stations would include a "kit-of-parts" that can be assembled and laid out to suit the functionality of the station and fit with the surrounding land uses. Passenger amenities may include some or all of that listed under the side-running stations above.

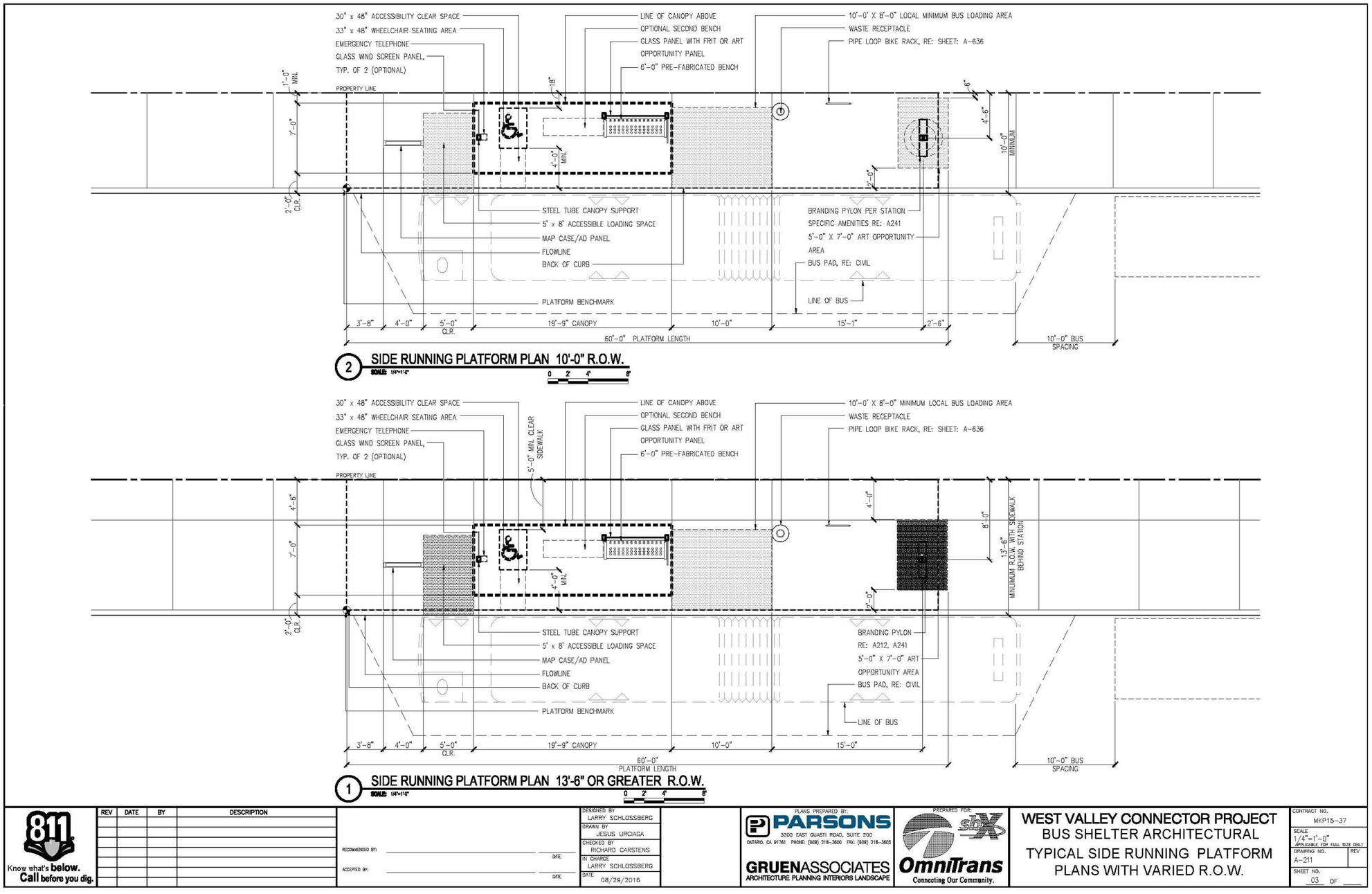

Figure 2-7 Side-Running Station Platform

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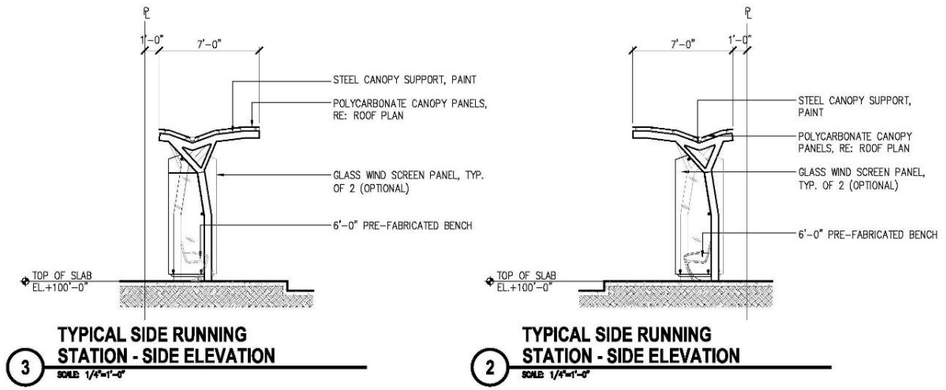

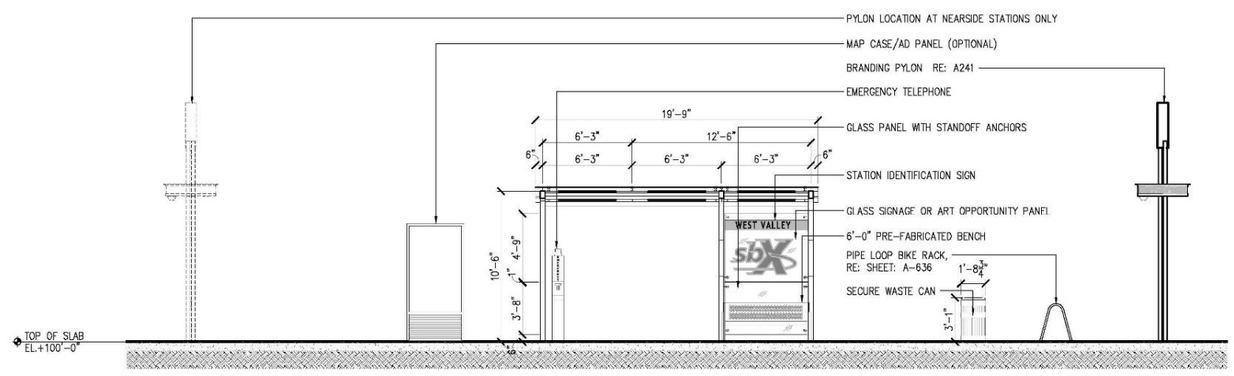

Know what's below. Call before you dig.

REV	DATE	BY	DESCRIPTION

RECOMMENDED BY: _____ DATE _____
ACCEPTED BY: _____ DATE _____

DESIGNED BY: LARRY SCHLOSSBERG
DRAWN BY: JESUS URCIAGA
CHECKED BY: RICHARD CARSTENS
IN CHARGE: LARRY SCHLOSSBERG
DATE: 08/29/2016

PLANS PREPARED BY:
PARSONS
3200 EAST GUASTI ROAD, SUITE 200
ONTARIO, CA 91761 PHONE: (909) 218-3600 FAX: (909) 218-3605
GRUENASSOCIATES
ARCHITECTURE PLANNING INTERIORS LANDSCAPE

PREPARED FOR:
OmniTrans
Connecting Our Community.

WEST VALLEY CONNECTOR PROJECT
BUS SHELTER ARCHITECTURAL
SIDE RUNNING STATION ELEV. WITH VARIABLE MESSAGE SIGN AT PYLON

CONTRACT NO. MKP15-37
SCALE 1/4"=1'-0" APPLICABLE FOR FULL SIZE ONLY
DRAWING NO. A-411 REV
SHEET NO. 11 OF ____

GREUN PROJECT 8195

PRELIMINARY ENGINEERING - NOT FOR CONSTRUCTION

Figure 2-8 Side-Running Station Elevation

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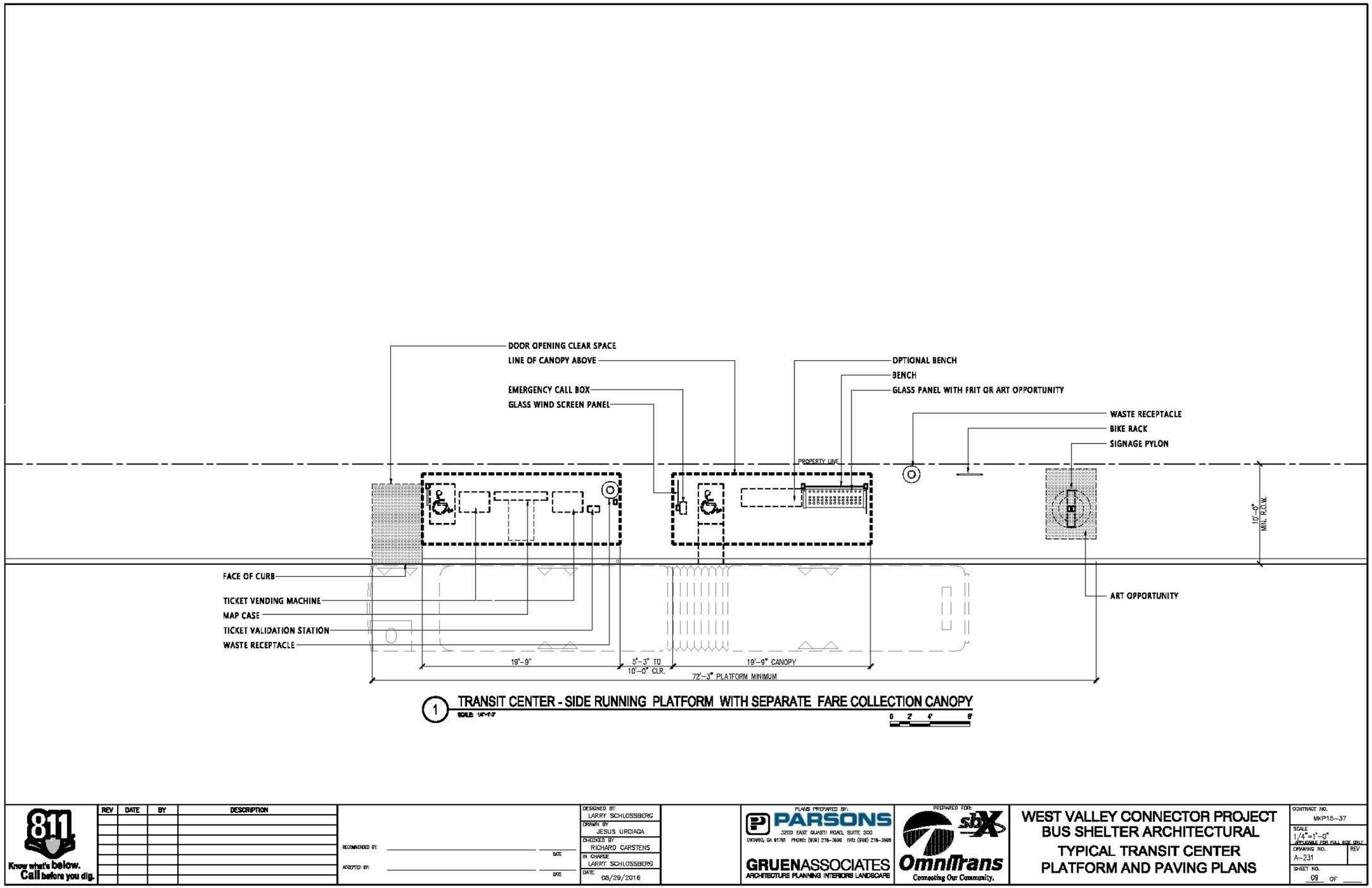

Figure 2-9 Transit Center Side-Running Station Platform

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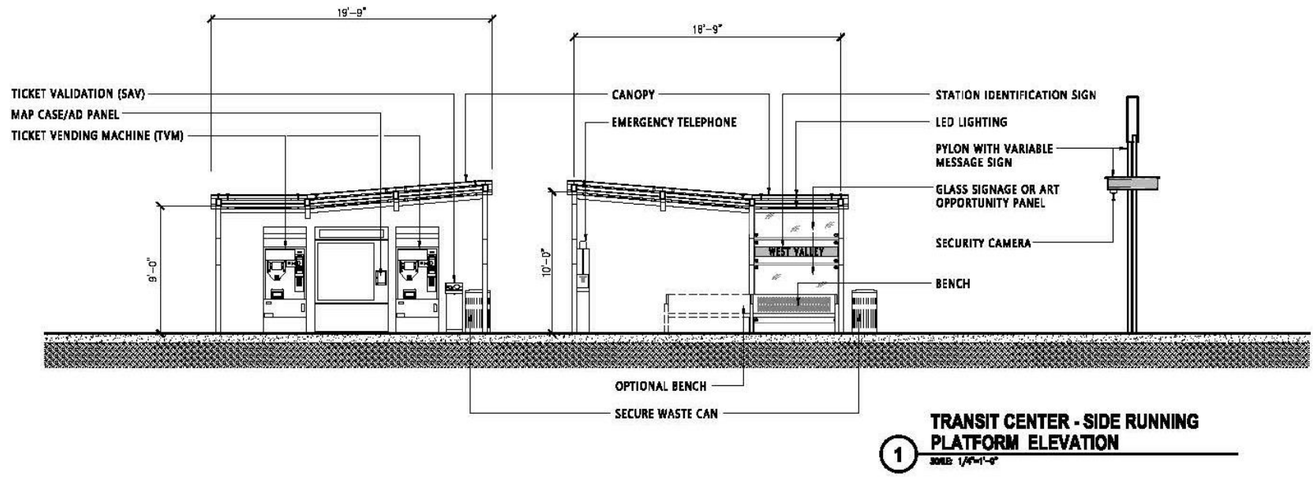

PRELIMINARY ENGINEERING - NOT FOR CONSTRUCTION

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DESIGNED BY: LARRY SCHLOSSBERG
DRAWN BY: JESUS URCIAGA
CHECKED BY: RICHARD CARSTENS
IN CHARGE: LARRY SCHLOSSBERG
DATE: 06/29/2018

PLANS PREPARED BY: PARSONS
3200 EAST GUASTI ROAD, SUITE 200
ONTARIO, CA 91761 PHONE (909) 218-3600 FAX: (909) 218-3605
GRUENASSOCIATES
ARCHITECTURE PLANNING INTERIORS LANDSCAPE

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BUS SHELTER ARCHITECTURAL
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PLATFORM ELEVATIONS

CONTRACT NO. MKP15-37
SCALE 1/4"=1'-0" APPLICABLE FOR FULL SIZE ONLY
DRAWING NO. A-431 REV
SHEET NO. 13 OF ____

GREUN PROJECT 8185

Figure 2-10 Transit Center Side-Running Station Elevation

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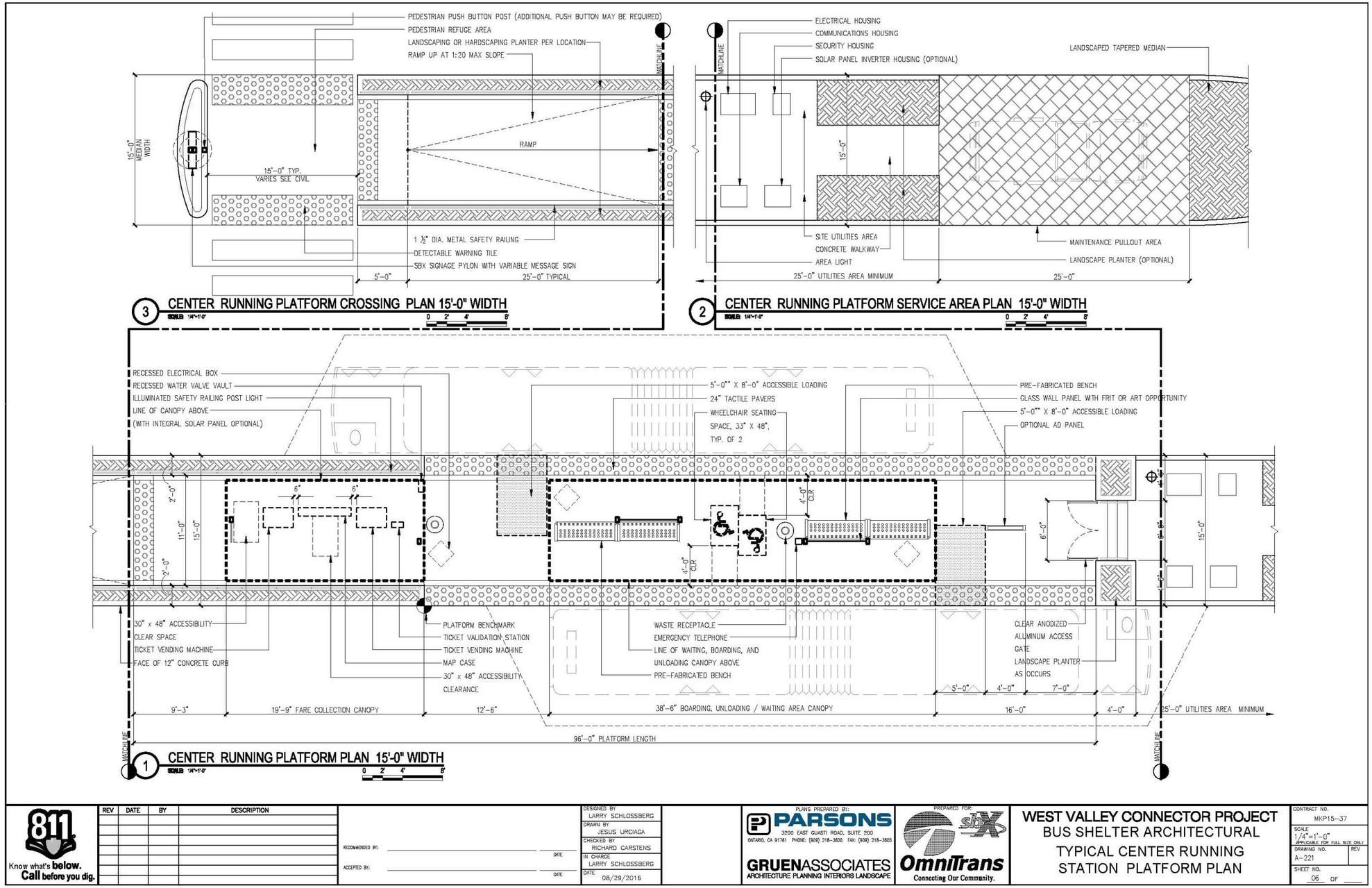

Figure 2-11 Center-Running Station Platform (Alternative B Only)

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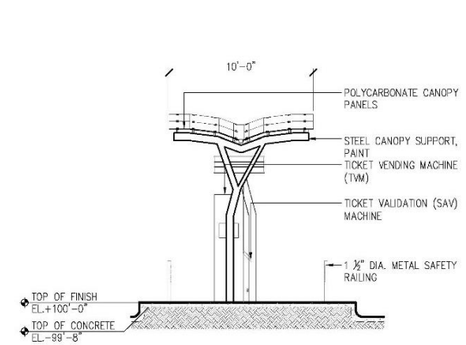
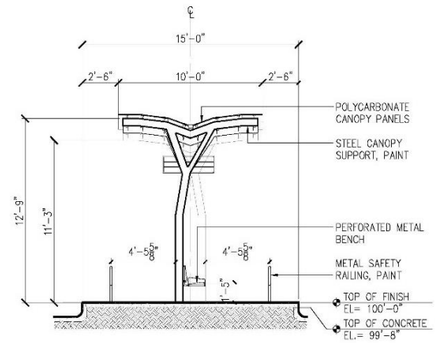
PRELIMINARY ENGINEERING - NOT FOR CONSTRUCTION



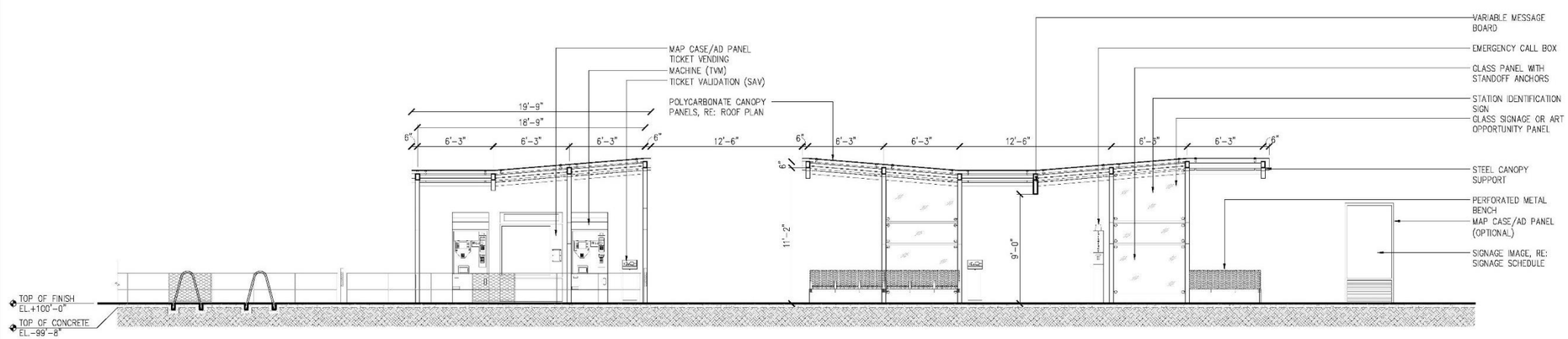
PRELIMINARY CENTER RUNNING STATION SIDE ELEVATION

3 SCALE: 1/4"=1'-0"



PRELIMINARY CENTER RUNNING STATION SIDE ELEVATION

1 SCALE: 1/4"=1'-0"



PRELIMINARY END-BLOCK CROSSING CENTER RUNNING STATION

2 SCALE: 1/4"=1'-0"

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ACCEPTED BY: _____ DATE _____

DESIGNED BY: LARRY SCHLOSSBERG
DRAWN BY: JESUS URCIAGA
CHECKED BY: RICHARD CARSTENS
IN CHARGE: LARRY SCHLOSSBERG
DATE: 08/03/2016

PLANS PREPARED BY:
PARSONS
3200 EAST GUASTI ROAD, SUITE 200
ONTARIO, CA 91761 PHONE: (909) 218-3600 FAX: (909) 218-3825
GRUENASSOCIATES
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WEST VALLEY CONNECTOR PROJECT
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SCALE
APPLICABLE FOR FULL SIZE ONLY
DRAWING NO. A-422 REV 30%
SHEET NO. _____ OF _____

GRUEN PROJECT 8195

Figure 2-12 Center-Running Station Elevation (Alternative B Only)

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2.4.3 Permanent BMP

Construction of Alternative A would occur within the existing ROW and would result in no net impervious area. Construction of the dedicated lane under Alternative B would result in an additional 1.81 acres of impervious area. A permanent treatment Best Management Practice (BMP) in the form of an infiltration basin would be installed along the median of Holt Boulevard and Plum Avenue, as shown in Figure 2-13, to treat the additional stormwater generated from the new impervious area.

2.5 sbX Bus Operations

The proposed project would require 18 buses during the Phase I operation and increase to 27 buses for the combined Phase I and Phase II operation to serve the designed headways and have sufficient spare vehicles.

Under Alternative A, sbX buses would operate entirely in mixed-flow lanes along the proposed 35 miles of the Phase I and Phase II alignments. For Alternative B, sbX buses would operate in mixed-flow lanes similar to Alternative A, except where dedicated bus-only lanes (3.5 miles) are proposed along Holt Boulevard, between Benson Avenue and Vine Avenue and between Euclid Avenue and Vineyard Avenue, in Ontario.

Roadway sections where the sbX would operate in mixed-flow lanes would generally be kept as existing conditions, although some modifications, such as relocated curb and gutter, may be necessary near the stations to provide sufficient room for bus stopping and loading. Reconstruction of curb and gutters would only be required for the segment where dedicated bus-only lanes are proposed. Vehicular lanes where the sbX buses would operate in dedicated bus-only lanes would feature concrete roadways, painted or striped to visually separate the exclusive lanes from mixed-flow lanes. Transition areas from mixed-flow to exclusive lanes would be provided at each end of an exclusive lane location. Such transitions would be clearly marked to separate bus movements from other vehicular traffic. Reinforced concrete bus pad in the pavement would be placed at all station locations for the sbX buses.

sbX Operations at Signalized Intersections

The project corridor would need to integrate sbX buses and other vehicular traffic movements. Traffic signals would be reconfigured at each appropriate intersection to provide TSP operation. Detailed traffic analysis would be conducted to determine the amount of signal priority requests that would be granted per hour, in cooperation with each City.

Wherever possible for exclusive lanes, the bus signals and the adjacent existing intersection signals would be integrated to create one signalized intersection controlling automobiles and buses. Intersection crossings would be controlled with signals, and pedestrians would be allocated standard crossing walk time.

Left-turn movements for vehicular traffic from mixed-flow lanes crossing exclusive lanes on the project alignment would require separate signal phases with red arrows when transit vehicles are crossing intersections. The signal modifications might also include "active" No-Right-Turn indications and "Bus Coming" signs to prevent right turns across the exclusive lanes.

Signal modifications would include upgrades to signal controllers and software to accommodate the transit priority treatment at intersections. Presignals and queue jumpers would be used where appropriate to prevent traffic from stopping or blocking the exclusive lanes.

Headways and Service Hours

sbX buses would generally operate from 6:00 a.m. to 8:00 p.m. with peak headways for 4 hours and off-peak headways for 10 hours per day for a total span of service of 14 hours per day, Monday through Friday. Service hours may change depending upon funding availability. From the Pomona Metrolink Transit Center station to Inland Empire Boulevard, the sbX buses would operate on 10-minute peak headways and 15-minute off-peak headways. Additional service hours, including weekend service, may be added if additional operating funds become available in the future.

2.6 Operations and Maintenance

Fleet Composition

The proposed project's fleet would be comprised of 60-foot-long articulated CNG propulsion buses. sbX buses would hold approximately 96 passengers at maximum capacity with up to 8 bicycles on board. Today, the average local bus operating speeds are only 12 to 15 mph, and they are getting slower as corridor congestion worsens. In calculating run times, it was assumed that the average dwell time at stations would be 30 seconds (peak service), and average overall speed would be 18 mph. The average speed for sbX buses would be 18 mph.

Maintenance Requirements and Associated Facilities

Omnitrans operates and maintains its existing bus fleets from two major Operations and Maintenance (O&M) facilities: East Valley Vehicle Maintenance Facility (EVVMF), located at 1700 W. 5th Street in the City of San Bernardino, and West Valley Vehicle Maintenance Facility (WVVMF), located at 4748 E. Arrow Highway in the City of Montclair. EVVMF is a Level III facility capable of full maintenance of buses, and WVVMF is a Level II facility suitable for light maintenance. Neither facility has sufficient capacity to accommodate the additional maintenance and storage requirements of the bus fleet associated with the proposed WVC Project.

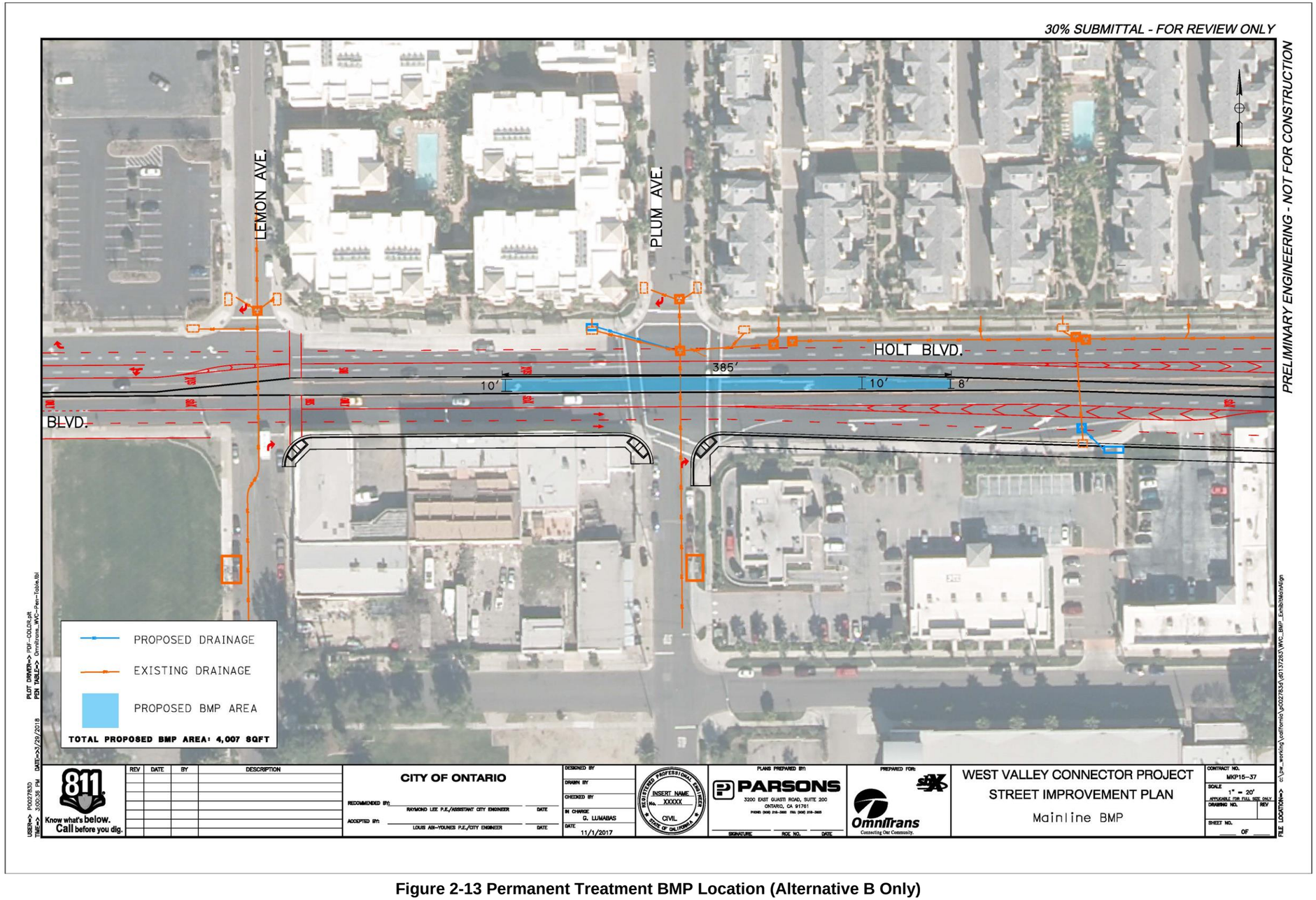

Figure 2-13 Permanent Treatment BMP Location (Alternative B Only)

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The purpose of the new O&M facility is to provide operations and maintenance support to the existing full-service EVVMF. The new facility would be designed and constructed to provide Level I service maintenance with a capacity to be upgraded to provide Level II service maintenance. Heavy repair functions and administrative functions would remain exclusively with the EVVMF in San Bernardino.

Facility Components

An O&M Facility Needs Assessment Report was developed in December 2017 to define the functional requirements and the associated space requirements for the new O&M facility to serve the WVC Corridor Project. Conceptually, the new O&M facility would be built on an approximate 5-acre site. The Level I facility would include a parking area, bus washing area, fueling area, and a personnel and storage building. As needs arise, the facility could be upgraded to provide Level II service, which would include the addition of a maintenance shop and an administrative building. Landscaping and irrigation would be provided to enhance the comfort of employees and the appearance of the facility, and to help screen maintenance facilities and operations from offsite viewpoints within the community. Figure 2-14 shows the conceptual site plan of the Level II facility.

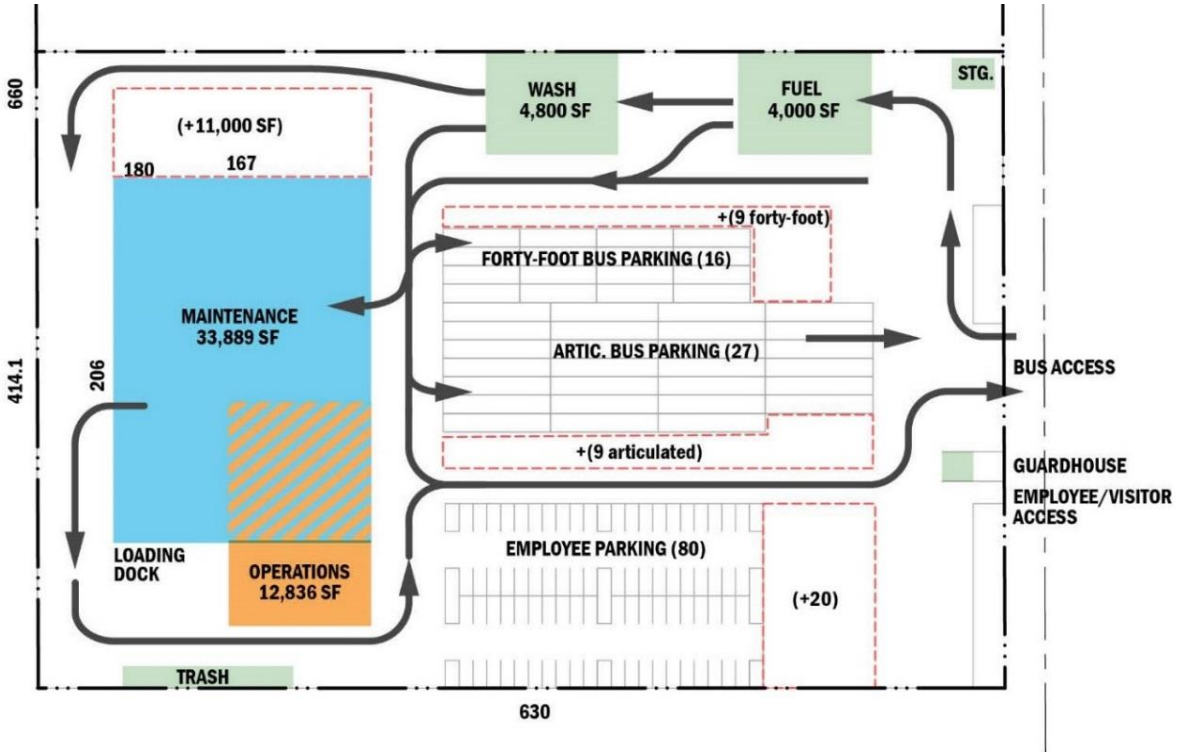

Figure 2-14 O&M Facility Conceptual Site Plan

In addition to the above facility components, stormwater treatment BMP in the form of a bioretention basin would be constructed along the fence line of the property boundary to treat stormwater runoff from the impervious area created as a result of facility construction.

Depending on the service level to be performed, approximately 50 to 100 staff would be using this facility, including bus operators and O&M staff.

Potential Sites

Three sites are being considered for placement of the new O&M facility (see Figure 2-15). All are owned by the City of Ontario and are located in the industrial zoned area, slightly more than 1 mile from the proposed BRT corridor alignment on Holt Boulevard:

- Site 1: 1516 S. Cucamonga Avenue, Ontario (APN 1050-131-03-0000 and APN 1050-131-02-0000). This property is currently a public works storage yard. If selected, the O&M facility would be built at the bottom portion of the parcel, encompassing an area of approximately 6.0 acres.
- Site 2: 1440 S. Cucamonga Avenue, Ontario (APN 1050-141-07-0000). This property is currently a CNG fueling station. If selected, the O&M facility would utilize the entire parcel, encompassing an area of approximately 4.8 acres.
- Site 3: 1333 S. Bon View Avenue, Ontario (APN 1049-421-01-0000 and APN 1049-421-02-0000). This property is currently a municipal utility and customer service center. If selected, the O&M facility would be built at the bottom portion of the parcel, encompassing an area of approximately 6.6 acres.

Buses coming to and from the new facility could use nearby access roads that directly connect to the BRT corridor, such as South Campus Avenue, South Bon View Avenue, and South Grove Avenue.

The O&M facility would be constructed during the same period as the Phase I/ Milliken Alignment and would be open for operation at the same time as the Phase I alignment. Construction duration is estimated at 12 months and would occur during the second half of the Phase I construction duration.

2.7 Cost Estimates

The following is the breakdown of project cost estimates in 2018 dollars.

- Capital construction cost only (Corridor and O&M Facility): $120 millions
- Capital plus ROW and support costs (Corridor and O&M Facility): $222 millions
- Operation and Maintenance costs (Corridor and O&M Facility): $5.8 millions

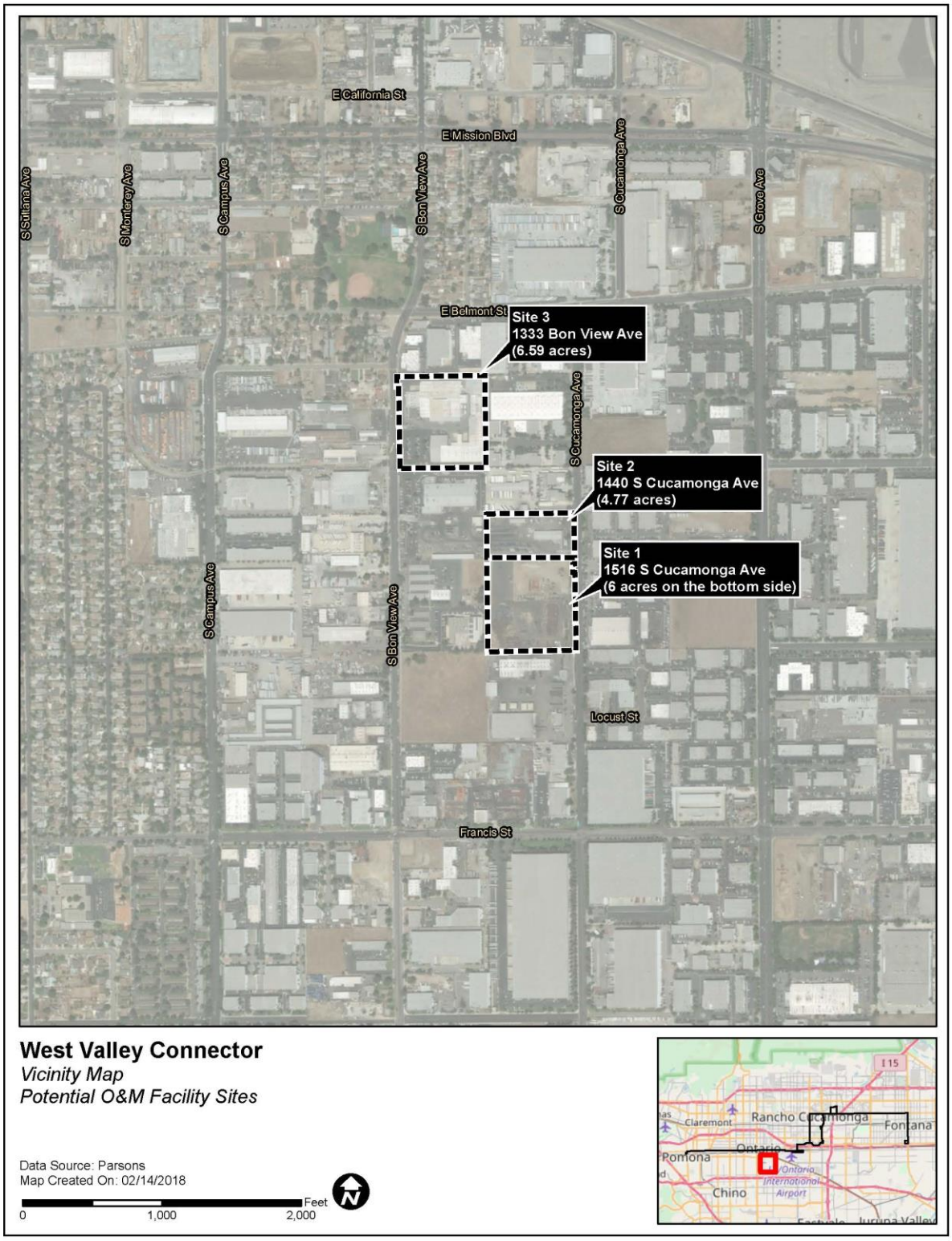

Figure 2-15 Potential Operations and Maintenance Facility Sites

2.8 Implementation Schedule

Implementation of the proposed project is planned over the next 5 years and would entail many activities, including:

- Completion of the environmental compliance phase (December 2019)
- Completion of Preliminary Engineering (December 2019)
- Completion of Final Design (May 2021)
- Commencement of Phase I/Milliken Alignment (early 2022) and O&M facility (early 2023)
- Completion of O&M facility (December 2023)
- Completion of Construction of Phase I/ Milliken Alignment and testing (December 2023)
- System operation (begin revenue operation in December 2023)
- Construction of Phase II/Haven Alignment is scheduled to occur after completion of the Phase I/Milliken Alignment, pending funding availability

2.9 Locally Preferred Alternative

SBCTA has identified Alternative B as the Locally Preferred Alternative (LPA) for the proposed project. This alternative was added in May 2017 by the SBCTA Board in cooperation with the five stakeholder cities. Each of the cities agreed on Alternative B as meeting the needs of premium transit service within their jurisdiction.

Selection of the final Preferred Alternative will be done after the Draft EIR/EA has been circulated and all public comments have been considered.

2.10 Alternatives Considered but Withdrawn from Further Consideration

As part of the initial environmental scoping process for the WVC Project, Omnitrans considered a range of alternatives. Six build alternatives were developed by Omnitrans. In addition, alternatives suggested by the public and alternatives from the *West Valley Connector* AA, adopted by Omnitrans in 2015, were also evaluated as part of the initial screening. The AA included a detailed alternatives analysis that assessed a No Build Alternative, a Transportation Systems Management (TSM) Alternative, and 14 potential viable build alternatives based on 5 categories (i.e., ridership and performance, capital costs, O&M costs, cost effectiveness, and financial viability).

This initial screening process is intended to eliminate from further study those alternatives that are not considered reasonable and feasible. The intention is to identify only the most viable alternatives for further detailed environmental evaluation. The following subsections provide a description of each alternative that was eliminated from further consideration.

2.10.1 Alternatives Developed as Part of the WVC AA

Based on the analysis provided in the WVC AA, 13 build alternatives and the

TSM Alternative were eliminated from further consideration because they did not meet project goals and objectives, had limited community/stakeholder support, or were not cost effective. A description of the TSM Alternative and the 13 build alternatives that were eliminated is provided below.

- **TSM Alternative** – The best alternative to the Build Alternative that could be provided without a major capital investment would be local bus service along the preferred project alignment, with headways similar to those of the Build Alternative (e.g., 10-minute peak headways and 15-minute off-peak headways). Headways on Routes 61 and 66 are currently 15 minutes between 5:45 a.m. and 6:00 p.m. and 30 minutes from 6:00 to 10:15 p.m. The suggested headways would provide a 50 percent increase in bus service during the peak hours. In addition, all existing bus stops in the corridor would provide shelters and information displays. This alternative was eliminated because the TSM Alternative required a higher capital and O&M cost, with less ridership compared to the Rapid Bus Alternative.
- **AA Build Alternative A** – Continuation of the existing Route 61 service at reduced headway (30-minute) plus 10-minute headway limited-stop BRT service (total of 8 buses per hour), with 18 stations and all mixed-flow operation through the 20.4-mile-long corridor, with no dedicated bus-only lane segments. This alternative was eliminated because other alternatives achieved higher ridership with less O&M costs per rider.
- **AA Build Alternative B** – Existing Route 61 service at reduced headway (30-minute) plus 10-minute headway limited-stop BRT service (total of 8 buses per hour), with 18 stations and all dedicated bus-only lane operation throughout the 20.4-mile-long corridor. This alternative was eliminated because other alternatives achieved higher ridership with less O&M costs per rider.
- **AA Build Alternative C** – Replacing the existing Route 61 service at 15-minute headway with 10-minute headway limited-stop BRT service (total of 6 buses per hour), with approximately 30 stations (average spacing of 0.67 mile) and all mixed-flow operation through the 20.4-mile-long corridor. This alternative was eliminated because other alternatives achieved significantly higher ridership.
- **AA Build Alternative D** – Existing Route 61 service at reduced headway (30-minute) plus 10-minute headway limited stop BRT service (total of 8 buses per hour), with 18 stations and 10 miles of dedicated bus-only lane operation, with the remainder of the 20.4-mile-long corridor in mixed-flow operation. The 10-mile-long dedicated lane segment extends from Holt Boulevard/Benson Avenue to 4th Street/Interstate 15 (I-15). This

alternative was eliminated because other alternatives achieved significantly higher ridership.

- **AA Build Alternative E** – Existing Route 61 service at reduced headway (30-minute) plus 10-minute headway limited-stop BRT service (total of 8 buses per hour), with 18 stations and 5 miles of dedicated bus-only lane operation, with the remainder of the 20.4-mile-long corridor in mixed-flow operation. The 5-mile-long dedicated lane segment extends from Holt Boulevard/Benson Avenue to Holt Boulevard/San Antonio Avenue and from Holt Boulevard/Euclid Avenue to Holt Boulevard/Vineyard Avenue (3.5 miles) and from Sierra Avenue/ Marygold Avenue to Sierra Avenue/ Orange Way (1.5 miles). This alternative was eliminated because other alternatives achieved higher ridership with less O&M costs per rider.
- **AA Build Alternative F** – Existing Route 61 service at reduced headway (30-minute) plus 10-minute headway limited stop BRT service (total of 8 buses per hour), with 18 stations and 3.5 miles of dedicated bus-only lane operation, with the remainder of the 20.4-mile-long corridor in mixed-flow operation. The 3.5-mile-long dedicated lane segment extends from Holt Boulevard/Benson Avenue to Holt Boulevard/San Antonio Avenue and from Holt Boulevard/Euclid Avenue to Holt Boulevard/Vineyard Avenue. This dedicated lane segment is consistent with the City of Ontario's Holt Boulevard Mobility and Streetscape Strategic Plan completed in March 2013. This alternative was eliminated because other alternatives achieved higher ridership with less O&M costs per rider.
- **AA Build Alternatives G, H, and I** – Increase in station access similar to Alternative C, with various amounts of Route 61 service at 60, 30, and 20 minutes for Alternatives G, H, and I, respectively, plus 10-minute BRT service with 30 stations and 3.5 miles of dedicated bus-only lanes. This alternative was eliminated because other alternatives achieved significantly higher ridership.
- **AA Build Alternative J** – (Alternative C + D) Route 61 service with 30-minute headways plus 10-minute BRT service with 30 stations and 10 miles of dedicated bus-only lanes. This alternative was eliminated because other alternatives achieved significantly higher ridership.
- **AA Build Alternative K** – Similar to Alternative C; however, it adds Route 61 service at 60-minute headways, which was not included in Alternative C. This alternative includes 10-minute BRT service with 30 stations and all mixed-flow operation. This alternative was eliminated because other alternatives achieved higher ridership with less O&M costs per rider.
- **AA Build Alternative L** – A hybrid alignment developed using Foothill Boulevard to traverse the eastern portion of the corridor instead of

San Bernardino Avenue, based on discussions with project stakeholders and the local jurisdictions. This alternative includes Route 61 (on Holt Boulevard) and Route 66 (on Foothill Boulevard) local service at 60-minute headways plus 10-minute BRT service with 28 stations and all mixed-flow operation. Segments of Routes 61 and 66 not covered by the build alignment BRT service would operate on 30- and 20-minute headways, respectively. This alternative was eliminated because it did not meet the needs of all stakeholder cities.

- **AA Build Alternative N** – Uses the hybrid alignment developed for Alternative L with Route 61 and Route 66 service at 60 minutes plus 10-minute BRT service with 27 stations and 3.5 miles of dedicated lanes on Holt Boulevard and 3.0 miles of dedicated lanes on Foothill Boulevard. Segments of Routes 61 and 66 not covered by the build alignment BRT service would operate on 30- and 20-minute headways, respectively. This alternative was eliminated because two other alternatives achieved similar ridership results with a reduced O&M cost per rider.

2.10.2 Alternatives Developed by Omnitrans

In February 2017, SBCTA commissioned a WVC BRT Project Assessment Report. The report summarized six alternatives originally developed by Omnitrans but eliminated from further consideration. These alternatives were determined to not meet the criteria set forth in the project scoping process and were removed from further consideration, as described below.

- **Milliken Avenue Alignment** – This alignment would run from the existing Pomona Transit Center and head eastward on Holt Avenue, south on Vineyard Avenue, east on Airport Drive to circulate through Ontario International Airport, north on Archibald Avenue, and east on Inland Empire Drive to Ontario Mills Mall. From this location, the alignment would continue north on Milliken Avenue, east on Foothill Boulevard, and lastly south on Sierra Avenue where it would reach the Kaiser Permanente Medical Center area on Sierra Avenue just north of Interstate 10 (I-10). This alternative was rejected because it did not meet the needs of the City of Rancho Cucamonga, one of the stakeholder cities.
- **Haven Avenue Alignment** – The Haven Avenue Alignment would include the original project alignment but would shift the north-south portion of the alignment to run along Haven Avenue instead of Milliken Avenue. The Haven Avenue Alignment was eliminated from further consideration because it did not serve Ontario Mills and the Rancho Cucamonga Metrolink Station, and it did not meet stakeholder needs. In addition, the Haven Avenue Alignment was eliminated because it did not interface with the Rancho Cucamonga Metrolink Station and Ontario Mills.

- **Zig-Zag Alignment Options** – The Zig-Zag Alignment Options would include the original project alignment with two alignment options. Option 1 would involve backtracking from Milliken Avenue to run along 4th Street and Haven Avenue, and Option 2 would involve backtracking from Milliken Avenue to run along Jersey Boulevard and Haven Avenue. The Zig-Zag Alignment Options were eliminated from further consideration because of increased travel time, the number of buses that would be required, higher operating costs, and lack of meeting stakeholder needs.
- **Lane Reduction BRT Alternative** – The Lane Reduction BRT Alternative would include the full 35-mile-long BRT corridor with 3.5 miles of dedicated bus-only lanes and center-running stations. The dedicated lanes would include one mixed-flow lane and one transit lane in each direction and five single-platform center-running stations. To accommodate the dedicated lanes, roadway widening and additional utilities, such as electrical and fiber-optic lines, would require permanent and temporary ROW acquisition. The Lane Reduction BRT Alternative was eliminated from further consideration because of an increase in traffic impacts. According to the *Traffic Operations Analysis Report* (Iteris, 2016a) that was prepared for the proposed project, the Lane Reduction BRT Alternative would result in 22 significant traffic impacts and several intersection impacts. The intersection impacts include peak-hour long queue lengths at eastbound and westbound left-turn movements along Holt Boulevard between Benson Avenue and Vineyard Avenue. These queue lengths would exceed the current available storage at most of the intersections along this segment. The increase in queue lengths is a result of additional intersection vehicle delay caused by the reduction in mixed-flow lanes on Holt Boulevard.
- **Juniper Avenue and Mango Avenue Alignment Alternatives** – During the scoping phase of the project in April 2016, a local stakeholder from Fontana proposed Juniper Avenue and Mango Avenue as alternative alignments to Sierra Avenue due to less congestion and fewer traffic signals. Per the City of Fontana Circulation Element, Juniper Avenue and Mango Avenue are two-lane local streets designed to serve a residential area, whereas Sierra Avenue is a four-lane divided arterial serving the main commercial core of Fontana. The WVC uses Sierra Avenue because it includes major destinations such as Kaiser Permanente Medical Center, Fontana Civic Center, Chaffey College Fontana Campus, and the Fontana Metrolink Station. The project supports the City of Fontana's Circulation Element Goal #2 by providing enhanced bus service to the City of Fontana, thereby making it more attractive for choice riders who otherwise may drive along Sierra Avenue today. Enhancements to

Sierra Avenue include TSP, which increases (or advances) green time for approaching buses, but it also benefits individual motorists approaching the same intersection. The individual motorists approaching the intersections in the same direction as the bus would benefit from the same increased green time and reduced delay. Through implementation of the enhanced BRT service, a reduction in local bus service along Sierra Avenue is anticipated. The proposed frequency of the BRT is not anticipated to have an adverse effect on future traffic on Sierra Avenue between Kaiser Permanente Medical Center and Foothill Boulevard.

- **Branch Alignment** – This alternative initially added an independent leg of BRT to the Milliken Avenue Alternative. The second BRT route overlapped on the east-west portion of the proposed Milliken Route from Pomona to Ontario via Holt Boulevard and Inland Empire Boulevard. Upon reaching Haven Avenue, the second or added BRT route (branch) would veer north for 5.1 miles and serve the Haven Avenue corridor northward to State Route (SR) 210 and ultimately reach Chaffey College in Rancho Cucamonga as an independent route. Once at Chaffey College, the route would follow a 1.7-mile-long loop along Campus Drive, stopping at the campus transfer station, and subsequently initiate its return trip to Pomona along Wilson Avenue leading back to Haven Avenue to complete the same route in reverse (Haven/Inland Empire/Archibald/Ontario Airport/Holt). This alternative was eliminated because it did not meet all city stakeholder needs and did not achieve the 10- to 15-minute headway for an individual line. The 10- to 15-minute headways were only achieved by overlapping two branch lines of 20- to 30-minute headways.

2.11 Other Development Projects

Several other projects are being planned or developed within the project area. Tables 2-3 and 2-4 and Figure 2-16 show foreseeable land and transportation development projects located within 5 miles of the proposed project alignment and all other land development projects (e.g., commercial development) located within 2 miles of the proposed project alignment that would be built within 3 years after the proposed project is implemented. The list of reasonably foreseeable projects is based on publicly available information collected from relevant cities and those projects allocated for funding in SCAG's 2015 Federal Transportation Improvement Program (FTIP).

Table 2-3 Land Development Projects within the Project Vicinity

No.*	Project	Type/Sponsor/ Location/Status	Summary
1	Old Town La Verne Specific Plan	• Land development project • City of La Verne • Located in La Verne • Adopted in 2013	The plan will establish Old Town La Verne as a distinctive center for La Verne with attractive streets, enjoyable public spaces, historic neighborhoods, lively mixed-used commercial areas, and a variety of housing options.
2	Pomona Corridors Specific Plan	• Land development project • City of Pomona • Located in Pomona • Adopted in 2013	The plan was established to orchestrate private and public investment activities along the Garey Avenue, Holt Avenue, Mission Boulevard, and Foothill Boulevard corridors, and to support and promote the type of investment that will enhance the beauty and vitality of Pomona's primary commercial corridors.
3	Downtown Pomona Specific Plan	• Land development project • City of Pomona • Located in Pomona • Final EIR approved in 2005	The plan is proposed to facilitate and encourage development of higher-intensity residential uses that would provide a greater range of housing opportunities for a wider variety of lifestyles, while supporting and enhancing existing and future businesses and educational institutions in the heart of downtown Pomona.
4	Park View Specific Plan	• Land development project • City of Upland • Located in Upland • To be implemented between 2013 and 2021	This Specific Plan area is composed of a residential development with a small commercial-retail component. The Specific Plan proposes 355 multi-family attached and 14 detached residential units. The area is bound by Foothill Boulevard, Monte Vista Avenue, and West Arrow Route, just below Central Avenue.
5	College Park Specific Plan	• Land development project • City of Upland • Located in Upland • To be implemented between 2013 and 2021	In 2004, the City of Upland adopted the College Park Specific Plan to encourage mixed-use development in southwest Upland and provide housing opportunities for the Claremont Colleges. The planning area includes 25 acres of residential land that can accommodate approximately 500 housing units. A total of 450 apartment units have been built. An additional 92 small-lot, detached single-family units are planned at a density of 10 units per acre.

Table 2-3 Land Development Projects within the Project Vicinity

No.*	Project	Type/Sponsor/ Location/Status	Summary
6	North Montclair Downtown Specific Plan	• Land development project • City of Montclair • Located in Montclair • Specific Plan approved in 2006	This Specific Plan is a master plan for approximately 150 acres of North Montclair as a mixed-use, transit-oriented district. The project will introduce up to 1,850 new residential units and a variety of mixed-use, small office, local-serving retail, and regional retail uses. The plan is phased through 2020. In 2014, The Paseos, a 385-unit multi-family residential development at the northeast corner of Monte Vista Avenue and Moreno Street, was completed within the Specific Plan area.
7	Holt Boulevard Specific Plan	• Land development project • City of Montclair • Located in Montclair • Updated in 2013	The plan guides land use development and manages future growth along Holt Boulevard in Montclair.
8	Meredith International Centre Specific Plan	• Land development project • City of Ontario • Located in Ontario • Initial Study prepared in 2014	The Meredith International Centre Specific Plan Amendment Project proposes a mix of industrial, commercial, and residential land uses on approximately 257 acres located in the southeast portion of Ontario within San Bernardino County. The site is generally located north of I-10, south of 4th Street, between Vineyard Avenue and Archibald Avenue. The project area is located in between the Southern Pacific Trail and west Arrow Route. Construction activities were initiated in late 2015.
9	Ontario Festival Specific Plan	• Land development project • City of Ontario • Located in Ontario • Approved in 2012	The Ontario Festival Specific Plan is a comprehensive plan for the development of a planned residential site that could accommodate up to 472 dwelling units on approximately 37.6 acres. This project will be located along Inland Empire Boulevard between Archibald Avenue and Turner Avenue, just below Guasti Regional Park.
10	Wagner Properties Specific Plan	• Land development project • City of Ontario • Located in Ontario • Approved in 2010	The Specific Plan addresses the development of 11 parcels, totaling 54.57 acres of eastern Ontario. The plan will guide creation of a commercial center with commercial and residential uses.

Table 2-3 Land Development Projects within the Project Vicinity

No.*	Project	Type/Sponsor/ Location/Status	Summary
11	Ontario Center Specific Plan	• Land development project • City of Ontario • Located in Ontario • Amended in 2006	The Ontario Center site consists of approximately 88 acres of vacant land located at the northerly boundary of the eastern portion of Ontario, south of 4th Street, between Haven Avenue and Milliken Avenue, and less than 0.25 mile north of I-10. The Ontario Center will accommodate up to 2,840,000 square feet of development, including urban commercial, urban residential, garden commercial, and open space elements.
12	The Exchange Specific Plan	• Land development project • City of Ontario • Located in Ontario • Approved in 2003	The Exchange is an approximately 23.60-acre commercial development designed as a destination for customers traveling along I-15, 4th Street, and Inland Empire Boulevard.
13	Tuscana Village Specific Plan	• Land development project • City of Ontario • Located in Ontario • Last amended in 2008	The Tuscana Village Specific Plan encompasses approximately 20 acres 0.25 mile south of the State Route (SR) 60/Milliken Avenue interchange. The plan would construct a pedestrian-oriented urban village, mixed-use development that would provide up to 200 residential uses and 210,830 square feet of commercial uses.
14	Rich-Haven Specific Plan	• Land development project • City of Ontario • Located in Ontario • Approved in 2007	The plan defines uses for 510.6 gross acres for development of a maximum of 4,256 dwelling units and a minimum of 889,200 square feet of regional commercial/office uses. The project site is bound by Riverside Drive, Haven Avenue, Edison Avenue, and Milliken Avenue.
15	West Haven Specific Plan	• Land development project • City of Ontario • Located in Ontario • Last amended in 2008	The West Haven Specific Plan is a comprehensive plan for development of a mixed-used community with planned residential sites that will accommodate 753 dwelling units, a neighborhood center, school, and parks. It is bound by Haven Avenue, Riverside Drive, and Schaefer Avenue.

Table 2-3 Land Development Projects within the Project Vicinity

No.*	Project	Type/Sponsor/ Location/Status	Summary
16	The Avenue Specific Plan	• Land development project • City of Ontario • Located in Ontario • Last amended in 2010	The Avenue Specific Plan will develop approximately 569 gross acres of agricultural operations to include a maximum of 2,606 residential units and 250,000 square feet of retail land use. The plan is bound by Schaeffer Avenue, Carpenter Avenue, Edison Avenue, and Haven Avenue.
17	Parkside Specific Plan	• Land development project • City of Ontario • Located in Ontario • Approved in 2006	Parkside is proposed as a new 250.89-gross-acre planned community that will include up to 1,947 residential units and a 58.47-acre “Great Park.” The site is located between Cucamonga Creek and Archibald Avenue.
18	Grand Park Specific Plan	• Land development project • City of Ontario • Located in Ontario • Approved in 2014	The plan will develop 320.2 gross acres of undeveloped agricultural land to include up to 1,327 residential dwelling units, a high school, an elementary school, and a public community park. The plan area is located east of Archibald Avenue, west of Haven Avenue, south of Edison Avenue, and north of Eucalyptus Avenue.
19	Empire Yards at Rancho Cucamonga Metrolink Station (Empire Lakes Specific Plan)	• Land development project • SC Rancho Development/City of Rancho Cucamonga • Located in Rancho Cucamonga • Final EIR to amend the Empire Lakes Specific Plan released in 2016 • City of Rancho Cucamonga has adopted the Specific Plan • Construction is expected to start in 2019 and complete by 2024	The Empire Lakes Specific Plan would develop the privately-owned Empire Lakes Golf Course (160 acres) into a mixed-use, TOD site. The project would include a combination of residential, commercial, recreational, and office uses in an urban setting near transit services, including the Rancho Cucamonga Metrolink Station, and local regional activity centers. The project site is located north of 4th Street, west of Milliken Avenue, east of Cleveland Avenue, and south of 8th Street and the railroad.
20	Foothill Boulevard Visual Improvement Plan	• Land development project • City of Rancho Cucamonga • Located in Rancho Cucamonga • Adopted in 2002	The purpose of the plan is to develop a specification plan that will set forth design concepts for the streetscape improvements within the public ROW and entry areas along the entire length of Foothill Boulevard/Route 66 in Rancho Cucamonga.

Table 2-3 Land Development Projects within the Project Vicinity

No.*	Project	Type/Sponsor/ Location/Status	Summary
21	Victoria Arbors Master Plan	• Land development plan • City of Rancho Cucamonga • Located in Rancho Cucamonga • Amended in 2003	The master plan provides the framework on which the development of a viable, mixed-use village with a series of residential neighborhoods and mixed-use areas interconnected to each other and to a central school/park by a system of paseos and linear parks will develop.
22	Southwest Industrial Park (SWIP)	• Land development project • City of Fontana • Located in Fontana • Amended in 2009	The SWIP Specific Plan is expected to promote economic development and provide opportunities for existing property owners and new businesses. A total of 1,101 acres has been included in the plan since its adoption in 1977. The project area spans both sides of I-10 and is roughly between Etiwanda Avenue and Citrus Avenue.
23	West End Specific Plan	• Land development plan • City of Fontana • Located in Fontana • Amended in 2003	The West End Specific Plan is approximately 1,296 acres bound by East Avenue, the Southern Pacific Rail ROW, Cherry Avenue, Hemlock Avenue, and Foothill Boulevard. It is envisioned to be a mixed-use community, including business, commercial, office, public, and residential spaces.
24	Westgate Specific Plan	• Land development project • City of Fontana • Located in Fontana • Final EIR released in September 2015	The Westgate Specific Plan encompasses 964 acres in northwestern Fontana and will include a maximum of 6,410 residential units and a variety of other uses to create a village-oriented mixed-use development. The project is bound by I-15, Baseline Avenue, and Lytle Creek Road.
25	Ventana at Duncan Canyon Specific Plan	• Land development project • City of Fontana • Located in Fontana • Approved in 2007	The Ventana at Duncan Canyon Specific Plan project area is a 105-acre master-planned, mixed-use community that is adjacent to I-15 on Duncan Canyon Road. It will support a maximum of 842 residential units, more than 100,000 square feet of retail space, and more than 350,000 square feet of office space.

Table 2-3 Land Development Projects within the Project Vicinity

No.*	Project	Type/Sponsor/ Location/Status	Summary
26	Arboretum Specific Plan	• Land development project • City of Fontana • Located in Fontana • Awaiting construction	The Arboretum Specific Plan is located on the northern portion of Fontana and will create a 531.3-gross-acre master-planned community with up to 3,526 residential units. The project is generally bound by Citrus Avenue, Sierra Avenue, Grapeland Street, Duncan Canyon Road, Casa Grande Avenue, and Cypress Avenue.
27	Summit at Rosena Specific Plan	• Land development project • City of Fontana • Located in Fontana • Approved in 2006	The Summit at Rosena is located in the northern portion of Fontana and is at the intersection of Sierra Avenue and Summit Avenue. The 179.8-acre community will support a maximum of 856 dwelling units, mixed-use activity center, elementary school, and open space areas.
28	Fontana Promenade Specific Plan	• Land development project • City of Fontana • Located in Fontana • Approved in 2007	The 125-gross-acre property just south of the Sierra Avenue and I-210 interchange is a master-planned mixed-use community that will offer a variety of retail, office, and residential types and densities.
29	Downtown Fontana Transit-Oriented Development Study	• Land development project • City of Fontana • Located in Fontana • Completed in 2010	The City of Fontana evaluated TOD opportunities near the adjacent Metrolink station. The study researched comparable transit stations across the country to help understand the critical factors to achieve a truly transit-oriented, transit-serving Downtown, identified the market potential that will result in the Downtown serving as a destination for residents, and identified residential prototypes and suitable locations that will help create an urban, transit-oriented place.

Table 2-3 Land Development Projects within the Project Vicinity

No.*	Project	Type/Sponsor/ Location/Status	Summary
30	Sierra Avenue Valley Boulevard Land Use Study	• Land development project • City of Fontana • Located in Fontana • Completed in 2013	The purpose of the study was to create a vision for TOD around Kaiser Permanente Hospital in Fontana. The intersection of Sierra Avenue and Valley Boulevard is a unique and diverse area of Fontana. The area is home to Fontana's largest employer (Kaiser Permanente Hospital), sees some of its largest volumes of traffic, and contains large concentrations of shopping as well as residential areas. The study recommends investment in multimodal transportation to influence transportation behavior and catalyze market changes. Recommendation for dedicated side-running transit lanes on Sierra Avenue, with a station in front of Kaiser Permanente on Sierra Avenue south of Marygold Avenue.
31	Valley Trails Specific Plan	• Land development project • City of Fontana • Located in Fontana • Approved in 2007	Valley Trails is envisioned as a 290.8-acre master-planned community containing a maximum of 1,154 residential units, a school, and recreational facilities. The property is located adjacent to established residential neighborhoods in southeastern Fontana.
32	The Renaissance Specific Plan	• Land development project • City of Rialto • Located in Rialto • Adopted in 2010	The Renaissance Specific Plan is designed as a master-planned community on 1,439 acres that will contain up to 16.2 million square feet of business and commercial use, 1,667 residential units, a school, a community park, and multiple neighborhood parks all located in close proximity. The project site is generally bound by Casmalia Street, Baseline Road, Ayala Drive, and Tamarind Avenue.
33	Lytle Creek Ranch Specific Plan	• Land development project • City of Rialto • Located in San Bernardino County • EIR certified August 2012	The project would annex approximately 2,447 acres of County of San Bernardino land to establish new land-use policies authorizing the development of up to 8,407 dwelling units and 849,420 gross square feet of general and specialty commercial, office, business, light industrial, and other similar uses.

Table 2-3 Land Development Projects within the Project Vicinity

No.*	Project	Type/Sponsor/ Location/Status	Summary
34	Pepper Avenue Specific Plan	• Land development project • City of Rialto • Located in Rialto • Draft EIR released in 2017; Final EIR has not been certified	The Pepper Avenue Specific Plan would develop 101.7 acres of mostly vacant land to include a mix of retail, office, and up to 275 multi-family residential land uses. The project site is located east of Eucalyptus Avenue, south of SR-210, west of Meridian Avenue, and north of Walnut Avenue.
35	Foothill Boulevard Specific Plan	• Land development project • City of Rialto • Located in Rialto • Adopted in 2010	Foothill Boulevard stretches for 4 miles through Rialto. The focus of this plan is changing from regional and highway commercial uses to more locally serving community, commercial, and residential uses.
36	Integrated Transit and Land Use Planning for the Foothill Boulevard/ 5th Street/ Baseline Road Corridor	• Land development project • SBCTA and SCAG • Located in Rialto • Completed in 2013	The purpose of the study was to evaluate options for alignments, operating scenarios, and land use scenarios for BRT service along Foothill Boulevard.
37	San Bernardino County Flood Control District's Master Stormwater System Maintenance Program (MSWMP)	• Flood control facility maintenance • San Bernardino County Flood Control District • Located within the San Bernardino County Flood Control District jurisdiction (the project is located in multiple locations along the project corridor and is not shown in Figure 2-16) • Initial Study prepared in June 2014	The project proposes to implement a comprehensive program to prepare and implement a Maintenance Plan for maintenance of flood facilities throughout San Bernardino County. Types of routine O&M activities include, but are not limited to, removal of excess sediment, debris, and vegetation; stockpiling excess material and debris following removal; maintaining sufficient flow paths; grooming/repairing earthen and improved channel slopes and bottoms; and maintaining culverts and bridges to ensure proper drainage and structural integrity.
*Reference number corresponds to the location of the development project site in Figure 2-16.			

Source: WVC Project Community Impact Report, 2018.

Table 2-4: Transportation Projects within the Project Vicinity

No.*	Project	Type/Sponsor/ Location/Status	Summary
1	Pomona Americans with Disabilities Act Improvements – Major Street Rehabilitation	• City of Pomona • Located in Pomona (the project has work locations throughout Pomona and is not shown in Figure 2-16) • Plans signed February 2016	The City of Pomona's Major Street Rehabilitation project provides rehabilitation of 3.57 lane miles of the City's arterial streets, including parts of Garey Avenue, Indian Hill Boulevard, County Road, San Antonio Avenue, and La Verne Avenue. The project includes removal and replacement of trees; removal and replacement of damaged sidewalk, curbs and gutters; ADA access ramps; removal and relocation of fencing; and construction of new wider sidewalk within existing street ROW as possible without obtaining additional easements.
2	Pomona Americans with Disabilities Act Curb Ramps and Sidewalk Compliance Program	• City of Pomona • Located in Pomona (the program has work locations throughout Pomona and is not shown in Figure 2-16) • Public hearing on the Appeal of Historic Preservation Commission's Approval of Major Certification of Appropriateness and Design Plan was held in July 2017	The ADA Curb Ramps and Sidewalks Compliance Program is a citywide program to implement ADA improvements, such as curb ramps and detectable warning surfaces.
3	Pomona Americans with Disabilities Act Transition Plan	• City of Pomona • Located in Pomona (the plan has projects that are located throughout Pomona and is not shown in Figure 2-16) • Plan approval signed October 2015	The Pomona ADA Transition Plan outlines City ADA codes and standards, and goals and objectives in making pedestrian facilities within public ROW ADA compliant. The plan includes an inventory of existing public ROW facilities, funding sources, and programs.

Table 2-4: Transportation Projects within the Project Vicinity

No.*	Project	Type/Sponsor/ Location/Status	Summary
4	Los Angeles-San Bernardino Inter-County Transit and Rail Study	• SCAG • Located in Claremont, La Verne, Montclair, Ontario, Pomona, Rancho Cucamonga, and Upland (the project is located throughout Los Angeles and San Bernardino counties and is not shown in Figure 2-16) • Currently underway	The study's objectives are to understand the market for transit and rail travel in the corridor, including travel to and from Ontario International Airport; estimate potential benefits and costs associated with different transit and rail improvement options for the corridor; and recommend a path forward for cost-effective transit and rail improvements, with a focus on coordinating plans for the Metro Gold Line, Metrolink, and access to Ontario International Airport.
5	Improvement to Transit Access for Cyclists and Pedestrians	• SBCTA and SCAG • Located in Montclair, Upland, Rancho Cucamonga, Fontana, Rialto, San Bernardino, and Loma Linda • Plan completed in 2013 • Currently working on implementing the plan	The plan includes sidewalk improvements around/near six Metrolink stations on the San Bernardino Line and four future E Street sbX BRT stations in the cities of San Bernardino and Loma Linda. The project is designed to improve access to and from stations for local residents and commuters, thereby reducing parking demand and increasing transit ridership.
6	I-10 Corridor Project	• SBCTA and California Department of Transportation (Caltrans) • Located in Pomona, Claremont, Montclair, Upland, Ontario, Fontana, Bloomington, Rialto, Colton, San Bernardino, Loma Linda, Redlands, and Yucaipa • Environmental approval phase completed in 2017	The I-10 Corridor Project is proposed to improve safety and relieve traffic congestion on I-10, 0.4 mile west of White Avenue in Pomona at Post Mile (PM) 44.9 to just east/west of Live Oak Canyon Road in Yucaipa at PM 37.0.

Table 2-4: Transportation Projects within the Project Vicinity

No.*	Project	Type/Sponsor/ Location/Status	Summary
7	I-10/Grove Avenue Interchange Project	• City of Ontario • Located in Ontario • Environmental approval phase expected to be completed in 2019	The I-10/Grove Avenue Interchange Project proposes to improve on the operational deficiencies of the existing interchange and relieve traffic congestion to accommodate anticipated increases in automobile and truck traffic in the study area. The project would construct a new interchange at Grove Avenue, close the existing I-10/4th street interchange, and include improvements along Grove Avenue and 4th Street near the interchange.
8	Grove Avenue Corridor Project	• City of Ontario • Located in Ontario • Currently in preliminary and environmental document phase	The Grove Avenue Corridor Project proposes to widen Grove Avenue between 4th Street and Holt Boulevard in Ontario. The project would accommodate recent and projected growth in passenger and goods/trucks movement associated with Ontario International Airport and changes in land use since Grove Avenue was originally constructed.
9	Metro Gold Line Foothill Extension Construction Activity: Ontario Airport Extension	• LA Metro • Located in Montclair, Upland, and Ontario • Completion anticipated in 2026	The project would extend the Gold Line approximately 8 miles – from the TransCenter in Montclair, located just east of Monte Vista Avenue and north of Arrow Highway, to Ontario – and terminate the line at Ontario International Airport. Although not formally part of the Foothill Extension Project, the Construction Authority completed a study to understand the feasibility of extending the line from Montclair to the airport in 2008. The Initial Study concluded that extending the line was feasible and provided many potential route options.
10	Ontario Airport Rail Access Study	• SBCTA • Located in Ontario • Completed in 2015	The study evaluated options for transit to Ontario International Airport, including shuttle bus from nearby Metrolink stations, such as Rancho Cucamonga Metrolink Station.

Table 2-4: Transportation Projects within the Project Vicinity

No.*	Project	Type/Sponsor/ Location/Status	Summary
11	ARRIVE Corridor Study	• SCAG/SBCTA • Located in Ontario • Completed in 2015	The study evaluated alternatives for passenger rail service within 0.5 mile of Ontario International Airport and San Bernardino Airport.
12	I-15 Corridor Improvement Project	• Riverside County Transportation Commission (RCTC) and Caltrans • Located in Jurupa Valley, Eastvale, Norco, Corona, and Riverside • Construction began in 2018	The project proposes to improve a 14.6-mile-long segment of the I-15 corridor. The proposed project would include the addition of one to two tolled Express Lanes in each direction from Cajalco Road where it crosses I-15 in Corona to just south of the I-15 and SR-60 interchange at Riverside Drive.
13	Customer-Based Ridesharing and Transit Interconnectivity Study	• SBCTA • Located throughout San Bernardino County • Study in progress	This project is studying how to improve shared and active transportation in San Bernardino County. The study examines transit interconnectivity, service gaps and inefficiencies, and costs and funding opportunities. The project is also studying the transit connection between the Rancho Cucamonga Metrolink Station and Ontario International Airport.
14	Foothill Boulevard BRT Study	• City of Rancho Cucamonga • Located in Rancho Cucamonga • Completed in 2013	This study evaluated feasibility and phasing options for BRT service along Foothill Boulevard in Rancho Cucamonga and identified opportunities for station area development. The outcome of discussions with Rancho Cucamonga board members resulted in an agreement that they want median-running dedicated BRT on at least part of the corridor. Recommendation to deviate the planned BRT route at Victoria Gardens.

Table 2-4: Transportation Projects within the Project Vicinity

No.*	Project	Type/Sponsor/ Location/Status	Summary
15	WVC Corridor – Safe Routes to Transit Project	• Omnitrans • Located in the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana • Categorical Exemption/ Categorical Exclusion (CE/CE) completed and approved in May 2016 • Construction to be complete in mid-2019	The project proposes sidewalk and curb ramp improvements, installation of bicycle racks, and restriping of pedestrian crosswalks within 0.5 mile of proposed WVC stations in the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana.
16	Safe Routes to School Project – Fontana Avenue and Arrow Boulevard	• City of Fontana • Located in Fontana • Preliminary Environmental Study signed August 2016 • Construction scheduled to start in 2019	The City of Fontana's Safe Routes to School Project consists of installing sidewalk and bicycle infrastructure. This project is for the installation of 2.2 miles of sidewalk and bicycle infrastructure, where none currently exist, located on Arrow Boulevard and Fontana Avenue. The project includes construction of 5-foot-wide sidewalks, Class II bicycle lanes, curb and gutter, reconstructing ADA-compliant driveways, installing 25 ADA curb ramps, and providing signage and pavement striping.
17	Fontana Grade Crossings Pedestrian Improvement Project	• SBCTA • Located in Fontana • Construction is scheduled to complete in spring 2018	The project was initiated by SBCTA and Fontana in February 2015 to construct grade crossing safety enhancements for pedestrians at the existing Sierra Avenue and Juniper Avenue Metrolink at-grade crossings in Fontana.
*Reference number corresponds to the location of the development project site in Figure 2-16.			

Source: WVC Project Community Impact Report, 2018.

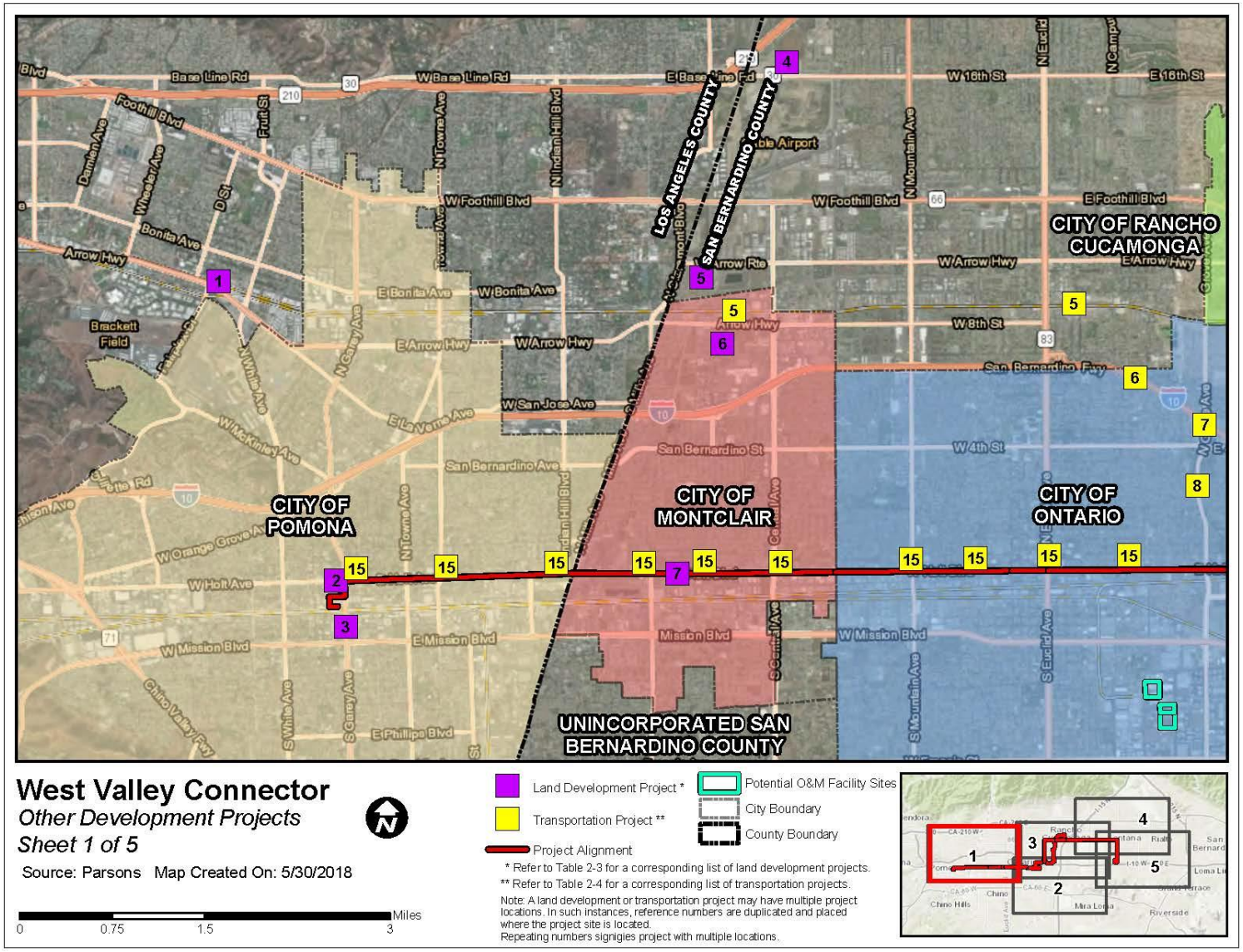

Figure 2-16 Other Development Projects (Sheet 1 of 5)

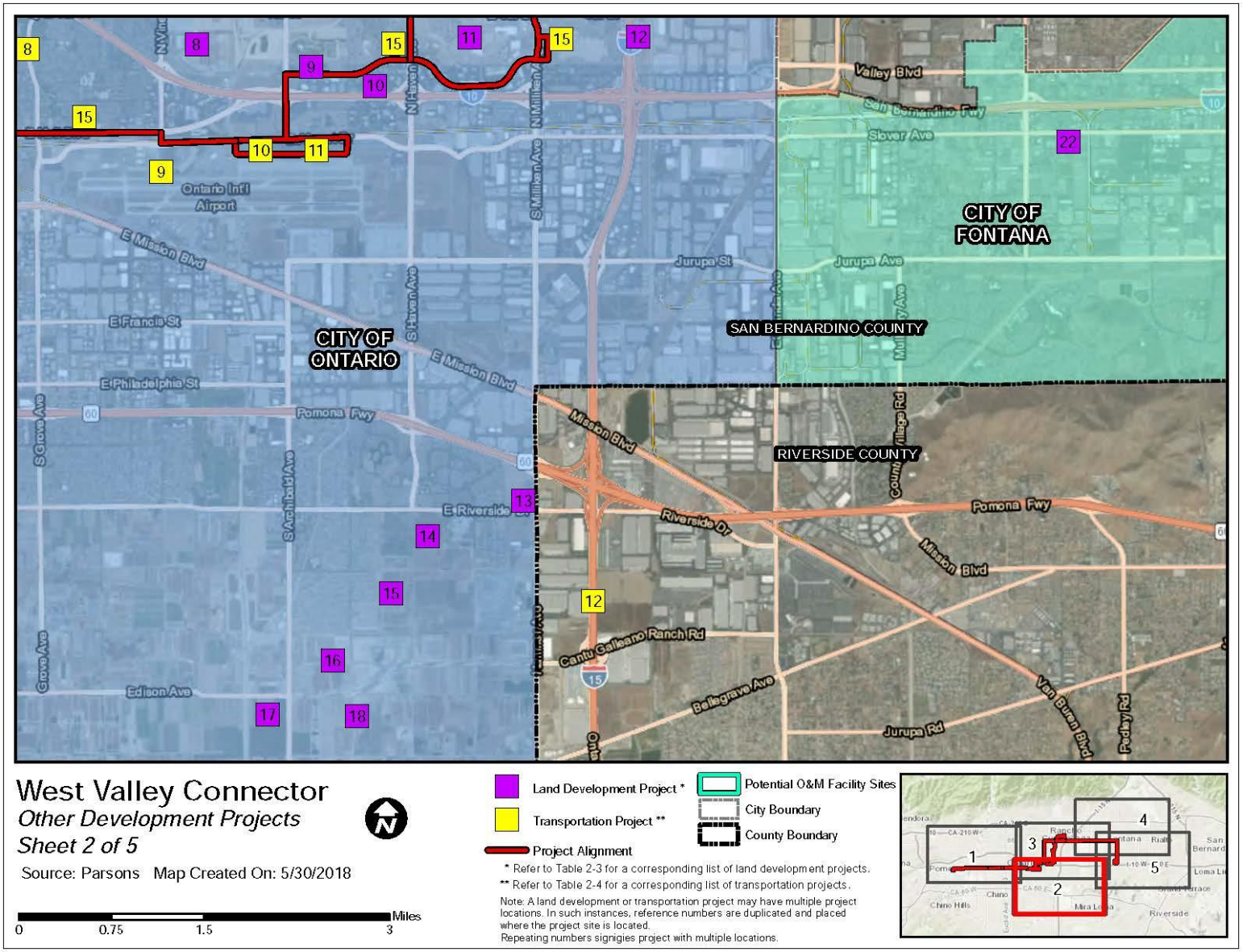

Figure 2-16 Other Development Projects (Sheet 2 of 5)

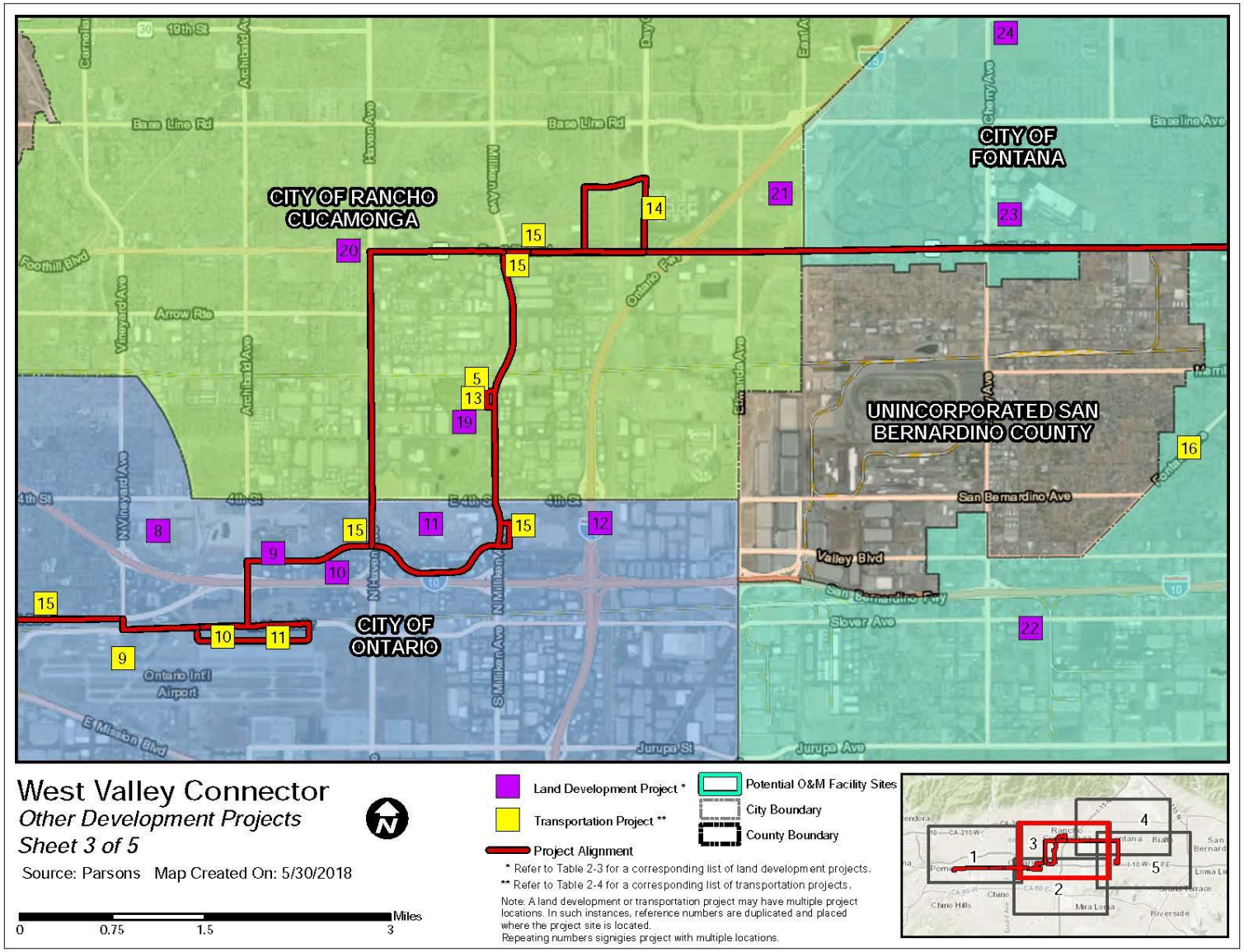

Figure 2-16 Other Development Projects (Sheet 3 of 5)

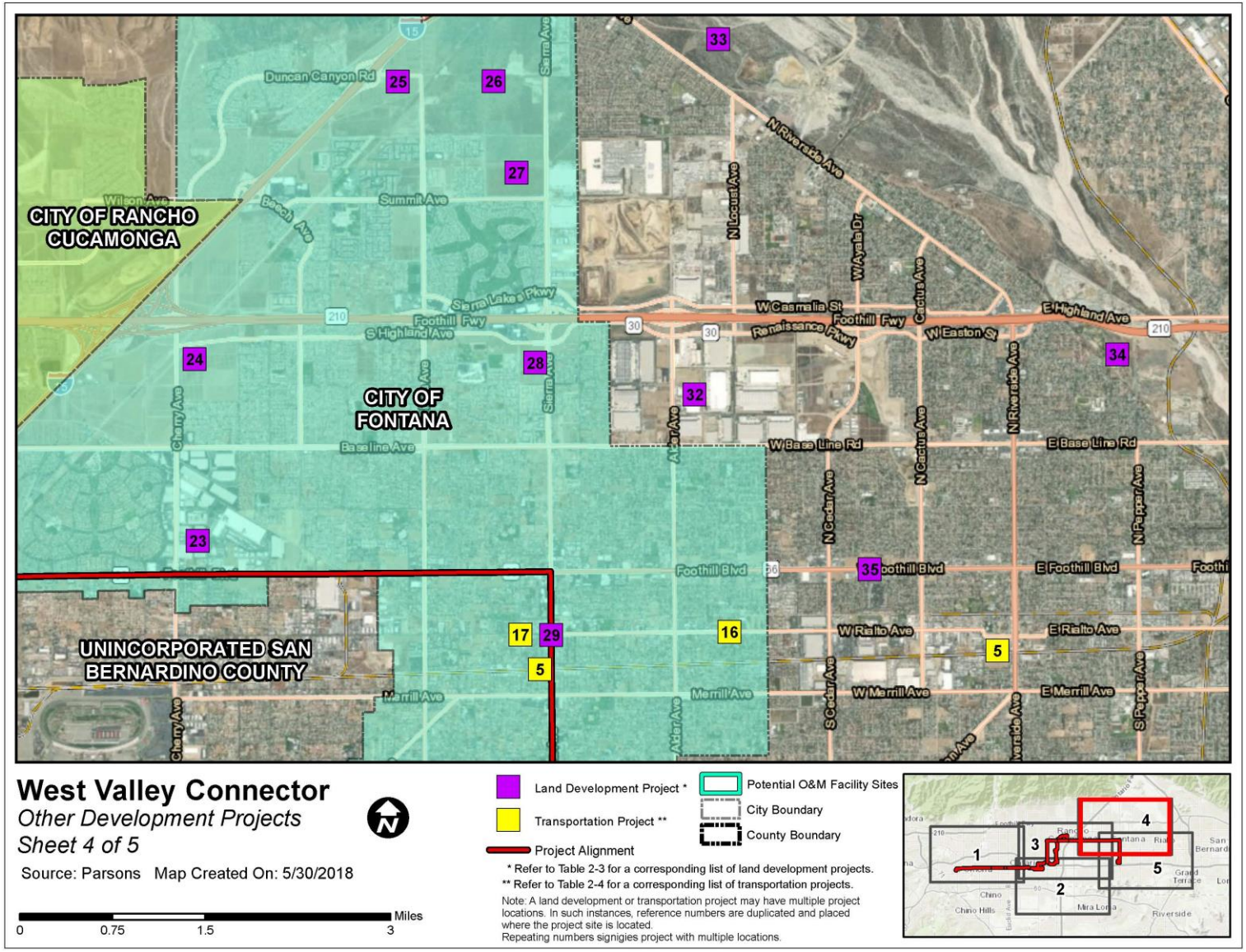

Figure 2-16 Other Development Projects (Sheet 4 of 5)

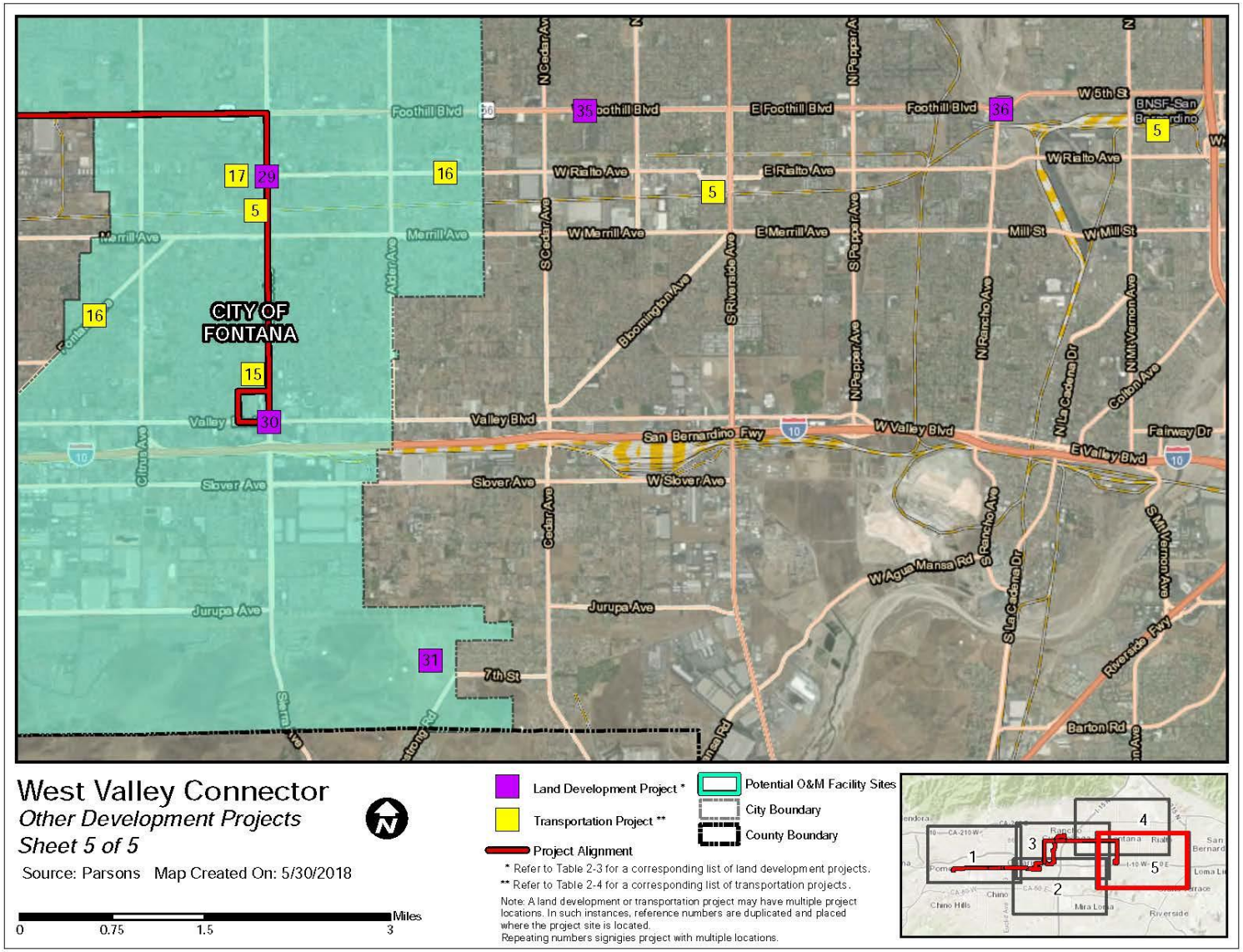

Figure 2-16 Other Development Projects (Sheet 5 of 5)

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CHAPTER 3 – TRAFFIC & TRANSPORTATION – AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

3.0 TRAFFIC & TRANSPORTATION – AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

3.1 Overview

This chapter documents potential transportation impacts associated with development of the WVC Project pursuant to NEPA. Significant effect determinations pursuant to CEQA are also noted when applicable. The chapter addresses existing and future bus and rail transit services, traffic operations, parking, and pedestrian and bicycle access throughout the proposed project corridor.

Overall, based on the detailed analysis conducted and summarized in this chapter, the proposed action is not expected to create any adverse effects on the traffic and transportation system pursuant to NEPA. A more-detailed analysis of proposed project impacts to traffic and transportation is provided in the *West Valley Connector* Project – Alternative Analysis Report (prepared in 2014 and adopted by Omnitrans in 2015) and *Traffic Operations Analysis* (December 2017).

The proposed project is a 35-mile-long transit project that would provide speed and quality improvements to the public transit system within the corridor and attract increased ridership. The WVC line would primarily run along Holt Avenue/ Boulevard, Milliken Avenue, Haven Avenue, Foothill Boulevard, and Sierra Avenue through the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. The proposed project alignment consists of two alignments: The Phase I/Milliken Alignment and the Phase II/Haven Alignment. The proposed project would provide improved public transit as an alternative to the private automobile for trips along the proposed project corridor and connecting to other transit opportunities serving the region. The analysis presented in this chapter also examines potential effects related to parking and pedestrian and bicycle facilities.

Based on SCAG 2016 RTP/SCS growth forecast, population and employment growth throughout the San Bernardino Valley is expected to be significant between now and 2040, with an associated growth in traffic volumes (see Table 4.11-1 in Section 4.11, Demographics and Neighborhoods). This would result in worsening LOS, traffic congestion, travel delays on various roadways and at various intersections along the proposed project corridor. In addition to various municipal improvements that would be implemented to help alleviate the higher traffic volumes, SBCTA is developing more attractive

transit options to reduce automobile travel, including the proposed project.

3.2 Bus and Rail Transit Service

3.2.1 Existing Bus and Rail Services

Omnitrans operates 35 fixed bus routes in the San Bernardino Valley, including 34 local bus routes and one BRT line – the sbX Green Line. Portions of two routes in particular, Routes 61 and 66, share their alignment with the proposed project. Route 61, with 5,000 passengers per average weekday, and local Route 66, with 3,185 passengers per average weekday, based on September-October 2015 counts, are two of Omnitrans' four services with the highest ridership, together accounting for more than 18 percent of Omnitrans' total system-wide daily ridership (see Figure 3-1). In addition, the corridor is home to several important employment, education, and activity centers where public transit demand by workers, shoppers, students, visitors, and others is concentrated. The proposed project corridor connects Victoria Gardens shopping mall to Ontario Mills shopping mall, Ontario International Airport, and Kaiser Permanente Medical Center, and it also provides new direct connections to three Metrolink stations.

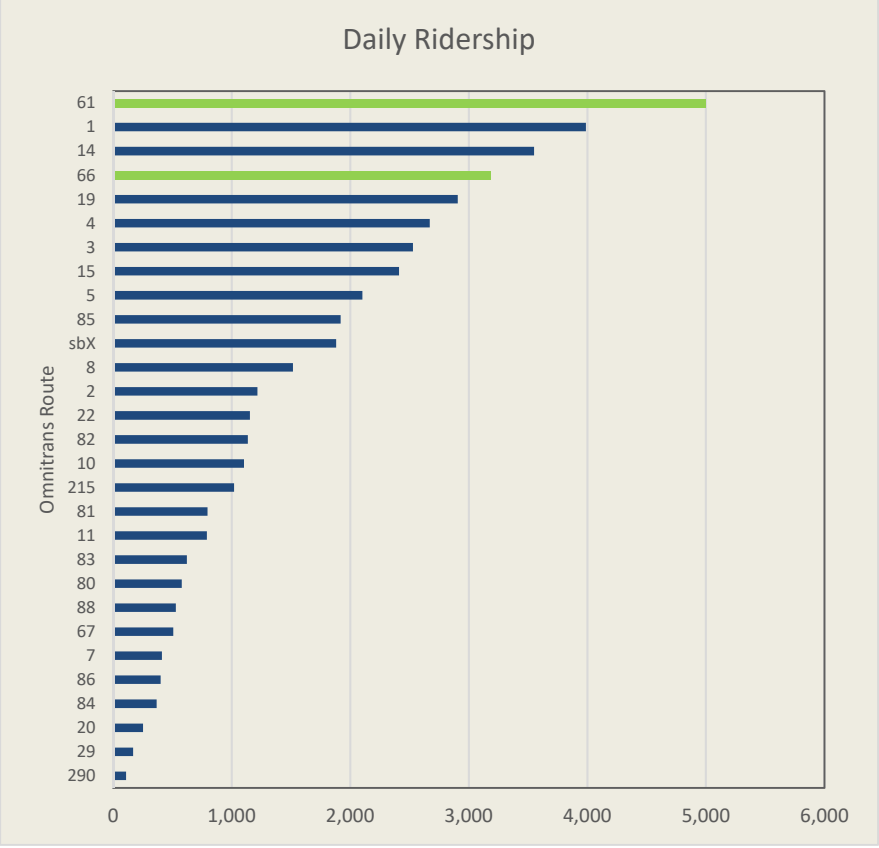

Figure 3-1 Omnitrans Average Weekday Ridership by Route

3.2.1.1 Bus Route 61

Route 61 is a 20.4-mile-long route from the Pomona Transit Center on the west end along Holt Avenue in Pomona to Ontario International Airport along Inland Empire Boulevard and Milliken Avenue to Ontario Mills. The corridor continues east along 4th Street/San Bernardino Avenue to the South Fontana Transit Center near Kaiser Permanente Hospital, then north along Sierra Avenue, terminating at the Fontana Metrolink Station.

Route 61 crosses the western portion of the San Bernardino Valley in an east-west direction, providing one of three east-west transit options, along with Route 66 on Foothill Boulevard and Route 67 on Baseline Road.

Route 61 serves 92 local stops along the corridor in each direction, with an average of 4.5 stops per mile in each direction in the corridor. Transfers along the corridor include 16 other Omnitrans bus routes, 2 Metrolink commuter rail lines (the San Bernardino Line and Riverside Line), Foothill Transit Silver Streak BRT, and 9 Foothill Transit local bus routes. Since 2006, ridership in the corridor has remained the highest in the Omnitrans service area at approximately 5,000 riders on average per weekday. This represents approximately 11.2 percent of Omnitrans' total system ridership.

3.2.1.2 Bus Route 66

Route 66 is a 15.8-mile-long route that runs primarily along Foothill Boulevard with termini in Montclair and Fontana. The route serves two primary transit stations at the Montclair Transit Center and Fontana Metrolink Transit Center. Route 66 has moderate ridership, with most boardings occurring at the route termini. The route includes 73 bus stops in each direction, with an average of 0.22 mile between stops. Route 66 has the fifth highest ridership among Omnitrans routes with approximately 3,185 riders on average per weekday, representing 7.1 percent of all Omnitrans' total system ridership.

3.2.1.3 Other Bus Operators

The following local transit operators also provide service in the service area of the proposed project:

- Foothill Transit, serving the San Gabriel Valley, with connections to Omnitrans bus routes at the Montclair Transcenter on several Foothill Transit routes, and connections between Route 61 and several Foothill Transit routes at Pomona Transit Center.
- Victor Valley Transit Authority, serving Victorville and Apple Valley, provides service to Fontana Metrolink and Fontana Kaiser Permanente Hospital.

3.2.1.4 Metrolink

Metrolink is a regional commuter train service that operates service on seven regional lines serving Los Angeles County, Ventura County, the Antelope Valley, and San Bernardino, Riverside, and Orange counties under the jurisdiction of the Southern California Regional Rail Authority (SCRRA). Three routes serve San Bernardino County and include the

San Bernardino, Riverside, and Inland Empire/Orange County lines. The San Bernardino and Riverside routes interface with the planned WVC corridor alignments and serve an average of 11,036 and 4,630 average weekday riders in 2016, respectively. The San Bernardino Line runs 7 days per week, while the Riverside Line only runs on weekdays. Direct connections to both lines are provided via transit centers served along the proposed project alignment.

3.2.2 Future Bus and Rail Service

In 2004, Omnitrans developed the *Omnitrans System-Wide Plan*, which identified major transit corridors for potential improvement service, and in 2011, the plan was updated. SBCTA included the corridors from the System-Wide Plan in its own San Bernardino County Long Range Transit Plan in 2009. The corridors were also included as strategic corridors in the 2012 RTP/SCS produced by SCAG.

3.2.3 Projected Future WVC System-Wide Patronage

As mentioned in Chapter 1, the WVC corridor is a strong market for transit. Bus Routes 61 and 66 accommodate a large travel market within the corridor, with combined ridership of almost 8,200 daily in 2015.

The ridership forecasts for the WVC corridor are summarized in Table 3-1. This table displays a summary of the ridership forecast for the proposed project and local bus routes serving the corridor. Ridership forecasts are displayed for the No Build Alternative and build alternatives.

Table 3-1 WVC Ridership Summary

Alternative	Proposed Project Service	Local (61 & 66)	Corridor Total
2015 Ridership			
No Build	–	8,185	8,185
2020 Ridership			
No Build	–	8,640	8,640
Phase I/Milliken Alignment	5,800	5,160	10,960
Between 2023 and 2040			
No Build	–	8,820	8,820
Phases I and II (Milliken and Haven Alignments combined)	8,290	3,700	11,990
Horizon Year (2040)			
No Build	–	10,460	10,460
Phases I and II (Milliken and Haven Alignments combined)	10,170	4,540	14,710

The WVC Project was initially planned for opening year 2020. Modification in the project design has delayed the opening year to 2023. As shown in Table 3-1, Phase I/Milliken Alignment of the proposed project is forecast to provide service for 5,800 riders in 2020, the initially planned opening year. When coupled with ridership that would be maintained from local Bus Routes 61 and 66, total daily public transit ridership along the corridor in 2020 is estimated to be approximately 11,000. This amounts to more than 2,300 new daily transit trips, or a 27 percent increase over the forecast ridership without the proposed project.

The Phase II/Haven Alignment is planned to be constructed after the Phase I/ Milliken Alignment is completed and when the funding is available. The opening year for Phase II/Haven Alignment would be sometime between 2023 and 2040. Both phases of operation combined are forecast to provide service for 8,290 riders at the opening year. When coupled with ridership on the local bus routes, total daily ridership along the corridor is estimated to be approximately 12,000 daily transit trips, a 36 percent increase over the forecast ridership without the proposed project.

The two alignments of the proposed project are forecast to serve 10,170 transit riders daily in horizon year 2040, further improving the overall transportation system in the study area and helping reduce automobile travel. When coupled with ridership on the local bus routes, total daily ridership along the corridor in 2040 is estimated to be approximately 14,700 daily transit trips, a 41 percent increase over the forecast ridership without the proposed project. The proposed project's overall effect on transit would be beneficial; it would not cause any negative impacts to the transit system in the study area.

3.2.4 Projected Travel Times and Accessibility

The priority of the proposed project is to design a system that reduces transit travel times and improves accessibility to provide a service more competitive than the private automobile. The reduction would be accomplished through provisions of exclusive bus-only lanes and stations, as well as more frequent service headways.

It is projected that with implementation of the proposed project, current travel times would decrease by almost 20 percent in the eastbound direction and 13 percent in the westbound direction versus existing conditions. Buses are also projected to run, on average, 7.3 mph faster than existing service speeds.

Based on these projections, the proposed project would minimize the pitfalls associated with current standard bus travel along the Bus Route 61 and 66 corridors.

3.3 Vehicular Traffic

3.3.1 Existing Street and Highway Conditions

The existing street network can be characterized as a standard, grid system

of local streets traversed by a network of freeways, the most relevant of which is I-10, which crosses the proposed project alignment at Archibald Avenue. The primary arterial streets along which the proposed project would run are Holt Avenue/Boulevard, Inland Empire Boulevard, Milliken Avenue, Haven Avenue, Foothill Boulevard, and Sierra Avenue. Holt Avenue/Boulevard and Sierra Avenue are four-lane roadways. Haven Avenue, Milliken Avenue, and Foothill Boulevard are six-lane divided roadways.

3.3.2 Traffic Operations Methodology

The quality of traffic operations is characterized using the concept of Level of Service (LOS). LOS is defined by a range of grades from A (best) to F (worst). At intersections, LOS “A” represents relatively free operating conditions with little or no delay (see Table 3-2). LOS “F” is characterized by extremely unstable flow conditions and severe congestion with volumes at or near the intersection’s design capacity. This results in long queues backing up from all approaches to intersections.

Analysis of traffic operations were conducted using the SBCTA’s Congestion Management Program Traffic Impact Analysis guidelines. LOS analysis was calculated at most of the study area intersections following Highway Capacity Manual (HCM) 2000 methodology for evaluation and using Synchro software for calculations. Due to differences in the configuration and operation of the dedicated bus lane facility along Holt Boulevard between Benson Avenue and Vineyard Avenue in Ontario, intersection analysis was performed using VISSIM micro-simulation software for that particular segment. Intersection vehicle delay results generated by micro-simulation models such as VISSIM are not HCM compliant; however, the differences in the results of the LOS analysis between VISSIM and Synchro are typically negligible.

3.3.3 Effect Determination

The study area of the proposed WVC Project passes through the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. NEPA considers the context and intensity of an impact to determine if there would be an adverse effect; the CEQA thresholds provide an appropriate measure of context and intensity. The jurisdictions within the study area consider LOS D as the minimum acceptable LOS to be used for all intersections. A significant impact under CEQA is considered to occur if an intersection that is forecast to operate at LOS D or better in no-build conditions exceeds LOS D under the build alternatives. In addition, a significant impact is considered to occur if the proposed project results in any increase in delay at an intersection forecast to operate at LOS E or F in no-build conditions. The jurisdictions do not have specific significant impact criteria for unsignalized intersections.

Table 3-2: Intersection LOS Definitions

Level of Service	Description	Signalized Intersection Delay (seconds per vehicle)	Unsignalized Intersection Delay (seconds per vehicle)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 10	≤ 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>10 and ≤ 20	>10 and ≤ 15
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>20 and ≤ 35	>15 and ≤ 25
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>35 and ≤ 55	>25 and ≤ 35
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>55 and ≤ 80	>35 and ≤ 50
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 80	> 50

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington, DC, 2000.

3.3.4 Existing (2016) Traffic Conditions for BRT Corridor

Based on the proposed Phase I and Phase II alignments, 129 intersections were analyzed in the *WVC Project Traffic Operations Analysis Report (2018).* The Phase I alignment (Milliken Avenue alignment) consists of 84 intersections, which includes 65 intersections along the proposed WVC routes and 19 intersections along parallel routes, such as D Street, State Street, and Mission Boulevard, within Ontario. The Phase II alignment (Haven Avenue Alignment) consists of an additional 45 intersections, for a total of 129 intersections. These intersections are shown in Figure 3-2.

Existing traffic counts were collected in April, May, July, and September 2016 at the 129 study intersections. Detailed vehicle classification counts were conducted at 7 intersections, while peak-hour vehicle counts were collected at the remaining 12 study intersections. In addition to the intersection counts, peak-hour turning movement counts were collected at 6 unsignalized, minor street intersections along Holt Boulevard, between Benson Avenue and Vineyard Avenue, to estimate the magnitude of trip diversion that could result from construction of center-running bus lanes with raised medians. These streets were Oaks Avenue, Boulder Avenue, Lemon Avenue, Monterey Avenue, Virginia Avenue, and Imperial Avenue.

Based on existing condition traffic counts, most intersections are currently operating at LOS D or better during peak hours. The following 4 intersections are currently operating at LOS E or worse:

- #25 San Antonio Avenue/State Street (AM and PM peak hours)
- #38 Campus Avenue/State Street (AM and PM peak hours)
- #44 Grove Avenue/State Street (AM peak hour)
- #79 Day Creek Boulevard/Foothill Boulevard (PM peak hour)

3.3.5 Existing (2018) Traffic Conditions for Operations and Maintenance (O&M) Facility

Based on the proposed three O&M facility site alternatives, seven intersections were analyzed in the *WVC* Project *Operations and Maintenance Facility Traffic Analysis Report (2018b).* O&M facility Sites 1 and 2 have access points along Cucamonga Avenue, whereas the Site 3 alternative has access points along Bon View Avenue. These intersections are shown in Figure 3-3.

Traffic operations at intersections – or quality in which traffic flows through intersections – is typically described by LOS. The operations analysis for the O&M facility follows the same LOS methodology outlined in Section 3.3.2.

Existing traffic counts were collected in February 2018 at the seven study intersections.

Based on existing condition traffic counts, most intersections are currently operating at LOS D or better during peak hours. The following intersection is currently operating at LOS E or worse:

- #2 Campus Avenue/Belmont Street (AM and PM peak hours)

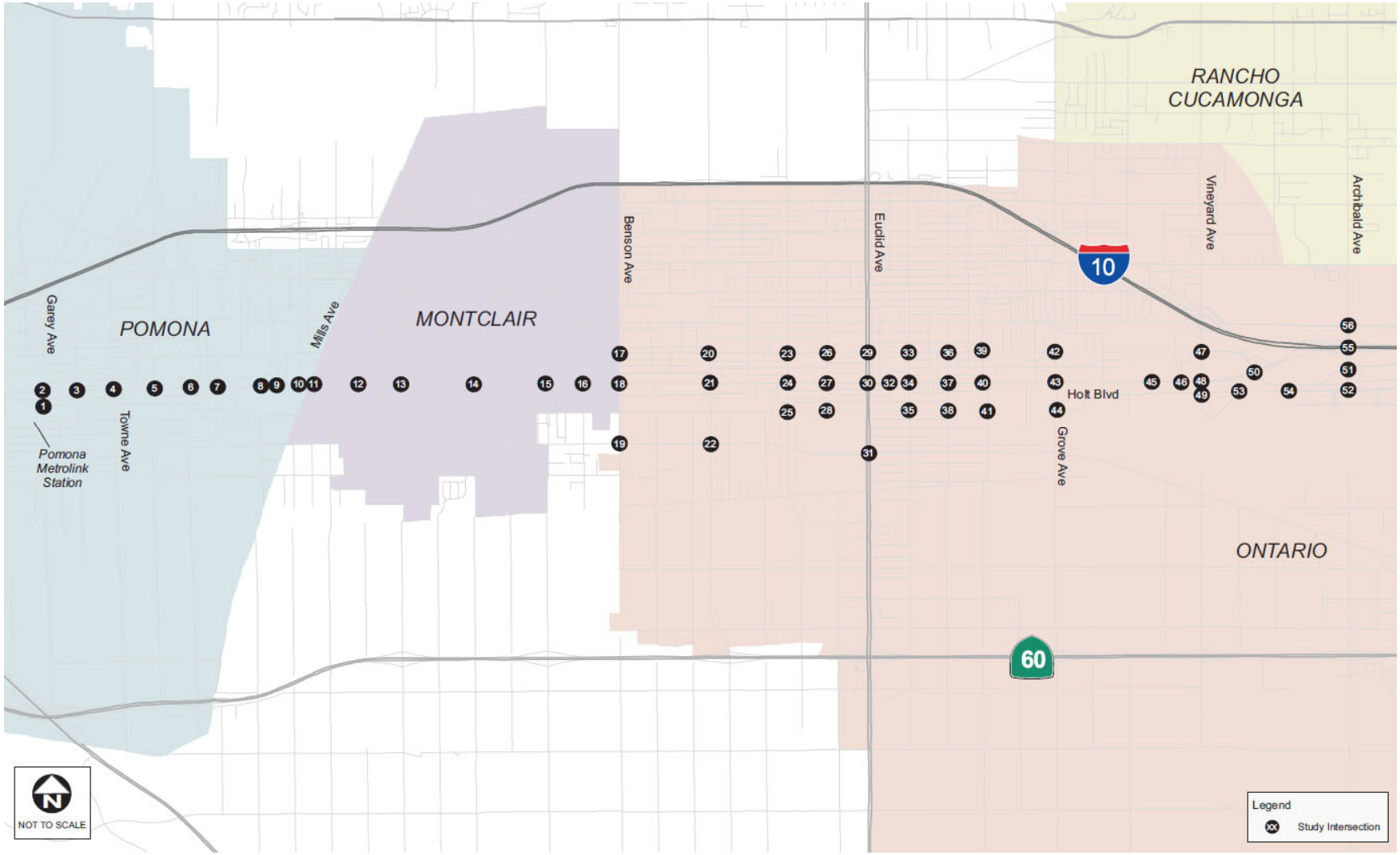

Figure 3-2 Study Intersection Locations (Sheet 1 of 2)

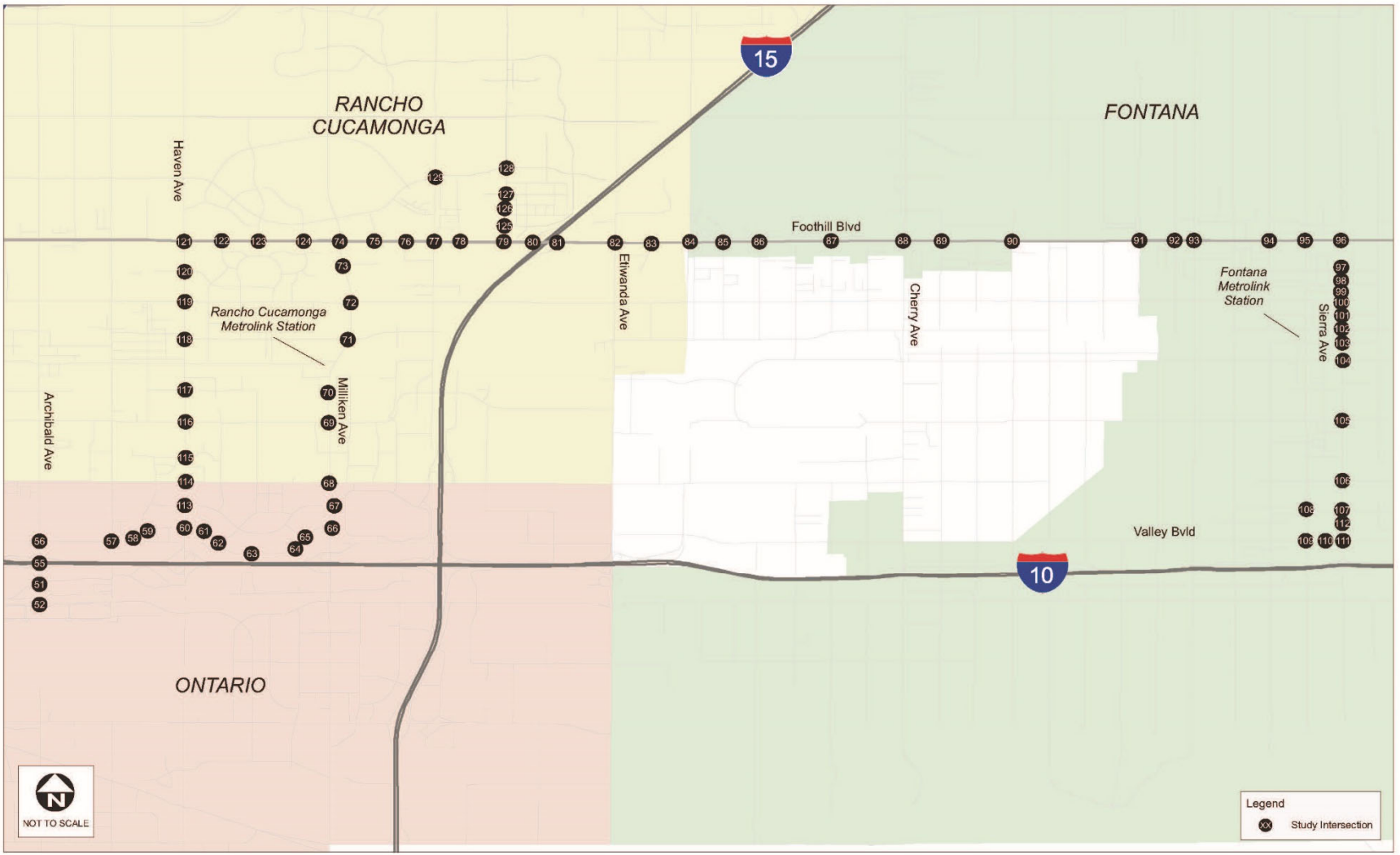

Figure 3-2 Study Intersection Locations (Sheet 2 of 2)

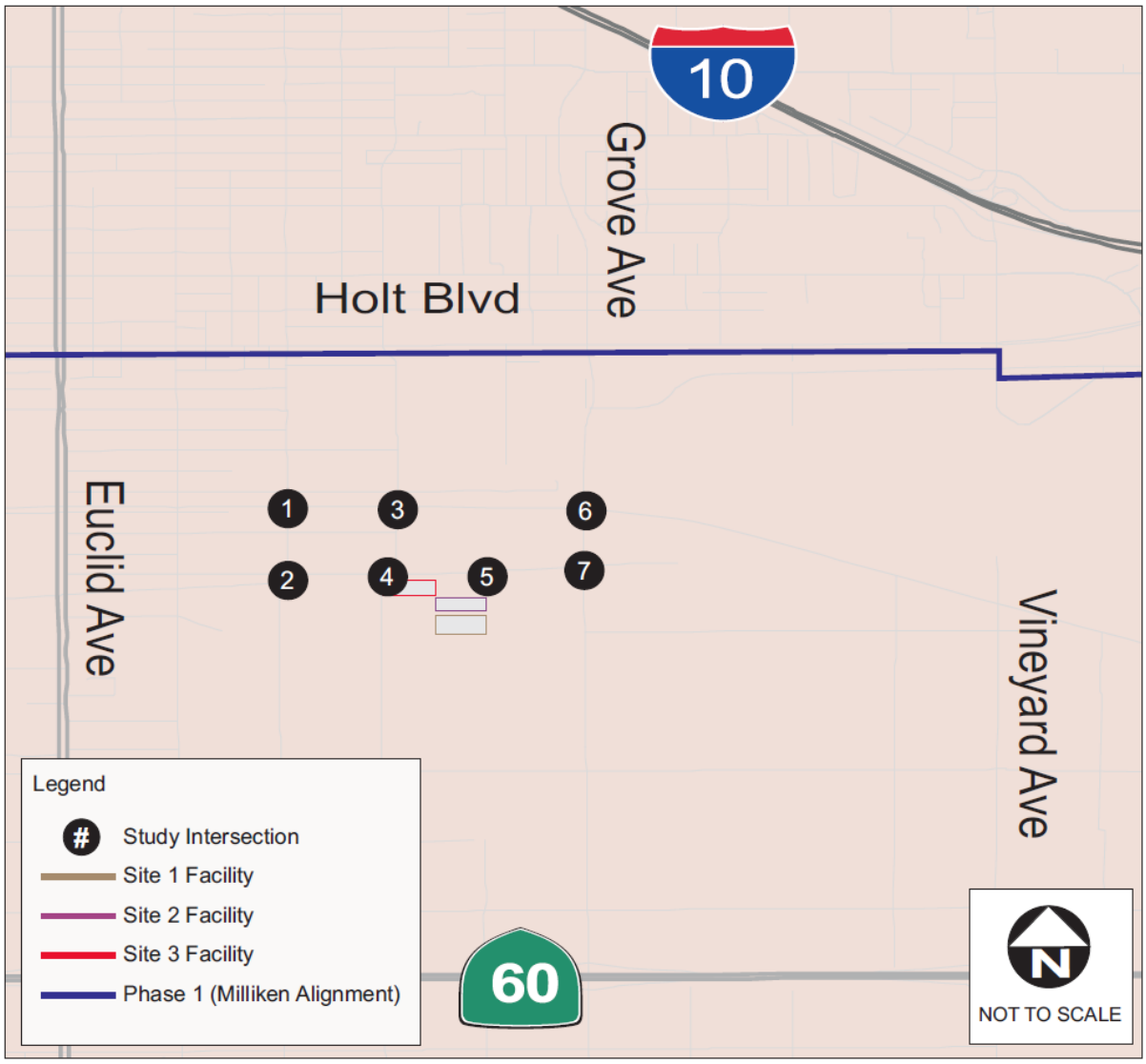

Figure 3-3 O&M Facility Study Intersection Locations

3.3.6 Traffic Impact Analysis for BRT Corridor

This section summarizes the traffic impacts of the two build alternatives during the opening year (2023) and the horizon year (2040). The project analysis evaluates the changes in traffic patterns as a result of the proposed project. The traffic conditions for the future years are also compared against the baseline 2016 conditions.

Note that the traffic analysis was prepared when 2020 was the estimated opening year. The current opening year estimate is 2023. Nevertheless, the traffic modeling forecast volumes through 2040 and the results show that a negligible traffic increase would occur between 2020 and 2023. Thus, a 3-year delay in the opening date does not substantially alter this analysis.

No Build Alternative

The No Build Alternative would result in impacts associated with normal traffic growth in San Bernardino County. Table 3-3 provides a summary of LOS analysis results for the No Build Alternative for the existing year, opening year 2023, and future year 2040.

The No Build Alternative would maintain the current configuration of study corridor arterials and maintain the existing levels of public transportation services. Under the No Build Alternative, the proposed project would not be constructed, and the existing multimodal transportation system would not be enhanced by the new choice for commuting. Additionally, no traffic condition improvements along major arterials would be implemented without the proposed project improvements.

By opening year 2023, two additional intersections beyond those identified under existing condition are anticipated to further deteriorate and operate at LOS E or worse, which is considered a significant impact under CEQA based on the threshold set forth by the local jurisdiction described in Section 3.3.3:

- #96 Sierra Avenue/Foothill Boulevard (PM peak hour)
- #111 Sierra Avenue/Valley Boulevard (PM peak hour)

By future year 2040, an additional 15 intersections beyond those identified under existing condition are anticipated to further deteriorate and operate at LOS E or worse:

- #2 Garey Avenue/Holt Avenue (AM and PM peak hours)
- #4 Towne Avenue/Holt Avenue (PM peak hour)
- #8 East End Avenue/Holt Avenue (PM peak hour)
- #22 Mountain Avenue/Mission Boulevard (AM peak hour)
- #28 Vine Avenue/State Street (AM peak hour)
- #36 Campus Avenue/D Street (PM peak hour)
- #77 Rochester Avenue/Foothill Boulevard (PM peak hour)

Table 3-3 No Build Alternative Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1. Garey Avenue/Monterey Avenue	16.2	B	15.1	B	16.5	B	15.3	B	18.4	B	16.7	B
2. Garey Avenue/Holt Avenue	37.7	D	46.5	D	39.7	D	51.4	D	**56.9**	**E**	**70.4**	**E**
3. Palomares Street/Holt Avenue	9.6	A	11.2	B	9.7	A	10.3	B	10.0	A	12.0	B
4. Towne Avenue/Holt Avenue	32.6	C	40.6	D	35.4	D	42.9	D	51.5	D	**63.6**	**E**
5. San Antonio Avenue/Holt Avenue	17.0	B	11.3	B	15.0	B	12.3	B	17.0	B	16.9	B
6. Reservoir Street/Holt Avenue	14.5	B	17.2	B	15.9	B	17.5	B	20.8	C	22.9	C
7. Clark Avenue/Holt Avenue	7.2	A	7.7	A	8.0	A	7.9	A	7.1	A	8.4	A
8. East End Avenue/Holt Avenue	21.7	C	40.3	D	22.4	C	44.0	D	24.5	C	**68.1**	**E**
9. Via Del Paseo/Holt Avenue	5.9	A	6.3	A	6.4	A	6.3	A	4.9	A	7.6	A
10. Indian Hill Boulevard/Holt Avenue	21.6	C	22.6	C	22.3	C	23.3	C	26.6	C	28.4	C
11. Mills Avenue/Holt Boulevard	11.0	B	16.7	B	9.7	A	17.0	B	10.2	B	18.5	B
12. Amherst Avenue/Holt Boulevard	5.8	A	2.8	A	5.1	A	3.0	A	6.7	A	3.4	A
13. Ramona Avenue/Holt Boulevard	30.1	C	21.1	C	30.0	C	22.4	C	28.9	C	23.6	C
14. Monte Vista Avenue/Holt Boulevard	19.4	B	19.4	B	19.8	B	19.7	B	22.7	C	21.9	C
15. Central Avenue/Holt Boulevard	26.2	C	28.2	C	27.5	C	28.0	C	30.5	C	29.4	C
16. Vernon Avenue/Holt Boulevard	9.2	A	12.9	B	9.3	A	12.9	B	9.1	A	12.9	B
17. Benson Avenue/D Street	10.6	B	9.9	A	10.7	B	10.1	B	12.3	B	11.2	B
18. Benson Avenue/Holt Boulevard	10.9	B	11.1	B	10.9	B	11.5	B	20.2	C	12.7	B
19. Benson Avenue/Mission Boulevard	26.5	C	22.7	C	26.9	C	23.2	C	30.5	C	26.7	C
20. Mountain Avenue/D Street	12.8	B	13.3	B	13.1	B	13.5	B	15.7	B	14.9	B
21. Mountain Avenue/Holt Boulevard	33.5	C	34.8	C	34.8	C	35.3	D	30.6	C	36.4	D

Table 3-3 No Build Alternative Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
22. Mountain Avenue/Mission Boulevard	38.5	D	38.6	D	40.2	D	40.0	D	**55.7**	**E**	51.2	D
23. San Antonio Avenue/D Street	12.4	B	16.9	C	12.8	B	21.5	C	15.9	C	26.8	D
24. San Antonio Avenue/Holt Boulevard	19.2	C	24.2	C	19.4	B	22.2	C	19.3	C	26.3	C
25. San Antonio Avenue/State Street	**273.8**	**F**	**397.6**	**F**	**348.6**	**F**	**523.2**	**F**	**> 500**	**F**	**> 500**	**F**
26. Vine Avenue/D Street	10.4	B	10.0	A	10.6	B	10.2	B	11.9	B	11.3	B
27. Vine Avenue/Holt Boulevard	12.3	B	9.3	A	12.3	B	10.5	B	13.8	B	9.2	A
28. Vine Avenue/State Street	22.5	C	17.3	C	24.4	C	18.1	C	**42.5**	**E**	24.0	C
29. Euclid Avenue/D Street	11.3	B	11.9	B	11.6	B	12.2	B	13.3	B	14.1	B
30. Euclid Avenue/Holt Boulevard	35.4	D	33.5	C	38.6	D	35.0	D	54.0	D	40.4	D
31. Euclid Avenue/Mission Boulevard	35.9	D	37.2	D	37.1	D	38.4	D	45.4	D	52.9	D
32. Plum Avenue/Holt Boulevard	2.9	A	4.1	A	3.0	A	4.4	A	6.8	A	4.6	A
33. Sultana Avenue/D Street	12.8	B	13.8	B	13.5	B	14.5	B	17.4	C	19.9	C
34. Sultana Avenue/Holt Boulevard	17.3	B	18.6	B	17.7	B	19.9	B	17.2	B	20.4	C
35. Sultana Avenue/State Street	14.2	B	12.1	B	15.0	B	12.5	B	21.6	C	15.6	C
36. Campus Avenue/D Street	16.9	C	17.5	C	18.0	C	19.0	C	34.4	D	**38.1**	**E**
37. Campus Avenue/Holt Boulevard	12.8	B	15.2	B	13.0	B	16.4	B	21.0	C	24.6	C
38. Campus Avenue/State Street	**49.5**	**E**	**45.3**	**E**	**63.0**	**F**	**58.5**	**F**	**273.7**	**F**	**311.8**	**F**
39. Allyn Avenue/D Street	11.6	B	11.0	B	11.9	B	11.3	B	14.3	B	13.1	B
40. Bon View Avenue-Allyn Avenue/Holt Boulevard	12.3	C	14.3	B	12.9	B	15.0	B	12.1	B	16.2	B
41. Bon View Avenue/State Street	12.6	B	19.7	C	13.0	B	21.8	C	**54.2**	**F**	**84.3**	**F**

Table 3-3 No Build Alternative Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
42. Grove Avenue/D Street	11.9	B	6.9	A	12.2	B	7.1	A	13.9	B	7.9	A
43. Grove Avenue/Holt Boulevard	37.9	D	44.8	D	38.8	D	50.4	D	38.7	D	48.3	D
44. Grove Avenue/State Street	**76.3**	**E**	40.5	D	**81.6**	**F**	44.8	D	**117.3**	**F**	**64.6**	**E**
45. County Building/Holt Boulevard	10.9	B	9.9	A	10.8	B	11.5	B	10.4	B	9.0	A
46. Corona Avenue/Holt Boulevard	12.9	B	8.0	A	13.1	B	10.6	B	19.5	B	9.8	A
47. Vineyard Avenue/D Street	19.1	B	17.4	B	18.6	B	17.6	B	20.2	C	19.1	B
48. Vineyard Avenue/Holt Boulevard	24.8	C	20.6	C	25.7	C	30.3	C	21.0	C	23.0	C
49. Vineyard Avenue/Airport Drive	24.8	C	22.4	C	25.1	C	22.7	C	26.7	C	24.6	C
50. Guasti Road/Holt Boulevard	9.7	A	10.1	B	9.8	A	10.2	B	11.6	B	11.0	B
51. Archibald Avenue/Guasti Road	14.8	B	17.0	B	14.7	B	17.8	B	14.7	B	19.3	B
52. Archibald Avenue/Airport Drive	25.2	C	28.4	C	25.5	C	28.9	C	26.7	C	31.9	C
53. Moore Way/Airport Drive	13.3	B	13.0	B	13.2	B	12.8	B	12.7	B	11.9	B
54. Terminal Way/Airport Drive	14.9	B	15.1	B	14.9	B	15.1	B	15.0	B	15.1	B
55. Archibald Avenue/I-10 Ramps	21.0	C	18.6	B	21.3	C	18.9	B	24.4	C	21.4	C
56. Archibald Avenue/Inland Empire Boulevard	25.1	C	33.1	C	25.8	C	35.0	D	32.6	C	40.8	D
57. Hermosa Avenue/Inland Empire Boulevard	25.3	C	20.9	C	25.9	C	21.3	C	25.8	C	22.7	C
58. Shelby Street/Inland Empire Boulevard	7.3	A	9.4	A	7.4	A	9.2	A	9.8	A	9.5	A
59. Center Avenue/Inland Empire Boulevard	6.8	A	7.7	A	6.8	A	7.8	A	6.6	A	7.5	A
60. Haven Avenue/Inland Empire Boulevard	15.5	B	30.5	C	15.8	B	31.8	C	17.4	B	42.1	D
61. Porsche Way/Inland Empire Boulevard	19.4	B	19.6	B	19.5	B	19.9	B	19.4	B	20.7	C
62. Mercedes Lane/Inland Empire Boulevard	8.3	A	9.3	A	8.1	A	9.0	A	9.4	A	8.8	A

Table 3-3 No Build Alternative Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
63. Private Driveway/Inland Empire Boulevard	6.9	A	7.9	A	6.6	A	8.4	A	7.1	A	8.6	A
64. Mathis-Car Max/Inland Empire Boulevard	2.3	A	5.4	A	2.5	A	5.6	A	2.9	A	5.5	A
65. Ferrari Lane/Inland Empire Boulevard	8.5	A	9.5	A	8.7	A	10.0	B	8.5	A	9.8	A
66. Milliken Avenue/Inland Empire Boulevard	12.8	B	15.0	B	12.8	B	14.5	B	13.6	B	16.1	B
67. Milliken Avenue/Concours Street	8.6	A	14.8	B	8.7	A	14.8	B	8.9	A	15.5	B
68. Milliken Avenue/4th Street	23.4	C	36.7	D	23.8	C	38.4	D	25.1	C	52.7	D
69. Milliken Avenue/6th Street	16.9	B	20.1	C	16.8	B	20.5	C	17.6	B	23.2	C
70. Milliken Avenue/7th Street	7.7	A	8.5	A	7.7	A	8.5	A	6.9	A	10.7	B
71. Milliken Avenue/Jersey Boulevard	13.0	B	15.2	B	12.8	B	15.6	B	15.8	B	21.0	C
72. Milliken Avenue/Arrow Route	24.5	C	29.6	C	24.8	C	31.6	C	29.5	C	46.0	D
73. Milliken Avenue/Millennium Court	4.4	A	3.2	A	4.8	A	3.2	A	5.0	A	3.9	A
74. Milliken Avenue/Foothill Boulevard	22.0	C	27.1	C	22.3	C	27.6	C	23.1	C	35.1	D
75. Mayten Avenue/Foothill Boulevard	6.3	A	14.8	B	6.5	A	17.1	B	6.9	A	48.6	D
76. Masi Drive/Foothill Boulevard	6.7	A	8.4	A	6.5	A	8.6	A	6.7	A	9.4	A
77. Rochester Avenue/Foothill Boulevard	14.3	B	33.6	C	14.4	B	34.6	C	16.4	B	**59.6**	**E**
78. Victoria Commons/Foothill Boulevard	2.2	A	5.1	A	3.3	A	5.4	A	3.9	A	6.9	A
79. Day Creek Boulevard/ Foothill Boulevard	23.5	C	**57.3**	**E**	23.3	C	**63.4**	**E**	30.6	C	**102.3**	**F**
80. I-15 Southbound Ramps/Foothill Boulevard	12.6	B	11.8	B	13.0	B	11.5	B	15.1	B	13.2	B
81. I-15 Northbound Ramps/Foothill Boulevard	12.9	B	12.8	B	12.9	B	12.3	B	14.1	B	14.7	B
82. Etiwanda Avenue/Foothill Boulevard	20.6	C	29.1	C	21.6	C	29.4	C	24.7	C	35.5	D
83. Cornwall Avenue/Foothill Boulevard	6.9	A	5.1	A	6.0	A	6.7	A	7.2	A	5.8	A

Table 3-3 No Build Alternative Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
84. East Avenue/Foothill Boulevard	10.4	B	7.8	A	12.2	B	7.3	A	17.3	B	8.2	A
85. Cottonwood Avenue/Foothill Boulevard	6.5	A	6.0	A	6.2	A	6.0	A	6.1	A	6.3	A
86. Mulberry Avenue/Foothill Boulevard	15.4	B	14.9	B	15.8	B	14.9	B	17.1	B	14.7	B
87. Banana Avenue/Foothill Boulevard	8.2	A	6.2	A	7.9	A	6.4	A	8.2	A	8.3	A
88. Cherry Avenue/Foothill Boulevard	24.1	C	22.8	C	24.6	C	23.1	C	26.0	C	24.2	C
89. Redwood Avenue/Foothill Boulevard	5.9	A	8.8	A	6.3	A	9.6	A	8.6	A	9.9	A
90. Hemlock Avenue/Foothill Boulevard	9.2	A	10.3	B	8.9	A	10.9	B	9.9	A	11.6	B
91. Almeria Avenue/Foothill Boulevard	13.7	B	9.8	A	14.0	B	9.0	A	14.2	B	10.9	B
92. Tokay Avenue/Foothill Boulevard	11.9	B	8.8	A	12.1	B	9.0	A	11.7	B	9.1	A
93. Citrus Avenue/Foothill Boulevard	32.6	C	47.1	D	33.8	C	51.0	D	50.1	D	**80.2**	**F**
94. Cypress Avenue/Foothill Boulevard	7.5	A	8.4	A	7.2	A	9.1	A	7.9	A	8.7	A
95. Juniper Avenue/Foothill Boulevard	13.0	B	19.4	B	14.6	B	20.7	C	13.9	B	26.1	C
96. Sierra Avenue/Foothill Boulevard	32.1	C	53.0	D	32.4	C	**59.8**	**E**	**60.7**	**E**	**81.7**	**F**
97. Sierra Avenue/Upland Avenue	10.2	B	12.5	B	10.3	B	12.8	B	10.9	B	15.7	B
98. Sierra Avenue/Seville Avenue	1.5	A	3.7	A	1.4	A	3.6	A	1.5	A	3.9	A
99. Sierra Avenue/Spring Street	1.5	A	4.4	A	1.7	A	4.6	A	1.6	A	4.6	A
100. Sierra Avenue/Arrow Boulevard	22.2	C	31.4	C	22.7	C	33.5	C	25.2	C	43.8	D
101. Sierra Avenue/Valencia Avenue	3.2	A	10.4	B	3.4	A	8.9	A	3.3	A	5.9	A
102. Sierra Avenue/Orange Way	6.5	A	6.8	A	6.7	A	7.0	A	6.5	A	7.6	A
103. Sierra Avenue/Ceres Avenue	4.2	A	5.0	A	5.2	A	5.5	A	5.2	A	6.3	A
104. Sierra Avenue/Merrill Avenue	18.3	B	28.1	C	18.6	B	29.9	C	20.1	C	37.4	D

Table 3-3 No Build Alternative Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
105. Sierra Avenue/Randall Avenue	19.5	B	18.5	B	20.1	C	19.3	B	23.3	C	21.8	C
106. Sierra Avenue/San Bernardino Avenue	30.3	C	33.9	C	37.1	D	34.7	C	**73.0**	**E**	52.9	D
107. Sierra Avenue/Marygold Avenue	27.7	C	40.1	D	28.2	C	45.8	D	35.1	D	**67.2**	**E**
108. Juniper Avenue/Marygold Avenue	11.9	B	16.8	B	12.0	B	17.1	B	12.7	B	18.6	B
109. Juniper Avenue/Valley Boulevard	31.1	C	43.0	D	31.9	C	45.0	D	34.0	C	**70.5**	**E**
110. Inland Empire Center/Valley Boulevard	17.7	B	20.7	C	17.7	B	20.9	C	17.7	B	22.8	C
111. Sierra Avenue/Valley Boulevard	29.2	C	51.9	D	31.4	C	**56.7**	**E**	52.0	D	**90.7**	**F**
112. Sierra Avenue/Kaiser Permanente	3.6	A	5.5	A	3.5	A	5.5	A	2.6	A	5.9	A
113. Haven Avenue/Concours Street	16.5	B	13.2	B	17.1	B	14.2	B	18.6	B	17.4	B
114. Haven Avenue/4th Street	17.9	B	31.7	C	15.2	B	26.8	C	17.5	B	30.6	C
115. Haven Avenue/Trademark Street	5.7	A	8.4	A	4.2	A	12.8	B	7.9	A	13.1	B
116. Haven Avenue/6th Street	20.1	C	26.9	C	20.7	C	25	C	24	C	33.2	C
117. Haven Avenue/7th Street	4.7	A	15.5	B	3.7	A	16.1	B	4.7	A	12.2	B
118. Haven Avenue/Jersey Boulevard	8.9	A	28.8	C	8.5	A	21.7	C	8.4	A	49.4	D
119. Haven Avenue/Arrow Route	24.6	C	34.6	C	25.5	C	40.6	D	38	D	**67.3**	**E**
120. Haven Avenue/Civic Center Drive	18.9	B	17	B	8.8	A	12.6	B	10.7	B	10.2	B
121. Haven Avenue/Foothill Boulevard	31.9	C	41.7	D	28.5	C	39.2	D	29.2	C	**70.8**	**E**
122. Aspen Street/Foothill Boulevard	13.6	B	18.3	B	14.1	B	15.9	B	10.5	B	18.5	B
123. Spruce Avenue/Foothill Boulevard	14.2	B	23.2	C	13	B	20.5	C	16	B	25.8	C
124. Elm Avenue/Foothill Boulevard	15.3	B	16.9	B	14.1	B	15	B	14	B	21.9	C
125. Day Creek Boulevard/ Victoria Gardens Lane	15.3	B	20.6	C	14	B	22	C	15.3	B	23.7	C

Table 3-3 No Build Alternative Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
126. Day Creek Boulevard/S. Main Street	2.1	A	8.2	A	2.2	A	9.4	A	2.3	A	9.1	A
127. Day Creek Boulevard/N. Main Street	10	A	16.9	B	11.9	B	17.2	B	11.1	B	18.3	B
128. Day Creek Boulevard/Church Street	24.1	C	28.5	C	24.8	C	30.7	C	27.9	C	33.8	C
129. Rochester Avenue/Church Street	25.6	C	23.2	C	26.6	C	30.6	C	33.2	C	37.2	D

Source: WVC Project Traffic Operational Analysis Report, 2018.

- #93 Citrus Avenue/Foothill Boulevard (PM peak hour)
- #96 Sierra Avenue/Foothill Boulevard (AM and PM peak hours)
- #106 Sierra Avenue/San Bernardino Avenue (AM peak hour)
- #107 Sierra Avenue/Marygold Avenue (PM peak hour)
- #109 Juniper Avenue/Valley Boulevard (PM peak hour)
- #111 Sierra Avenue/Valley Boulevard (PM peak hour)
- #119 Haven Avenue/Arrow Route (PM peak hour)
- #121 Haven Avenue/Foothill Boulevard (PM peak hour)

As forecast for future year 2040, during the AM and PM peak hours, 5 and 7 intersections would operate at LOS F, respectively. An additional 9 intersections during the AM peak hour and 11 intersections during the PM peak hour would operate at LOS E. Traffic operations are expected to continue to deteriorate under the No Build Alternative as congestion worsens.

Build Alternatives

The proposed project is a transit improvement project. The project would add six buses per direction during peak hours to the arterials. Typically, that volume of traffic is well below any threshold requiring a traffic impact study. Traffic analysis was prepared based on the conservative assumption that there would be no reduction in traffic volumes with the increased use of the transit vehicles.

NEPA considers the context and intensity of an impact to determine if there would be an adverse effect, and the traffic study was conducted using the CEQA thresholds to provide an appropriate measure of context and intensity.

A significant traffic impact pursuant to CEQA is considered to occur if an intersection that is forecast to operate at LOS D or better under the no-build condition worsens to LOS E under build conditions. In addition, an adverse impact is considered to occur if the proposed project results in any increase in delay at an intersection forecast to operate at LOS E or F in no-build conditions.

Alternative A

Alternative A consists of the proposed WVC buses operating along the entirety of the route within mixed-flow lanes and stopping at side-running stations only. Table 3-4 summarizes the traffic analysis results for Alternative A under existing, opening year 2023, and future year 2040 conditions.

Based on the CEQA threshold set forth by local jurisdictions described in Section 3.3.3, in opening year 2023, the following three intersections are considered to be significantly impacted under the Alternative A scenario, as shown in Table 3-5:

- #2 Garey Avenue/Holt Avenue (PM peak hour)
- #79 Day Creek Boulevard/Foothill Boulevard (PM peak hour)

- #96 Sierra Avenue/Foothill Boulevard (PM peak hour)

By future year 2040, the following 11 intersections are considered to be adversely impacted under the Alternative A scenario:

- #2 Garey Avenue/Holt Avenue (AM and PM peak hours)
- #4 Towne Avenue/Holt Avenue (PM peak hour)
- #8 East End Avenue/Holt Avenue (PM peak hour)
- #77 Rochester Avenue/Foothill Boulevard (PM peak hour)
- #79 Day Creek Boulevard/Foothill Boulevard (PM peak hour)
- #93 Citrus Avenue/Foothill Boulevard (PM peak hour)
- #106 Sierra Avenue/San Bernardino Avenue (AM peak hour)
- #107 Sierra Avenue/Marygold Avenue (PM peak hour)
- #109 Juniper Avenue/Valley Boulevard (PM peak hour)
- #119 Haven Avenue/Arrow Route (PM peak hour)
- #121 Haven Avenue/Foothill Boulevard (PM peak hour)

As can be seen in Table 3-5, out of 129 study intersections, there would be only 1 intersection where the LOS would be worsened from D to E and 1 intersection would be improved from E to D. Although LOS is degraded slightly at these intersections based on CEQA thresholds, the project would introduce a new transit line designed to move a higher volume of people more efficiently than lower-volume passenger vehicles, thus providing a more positive short- and long-term effect to the environment.

Several traffic mitigation measures are identified in the *Traffic Operations Analysis Report* to help mitigate traffic impacts that are anticipated by 2023 and 2040 throughout the corridor. These recommended traffic operational improvements consist of various right-turn geometric improvements, traffic signal timing and phasing improvements, and other TSM improvements that could be implemented, as summarized in Table 3-8 (at the end of this subsection). In addition, it is recognized that increases in delay and LOS are projected at other intersections along the corridor; however, these increases are not considered adverse and would not require mitigation.

Table 3-4 Alternative A Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1. Garey Avenue/Monterey Avenue	16.2	B	15.1	B	17.0	B	15.4	B	19.0	B	16.8	B
2. Garey Avenue/Holt Avenue	37.7	D	46.5	D	41.7	D	**57.0**	**E**	**59.4**	**E**	**77.4**	**E**
3. Palomares Street/Holt Avenue	9.6	A	11.2	B	10.0	B	7.5	A	10.3	B	9.4	A
4. Towne Avenue/Holt Avenue	32.6	C	40.6	D	35.8	D	44.7	D	53.1	D	**64.4**	**E**
5. San Antonio Avenue/Holt Avenue	17.0	B	11.3	B	14.4	B	13.0	B	17.1	B	17.0	B
6. Reservoir Street/Holt Avenue	14.5	B	17.2	B	16.4	B	16.6	B	21.4	C	23.2	C
7. Clark Avenue/Holt Avenue	7.2	A	7.7	A	7.8	A	7.7	A	7.0	A	8.4	A
8. East End Avenue/Holt Avenue	21.7	C	40.3	D	22.5	C	46.6	D	24.9	C	**71.2**	**E**
9. Via Del Paseo/Holt Avenue	5.9	A	6.3	A	6.5	A	6.4	A	5.1	A	7.8	A
10. Indian Hill Boulevard/Holt Avenue	21.6	C	22.6	C	22.5	C	23.4	C	26.2	C	28.9	C
11. Mills Avenue/Holt Boulevard	11.0	B	16.7	B	9.7	A	16.9	B	10.3	B	18.5	B
12. Amherst Avenue/Holt Boulevard	5.8	A	2.8	A	5.0	A	3.0	A	7.6	A	3.4	A
13. Ramona Avenue/Holt Boulevard	30.1	C	21.1	C	29.9	C	22.2	C	28.0	C	22.9	C
14. Monte Vista Avenue/Holt Boulevard	19.4	B	19.4	B	19.7	B	19.7	B	22.7	C	22.7	C
15. Central Avenue/Holt Boulevard	26.2	C	28.2	C	27.6	C	27.8	C	30.6	C	28.8	C
16. Vernon Avenue/Holt Boulevard	9.2	A	12.9	B	9.4	A	12.8	B	9.2	A	12.9	B
17. Benson Avenue/D Street	10.6	B	9.9	A	10.7	B	10.1	B	12.3	B	11.2	B
18. Benson Avenue/Holt Boulevard	10.9	B	11.1	B	10.9	B	11.6	B	20.3	C	12.9	B
19. Benson Avenue/Mission Boulevard	26.5	C	22.7	C	26.9	C	23.2	C	30.5	C	26.7	C
20. Mountain Avenue/D Street	12.8	B	13.3	B	13.1	B	13.5	B	15.7	B	14.9	B
21. Mountain Avenue/Holt Boulevard	33.5	C	34.8	C	34.8	C	35.6	D	30.7	C	36.5	D

Table 3-4 Alternative A Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
22. Mountain Avenue/Mission Boulevard	38.5	D	38.6	D	40.2	D	40.0	D	**55.7**	**E**	51.2	D
23. San Antonio Avenue/D Street	12.4	B	16.9	C	12.8	B	17.9	C	15.9	C	26.8	D
24. San Antonio Avenue/Holt Boulevard	19.2	C	24.2	C	19.7	B	22.0	C	19.4	B	26.7	C
25. San Antonio Avenue/State Street	**273.8**	**F**	**397.6**	**F**	**348.6**	**F**	**523.2**	**F**	**500.0**	**F**	**500.0**	**F**
26. Vine Avenue/D Street	10.4	B	10.0	A	10.6	B	10.2	B	11.9	B	11.3	B
27. Vine Avenue/Holt Boulevard	12.3	B	9.3	A	12.2	B	10.6	B	13.8	B	9.1	A
28. Vine Avenue/State Street	22.5	C	17.3	C	24.4	C	18.1	C	**42.5**	**E**	24.0	C
29. Euclid Avenue/D Street	11.3	B	11.9	B	11.6	B	12.2	B	13.3	B	14.1	B
30. Euclid Avenue/Holt Boulevard	35.4	D	33.5	C	38.4	D	35.7	D	54.5	D	40.9	D
31. Euclid Avenue/Mission Boulevard	35.9	D	37.2	D	37.1	D	38.4	D	45.4	D	52.9	D
32. Plum Avenue/Holt Boulevard	2.9	A	4.1	A	3.2	A	4.4	A	7.0	A	4.6	A
33. Sultana Avenue/D Street	12.8	B	13.8	B	13.5	B	14.5	B	17.4	C	19.9	C
34. Sultana Avenue/Holt Boulevard	17.3	B	18.6	B	18.1	B	20.1	C	17.4	C	20.8	C
35. Sultana Avenue/State Street	14.2	B	12.1	B	15.0	B	12.5	B	21.6	C	15.6	C
36. Campus Avenue/D Street	16.9	C	17.5	C	18.0	C	19.0	C	34.4	D	38.1	E
37. Campus Avenue/Holt Boulevard	12.8	B	15.2	B	13.0	B	16.3	B	21.1	C	24.7	C
38. Campus Avenue/State Street	**49.5**	**E**	**45.3**	**E**	**63.0**	**F**	**58.5**	**F**	**273.7**	**F**	**311.8**	**F**
39. Allyn Avenue/D Street	11.6	B	11.0	B	11.9	B	11.3	B	14.3	B	13.1	B
40. Bon View Avenue-Allyn Avenue/Holt Boulevard	12.3	C	14.3	B	12.8	B	15.1	B	12.3	B	16.2	C

Table 3-4 Alternative A Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
41. Bon View Avenue/State Street	12.6	B	19.7	C	13.0	B	21.8	C	16.4	C	34.6	D
42. Grove Avenue/D Street	11.9	B	6.9	A	12.2	B	7.1	A	13.9	B	7.9	A
43. Grove Avenue/Holt Boulevard	37.9	D	44.8	D	38.7	D	51.2	D	39.0	D	48.9	D
44. Grove Avenue/State Street	**76.3**	**E**	40.5	D	**81.6**	**F**	44.8	D	**117.3**	**F**	**64.6**	**E**
45. County Building/Holt Boulevard	10.9	B	9.9	A	10.7	B	11.6	B	10.6	B	8.9	A
46. Corona Avenue/Holt Boulevard	12.9	B	8.0	A	13.3	B	10.7	B	19.7	B	9.9	A
47. Vineyard Avenue/D Street	19.1	B	17.4	B	18.6	B	17.6	B	20.2	C	19.1	B
48. Vineyard Avenue/Holt Boulevard	24.8	C	20.6	C	26.0	C	30.4	C	21.1	C	23.2	C
49. Vineyard Avenue/Airport Drive	24.8	C	22.4	C	25.2	C	23.0	C	26.8	C	24.9	C
50. Guasti Road/Holt Boulevard	9.7	A	10.1	B	9.8	A	10.2	B	11.6	B	11.0	B
51. Archibald Avenue/Guasti Road	14.8	B	17.0	B	14.6	B	17.8	B	14.7	B	19.4	B
52. Archibald Avenue/Airport Drive	25.2	C	28.4	C	25.6	C	29.0	C	26.9	C	32.1	C
53. Moore Way/Airport Drive	13.3	B	13.0	B	13.2	B	12.7	B	12.8	B	11.9	B
54. Terminal Way/Airport Drive	14.9	B	15.1	B	15.6	B	15.6	B	15.8	B	15.5	B
55. Archibald Avenue/I-10 Ramps	21.0	C	18.6	B	21.4	C	19.1	B	24.5	C	21.6	C
56. Archibald Avenue/Inland Empire Boulevard	25.1	C	33.1	C	27.3	C	35.7	D	33.1	C	41.5	D
57. Hermosa Avenue/Inland Empire Boulevard	25.3	C	20.9	C	26.2	C	21.2	C	25.9	C	22.6	C
58. Shelby Street/Inland Empire Boulevard	7.3	A	9.4	A	7.3	A	9.2	A	9.9	A	9.4	A

Table 3-4 Alternative A Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
59. Center Avenue/Inland Empire Boulevard	6.8	A	7.7	A	6.8	A	7.8	A	6.6	A	7.5	A
60. Haven Avenue/Inland Empire Boulevard	15.5	B	30.5	C	15.8	B	32.4	C	20.0	C	43.2	D
61. Porsche Way/Inland Empire Boulevard	19.4	B	19.6	B	19.3	B	19.6	B	19.2	B	20.6	C
62. Mercedes Lane/Inland Empire Boulevard	8.3	A	9.3	A	8.0	A	9.4	A	9.4	A	8.7	A
63. Private Driveway/Inland Empire Boulevard	6.9	A	7.9	A	6.6	A	8.2	A	7.1	A	8.5	A
64. Mathis-Car Max/Inland Empire Boulevard	2.3	A	5.4	A	2.8	A	6.7	A	3.0	A	5.5	A
65. Ferrari Lane/Inland Empire Boulevard	8.5	A	9.5	A	8.9	A	9.8	A	8.7	A	9.6	A
66. Milliken Avenue/Inland Empire Boulevard	12.8	B	15.0	B	13.2	B	14.5	B	14.0	B	16.8	B
67. Milliken Avenue/Concours Street	8.6	A	14.8	B	8.6	A	14.8	B	8.8	A	15.4	B
68. Milliken Avenue/4th Street	23.4	C	36.7	D	24.1	C	38.7	D	25.5	C	53.7	D
69. Milliken Avenue/6th Street	16.9	B	20.1	C	15.7	B	20.4	C	16.9	B	22.5	C
70. Milliken Avenue/7th Street	7.7	A	8.5	A	8.9	A	9.3	A	8.0	A	11.8	B
71. Milliken Avenue/Jersey Boulevard	13.0	B	15.2	B	12.7	B	15.6	B	16.0	B	20.3	C
72. Milliken Avenue/Arrow Route	24.5	C	29.6	C	25.7	C	32.1	C	29.6	C	47.4	D
73. Milliken Avenue/Millennium Court	4.4	A	3.2	A	4.9	A	3.3	A	5.2	A	3.9	A

Table 3-4 Alternative A Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
74. Milliken Avenue/Foothill Boulevard	22.0	C	27.1	C	18.7	B	26.1	C	35.8	D	31.1	C
75. Mayten Avenue/Foothill Boulevard	6.3	A	14.8	B	6.5	A	18.4	B	7.0	A	52.1	D
76. Masi Drive/Foothill Boulevard	6.7	A	8.4	A	6.5	A	8.4	A	7.2	A	9.2	A
77. Rochester Avenue/Foothill Boulevard	14.3	B	33.6	C	14.4	B	37.0	D	17.0	B	**61.2**	**E**
78. Victoria Commons/Foothill Boulevard	2.2	A	5.1	A	3.3	A	5.5	A	3.9	A	7.1	A
79. Day Creek Boulevard/Foothill Boulevard	23.5	C	**57.3**	**E**	23.6	C	**64.6**	**E**	31.5	C	**105.9**	**F**
80. I-15 Southbound Ramps/Foothill Boulevard	12.6	B	11.8	B	13.0	B	11.9	B	15.0	B	13.3	B
81. I-15 Northbound Ramps/Foothill Boulevard	12.9	B	12.8	B	12.9	B	12.5	B	14.1	B	14.1	B
82. Etiwanda Avenue/Foothill Boulevard	20.6	C	29.1	C	21.6	C	29.1	C	25.4	C	36.0	D
83. Cornwall Avenue/Foothill Boulevard	6.9	A	5.1	A	6.0	A	6.7	A	7.3	A	5.8	A
84. East Avenue/Foothill Boulevard	10.4	B	7.8	A	12.2	B	7.4	A	17.6	B	8.3	A
85. Cottonwood Avenue/Foothill Boulevard	6.5	A	6.0	A	6.1	A	5.8	A	6.1	A	6.4	A
86. Mulberry Avenue/Foothill Boulevard	15.4	B	14.9	B	15.8	B	13.9	B	17.1	B	14.7	B
87. Banana Avenue/Foothill Boulevard	8.2	A	6.2	A	7.8	A	7.7	A	8.1	A	8.3	A
88. Cherry Avenue/Foothill Boulevard	24.1	C	22.8	C	24.6	C	23.0	C	25.6	C	24.3	C
89. Redwood Avenue/Foothill Boulevard	5.9	A	8.8	A	6.2	A	9.6	A	6.9	A	9.9	A

Table 3-4 Alternative A Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
90. Hemlock Avenue/Foothill Boulevard	9.2	A	10.3	B	8.8	A	11.0	B	11.2	B	11.6	B
91. Almeria Avenue/Foothill Boulevard	13.7	B	9.8	A	14.0	B	9.0	A	14.5	B	10.9	B
92. Tokay Avenue/Foothill Boulevard	11.9	B	8.8	A	12.1	B	9.0	A	10.9	B	9.1	A
93. Citrus Avenue/Foothill Boulevard	32.6	C	47.1	D	33.8	C	51.9	D	50.3	D	**80.8**	**F**
94. Cypress Avenue/Foothill Boulevard	7.5	A	8.4	A	7.1	A	9.3	A	7.8	A	8.7	A
95. Juniper Avenue/Foothill Boulevard	13.0	B	19.4	B	14.6	B	19.1	B	13.9	B	26.7	C
96. Sierra Avenue/Foothill Boulevard	32.1	C	53.0	D	32.9	C	**61.2**	**E**	41.4	D	**81.7**	**F**
97. Sierra Avenue/Upland Avenue	10.2	B	12.5	B	10.2	B	12.8	B	10.9	B	15.7	B
98. Sierra Avenue/Seville Avenue	1.5	A	3.7	A	1.6	A	3.6	A	1.5	A	3.8	A
99. Sierra Avenue/Spring Street	1.5	A	4.4	A	1.6	A	4.5	A	1.6	A	4.7	A
100. Sierra Avenue/Arrow Boulevard	22.2	C	31.4	C	22.8	C	33.5	C	25.3	C	44.1	D
101. Sierra Avenue/Valencia Avenue	3.2	A	10.4	B	3.4	A	8.9	A	3.3	A	5.9	A
102. Sierra Avenue/Orange Way	6.5	A	6.8	A	7.8	A	7.8	A	7.1	A	8.5	A
103. Sierra Avenue/Ceres Avenue	4.2	A	5.0	A	5.0	A	5.4	A	4.9	A	6.3	A
104. Sierra Avenue/Merrill Avenue	18.3	B	28.1	C	18.3	B	31.5	C	20.1	C	37.9	D
105. Sierra Avenue/Randall Avenue	19.5	B	18.5	B	20.1	C	18.7	B	23.4	C	22.1	C
106. Sierra Avenue/San Bernardino Avenue	30.3	C	33.9	C	37.9	D	35.1	D	**74.6**	**E**	53.6	D
107. Sierra Avenue/Marygold Avenue	27.7	C	40.1	D	28.4	C	45.6	D	33.9	C	**68.6**	**E**
108. Juniper Avenue/Marygold Avenue	11.9	B	16.8	B	12.3	B	17.3	B	13.0	B	19.0	B
109. Juniper Avenue/Valley Boulevard	31.1	C	43.0	D	32.0	C	45.4	D	34.5	C	**71.1**	**E**

Table 3-4 Alternative A Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
110. Inland Empire Center/Valley Boulevard	17.7	B	20.7	C	17.7	B	21.0	C	17.7	B	22.9	C
111. Sierra Avenue/Valley Boulevard	29.2	C	51.9	D	31.5	C	**56.6**	**E**	55.0	D	**90.3**	**F**
112. Sierra Avenue/Kaiser Permanente	3.6	A	5.5	A	3.5	A	5.5	A	3.0	A	6.2	A
113. Haven Avenue/Concours Street	16.5	B	13.2	B	17.1	B	14.2	B	18.6	B	17.4	B
114. Haven Avenue/4th Street	17.9	B	31.7	C	15.2	B	26.9	C	17.5	B	30.8	C
115. Haven Avenue/Trademark Street	5.7	A	8.4	A	4.2	A	12.8	B	8.0	A	13.2	B
116. Haven Avenue/6th Street	20.1	C	26.9	C	20.7	C	25.1	C	24.2	C	33.5	C
117. Haven Avenue/7th Street	4.7	A	15.5	B	3.7	A	16.1	B	4.7	A	12.2	B
118. Haven Avenue/Jersey Boulevard	8.9	A	28.8	C	8.5	A	21.9	C	8.3	A	50.4	D
119. Haven Avenue/Arrow Route	24.6	C	34.6	C	25.6	C	41.0	D	38.3	D	**67.6**	**E**
120. Haven Avenue/Civic Center Drive	18.9	B	17	B	8.8	A	12.5	B	10.7	B	10.1	B
121. Haven Avenue/Foothill Boulevard	31.9	C	41.7	D	28.4	C	39.7	D	29.2	C	**72.2**	**E**
122. Aspen Street/Foothill Boulevard	13.6	B	18.3	B	10.6	B	15.9	B	10.1	B	18.6	B
123. Spruce Avenue/Foothill Boulevard	14.2	B	23.2	C	16.0	B	20.5	C	18.0	B	25.8	C
124. Elm Avenue/Foothill Boulevard	15.3	B	16.9	B	14.0	B	15.0	B	13.6	B	21.9	C
125. Day Creek Boulevard/Victoria Gardens Lane	15.3	B	20.6	C	14.0	B	22.0	C	15.3	B	23.7	C
126. Day Creek Boulevard/S. Main Street	2.1	A	8.2	A	2.2	A	9.4	A	2.3	A	9.1	A
127. Day Creek Boulevard/N. Main Street	10	A	16.9	B	11.8	B	17.3	B	11.0	B	18.3	B

Table 3-4 Alternative A Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
128. Day Creek Boulevard/Church Street	24.1	C	28.5	C	25.4	C	30.9	C	28.3	C	34.3	C
129. Rochester Avenue/Church Street	25.6	C	23.2	C	26.5	C	30.9	C	33.1	C	38.8	D

Source: WVC Project Traffic Operational Analysis Report, 2018.

Table 3-5 Future Year Traffic Condition Comparison between No Build Alternative and Alternative A

Intersection	No Build Alternative				Alternative A				Change in AM Delay	Change in PM Delay	Exceeding CEQA Significant Threshold?
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS			
Year 2023											
2. Garey Avenue/Holt Avenue	39.7	D	51.4	D	41.7	D	**57.0**	**E**	**2.0**	**5.6**	**Yes**
4. Towne Avenue/Holt Avenue	35.4	D	42.9	D	35.8	D	44.7	D	**0.4**	**1.8**	**Yes**
8. East End Avenue/Holt Avenue	22.4	C	44.0	D	22.5	C	46.6	D	**0.1**	**2.6**	**Yes**
77. Rochester Avenue/Foothill Boulevard	14.4	B	34.6	C	14.4	B	37.0	D	**0.0**	**2.4**	**Yes**
79. Day Creek Boulevard/Foothill Boulevard	23.3	C	**63.4**	**E**	23.6	C	**64.6**	**E**	**0.3**	**1.2**	**Yes**
93. Citrus Avenue/Foothill Boulevard	33.8	C	51.0	D	33.8	C	51.9	D	**0.0**	**0.9**	**Yes**
96. Sierra Avenue/Foothill Boulevard	32.4	C	**59.8**	**E**	32.9	C	**61.2**	**E**	**0.5**	**1.4**	**Yes**
106. Sierra Avenue/San Bernardino Avenue	37.1	D	34.7	C	37.9	D	35.1	D	**0.8**	**0.4**	**Yes**

Table 3-5 Future Year Traffic Condition Comparison between No Build Alternative and Alternative A

Intersection	No Build Alternative				Alternative A				Change in AM Delay	Change in PM Delay	Exceeding CEQA Significant Threshold?
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS			
107. Sierra Avenue/Marygold Avenue	28.2	C	45.8	D	28.4	C	45.6	D	**0.2**	**-0.2**	**Yes**
109. Juniper Avenue/Valley Boulevard	31.9	C	45.0	D	32.0	C	45.4	D	**0.1**	**0.4**	**Yes**
119. Haven Avenue/Arrow Route	25.5	C	40.6	D	25.6	C	41.0	D	**0.1**	**0.4**	**Yes**
121. Haven Avenue/Foothill Boulevard	28.5	C	39.2	D	28.4	C	39.7	D	**-0.1**	**0.5**	**Yes**
Year 2040											
2. Garey Avenue/Holt Avenue	**56.9**	**E**	**70.4**	**E**	**59.4**	**E**	**77.4**	**E**	**2.5**	**7.0**	**Yes**
4. Towne Avenue/Holt Avenue	51.5	D	**63.6**	**E**	53.1	D	**64.4**	**E**	**1.6**	**0.8**	**Yes**
8. East End Avenue/Holt Avenue	24.5	C	**68.1**	**E**	24.9	C	**71.2**	**E**	**0.4**	**3.1**	**Yes**
77. Rochester Avenue/Foothill Boulevard	16.4	B	**59.6**	**E**	17.0	B	**61.2**	**E**	**0.6**	**1.6**	**Yes**
79. Day Creek Boulevard/Foothill Boulevard	30.6	C	**102.3**	**F**	31.5	C	**105.9**	**F**	**0.9**	**3.6**	**Yes**
93. Citrus Avenue/Foothill Boulevard	50.1	D	**80.2**	**F**	50.3	D	**80.8**	**F**	**0.2**	**0.6**	**Yes**
96. Sierra Avenue/Foothill Boulevard	**60.7**	**E**	**81.7**	**F**	41.4	D	**81.7**	**F**	**-19.3**	**0.0**	**Yes**
106. Sierra Avenue/San Bernardino Avenue	**73.0**	**E**	52.9	D	**74.6**	**E**	53.6	D	**1.6**	**0.7**	**Yes**
107. Sierra Avenue/Marygold Avenue	35.1	D	**67.2**	**E**	33.9	C	**68.6**	**E**	**-1.2**	**1.4**	**Yes**
119. Haven Avenue/Arrow Route	38	D	**67.3**	**E**	38.3	D	**67.6**	**E**	**0.3**	**0.3**	**Yes**
121. Haven Avenue/Foothill Boulevard	29.2	C	**70.8**	**E**	29.2	C	**72.2**	**E**	**0.0**	**1.4**	**Yes**

Source: WVC Project Traffic Operational Analysis Report, 2018.

Alternative B

Alternative B consists of construction of one center-running, dedicated BRT lane in each direction in Ontario between Benson Avenue and Vineyard Avenue. The posted vehicular speed limit along this segment would be reduced to 35 mph. In addition, left-turn and north-south through movement access along the segment would be restricted via raised medians constructed to separate mixed-flow traffic from bus lane traffic. The buses would operate within mixed-flow lanes, stopping at side-running stations only, along the rest of the route.

Within the dedicated center-running BRT lanes, it is expected that bus movements would operate in conjunction with the eastbound and westbound Holt Boulevard through movement phases at all locations where dedicated BRT lanes are constructed. As a result, the new bus lanes would have a limited impact on the overall signal timing of each intersection because they would not require any new dedicated signal phases. Table 3-6 summarizes the traffic analysis for Alternative B under existing, opening year 2023, and future year 2040 conditions.

Based on the CEQA threshold set forth by local jurisdictions described in Section 3.3.3, in future year 2040, the following four intersections are considered to be adversely impacted under the Alternative B scenario as shown in Table 3-7:

- #2 Garey Avenue/Holt Avenue (PM peak hour)
- #30 Euclid Avenue/Holt Boulevard (AM peak hour)
- #79 Day Creek Boulevard/Foothill Boulevard (PM peak hour)
- #96 Sierra Avenue/Foothill Boulevard (PM peak hour)

By future year 2040, the following 12 intersections are considered to be adversely impacted under the Alternative B scenario:

- #2 Garey Avenue/Holt Avenue (AM and PM peak hours)
- #4 Towne Avenue/Holt Avenue (PM peak hour)
- #8 East End Avenue/Holt Avenue (PM peak hour)
- #30 Euclid Avenue/Holt Boulevard (AM peak hour)
- #77 Rochester Avenue/Foothill Boulevard (PM peak hour)
- #79 Day Creek Boulevard/Foothill Boulevard (PM peak hour)
- #93 Citrus Avenue/Foothill Boulevard (PM peak hour)
- #106 Sierra Avenue/San Bernardino Avenue (AM peak hour)
- #107 Sierra Avenue/Marygold Avenue (PM peak hour)
- #109 Juniper Avenue/Valley Boulevard (PM peak hour)
- #119 Haven Avenue/Arrow Route (PM peak hour)
- #121 Haven Avenue/Foothill Boulevard (PM peak hour)

Table 3-6 Alternative B Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1. Garey Avenue/Monterey Avenue	16.2	B	15.1	B	17.0	B	15.4	B	19.0	B	16.8	B
2. Garey Avenue/Holt Avenue	37.7	D	46.5	D	41.7	D	**57.0**	**E**	**59.4**	**E**	**77.4**	**E**
3. Palomares Street/Holt Avenue	9.6	A	11.2	B	10.0	A	7.5	A	10.3	B	9.4	A
4. Towne Avenue/Holt Avenue	32.6	C	40.6	D	35.8	D	44.7	D	53.1	D	**64.4**	**E**
5. San Antonio Avenue/Holt Avenue	17.0	B	11.3	B	14.4	B	13.0	B	17.1	B	17.0	B
6. Reservoir Street/Holt Avenue	14.5	B	17.2	B	16.4	B	16.6	B	21.4	C	23.2	C
7. Clark Avenue/Holt Avenue	7.2	A	7.7	A	7.8	A	7.7	A	7.0	A	8.4	A
8. East End Avenue/Holt Avenue	21.7	C	40.3	D	22.5	C	46.6	D	24.9	C	**71.2**	**E**
9. Via Del Paseo/Holt Avenue	5.9	A	6.3	A	6.5	A	6.4	A	5.1	A	7.8	A
10. Indian Hill Boulevard/Holt Avenue	21.6	C	22.6	C	22.5	C	23.4	C	26.2	C	28.9	C
11. Mills Avenue/Holt Boulevard	11.0	B	16.7	B	9.7	A	16.9	B	10.3	B	18.5	B
12. Amherst Avenue/Holt Boulevard	5.8	A	2.8	A	5.0	A	3.0	A	7.6	A	3.4	A
13. Ramona Avenue/Holt Boulevard	30.1	C	21.1	C	29.9	C	22.2	C	28.0	C	22.9	C
14. Monte Vista Avenue/Holt Boulevard	19.4	B	19.4	B	19.7	B	19.7	B	22.7	C	22.7	C
15. Central Avenue/Holt Boulevard	26.2	C	28.2	C	27.5	C	27.9	C	30.6	C	28.8	C
16. Vernon Avenue/Holt Boulevard	9.2	A	12.9	B	9.5	A	12.8	B	9.3	A	12.8	B
17. Benson Avenue/D Street	10.6	B	9.9	A	10.7	B	10.1	B	12.3	B	11.2	B
18. Benson Avenue/Holt Boulevard	10.9	B	11.1	B	11.2	B	11.8	B	21.3	C	24.7	C
19. Benson Avenue/Mission Boulevard	26.5	C	22.7	C	26.9	C	23.2	C	30.5	C	26.7	C
20. Mountain Avenue/D Street	12.8	B	13.3	B	13.1	B	13.5	B	15.7	B	14.9	B
21. Mountain Avenue/Holt Boulevard	33.5	C	34.8	C	35.3	D	36.5	D	32.4	C	41.0	D

Table 3-6 Alternative B Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
22. Mountain Avenue/Mission Boulevard	38.5	D	38.6	D	40.2	D	40.0	D	**55.7**	**E**	51.2	D
23. San Antonio Avenue/D Street	12.4	B	16.9	C	12.8	B	17.9	C	15.9	C	26.8	D
24. San Antonio Avenue/Holt Boulevard	19.2	C	24.2	C	23.5	C	29.0	C	26.3	C	27.9	C
25. San Antonio Avenue/State Street	**273.8**	**F**	**397.6**	**F**	**348.6**	**F**	**523.2**	**F**	**500.0**	**F**	**500.0**	**F**
26. Vine Avenue/D Street	10.4	B	10.0	A	10.6	B	10.2	B	11.9	B	11.3	B
27. Vine Avenue/Holt Boulevard	12.3	B	9.3	A	24.1	C	15.6	B	25.8	C	28.0	C
28. Vine Avenue/State Street	22.5	C	17.3	C	24.4	C	18.1	C	**42.5**	**E**	24.0	C
29. Euclid Avenue/D Street	11.3	B	11.9	B	11.6	B	12.2	B	13.3	B	14.1	B
30. Euclid Avenue/Holt Boulevard	35.4	D	33.5	C	**73.5**	**E**	42.3	D	**75.7**	**E**	49.8	D
31. Euclid Avenue/Mission Boulevard	35.9	D	37.2	D	37.1	D	38.4	D	45.4	D	52.9	D
32. Plum Avenue/Holt Boulevard	2.9	A	4.1	A	0.5	A	0.9	A	0.6	A	1.1	A
33. Sultana Avenue/D Street	12.8	B	13.8	B	13.5	B	14.5	B	17.4	C	19.9	C
34. Sultana Avenue/Holt Boulevard	17.3	B	18.6	B	21.7	C	24.9	C	29.7	C	36.0	D
35. Sultana Avenue/State Street	14.2	B	12.1	B	15.0	B	12.5	B	21.6	C	15.6	C
36. Campus Avenue/D Street	16.9	C	17.5	C	18.0	C	19.0	C	34.4	D	**38.1**	**E**
37. Campus Avenue/Holt Boulevard	12.8	B	15.2	B	19.8	C	23.7	C	27.6	C	41.5	D
38. Campus Avenue/State Street	**49.5**	**E**	**45.3**	**E**	**63.0**	**F**	**58.5**	**F**	**273.7**	**F**	**311.8**	**F**
39. Allyn Avenue/D Street	11.6	B	11.0	B	11.9	B	11.3	B	14.3	B	13.1	B
40. Bon View Avenue-Allyn Avenue/Holt Boulevard	12.3	C	14.3	B	10.8	B	12.3	B	15.4	B	13.6	B
41. Bon View Avenue/State Street	12.6	B	19.7	C	13.0	B	21.8	C	16.4	C	34.6	D

Table 3-6 Alternative B Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
42. Grove Avenue/D Street	11.9	B	6.9	A	12.2	B	7.0	A	13.9	B	7.7	A
43. Grove Avenue/Holt Boulevard	37.9	D	44.8	D	50.2	D	46.8	D	45.9	D	50.3	D
44. Grove Avenue/State Street	**76.3**	**E**	40.5	D	**81.6**	**F**	44.5	D	**117.3**	**F**	**64.0**	**E**
45. County Building/Holt Boulevard	10.9	B	9.9	A	10.5	B	10.0	B	9.9	A	2.7	A
46. Corona Avenue/Holt Boulevard	12.9	B	8.0	A	13.7	B	8.9	A	17.8	B	20.8	C
47. Vineyard Avenue/D Street	19.1	B	17.4	B	18.6	B	17.6	B	20.2	C	19.1	B
48. Vineyard Avenue/Holt Boulevard	24.8	C	20.6	C	26.1	C	21.5	C	24.8	C	25.7	C
49. Vineyard Avenue/Airport Drive	24.8	C	22.4	C	25.2	C	23.0	C	26.8	C	24.9	C
50. Guasti Road/Holt Boulevard	9.7	A	10.1	B	9.8	A	10.2	B	11.6	B	11.0	B
51. Archibald Avenue/Guasti Road	14.8	B	17.0	B	14.6	B	17.8	B	14.7	B	19.4	B
52. Archibald Avenue/Airport Drive	25.2	C	28.4	C	25.6	C	29.0	C	26.9	C	32.1	C
53. Moore Way/Airport Drive	13.3	B	13.0	B	13.2	B	12.7	B	12.8	B	11.9	B
54. Terminal Way/Airport Drive	14.9	B	15.1	B	15.6	B	15.6	B	15.8	B	15.5	B
55. Archibald Avenue/I-10 Ramps	21.0	C	18.6	B	21.4	C	19.1	B	24.5	C	21.6	C
56. Archibald Avenue/Inland Empire Boulevard	25.1	C	33.1	C	27.3	C	35.7	D	33.1	C	41.5	D
57. Hermosa Avenue/Inland Empire Boulevard	25.3	C	20.9	C	26.2	C	21.2	C	25.9	C	22.6	C
58. Shelby Street/Inland Empire Boulevard	7.3	A	9.4	A	7.3	A	9.2	A	9.9	A	9.4	A
59. Center Avenue/Inland Empire Boulevard	6.8	A	7.7	A	6.8	A	7.8	A	6.6	A	7.5	A

Table 3-6 Alternative B Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
60. Haven Avenue/Inland Empire Boulevard	15.5	B	30.5	C	15.8	B	32.4	C	20.0	C	43.2	D
61. Porsche Way/Inland Empire Boulevard	19.4	B	19.6	B	19.3	B	19.6	B	19.2	B	20.6	C
62. Mercedes Lane/Inland Empire Boulevard	8.3	A	9.3	A	8.0	A	9.4	A	9.4	A	8.7	A
63. Private Driveway/Inland Empire Boulevard	6.9	A	7.9	A	6.6	A	8.2	A	7.1	A	8.5	A
64. Mathis-Car Max/Inland Empire Boulevard	2.3	A	5.4	A	2.8	A	6.7	A	3.0	A	5.5	A
65. Ferrari Lane/Inland Empire Boulevard	8.5	A	9.5	A	8.9	A	9.8	A	8.7	A	9.6	A
66. Milliken Avenue/Inland Empire Boulevard	12.8	B	15.0	B	13.2	B	14.5	B	14.0	B	16.8	B
67. Milliken Avenue/Concours Street	8.6	A	14.8	B	8.6	A	14.8	B	8.8	A	15.4	B
68. Milliken Avenue/4th Street	23.4	C	36.7	D	24.1	C	38.7	D	25.5	C	53.7	D
69. Milliken Avenue/6th Street	16.9	B	20.1	C	15.7	B	20.4	C	16.9	B	22.5	C
70. Milliken Avenue/7th Street	7.7	A	8.5	A	8.9	A	9.3	A	8.0	A	11.8	B
71. Milliken Avenue/Jersey Boulevard	13.0	B	15.2	B	12.7	B	15.6	B	16.0	B	20.3	C
72. Milliken Avenue/Arrow Route	24.5	C	29.6	C	25.7	C	32.1	C	29.6	C	47.4	D
73. Milliken Avenue/Millennium Court	4.4	A	3.2	A	4.9	A	3.3	A	5.2	A	3.9	A
74. Milliken Avenue/Foothill Boulevard	22.0	C	27.1	C	18.7	B	26.1	C	35.8	D	31.1	C
75. Mayten Avenue/Foothill Boulevard	6.3	A	14.8	B	6.5	A	18.4	B	7.0	A	52.1	D

Table 3-6 Alternative B Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
76. Masi Drive/Foothill Boulevard	6.7	A	8.4	A	6.5	A	8.4	A	7.2	A	9.2	A
77. Rochester Avenue/Foothill Boulevard	14.3	B	33.6	C	14.4	B	37.0	D	17.0	B	**61.2**	**E**
78. Victoria Commons/Foothill Boulevard	2.2	A	5.1	A	3.3	A	5.5	A	3.9	A	7.1	A
79. Day Creek Boulevard/Foothill Boulevard	23.5	C	**57.3**	**E**	23.6	C	**64.6**	**E**	31.5	C	**105.9**	**F**
80. I-15 Southbound Ramps/Foothill Boulevard	12.6	B	11.8	B	13.0	B	11.9	B	15.0	B	13.3	B
81. I-15 Northbound Ramps/Foothill Boulevard	12.9	B	12.8	B	12.9	B	12.5	B	14.1	B	14.1	B
82. Etiwanda Avenue/Foothill Boulevard	20.6	C	29.1	C	21.6	C	29.1	C	25.4	C	36.0	D
83. Cornwall Avenue/Foothill Boulevard	6.9	A	5.1	A	6.0	A	6.7	A	7.3	A	5.8	A
84. East Avenue/Foothill Boulevard	10.4	B	7.8	A	12.2	B	7.4	A	17.6	B	8.3	A
85. Cottonwood Avenue/Foothill Boulevard	6.5	A	6.0	A	6.1	A	5.8	A	6.1	A	6.4	A
86. Mulberry Avenue/Foothill Boulevard	15.4	B	14.9	B	15.8	B	13.9	B	17.1	B	14.7	B
87. Banana Avenue/Foothill Boulevard	8.2	A	6.2	A	7.8	A	7.7	A	8.1	A	8.3	A
88. Cherry Avenue/Foothill Boulevard	24.1	C	22.8	C	24.6	C	23.0	C	25.6	C	24.3	C
89. Redwood Avenue/Foothill Boulevard	5.9	A	8.8	A	6.2	A	9.6	A	6.9	A	9.9	A
90. Hemlock Avenue/Foothill Boulevard	9.2	A	10.3	B	8.8	A	11.0	B	11.2	B	11.6	B
91. Almeria Avenue/Foothill Boulevard	13.7	B	9.8	A	14.0	B	9.0	A	14.5	B	10.9	B
92. Tokay Avenue/Foothill Boulevard	11.9	B	8.8	A	12.1	B	9.0	A	10.9	B	9.1	A

Table 3-6 Alternative B Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
93. Citrus Avenue/Foothill Boulevard	32.6	C	47.1	D	33.8	C	51.9	D	50.3	D	**80.8**	**F**
94. Cypress Avenue/Foothill Boulevard	7.5	A	8.4	A	7.1	A	9.3	A	7.8	A	8.7	A
95. Juniper Avenue/Foothill Boulevard	13.0	B	19.4	B	14.6	B	19.1	B	13.9	B	26.7	C
96. Sierra Avenue/Foothill Boulevard	32.1	C	53.0	D	32.9	C	**61.2**	**E**	41.4	D	**81.7**	**F**
97. Sierra Avenue/Upland Avenue	10.2	B	12.5	B	10.2	B	12.8	B	10.9	B	15.7	B
98. Sierra Avenue/Seville Avenue	1.5	A	3.7	A	1.6	A	3.6	A	1.5	A	3.8	A
99. Sierra Avenue/Spring Street	1.5	A	4.4	A	1.6	A	4.5	A	1.6	A	4.7	A
100. Sierra Avenue/Arrow Boulevard	22.2	C	31.4	C	22.8	C	33.5	C	25.3	C	44.1	D
101. Sierra Avenue/Valencia Avenue	3.2	A	10.4	B	3.4	A	8.9	A	3.3	A	5.9	A
102. Sierra Avenue/Orange Way	6.5	A	6.8	A	7.8	A	7.8	A	7.1	A	8.5	A
103. Sierra Avenue/Ceres Avenue	4.2	A	5.0	A	5.0	A	5.4	A	4.9	A	6.3	A
104. Sierra Avenue/Merrill Avenue	18.3	B	28.1	C	18.3	B	31.5	C	20.1	C	37.9	D
105. Sierra Avenue/Randall Avenue	19.5	B	18.5	B	20.1	C	18.7	B	23.4	C	22.1	C
106. Sierra Avenue/San Bernardino Avenue	30.3	C	33.9	C	37.9	D	35.1	D	**74.6**	**E**	53.6	D
107. Sierra Avenue/Marygold Avenue	27.7	C	40.1	D	28.4	C	45.6	D	33.9	C	**68.6**	**E**
108. Juniper Avenue/Marygold Avenue	11.9	B	16.8	B	12.3	B	17.3	B	13.0	B	19.0	B
109. Juniper Avenue/Valley Boulevard	31.1	C	43.0	D	32.0	C	45.4	D	34.5	C	**71.1**	**E**
110. Inland Empire Center/Valley Boulevard	17.7	B	20.7	C	17.7	B	21.0	C	17.7	B	22.9	C
111. Sierra Avenue/Valley Boulevard	29.2	C	51.9	D	31.5	C	**56.6**	**E**	55.0	D	**90.3**	**F**

Table 3-6 Alternative B Traffic Analysis

Intersection	Existing 2016				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
112. Sierra Avenue/Kaiser Permanente	3.6	A	5.5	A	3.5	A	5.5	A	3.0	A	6.2	A
113. Haven Avenue/Concours Street	16.5	B	13.2	B	17.1	B	14.2	B	18.6	B	17.4	B
114. Haven Avenue/4th Street	17.9	B	31.7	C	15.2	B	26.9	C	17.5	B	30.8	C
115. Haven Avenue/Trademark Street	5.7	A	8.4	A	4.2	A	12.8	B	8.0	A	13.2	B
116. Haven Avenue/6th Street	20.1	C	26.9	C	20.7	C	25.1	C	24.2	C	33.5	C
117. Haven Avenue/7th Street	4.7	A	15.5	B	3.7	A	16.1	B	4.7	A	12.2	B
118. Haven Avenue/Jersey Boulevard	8.9	A	28.8	C	8.5	A	21.9	C	8.3	A	50.4	D
119. Haven Avenue/Arrow Route	24.6	C	34.6	C	25.6	C	41.0	D	38.3	D	**67.6**	**E**
120. Haven Avenue/Civic Center Drive	18.9	B	17	B	8.8	A	12.5	B	10.7	B	10.1	B
121. Haven Avenue/Foothill Boulevard	31.9	C	41.7	D	28.4	C	39.7	D	29.2	C	**72.2**	**E**
122. Aspen Street/Foothill Boulevard	13.6	B	18.3	B	10.6	B	15.9	B	10.1	B	18.6	B
123. Spruce Avenue/Foothill Boulevard	14.2	B	23.2	C	16.0	B	20.5	C	18.0	B	25.8	C
124. Elm Avenue/Foothill Boulevard	15.3	B	16.9	B	14.0	B	15.0	B	13.6	B	21.9	C
125. Day Creek Boulevard/Victoria Gardens Lane	15.3	B	20.6	C	14.0	B	22.0	C	15.3	B	23.7	C
126. Day Creek Boulevard/S. Main Street	2.1	A	8.2	A	2.2	A	9.4	A	2.3	A	9.1	A
127. Day Creek Boulevard/N. Main Street	10	A	16.9	B	11.8	B	17.3	B	11.0	B	18.3	B
128. Day Creek Boulevard/Church Street	24.1	C	28.5	C	25.4	C	30.9	C	28.3	C	34.3	C
129. Rochester Avenue/Church Street	25.6	C	23.2	C	26.5	C	30.9	C	33.1	C	38.8	D

Source: WVC Project Traffic Operational Analysis Report, 2018.

Table 3-7 Future Year Traffic Condition Comparison between No Build Alternative and Alternative B

Intersection	No Build Alternative				Alternative B				Change in AM Delay	Change in PM Delay	Exceeding CEQA Significant Threshold?
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS			
Year 2023											
2. Garey Avenue/Holt Avenue	39.7	D	51.4	D	41.7	D	**57.0**	**E**	**2.0**	**5.6**	**Yes**
4. Towne Avenue/Holt Avenue	35.4	D	42.9	D	35.8	D	44.7	D	**0.4**	**1.8**	**Yes**
8. East End Avenue/Holt Avenue	22.4	C	44.0	D	22.5	C	46.6	D	**0.1**	**2.6**	**Yes**
30. Euclid Avenue/Holt Boulevard	38.6	D	35.0	D	**73.5**	**E**	42.3	D	**34.9**	**7.3**	**Yes**
77. Rochester Avenue/Foothill Boulevard	14.4	B	34.6	C	14.4	B	37.0	D	**0.0**	**2.4**	**Yes**
79. Day Creek Boulevard/Foothill Boulevard	23.3	C	**63.4**	**E**	23.6	C	**64.6**	**E**	**0.3**	**1.2**	**Yes**
93. Citrus Avenue/Foothill Boulevard	33.8	C	51.0	D	33.8	C	51.9	D	**0.0**	**0.9**	**Yes**
96. Sierra Avenue/Foothill Boulevard	32.4	C	**59.8**	**E**	32.9	C	**61.2**	**E**	**0.5**	**1.4**	**Yes**
106. Sierra Avenue/San Bernardino Avenue	37.1	D	34.7	C	37.9	D	35.1	D	**0.8**	**0.4**	**Yes**
107. Sierra Avenue/Marygold Avenue	28.2	C	45.8	D	28.4	C	45.6	D	**0.2**	**-0.2**	**Yes**
109. Juniper Avenue/Valley Boulevard	31.9	C	45.0	D	32.0	C	45.4	D	**0.1**	**0.4**	**Yes**
119. Haven Avenue/Arrow Route	25.5	C	40.6	D	25.6	C	41.0	D	**0.1**	**0.4**	**Yes**
121. Haven Avenue/Foothill Boulevard	28.5	C	39.2	D	41.7	D	**57.0**	**E**	**2.0**	**5.6**	**Yes**
Year 2040											
2. Garey Avenue/Holt Avenue	**56.9**	**E**	**70.4**	**E**	**59.4**	**E**	**77.4**	**E**	**2.5**	**7.0**	**Yes**
4. Towne Avenue/Holt Avenue	51.5	D	**63.6**	**E**	53.1	D	**64.4**	**E**	**1.6**	**0.8**	**Yes**
8. East End Avenue/Holt Avenue	24.5	C	**68.1**	**E**	24.9	C	**71.2**	**E**	**0.4**	**3.1**	**Yes**
30. Euclid Avenue/Holt Boulevard	54.0	D	40.4	D	**75.7**	**E**	49.8	D	**21.7**	**9.4**	**Yes**
77. Rochester Avenue/Foothill Boulevard	16.4	B	**59.6**	**E**	17.0	B	**61.2**	**E**	**0.6**	**1.6**	**Yes**

Table 3-7 Future Year Traffic Condition Comparison between No Build Alternative and Alternative B

Intersection	No Build Alternative				Alternative B				Change in AM Delay	Change in PM Delay	Exceeding CEQA Significant Threshold?
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour				
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS			
79. Day Creek Boulevard/Foothill Boulevard	30.6	C	**102.3**	**F**	31.5	C	**105.9**	**F**	**0.9**	**3.6**	**Yes**
93. Citrus Avenue/Foothill Boulevard	50.1	D	**80.2**	**F**	50.3	D	**80.8**	**F**	**0.2**	**0.6**	**Yes**
96. Sierra Avenue/Foothill Boulevard	**60.7**	**E**	**81.7**	**F**	41.4	D	**81.7**	**F**	**-19.3**	**0.0**	**Yes**
106. Sierra Avenue/San Bernardino Avenue	**73.0**	**E**	52.9	D	**74.6**	**E**	53.6	D	**1.6**	**0.7**	**Yes**
107. Sierra Avenue/Marygold Avenue	35.1	D	**67.2**	**E**	33.9	C	**68.6**	**E**	**-1.2**	**1.4**	**Yes**
119. Haven Avenue/Arrow Route	38	D	**67.3**	**E**	38.3	D	**67.6**	**E**	**0.3**	**0.3**	**Yes**
121. Haven Avenue/Foothill Boulevard	29.2	C	**70.8**	**E**	29.2	C	**72.2**	**E**	**0.0**	**1.4**	**Yes**

Source: WVC Project Traffic Operational Analysis Report, 2018.

As can be seen in Table 3-7, out of 129 study intersections under Alternative B, there would be only 3 intersections with traffic conditions worsened from LOS D to E and 1 intersection improved from E to D. Although LOS is degraded slightly at these intersections based on CEQA thresholds, the project would introduce a new transit line designed to move a higher volume of people more efficiently than lower-volume passenger vehicles, thus providing a more positive short- and long-term effect to the environment.

Several traffic mitigation measures are identified in the *Traffic Operations Analysis Report* to help mitigate traffic impacts that are anticipated by 2023 and 2040 throughout the corridor. These recommended traffic operation improvements consist of various right-turn geometric improvements, traffic signal timing and phasing improvements, and other TSM improvements that could be implemented, as summarized in Table 3-8

SBCTA will work with local jurisdictions to improve local roadway conditions where traffic operation impacts have been identified. For the intersections identified where feasible mitigation is proposed, SBCTA will include those feasible intersection improvement measures as part of the proposed project. SBCTA will be responsible to fund the full cost for feasible improvements to be undertaken by local jurisdictions.

For intersections that could not be mitigated to the level of less than significant under CEQA, further coordination with local jurisdictions would be required to identify appropriate traffic improvement compensation.

Table 3-8 Proposed Potential Mitigation Measures

Impacted Intersections	Alternatives	Proposed Avoidance Measures	Level of Significance with Mitigation (under CEQA)
#2 Garey Avenue/ Holt Avenue	A and B	Restripe the eastbound Holt Avenue approach to add a dedicated right-turn lane. (2023, 2040)	Not Significant
#4 Towne Avenue/ Holt Avenue	A and B	Modify the traffic signal to include protected plus permitted phasing at the northbound and southbound Towne Avenue approaches. (2040)	Not Significant
#8 East End Avenue/ Holt Avenue	A and B	Restripe the eastbound Holt Avenue right-turn lane to a shared through/right-turn lane. (2040)	Not Significant
#30 Euclid Avenue/ Holt Boulevard	B	No feasible measures are available. (Existing, 2023, 2040)	Significant and Unavoidable
#77 Rochester Avenue/Foothill Boulevard	A and B	No feasible measures are available. (2040)	Significant and Unavoidable
#79 Day Creek Boulevard/Foothill Boulevard	A and B	Restripe the third northbound through lane to a shared through/ right-turn lane. (Existing, 2023, 2040)	Not Significant
#93 Citrus Avenue/ Foothill Boulevard	A and B	No feasible measures are available. (2040)	Significant and Unavoidable
#96 Sierra Avenue/ Foothill Boulevard	A and B	Modify the traffic signal to include protected plus permitted phasing at the eastbound and westbound Foothill Boulevard approaches. (2023)	Not Significant
#106 Sierra Avenue/ San Bernardino Avenue	A and B	Modify the traffic signal to include protected plus permitted phasing at the eastbound and westbound San Bernardino Avenue approaches. (2040)	Not Significant
#107 Sierra Avenue/ Marygold Avenue	A and B	Modify and restripe the eastbound Marygold Avenue shared through/ right lane to a right-turn lane with a dedicated eastbound through lane. (2040)	Not Significant
#109 Juniper Avenue/ Valley Boulevard	A and B	Restripe the westbound Valley Boulevard approach to add a dedicated right-turn lane. (2040)	Not Significant
#119 Haven Avenue/ Arrow Route	A and B	No feasible measures are available. (2040)	Significant and Unavoidable
#121 Haven Avenue/ Foothill Boulevard	A and B	No feasible measures are available. (2040)	Significant and Unavoidable

Source: WVC Project Traffic Operational Analysis Report, 2018.

3.3.7 Traffic Impact Analysis for Operations and Maintenance (O&M) Facility

This section summarizes the traffic impacts of the three O&M facility site alternatives during the opening year (2023) and the horizon year (2040). The project analysis evaluates the changes in traffic patterns as a result of the proposed project. The traffic conditions for the future years are also compared against the baseline 2018 conditions.

No Build Alternative

The No Build Alternative would result in impacts associated with normal traffic growth in San Bernardino County.

Table 3-9 provides a summary of LOS analysis results for the No Build Alternative for the existing year, opening year 2023, and future year 2040.

The No Build Alternative would maintain the current configuration of study corridor arterials and maintain the existing levels of public transportation services.

By opening year 2023, no additional intersections beyond the one identified under existing condition are anticipated to further deteriorate and operate at LOS E or worse (a CEQA threshold set forth by local jurisdictions).

By future year 2040, an additional two intersections beyond the one identified under existing conditions are anticipated to further deteriorate and operate at LOS E or worse:

- #4 Bon View Avenue/Belmont Street (PM peak hour)
- #6 Grove Avenue/Mission Boulevard (AM and PM peak hours)

As forecast for future year 2040, during the AM and PM peak hours, one and two intersections would operate at LOS F, respectively. Traffic operations are expected to continue to deteriorate under the No Build Alternative as congestion worsens.

Build Alternatives

Under the build alternatives, an adverse traffic impact at an intersection is determined when the No Build Alternative is compared with the forecasted years 2023 and 2040. An adverse traffic impact is considered to occur if an intersection that is forecast to operate at LOS D or better under the no-build condition worsens to LOS E under build conditions. In addition, an adverse impact is considered to occur if the proposed project results in any increase in delay at an intersection forecast to operate at LOS E or F in no-build conditions.

O&M Facility Site 1 or 2 Alternative

The O&M facility at Site Options 1 or 2 would have access along Cucamonga Avenue. Table 3-10 summarizes the traffic analysis for an O&M facility at Site 1 or 2 under existing, opening year 2023, and future year 2040 conditions.

Table 3-9 No Build Alternative Traffic Analysis – O&M Facility

Intersection	Existing 2018				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1. Campus Avenue/Mission Boulevard	25.9	C	23.8	C	26.8	C	25.1	C	36.9	D	30.4	C
2. Campus Avenue/Belmont Street	**64.9**	**F**	**73.1**	**F**	**78.5**	**F**	**87.9**	**F**	**342.1**	**F**	**308.0**	**F**
3. Bon View Avenue/Mission Boulevard	24.4	C	23.8	C	25.3	C	23.7	C	41.0	D	26.6	C
4. Bon View Avenue/Belmont Street	17.7	C	31.1	D	18.5	C	34.6	D	25.9	D	**82.7**	**F**
5. Cucamonga Avenue/Belmont Street	13.8	B	13.5	B	14.0	B	13.9	B	16.4	C	16.5	C
6. Grove Avenue/Mission Boulevard	39.1	D	47.2	D	41.6	D	50.4	D	**58.2**	**E**	**82.0**	**F**
7. Grove Avenue/Belmont Street	8.5	A	8.8	A	8.7	A	8.9	A	9.3	A	9.6	A

Source: WVC Project Traffic Operations and Maintenance Facility Traffic Analysis Report, 2018.

Table 3-10 O&M Facility Site 1 or 2 Alternative Traffic Analysis

Intersection	Existing 2018				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1. Campus Avenue/Mission Boulevard	26.5	C	23.7	C	27.1	C	25.0	C	37.3	D	30.3	C
2. Campus Avenue/Belmont Street	**66.0**	**F**	**88.2**	**F**	**80.0**	**F**	**107.9**	**F**	**357.9**	**F**	**369.3**	**F**
3. Bon View Avenue/Mission Boulevard	23.4	C	24.2	C	25.1	C	24.1	C	40.6	D	27.2	C
4. Bon View Avenue/Belmont Street	18.9	C	34.6	D	19.9	C	**38.9**	**E**	28.9	D	**97.3**	**F**
5. Cucamonga Avenue/Belmont Street	14.9	B	14.1	B	15.2	C	14.5	B	18.3	C	17.6	C
6. Grove Avenue/Mission Boulevard	39.1	D	46.9	D	41.7	D	50.7	D	**58.3**	**E**	**97.3**	**F**
7. Grove Avenue/Belmont Street	8.7	A	9.1	A	8.8	A	9.2	A	9.5	A	17.6	C

Source: WVC Project Traffic Operations and Maintenance Facility Traffic Analysis Report, 2018.

Based on the CEQA threshold set forth by local jurisdictions described in Section 3.3.3, in opening year 2023, the following two intersections are considered to be adversely impacted with the operation of the O&M facility at the Site 1 or 2 scenario:

- #2 Campus Avenue/Belmont Street (AM and PM peak hours)
- #4 Bon View Avenue/Belmont Street (PM peak hour)

Based on the CEQA threshold set forth by local jurisdictions described in Section 3.3.3, by future year 2040, the following three intersections are considered to be adversely impacted by the O&M facility at the Site 1 or 2 scenario:

- #2 Campus Avenue/Belmont Street (AM and PM peak hours)
- #4 Bon View Avenue/Belmont Street (PM peak hour)
- #6 Grove Avenue/Mission Boulevard (AM and PM peak hours)

Several traffic mitigation measures are identified in the *Operations and Maintenance Facility Traffic Analysis Report* to help mitigate traffic impacts that are anticipated by 2023 and 2040. These recommended traffic operational improvements are summarized in Table 3-12. In addition, it is recognized that increases in delay and LOS are projected at other intersections in the study area. However, these increases are not considered adverse (based on threshold criteria) and would not require mitigation.

O&M Facility Site 3 Alternative

The O&M facility at Site Option 3 would have access along Bon View Avenue. Table 3-11 summarizes the traffic analysis for an O&M facility at Site 3 under existing, opening year 2023, and future year 2040 conditions.

Based on the CEQA threshold set forth by local jurisdictions described in Section 3.3.3, in opening year 2023, the following two intersections are considered to be adversely impacted by the O&M facility at the Site 3 scenario:

- #2 Campus Avenue/Belmont Street (AM and PM peak hours)
- #4 Bon View Avenue/Belmont Street (PM peak hour)

Based on the CEQA threshold set forth by local jurisdictions described in Section 3.3.3, by future year 2040, the following three intersections are considered to be adversely impacted by the O&M facility at the Site 3 scenario:

- #2 Campus Avenue/Belmont Street (AM and PM peak hours)
- #4 Bon View Avenue/Belmont Street (PM peak hour)
- #6 Grove Avenue/Mission Boulevard (AM and PM peak hours)

Several traffic mitigation measures are identified in the *Operations and Maintenance Facility Traffic Analysis Report* to help mitigate traffic impacts that are anticipated by 2023 and 2040. These recommended traffic operation improvements are summarized in Table 3-12.

Table 3-11 O&M Facility Site 3 Alternative Traffic Analysis

Intersection	Existing 2018				Opening Year 2023				Future Year 2040			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
1. Campus Avenue/Mission Boulevard	26.5	C	23.7	C	27.1	C	25.0	C	37.3	D	30.3	C
2. Campus Avenue/Belmont Street	**66.0**	**F**	**88.2**	**F**	**80.0**	**F**	**107.9**	**F**	**357.9**	**F**	**369.3**	**F**
3. Bon View Avenue/Mission Boulevard	23.4	C	24.2	C	25.1	C	24.1	C	40.6	D	27.2	C
4. Bon View Avenue/Belmont Street	18.9	C	34.6	D	19.9	C	**38.9**	**E**	28.9	D	**97.3**	**F**
5. Cucamonga Avenue/Belmont Street	14.9	B	14.1	B	15.2	C	14.5	B	18.3	C	17.6	C
6. Grove Avenue/Mission Boulevard	39.1	D	46.9	D	41.7	D	50.7	D	**58.3**	**E**	**97.3**	**F**
7. Grove Avenue/Belmont Street	8.7	A	9.1	A	8.8	A	9.2	A	9.5	A	17.6	C

Source: WVC Project Traffic Operations and Maintenance Facility Traffic Analysis Report, 2018.

Table 3-12 Potential Mitigation Measures – O&M Facility

Impacted Intersections	Alternatives	Proposed Avoidance Measures	Level of Significance with Mitigation (Under CEQA)
#2 Campus Avenue/ Belmont Street	O&M facility Sites 1,2, or 3	No feasible measures are available. (Existing, 2023, 2040)	Significant and Unavoidable
#4 Bon View Avenue/ Belmont Street	O&M facility Sites 1,2, or 3	No feasible measures are available. (Existing, 2023, 2040)	Significant and Unavoidable
#6 Grove Avenue/ Mission Boulevard	O&M facility Sites 1,2, or 3	Modify the traffic signal to include a right-turn overlap phase at the westbound Mission Boulevard approach. (2040)	Not Significant

Source: WVC Project Traffic Operations and Maintenance Facility Traffic Analysis Report, 2018.

SBCTA will work with local jurisdictions to improve local roadway conditions where traffic operation impacts have been identified. For the intersections identified where feasible mitigation is proposed, SBCTA will include those feasible intersection improvement measures as part of the proposed project. SBCTA will be responsible to fund the full cost for feasible improvements to be undertaken by local jurisdictions.

For intersections that could not be mitigated to a less than significant level under CEQA, further coordination with local jurisdictions would be required to identify appropriate traffic improvement compensation.

3.3.8 Avoidance, Minimization, and/or Mitigation Measures

Although the proposed project would not result in an adverse effect to traffic and circulation along the proposed BRT corridor considering context and intensity, the project would incorporate project design features to improve traffic conditions where applicable in addition to traffic operational measures as outlined below.

TRA-1: The proposed BRT project design will incorporate the following improvement measures to enhance sbX Operations:

- Reconstruction of curb and gutters will only be required for the segment where dedicated bus-only lanes are proposed.
- Vehicular lanes where the sbX operates in dedicated bus-only lanes will feature concrete roadways, painted or striped to visually separate the exclusive lanes from the mixed-flow lanes.
- Concrete pads will be placed at all station locations for the sbX vehicles.
- Wherever possible for exclusive lanes, the bus signals and the adjacent existing intersection signals will be integrated to create one signalized intersection controlling automobiles and buses.
- Intersection crossings will be controlled with signals, and pedestrians will be allocated standard crossing time.
- Left-turn movements for vehicular traffic from mixed-flow lanes crossing exclusive lanes on the proposed project alignment will require separate signal phases with red arrows when transit vehicles are crossing intersections.
- The signal modifications may also include “active” No-Right-Turn indications and “Bus Coming” signs to prevent right turns across the exclusive lanes.
- Signal modifications will include upgrades to signal controllers and software to accommodate the TSP treatment at intersections.
- Presignals and queue jumpers will be used to prevent traffic from stopping or blocking the exclusive lanes.

TRA-2: The following improvement measures will be carried out at the following affected intersections for both

BRT Alternatives A and B, and O&M facility site locations 1, 2, or 3:

A. #2 Garey Avenue/Holt Avenue: Restripe eastbound Holt Avenue approach to add a dedicated right-turn lane. (by 2023)
B. #4 Towne Avenue/Holt Avenue: Modify the traffic signal to include protected plus permitted phasing at the northbound and southbound Towne Avenue approaches (by 2040).
C. #8 East End Avenue/Holt Avenue: Restripe the eastbound Holt Avenue right-turn lane to a shared through/ right-turn lane (by 2040).
D. #79 Day Creek Boulevard/Foothill Boulevard: Restripe the third northbound through lane to a shared through/right-turn lane (by 2023).
E. #96 Sierra Avenue/Foothill Boulevard: Modify the traffic signal to include protected plus permitted phasing at the eastbound and westbound Foothill Boulevard approaches (by 2023).
F. #106 Sierra Avenue/San Bernardino Avenue: Modify the traffic signal to include protected plus permitted phasing at the eastbound and westbound San Bernardino Avenue approaches (by 2040).
G. #107 Sierra Avenue/Marygold Avenue: Modify and restripe the eastbound Marygold Avenue shared through/right lane to a right-turn lane with a dedicated eastbound through lane (by 2040).
H. #109 Juniper Avenue/Valley Boulevard: Restripe the westbound Valley Boulevard approach to add a dedicated right-turn lane (by 2040).
I. O&M Facility #6 Grove Avenue/ Mission Boulevard: Modify the traffic signal to include a right-turn overlap phase at the westbound Mission Boulevard approach (by 2040).

Tables 3-13 through 3-14 show the LOS improvement with the feasible mitigation measures listed for existing, opening year, and future conditions, respectively. The proposed feasible avoidance measures reduce the level of impact to less than substantial.

Table 3-13 Opening Year 2023 Conditions with Mitigation Measures

Intersection	Opening Year 2023 No Build				Opening Year 2023 Plus Alternative A or B			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
TRA-2A: #2 Garey Avenue/Holt Avenue	39.7	D	51.4	D	39.8	D	49.0	D
TRA-2D: #79 Day Creek Boulevard/Foothill Boulevard	23.3	C	**63.4**	**E**	23.7	C	**62.7**	**E**
TRA-2E: #96 Sierra Avenue/Foothill Boulevard	32.4	C	**59.8**	**E**	30.3	C	47.7	D

Source: WVC Project Traffic Operational Analysis Report, 2018.

Table 3-14 Future Year 2040 Conditions with Mitigation Measures

Intersection	Future Year 2040 No Build				Future Year 2040 Plus Alternative A or B			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
TRA-2A: #2 Garey Avenue/Holt Avenue	**56.9**	**E**	**70.4**	**E**	**55.6**	**E**	**64.0**	**E**
TRA-2B: #4 Towne Avenue/Holt Avenue	51.5	D	**63.6**	**E**	43.6	D	53.8	D
TRA-2C: #8 East End Avenue/Holt Avenue	24.5	C	**68.1**	**E**	23.4	C	44.6	D
TRA-2D: #79 Day Creek Boulevard/Foothill Boulevard	30.6	C	**102.3**	**F**	31.5	C	**93.6**	**F**
TRA-2F: #106 Sierra Avenue/San Bernardino Avenue	**73.0**	**E**	52.9	D	52.9	D	39.3	D
TRA-2G: #107 Sierra Avenue/Marygold Avenue	35.1	D	**67.2**	**E**	32.4	C	49.6	D
TRA-2H: #109 Juniper Avenue/Valley Boulevard	34.0	C	**70.5**	**E**	33.0	C	**56.9**	**E**
Future Year 2040 Plus O&M Facility Site 1 or 2 Alternative								
TRA-2I: O&M Facility #6 Grove Avenue/Mission Boulevard	**58.2**	**E**	**82.0**	**F**	**56.7**	**E**	**74.4**	**E**

Table 3-14 Future Year 2040 Conditions with Mitigation Measures

Intersection	Future Year 2040 No Build				Future Year 2040 Plus Alternative A or B			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS
Future Year 2040 Plus O&M Facility Site 3 Alternative								
TRA-2I: O&M Facility #6 Grove Avenue/Mission Boulevard	**58.2**	**E**	**82.0**	**F**	**57.2**	**E**	**74.4**	**E**

Source: WVC Project Traffic Operational Analysis Report, 2017 and WVC Project Traffic Operations and Maintenance Facility Traffic Analysis Report, 2018.

3.4 Parking

3.4.1 Existing Parking Conditions

Most of the proposed project corridor is characterized by commercial and light industrial properties adjacent to a major arterial. Parking conditions vary along major arterials within the study area, as shown in Table 3-15. In other areas, there is on-street and off-street parking in residential areas and usually plentiful off-street surface parking at commercial lots. Relevant General Plan policies are identified and analyzed in Section 4.8.3, Consistency with State, Regional, and Local Plans.

Table 3-15 Parking Conditions

Route	Segment	Possible Future Parking Conditions
Holt Avenue	Garey Avenue to Mills Avenue	On-street parking allowed
Holt Boulevard	Mills Avenue to Benson Avenue	On-street parking allowed
Holt Boulevard	Benson Avenue to Vineyard Avenue	Parking would be eliminated under Alternative B
Inland Empire Boulevard	Archibald Avenue to Haven Avenue	No on-street parking
Milliken Avenue	Inland Empire Boulevard to Foothill Boulevard	No on-street parking
Haven Avenue	Inland Empire Boulevard to Foothill Boulevard	No on-street parking
Foothill Boulevard	Haven Avenue to Day Creek Boulevard	No on-street parking
Foothill Boulevard	Day Creek Boulevard to Sierra Avenue	No on-street parking (except between Cypress Avenue and Sierra Avenue)
Sierra Avenue	Foothill Boulevard to Valley Boulevard	On-street parking allowed (except between Marygold Avenue and Valley Boulevard)
Sierra Avenue	Valley Boulevard to Kaiser Permanente Driveway	No on-street parking

3.4.2 Horizon Year 2040 Parking Conditions

No Build Alternative

The No Build Alternative would maintain the current configuration of study corridor arterials and maintain the existing levels of public transportation services. Under the No Build Alternative, the proposed project would not be constructed, and the existing parking capacity would not be modified.

Build Alternatives

Alternative A

Alternative A would displace some on-street parking along the proposed project corridor at side-running station platforms to accommodate the 60-foot-long articulated buses.

Alternative B

Under Alternative B, on-street parking along Holt Boulevard along the 3.5-mile-long segment between Benson Avenue and Vineyard Avenue would be eliminated. Currently, on-street, nonmetered parking is provided along this segment. Because on-street parking is unmarked, parking space capacity was estimated based on the length of available curb, assuming an average vehicle length of 20 feet. According to the Traffic Operations Analysis Report (April 2018), the current usage rate of on-street parking demand during a typical weekday is below 11 percent. In addition to the presence of off-street parking provided by most businesses, the parking usage in the area is expected to remain below optimal usage rates, indicating that adequate parking would remain available to automobile users.

3.4.3 Avoidance, Minimization, and/or Mitigation Measures

The proposed project impacts to parking would not introduce any adverse or significant impacts to parking along the proposed project corridor. No avoidance, minimization, and/ or mitigation measures are necessary.

3.5 Pedestrian and Bicycle Facilities

This section discusses the project impacts on pedestrian and bicycle facilities as a result of project implementation. Temporary impacts during project construction are discussed in Section 5.2.9.

3.5.1 Existing Conditions

The *SANBAG Non-Motorized Transportation Plan* (2015) and the *Los Angeles County Bicycle Master Plan* (2012) identify bikeways that run adjacent to the proposed project area. Existing and proposed bikeways are illustrated in Figure 3-4. Table 3-16 summarizes the existing and planned bikeways along the proposed project corridor.

3.5.2 Horizon Year 2040 Pedestrian and Bicycle Facilities

No Build Alternative

Under the No Build Alternative, there would be no disruption to existing or planned bicycle and pedestrian facilities during construction because construction would not occur.

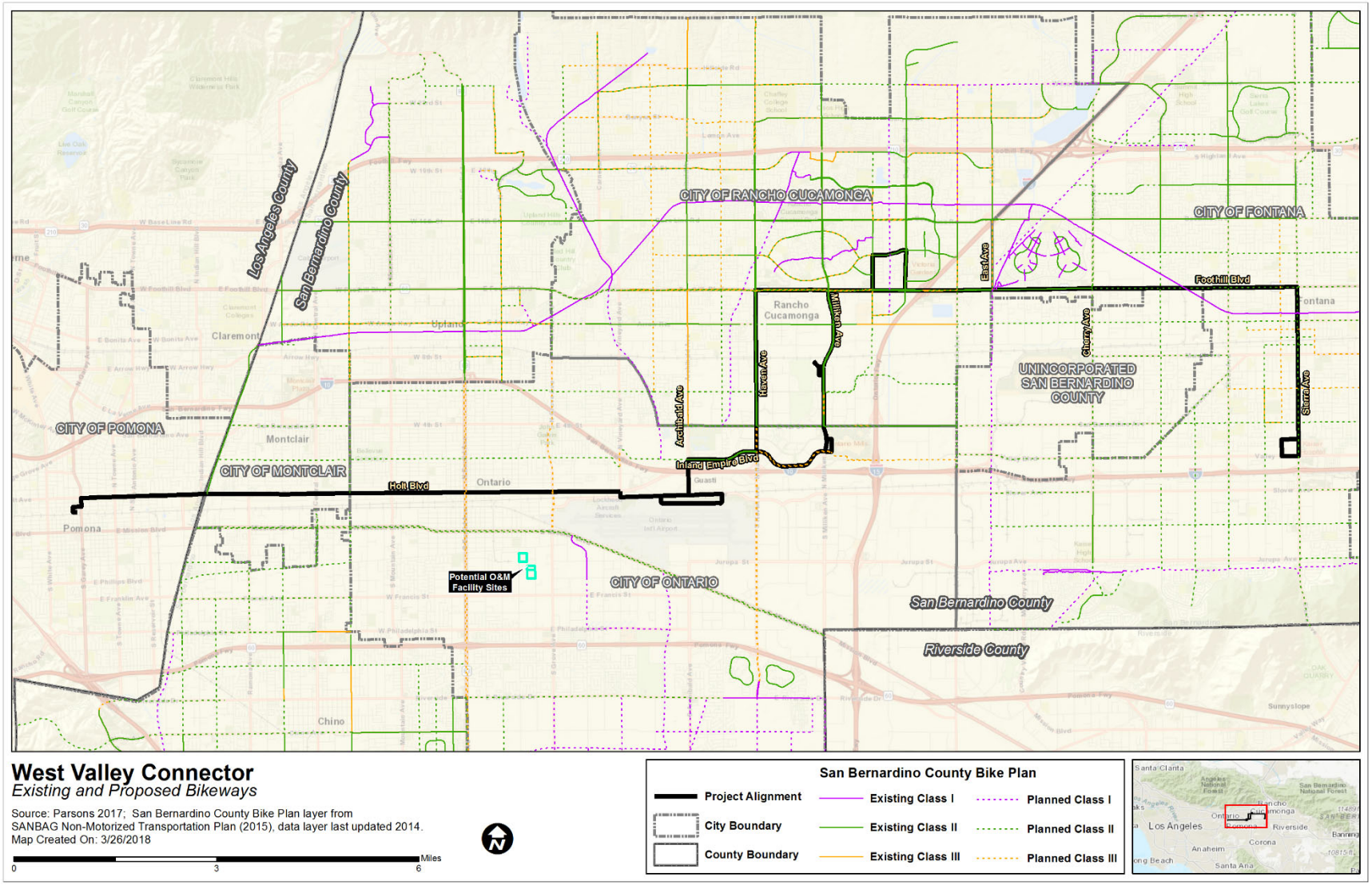

Figure 3-4 Existing and Proposed Bikeways

Table 3-16 Existing and Proposed Bikeways

Jurisdiction	Existing and Proposed Bikeways
Ontario	• Existing Class II facility along Inland Empire Boulevard from Archibald Avenue to Haven Avenue. • Planned Class III facility along Haven Avenue and along Inland Empire Boulevard between Haven Avenue and Milliken Avenue.
Rancho Cucamonga	• Existing Class II facility along Milliken Avenue, Haven Avenue, and Foothill Boulevard along the proposed project corridor.
Fontana	• Existing Class II facility along Foothill Boulevard between East Avenue and Cherry Avenue. • Planned Class II facility along Foothill Boulevard from Cherry Avenue to Sierra Avenue. • Planned Class II facility along Sierra Avenue.

Build Alternatives

Implementation of the build alternatives would not discontinue any existing sidewalk and bike trail networks or substantially limit existing plans to expand the networks. The existing pedestrian and bicycle system would be maintained and, where possible, improved to encourage pedestrians and bicyclists to use the West Valley Connector.

The proposed project is expected to provide various enhancements to improve the safety and environment for pedestrians and bicycles along the corridor, including improved station amenities and marked bike lanes. Both build alternatives would support modal shifts from automobiles to transit, cycling, and walking. Sidewalk connections would be provided between all station locations and adjacent land uses to help encourage transit usage. The new stations would include pedestrian amenities such as larger and more elaborate shelters with real-time passenger information displays and larger waiting and seating areas. Refer to Figures 2-7 through 2-10 for station features for typical side- and median-running stations. To create connectivity between bicycles and transit, bike storage for at least four bikes would be provided at every WVC station, and storage for up to eight bikes would be provided on WVC vehicles. The stations would be designed to minimize potential conflicts between pedestrians/bicyclists and automobiles, and between pedestrians/bicyclists and WVC vehicles.

Side-Running Stations

Of the 55 total stations proposed for the proposed project at 33 locations/major intersections along the corridor, 28 of them would be side-running stations. All side-running stations are planned to abut sidewalk areas. There are striped crosswalks and ADA-accessible curb ramps located in the immediate vicinity of all station locations.

Center-Running Stations

Five center-running stations would serve both directions of travel between Vineyard Avenue and Benson Avenue in Ontario. The stations would be located within raised medians. Sidewalks would connect the median stations to striped crosswalks and ADA-accessible curb ramps. The crosswalks would connect the center-running stations to areas that are currently connected by existing sidewalk networks.

3.5.3 Avoidance, Minimization, and/or Mitigation Measures

The proposed project would not result in any adverse permanent impacts to pedestrian and bicycle facilities; therefore, no mitigation is required.

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CHAPTER 4 – AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

4.0 AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

This chapter discusses the proposed project impacts on human, physical, and biological environments within the study area defined for each environmental resource. Analysis of each environmental factor includes a discussion of existing environmental conditions, potential environmental impacts (e.g., direct and indirect impacts), and avoidance, minimization, and mitigation measures for the build alternatives. Potential construction-related impacts and recommended mitigation measures are discussed separately in Chapter 5.

Though the regulations encourage the preparation of joint environmental documents under NEPA and CEQA for the purposes of achieving efficiency, one of the primary differences in the two laws is the manner in which significance is determined and analyzed in environmental documents. Under NEPA, significance is used to determine whether the proposed federal action (project) *as a whole* has the potential to "significantly affect the quality of the human environment." The determination of significance is based on "context and intensity." As a result, some environmental impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA, though they may be considered adverse.

CEQA, however, requires an identification of each "significant effect on the environment" resulting from the project and proposed measures to mitigate each significant effect. A significant effect on *any* one resource triggers the preparation of an EIR. In addition, the State CEQA Guidelines specifically identify a number of mandatory findings of significance. NEPA, on the other hand, has no parallel to the findings of mandatory significance found in CEQA.

This chapter analyzes impacts under both NEPA and CEQA and calls out those project impacts considered significant under CEQA. A further discussion of impacts under CEQA can be found in Chapter 7.

An important element of the impact analysis is the baseline against which the project impacts are evaluated. For CEQA, the environmental conditions existing in 2016, when the Notice of Preparation (NOP) was issued and when the traffic counts along the proposed corridor alignment were conducted, serves as the baseline for impact analysis evaluated in this environmental document. For NEPA, the No Build Alternative serves as the baseline for determining the project's impacts.

At the time of the NOP issuance in 2016, the opening year for the proposed project

was 2020; therefore, the opening year 2020 and the horizon year 2040 were initially used as the bases of impact analysis for the various environmental resources. As project development proceeded, some modifications to project design and operation occurred, resulting in the revised opening year of 2023 for the Phase I/Milliken Alignment and between 2023 and 2040 for the Phase II/Haven Alignment, when funding is anticipated to be available. Based on a review of the various environmental resources, including traffic conditions, it is not anticipated there would be a significant change in environmental conditions between years 2020 and 2023; therefore, the opening year 2023 is being used in this document instead of 2020. However, the horizon year of 2040 has been unchanged.

It is noteworthy that the potential sites for the O&M facilities were identified in late 2017. This environmental document includes the impact analysis of the O&M facility as part of the overall project.

To minimize repetition in the impact analysis, when the effects of the build alternatives are the same, they are presented together in the Environmental Consequences section. When project effects are found to be significant and adverse, then mitigation measures are developed to reduce the impacts to the extent possible. The avoidance, minimization, and/or mitigation measures apply to all build alternatives, unless specifically identified as only being applicable to certain alternatives.

4.1 Aesthetic and Visual Resources

This section analyzes potential environmental impacts related to visual and aesthetic conditions along the WVC Project. The analysis documents potential permanent visual impacts caused by the proposed project and proposes measures to lessen any detrimental impacts. Short-term impacts during project construction and proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with aesthetic and visual resources are discussed in Sections 5.2.1 and 5.3.1, respectively.

The information contained in this section is summarized from the *West Valley Connector Project – Visual Impact Assessment* (Parsons, 2018g) prepared for this proposed project.

The assessment found that the proposed project would not have significant or adverse impact on visual resources and quality with implementation of project design features. Additional measures are recommended to address specific visual impacts. As part of the proposed project implementation, the inclusion of aesthetic design features would help generate public acceptance and support.

4.1.1 Assessment Method

The visual impact assessment was conducted following the guidance outlined in the publication *Visual Impact Assessment for Highway Projects* published by the Federal Highway Administration (FHWA) in March 1981. Steps used in assessing potential visual impacts of the proposed project include:

- Define the proposed project location and setting.
- Identify visual assessment units and key views.
- Analyze existing visual resources and viewer response.
- Depict the visual appearance of proposed project alternatives.
- Assess the visual impacts of proposed project alternatives.
- Propose measures to offset visual impacts.

4.1.2 Regional Visual Environment

The regional landscape of the proposed project corridor is characterized by two identifying elements: the flat appearance of the foreground landscape and the steep San Bernardino and San Gabriel mountains, which form a dramatic backdrop to the development that occurs in most of the proposed project area. One additional element to be considered in the regional landscape is the haze that frequently develops in the area, obscuring views to the mountains and influencing the overall appearance of the regional landscape.

4.1.3 Landscape Units

BRT Corridor

The visual character of the proposed project corridor has been assessed by dividing the length of the corridor into

three visual assessment units derived from three generalized geographic segments, including western areas beginning at the Metrolink station in Pomona through and along Holt Boulevard, central portions of the corridor beginning at Vineyard Avenue through to the I-15 overcrossing, and eastern portions of the proposed project from I-15 to the Metrolink station in Fontana (see Figure 4.1-1). Each segment provides a framework for analyzing the existing visual and aesthetic conditions of the corridor, including fore, mid-, and background views.

Western Unit – Pomona Metrolink Station to Vineyard Avenue: The visual character of the western portion of the project is dominated in the foreground by the four lanes in Holt Boulevard. In the far western portions of this unit, Holt Boulevard has a center turn lane, but east of East End Avenue, there is a median rather than turn lanes. This landscaped median carries eastward to Benson Avenue, where the road shifts back to a center turn lane, except the intersection with Mountain Avenue, which also has medians located in Holt Boulevard. Motorists and pedestrians along the roadways have background views to the San Gabriel Mountains.

Central Unit –Vineyard Avenue to I-15 Undercrossing: The central section of the project area includes several key community focal points –Ontario International Airport, Ontario Mills, Citizens Bank Arena, and Victoria Gardens, which is a regional shopping mall. Development associated with this stretch is generally much newer and at a much larger scale compared to the Western Unit. In addition to commercial development, residential (primarily apartments and condominiums), offices, and large industrial warehouses can be found. Due to the newer development of this unit, the streets are wider and have streetscapes that include planted medians and plantings along the sidewalk

Eastern Unit – I-15 to Sierra Avenue: The Eastern Unit traverses Foothill Boulevard east of I-15 to Sierra Avenue. The unit contains more open space/ undeveloped areas than the previous unit. In general, the unit is more residential on its western end and becomes much more commercial along Sierra Avenue. Key visual assets within this unit include the Pacific Electric Bike Trail and associated park that cross Sierra Avenue near Downtown Fontana, as well as the Fontana Metrolink Station.

O & M Facility

The O&M Facility Unit is found within the City of Ontario and encompasses areas along S. Bon View Avenue and S. Cucamonga Avenue. The area is an older industrial area with three residential units along S. Bon View Avenue between Woodlawn Street and E. Belmont Street, and no sensitive receptors, such as schools or parks, are within view of the proposed facility locations.

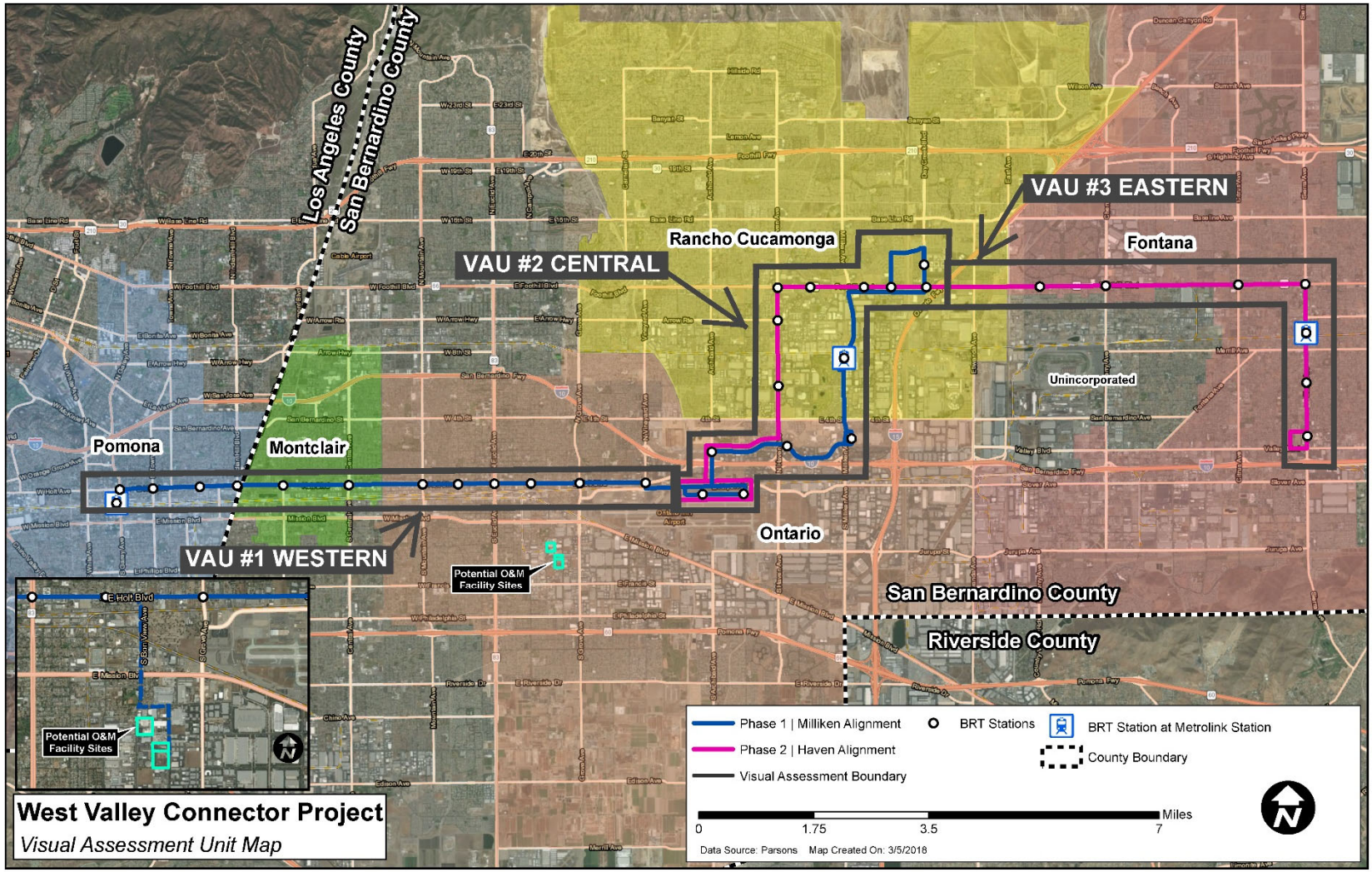

Figure 4.1-1 Visual Assessment Unit Map

Because it is not feasible to analyze all of the views in which the proposed project would be seen, it is necessary to select several key views associated with visual assessment units that would most clearly demonstrate the change in the proposed project's visual resources. Key views also represent the viewer groups that have the highest potential to be affected by the proposed project considering exposure and sensitivity.

4.1.4 Key Views at Proposed Station Areas along the Corridor

Two Key Views were identified to represent the side-running station under Alternatives A and B and the center-running platform station under Alternative B.

Key View 1 – Holt Boulevard at Grove Avenue (proposed location for the new center platform/station at Holt Boulevard): Proposed project features at this location would include placement of the center platform and station with its associated canopy, ramps and handrails, signage, and curbing. In addition, it is anticipated that new plantings along the outside edge and in the median of Holt Boulevard would be included. Existing views from this location have an undeveloped appearance. There is no median in this portion of Holt Boulevard, and the corner lot to the northwest, as well as the lot on the southwest, is undeveloped. The existing residential development, with its associated tree plantings, forms a mid-ground backdrop to the view.

Key View 2 – Foothill Boulevard, near Citrus Avenue (proposed location for one of the new side platform/ stations: Features at this location would include side platform and station with associated canopy and signage. Existing views have a suburban appearance with manicured lawns and free-standing development. The suburban character of this viewpoint is the opposite of the strip mall and more urban development found in the western portions of the proposed project corridor.

4.1.5 Key Views at the Proposed O&M Facility

The following Key Views represent both Alternatives A and B.

Key View 3.1 – Site 1: This view shows the view of the proposed O&M facility from across S. Cucamonga Avenue from the site. The proposed project features for the O&M facility include a screening fence along the street. Streetscape plantings, in keeping with the City of Ontario requirements, would be included as part of the development for the site. The proposed O&M buildings are one-story block buildings with metal roofing.

Key View 3.2 – Site 2: The view is to the west from across S. Cucamonga Avenue. Site 2 is immediately north of the proposed Site 1. The proposed project features for the O&M facility include a screening fence along the street. Streetscape plantings, in keeping with the City of Ontario requirements, would be included as part of the development for the site. The proposed O&M buildings are

one-story block buildings with metal roofing.

Key View 3.3 – Site 3: The view is to the east from across S. Bon View Avenue. Of the three sites, Site 3 appears the most developed with parking and a developed streetscape in front of existing buildings. The properties to the north and south are also industrial in nature. However, unlike the previous two sites, across from this site can be found existing residences. The proposed project features for the O&M facility include a screening fence along the street. Streetscape plantings, in keeping with the City of Ontario requirements, would be included as part of the development for the site. The proposed O&M buildings are one-story block buildings with metal roofing.

4.1.6 Viewer Groups, Exposure, and Sensitivity

There are two major types of viewer groups for roadway projects (or in this case a transit project along an existing road): roadway neighbors and roadway users. Roadway neighbors considered for this proposed project include community residents and business owners, employees, and customers. Roadway users were considered to be autos, transit users, pedestrians, and bicyclists.

Community residents near the proposed station areas would be very familiar with existing views and have frequent repeat views to proposed project elements; however, for the community resident, long-term views of the proposed project elements would be limited because most development along the corridor is nonresidential.

Businesses could have long- or short-term views, depending on locations of the proposed transit stations in relationship to any one business. For most businesses, views to the proposed project elements would be brief and associated primarily with exiting the building.

Roadway users would view proposed project elements as they drive along city streets, in particular the new proposed median in Holt Boulevard in Ontario. Transit stops would be noticeable as a point location to these viewers, only taking a few seconds to pass; however, the median would run for a distance and would be a visual element for the length of that section of the roadway.

Transit users, pedestrians, and bicyclists would have similar views to the proposed project elements as roadway users, except at a slower pace. Due to the slower pace, the duration of these views would be longer.

Community residents near proposed station areas are considered highly sensitive to changes in their visual environment because they have immediate and long-duration views of these areas. Commercial and institutional workers and visitors are considered moderately sensitive to changes in their visual environment, because they are generally familiar with the existing visual environment. Regular commuters/ motorists are also considered moderately sensitive to changes in their visual environment because they have continuous views of the proposed project corridor. Occasional

motorists are not considered sensitive to changes in the visual environment because they would not be familiar with the existing visual environment.

Several plans applicable to the proposed project area's aesthetic and visual environment include goals, objectives, and policies that further describe the community's sensitivity to changes in the visual environment. Each city the proposed corridor passes through has established conditions for streetscapes and aesthetics for roadways within their community. These indicate a high degree of sensitivity on the part of the communities in general to how projects would affect their urban environment. No scenic routes or potentially listed scenic routes have been identified within or adjacent to the proposed project area.

4.1.7 Expected Changes to the Visual Environment

Expected changes to the visual environment are associated with construction of the new or replacement side-running bus shelters along the Phase I and Phase II alignments under both alternatives, construction of an Operations and Maintenance (O&M) facility near the project corridor, and the construction of five center-running platform stations and dedicated bus-only lanes along the 3.5-mile-long portion of Holt Boulevard in Ontario under Alternative B. In addition to the shelters, pylons, signage, and other station site furnishings would be added in the station locations. Access to existing stations/stops, as well as to any new stations/stops, would be improved to meet ADA requirements. The proposed project may also include construction of new curb ramps at street corners and repair or replacement of existing sidewalks to allow universal access to the stations.

Outside of a 3.5-mile-long section on the Holt Boulevard portion of the proposed project, buses would run as part of a mixed flow in existing lanes on the streets, similar to today's current bus service. New bus stops would be constructed at various locations along the alignment, as would new signage and other elements associated with the stop.

The buses that would service the new stations would be 60-foot-long articulated buses, which are approximately 1.5 times the length of a standard bus. These larger vehicles could also be expected to affect the visual environment of the roadway, temporarily blocking some views for longer than would be anticipated with a standard-length bus.

4.1.8 Impacts

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes.

No Build Alternative

Because no new elements would be constructed, there is no anticipated change to the visual environment from this alternative.

Build Alternatives

BRT Corridor

The overall impact of the proposed project on the existing environment would be to add additional bus shelters, platforms, signage, and other miscellaneous elements typical to the stations on existing roadway corridors. In addition, an O&M facility would be constructed. It is anticipated that the addition of these elements to the streetscape would add a potential visual intrusion into areas where bus stops do not currently exist; however, it is also assumed that these intrusions would be briefly viewed by travelers along the roadway, which include local residents living adjacent to the corridor. The following subsections describe visual impacts of the proposed BRT corridor for each build alternative.

Alternative A

Alternative A would include the full 35-mile-long BRT corridor with no dedicated bus-only lanes. The addition of new shelters and their supporting elements would add many elements that might partially obstruct views for travelers during the few seconds while crossing in front of a stop, but this would be so short that it would not have a lasting effect on views (Figure 4.1-2). The buses that would be using these stops are longer than a standard bus, and they would likely have a greater effect on blocking views but only for very brief periods.

In addition, implementation of Alternative A would require removal of approximately 62 street trees to construct the side-running stations. No median planting removals are anticipated under this alternative.

Overall, the visual impact of Alternative A on the existing environment would be moderately low.

Alternative B

Alternative B would include the full 35-mile-long BRT corridor with 3.5 miles of dedicated bus-only lanes and center-running stations. For areas along Holt Boulevard, between Benson and Vineyard avenues, a new median would be added to the streetscape (Figure 4.1-3). This median would include plantings and dedicated bus lanes. Within this segment of the proposed project, center platforms would be used. In addition to the station and platform elements, plantings would be included within the center median, as well as along the back of the curb line. The center platform stations would require several building and land acquisitions along Holt Boulevard, between Benson and Vineyard avenues, that would result in the removal of 44 existing structures and associated landscaping. Several undeveloped lots exist along Holt Boulevard. These additional removals would reinforce that number. The impact to the visual environment would be an increase in open, mostly nonvegetated areas along the corridor. These could fill in over time as new businesses or residential developments are added along the street.

Figure 4.1-2 Before and After Simulation of New Shelter on Foothill Boulevard near Citrus Avenue, looking Northeast

Figure 4.1-3 Before and After Simulation of Center Platform on Holt Boulevard near Grove Avenue, looking Northwest

Approximately 364 trees would be removed along the 3.5-mile-long exclusive BRT portion of Holt Boulevard in the City of Ontario, with most of these being removed from along the back of curb or at the edge of ROW. In addition, approximately 42 street trees would be removed to construct the side-running stations. Pursuant to Section 10-2.06 of the Ontario Municipal Code, the City of Ontario requires approval and removal permits for parkway trees to be removed. Parkway trees are defined as trees within a portion of any public street ROW between the ROW boundary line and the curb line, and those enclosed within the curb lines of a median divider. If a tree planned for removal qualifies as a parkway tree, coordination and authorization with the City of Ontario would occur prior to removal or relocation. This impact would be minimized by new trees that would be included with the proposed project; however, it would be approximately 10 to 15 years before the new trees attain the height and stature of the existing mature trees, depending on the species. The overall impact to the visual environment is anticipated to be moderately high; however, impacts would be reduced to less than significant or adverse through implementation of avoidance and minimization measures AV-1 through AV-7. Some areas, such as the three blocks east of Euclid Avenue where a higher concentration of trees is proposed for removal, would have greater impacts than others, but on average, the impacts could be minimized.

O&M Facility

Both alternatives of the proposed project would include a new Level 2 O&M facility near the project alignment to provide servicing and inspection, washing and fueling, interior cleaning, fare collection, light maintenance (i.e., engine tune-up, lubrication, tire changing, brake repair, minor body work, and unit change out), and light repair. Heavy repair functions would remain at the existing EVVMF. No adverse impacts on visual resources are anticipated because the site is likely to be located within the area designated for industrial use and would be similar to the existing WVVMF, which is for light maintenance.

The three potential locations fall on properties that represent the older or less intensively developed properties within the block. Depending on the location finally chosen, there would be a small number of additional trees added to the removal quantities for either alternative. Site 1 would have no additional removals, Site 2 would have a total of 2, and Site 3 would have a total of 15. Site 1 is primarily an open facility with no existing structures that would be removed, while Site 2 has one small primary building and several small outlying structures that would be removed. Site 3 has a large warehouse facility that would be removed if that is the selected site.

While there are no residential units with views to either Sites 1 or 2 for the O&M facility, Site 3 is located across S. Bon View Avenue from one unit and close to

the other units along the street. These units currently face a parking area immediately in front of an industrial building and chain-link fencing. The new O&M facility would include a screen wall and streetscape, which would mitigate the views into the facility for these residents.

Figures 4.1-4 through 4.1-6 show the before and after views of Site 1, Site 2, and Site 3, respectively. Note that the photo simulation of the three potential sites were drawn based on preliminary conceptual components of the O&M facility.

Due to the absence of scenic resources near the proposed project corridor, the new O&M facility would not affect any scenic resources in the area.

Figure 4.1-4 Before and After Simulation of the O&M Facility, Site 1, looking Northwest

Figure 4.1-5 Before and After Simulation of the O&M Facility, Site 2, looking Northwest

Figure 4.1-6 Before and After Simulation of the O&M Facility, Site 3, looking Southeast

4.1.9 Avoidance, Minimization, and/or Mitigation Measures

The following measures are proposed to minimize potential long-term impacts related to visual and aesthetics. Minimization and/or mitigation measures for short-term impacts are presented in Section 5.3.1.

AV-1: Conduct a final tree survey for all trees that will be impacted by the proposed project. Complete survey prior to final design efforts and minimize tree removal to the greatest extent possible.

AV-2: All lighting at the stations shall include shielding and directionality to limit the extent of glare created at these locations.

AV-3: Install replacement trees at a ratio and size required by either the tree or landscape ordinance, or the landscape development guidelines for the portion of the project developed in each of the corridor cities. If no requirement exists,

install replacement trees at a 1:1 ratio with a minimum size of 36-inch box for street trees and 24-inch box for any other project trees.

AV-4: Meet any currently established City requirements for streetscape design for the various roadways within the project area that are disturbed by the project construction and work with the community stakeholders to ensure implementation. Relevant goals and policies include Policy 6D.P24 of the Pomona General Plan, Policy CD3-6 of the Ontario General Plan, Policy CM-1.5 of the Rancho Cucamonga General Plan, and Goal #4.1 of the Fontana General Plan, all of which requires transit developments to provide elements such as landscaping to enhance the aesthetics, functionality, and sustainability of streetscapes.

AV-5: Develop and implement an Art-in-Transit strategy and incorporate artwork in to relevant center and side-running BRT station designs.

AV-6: Between Euclid and Sultana avenues, minimize the number of tree removals to the extent possible.

AV-7: Within the Holt Boulevard/Euclid Avenue intersection, ensure any work complies with requirements of the historic designations of the roadway regarding landscape and other contributing factors.

AV-8: For the O&M facility, provide streetscape planting, including trees, as well as incorporate screening along the street.

4.2 Air Quality

This section analyzes potential long-term environmental impacts related to air pollutant emissions as a result of proposed project operations.

Short-term impacts during project construction and proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with air quality are discussed in Sections 5.2.2 and 5.3.2, respectively.

The information contained in this section is summarized from the *West Valley Connector Project – Air Quality Report* (Terry A. Hayes and Associates, 2018a) prepared for the project.

4.2.1 Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal government has established ambient air quality standards or criteria for outdoor concentrations to protect public health. The federal standards have been set at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include: carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), particulate matter less than 10 microns in diameter (PM_{10}), and lead (Pb). These pollutants are discussed below.

Carbon Monoxide

CO is a colorless, odorless, relatively inert gas. It is a trace constituent in the unpolluted troposphere and is produced by natural processes and human activities. The major source of CO in urban areas is incomplete combustion of carbon-containing fuels, mainly gasoline. Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise and electrocardiograph changes indicative of worsening oxygen supply to the heart. Studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels. These include pre-term births and heart abnormalities.

Ozone

O_3, a colorless gas with a sharp odor, is a highly reactive form of oxygen. High O_3 concentrations exist naturally in the stratosphere; however, it is also formed in the atmosphere when volatile organic compounds (VOC) and nitrogen oxides (NO_X) react in the presence of ultraviolet sunlight. The primary sources of VOC and NO_X, which are the atmospheric precursors of O_3, are automobile exhaust and industrial sources.

O_3 predominantly enters the human body through the respiratory tract and can cause respiratory irritation and discomfort, make breathing more difficult during exercise, and reduce the respiratory system's ability to remove inhaled particles and fight infection.

Nitrogen Dioxide

NO_2 is a reddish-brown gas with a bleach-like odor that is responsible for the brownish tinge of polluted air. NO_2 is typically released into the atmosphere as a constituent of a mixture of NO_X. Another substantial contributor to NO_X emissions is nitric oxide (NO), which is a colorless gas formed from nitrogen and oxygen in the air under conditions of high temperature and pressure that are generally present during combustion of fuels (e.g., motor vehicles). Complex chemical reactions govern the concentrations of NO_X in the atmosphere. Upon being released into the air, NO reacts rapidly with the available oxygen to form NO_2. In the presence of sunlight, NO_2 reacts to form NO and an oxygen atom, which can react further to form O_3 under certain environmental conditions.

Sulfur Dioxide

SO_2 is a colorless gas with a sharp odor. It reacts in the air to form sulfuric acid, which contributes to acid precipitation, and sulfates, which can contribute to airborne particulate matter (PM). Main sources of SO_2 are coal and oil used in power plants and industries. Exposure of a few minutes to low levels of SO_2 can result in airway constriction in some asthmatics. All asthmatics are sensitive to the effects of SO_2. In asthmatics, an increase in resistance to air flow, as well as a reduction in breathing capacity and severe breathing difficulties, is observed after acute higher exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2.

Particulate Matter

Of great concern to public health are the particles small enough to be inhaled into the deepest parts of the lung. Major sources of respirable PM (PM_{10}) include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. PM_{10} can accumulate in the respiratory system and aggravate health problems such as asthma, bronchitis, and other lung diseases. Children, the elderly, exercising adults, and those suffering from asthma are especially vulnerable to adverse health effects of PM.

Fine PM ($PM_{2.5}$) results from fuel combustion (e.g., motor vehicles, power generation, and industrial facilities) and residential fireplaces and wood stoves. There is a consistent correlation between elevated ambient $PM_{2.5}$ levels and an increase in mortality rates, respiratory infections, and number and severity of asthma attacks.

Lead

Pb in the atmosphere is present as a mixture of several Pb compounds. Leaded gasoline and Pb smelters were historically the main sources of Pb emitted into the air. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple

commands, and lower intelligence quotient. Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. In adults, increased Pb levels are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death. Pb can be stored in the bone from early-age environmental exposure, and elevated blood Pb levels can occur due to a breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland), and osteoporosis (breakdown of bone tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous environmental Pb exposure of their mothers.

4.2.2 Regulatory Setting

United States Environmental Protection Agency

The United States Environmental Protection Agency (EPA) is responsible for enforcing the Clean Air Act (CAA), which governs air quality in the United States. EPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain types of locomotives. It also establishes various emission standards, including those for vehicles sold in states other than California. EPA is responsible for establishing health-protective limits on ambient concentrations of air pollutants.

Under the CAA, EPA established National Ambient Air Quality Standards (NAAQS) for six potential air pollutants: CO, O_3, NO_2, PM_{10} and $PM_{2.5}$, SO_2, and Pb. The NAAQS primary standards protect human health and secondary standards protect the environment. Primary standards set limits to protect public health, especially members of the public who are particularly sensitive to air quality pollution, such as children, the elderly, and those that suffer from chronic lung and respiratory conditions. Secondary standards protect the environment, including animals, crops, vegetation, and buildings. The NAAQS are presented in Table 4.2-1.

California Air Resources Board

In addition to being subject to requirements of the CAA, air quality in California is governed by more stringent regulations under the California Clean Air Act (California CAA). The California CAA is administered by the California Air Resources Board (ARB) at the State level and the air quality management districts and air pollution control districts at the regional and local levels. ARB is responsible for meeting the State requirements of the CAA, administering the California CAA, and establishing the California Ambient Air Quality Standards (CAAQS). The California CAA requires all air districts in the state to implement proactive measures to achieve and maintain the CAAQS, which are generally more stringent than the corresponding federal standards, and incorporate additional standards for sulfates, hydrogen sulfide (H_2S), vinyl chloride, and visibility-reducing particles. The CAAQS are presented in Table 4.2-1.

Table 4.2-1 Federal and State Air Quality Standards

Pollutant	Averaging Period	Federal (NAAQS)		State (CAAQS)
		Primary	Secondary	
Ozone (O_3)	1 hour	No federal standard	Same as Primary Standard	0.09 ppm (180 µg/m³)
	8 hours	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)
Respirable Particulate Matter (PM_{10})	24 hours	150 µg/m³	Same as Primary Standard	50 µg/m³
	Annual arithmetic mean	No federal standard		20 µg/m³
Fine Particulate Matter ($PM_{2.5}$)	24 hours	35 µg/m³	Same as Primary Standard	No State standard
	Annual arithmetic mean	12.0 µg/m³	15 µg/m³	12 µg/m³
Carbon Monoxide (CO)	8 hours	9 ppm (10 mg/m³)	--	9.0 ppm (10 mg/m³)
	1 hour	35 ppm (40 mg/m³)	--	20 ppm (23 mg/m³)
Nitrogen Dioxide (NO_2)	Annual arithmetic mean	53 ppb (100 µg/m³)	Same as Primary Standard	0.030 ppm 57 µg/m³)
	1 hour	100 ppb (188 µg/m³)	--	0.18 ppm (339 µg/m³)
Sulfur Dioxide (SO_2)	24 hours	0.14 ppm (365 µg/m³)	--	0.04 ppm (105 µg/m³)
	1 hour	75 ppb (196 µg/m³)	--	0.25 ppm (655 µg/m³)
Lead (Pb)	30-day average	--	--	1.5 µg/m³
	Calendar quarter	1.5 µg/m³	Same as Primary Standard	No State standard
	Rolling 3-month average	0.15 µg/m³		No State standard
Visibility-Reducing Particles	8 hours	No federal standard		Extinction coefficient of 0.23 per kilometer
Sulfates	24 hours	No federal standard		25 µg/m³
Hydrogen Sulfide (H_2S)	1 hour	No federal standard		0.03 ppm (42 µg/m³)

Note: ppb – parts per billion; ppm – parts per million; µg/m_3 – micrograms per cubic meter

Source: California Air Resources Board, Ambient Air Quality Standards, May 4, 2016.

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is the agency principally responsible for comprehensive air pollution control in the region. Specifically, SCAQMD is responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain the NAAQS and CAAQS. Programs include air quality rules and regulations that regulate stationary sources, area sources, point sources, and certain mobile source emissions.

In addition, because of SCAQMD's regulatory role in the South Coast Air Basin (Basin), the significance criteria and analysis methodologies in SCAQMD's *CEQA Air Quality Handbook* are used in evaluating project impacts. Regional significance thresholds are shown in Table 4.2-2.

SCAQMD has jurisdiction over an area of 10,743 square miles, consisting of the Basin and the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The Basin is bound by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east; and the San Diego county line to the south.

Attainment Status

EPA and ARB designate areas as in nonattainment, attainment, or maintenance with NAAQS and CAAQS based on trends in monitoring data. A region is nonattainment if one or more of the monitoring stations in the region measures a violation of the relevant standard and EPA officially designates the area nonattainment. Areas that were previously designated as nonattainment areas but currently meet the standard may be officially redesignated to attainment by EPA and are then called maintenance areas. The attainment status of the area in

Table 4.2-2 SCAQMD Regional Emission Thresholds

Pollutant	Emissions (pounds per day)	
	Construction	Operations
Volatile Organic Compounds (VOC)	75	55
Nitrogen Oxides (NO_X)	100	55
Carbon Monoxide (CO)	550	550
Sulfur Oxides (SO_2)	150	150
Respirable Particulates (PM_{10})	150	150
Fine Particulates ($PM_{2.5}$)	55	55

Source: SCAQMD, CEQA Air Quality Handbook, 1993; revised March 2015.

which the proposed project is located is shown in Table 4.2-3. According to the NAAQS, the San Bernardino County portion of the Basin is designated by EPA as a nonattainment area for O_3 and $PM_{2.5}$, and a maintenance area for PM_{10}, CO, and NO_2. ARB designated the proposed project area as nonattainment for O_3, PM_{10}, and $PM_{2.5}$.

Air Quality Management Plan

SCAQMD is responsible for preparing the regional Air Quality Management Plan (AQMP). The AQMP is SCAQMD's plan for improving regional air quality. The AQMP provides policies and control measures that reduce emissions to attain State and federal ambient air quality standards by their applicable deadlines. Environmental review of individual projects within the Basin must demonstrate that daily construction and operational emissions thresholds, as established by SCAQMD, would not be exceeded. The environmental review must also demonstrate that individual projects would not increase the number or severity of existing air quality violations. The most recent iteration of the AQMP was published in June 2016. According to SCAQMD, the 2016 AQMP is a regional blueprint for achieving air quality standards and healthful air. It represents a new approach, focusing on available, proven, and cost-effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases (GHGs) and toxic risk, as well as efficiencies in energy use, transportation, and goods movement.

Table 4.2-3 National and State Attainment Status

Pollutant and Standard	National Status	State Status
Carbon Monoxide (CO)	Maintenance (Serious)	Attainment
Lead (Pb)	Attainment/Nonattainment[a]	Attainment
Nitrogen Dioxide (NO_2)	Maintenance	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Ozone (O_3) – 1-Hour	Revoked NAAQS	Nonattainment
Ozone (O_3) – 8-Hour	Nonattainment (Extreme)	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Nonattainment	Nonattainment
Fine Particulate Matter ($PM_{2.5}$) – 24-Hour	Nonattainment (Serious)	Nonattainment
Fine Particulate Matter ($PM_{2.5}$) – Annual	Nonattainment (Moderate)	Nonattainment
Particulate Matter (PM_{10})	Maintenance (Serious)	Nonattainment
Note: (a) Only the Los Angeles County portion of the basin is nonattainment for Pb.		

Source: EPA, Status of SIP Requirements for Designated Areas, July 31, 2016; ARB, State Standard Area Designations, May 5, 2016.

4.2.3 Existing Air Quality Conditions

The following discussion summarizes regional and local air quality conditions.

Regional Setting

The Basin is in an area of high air pollution potential due to its climate and topography. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. It experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatologic pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The Basin is a coastal plain with connecting broad valleys and low hills, bound by the Pacific Ocean to the west and high mountains around the rest of its perimeter. The mountains and hills within the area contribute to the variation of rainfall, temperature, and winds throughout the region.

Average highs during the summer can reach the mid- to high-90s degrees Fahrenheit (°F), with maximum daily temperatures over 100°F common. The annual average temperature in the proposed project area is 66°F. Total precipitation in the proposed project area averages approximately 15 inches annually. Precipitation occurs mostly during the winter and relatively infrequently during the summer. Wind in the proposed project area predominantly blows from the southwest

Due to the prevailing daytime winds and time-delayed nature of photochemical O_3, oxidant concentrations are highest in the inland areas of southern California.

Temperature normally declines with altitude. A reversal of this atmospheric state, where temperature increases with altitude, is called an inversion. Inversions are generally lower in the nighttime when the ground is cool than during daylight hours when the sun warms the ground and, in turn, the surface air layer. As this heating process continues, the temperature of the surface air layer approaches the temperature of the inversion base, causing heating along its lower edge. If enough warming takes place, the inversion layer becomes weak and opens up to allow the surface air layers to mix upward.

The combination of stagnant wind conditions and low inversions produces the greatest pollutant concentrations. On days of no inversion or high wind speeds, ambient air pollutant concentrations are lowest. During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into San Bernardino County. In the winter, the greatest pollution problems are CO and NO_X because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, longer daylight hours and brighter sunshine combine to cause a reaction between hydrocarbons and NO_X to form photochemical O_3.

Local Setting

ARB and SCAQMD maintain a network of air quality monitoring stations located throughout the Basin to characterize the air quality environment by measuring and recording pollutant concentrations in the local ambient air. The monitoring stations relied upon to represent air quality conditions within these source receptor areas are located in Pomona, Ontario, and Fontana. Table 4.2-4 presents the State and federal standards, maximum recorded concentrations for the most recent 5 years available, and frequencies of standards being exceeded at the monitoring stations. The Pomona monitoring station actively measures concentrations of O_3 and NO_2, with CO data publication ceasing in 2013. The Ontario monitoring station is not equipped to record concentrations of CO, O_3, NO_2, or SO_2. The Fontana monitoring station ceased monitoring of CO in 2013 following years of demonstrated concentrations far below the NAAQS and CAAQS.

Table 4.2-4 Air Quality Monitoring Data

Pollutant	Air Quality Standards	Maximum Concentrations and Annual Frequencies of Exceeded Standards				
		2012	2013	2014	2015	2016
Pomona Monitoring Station						
CO	Maximum 8-hr concentration (ppm)	1.5	1.5	1.6	1.6	1.3
	Days > 9.0 ppm (Federal 8-hr standard)	0	0	0	0	0
	Days > 9 ppm (State 8-hr standard)	0	0	0	0	0
O_3	Maximum 1-hr Concentration (ppm)	0.117	0.125	0.123	0.136	0.127
	Days > 0.09 ppm (State 1-hr standard)	21	12	22	30	20
	Days > Federal 1-hr standard [Revoked]	0	1	0	2	1
	Maximum State 8-hr Concentration (ppm)	0.092	0.099	0.099	0.098	0.092
	Days > 0.070 ppm (State 8-hr standard)	28	22	53	53	26
	Days > 0.070 ppm (Federal 8-hr standard)	28	22	53	53	26
NO_2	Maximum 1-hr Concentration (ppm)	0.082	0.079	0.089	0.072	0.069
	Days > 0.18 ppm (State 1-hr standard)	0	0	0	0	0
	Days > 0.10 ppm (Federal 1-hr standard)	0	0	0	0	0
	Annual Arithmetic Mean (ppm)	0.021	0.022	0.022	0.021	0.020
	Exceed State Standard? (0.03 ppm)	No	No	No	No	No
	Exceed Federal Standard? (0.053 ppm)	No	No	No	No	No

Table 4.2-4 Air Quality Monitoring Data

Pollutant	Air Quality Standards	Maximum Concentrations and Annual Frequencies of Exceeded Standards				
		2012	2013	2014	2015	2016
Ontario Monitoring Station						
PM_{10}	Maximum 24-hr Concentration (µg/m^3)	59.0	117.0	67.0	n/a	n/a
	Days > 50 µg/m^3 (State 24-hr standard)	4	3	3	n/a	n/a
	Days > 150 µg/m^3 (Federal 24-hr standard)	0	0	0	n/a	n/a
	Annual Arithmetic Mean (µg/m^3)	31.9	35.0	34.2	n/a	n/a
	Exceed State Standard (20 µg/m^3)	Yes	Yes	Yes	n/a	n/a
$PM_{2.5}$	Maximum 24-hr Concentration (µg/m^3)	35.2	49.3	38.4	52.7	49.5
	Days > 35 µg/m^3 (Federal 24-hr standard)	0	1	1	n/a	n/a
	Annual Arithmetic Mean (µg/m^3)	12.4	12.6	n/a	14.3	14.8
	Exceed State Standard? (12 µg/m^3)	Yes	Yes	n/a	Yes	Yes
	Exceed Federal Standard? (12.0 µg/m^3)	Yes	Yes	n/a	Yes	Yes
Fontana Monitoring Station						
CO	Maximum 8-hr concentration (ppm)	1.8	1.2	1.3	1.2	1.0
	Days > 9.0 ppm (Federal 8-hr standard)	0	0	0	0	0
	Days > 9 ppm (State 8-hr standard)	0	0	0	0	0
O_3	Maximum 1-hr Concentration (ppm)	0.142	0.151	0.127	0.133	0.139
	Days > 0.09 ppm (State 1-hr standard)	60	34	31	36	34
	Days > Federal 1-hr standard [Revoked]	5	2	1	3	3
	Maximum State 8-hr Concentration (ppm)	0.110	0.122	0.105	0.111	0.105
	Days > 0.070 ppm (State 8-hr standard)	88	68	52	59	49
	Days > 0.070 ppm (Federal 8-hr standard)	62	42	37	39	49
NO_2	Maximum 1-hr Concentration (ppm)	0.069	0.082	0.070	0.089	0.072
	Days > 0.18 ppm (State 1-hr standard)	0	0	0	0	0
	Days > 0.10 ppm (Federal 1-hr standard)	0	0	0	0	0
	Annual Arithmetic Mean (ppm)	0.022	0.021	n/a	0.018	0.018
	Exceed State Standard? (0.03 ppm)	No	No	n/a	No	No
	Exceed Federal Standard? (0.053 ppm)	No	No	n/a	No	No
SO_2	Maximum 24-hr Concentration (ppm)	0.004	0.001	n/a	n/a	n/a
	Days > 0.04 ppm (State 24-hr standard)	0	n/a	n/a	n/a	n/a
PM_{10}	Maximum 24-hr Concentration (µg/m^3)	67.0	90.0	68.0	96.0	94.0
	Days > 50 µg/m^3 (State 24-hr standard)	5	15	10	13	n/a
	Days > 150 µg/m^3 (Federal 24-hr standard)	0	0	0	0	n/a
	Annual Arithmetic Mean (µg/m^3)	34.3	40.7	39.7	34.4	38.4
	Exceed State Standard? (20 µg/m^3)	Yes	Yes	Yes	Yes	Yes

Table 4.2-4 Air Quality Monitoring Data

Pollutant	Air Quality Standards	Maximum Concentrations and Annual Frequencies of Exceeded Standards				
		2012	2013	2014	2015	2016
$PM_{2.5}$	Maximum 24-hr Concentration (µg/m^3)	39.9	43.6	34.9	50.5	58.8
	Days > 35 µg/m^3 (Federal 24-hr standard)	3	1	0	3	1
	Annual Arithmetic Mean (µg/m^3)	12.8	12.2	n/a	11.0	12.3
	Exceed State Standard? (12 µg/m^3)	Yes	Yes	n/a	No	Yes
	Exceed Federal Standard? (12.0 µg/m^3)	Yes	Yes	n/a	No	Yes

Source: California Air Resources Board, Air Quality Data Statistics, July 2017.

4.2.4 Impacts

Based on EPA's transportation conformity rule (40 *Code of Federal Regulations* [CFR] Parts 51 and 93) and federal air quality regulations, the build alternatives would have an adverse effect on air quality if they were to result in the conditions listed below.

- The design and scope of the build alternatives would be inconsistent with the RTP/SCS or FTIP.
- The build alternatives would worsen existing or contribute to new localized CO or PM hot spots.
- The build alternatives would generate substantial levels of mobile source air toxic (MSAT) emissions.

A project's air quality impacts are considered substantial under the CAA if project emissions cause or contribute to ambient air concentrations that exceed an NAAQS.

No Build Alternative

The No Build Alternative proposes no improvements to the existing local bus services. Under the No Build Alternative, the existing local bus service on Routes 61 and 66 would maintain current services with no changes to air quality or emissions levels.

Build Alternatives

BRT Corridor

Alternative A

Operation of the proposed BRT corridor under Alternative A would not result in adverse effects related to criteria pollutants or MSAT emissions, nor would it cause a PM or CO hot spot within the proposed project corridor.

Alternative B

Operation of the proposed BRT corridor under Alternative B is not expected to cause permanent long-term impacts. This alternative would not result in adverse effects related to criteria pollutants or MSAT emissions, nor would it cause a PM or CO hot spot within the proposed project corridor.

Regional Emissions

Operational emissions associated with implementation of the proposed project

would result from vehicular traffic along the BRT corridor that could potentially be affected by installation of the additional lane(s).

The operational emissions analysis for the proposed project addresses sources of direct air pollutant emissions and potential effects on regional and local air quality under existing conditions, the No Build Alternative, and the build alternatives. The primary source of direct air pollutant emissions under operational conditions is vehicular traffic. Emissions from vehicular traffic within the proposed project corridor are based on VMT, speed distributions, and vehicle types. Table 4.2-5 displays the VMT for existing conditions (2016), the No Build Alternative and build alternatives in the opening year (2023), and the No Build Alternative and build alternatives in the design year (2040).

The VMT data presented in Table 4.2-5 were used to estimate air pollutant emissions from all vehicular traffic throughout the proposed project corridor. Emissions were quantified based on regional passenger vehicle VMT and regional CNG bus VMT within the corridor area.

Regional emissions estimated using EMFAC2014 are shown in Table 4.2-6 for the existing condition (2016), opening year (2023), and design year (2040). Air pollutant emissions associated with operation of the proposed O&M facility were estimated using the California Emissions Estimator Model. Compared to the CEQA baseline of 2016, regional ROG, CO, and NO_X emissions would substantially decrease, while PM_{10} and $PM_{2.5}$ emissions would increase for the build alternatives. This is because exhaust emissions decrease in future years as the

Table 4.2-5 Project Corridor Vehicle Miles Traveled

Scenario	No Build Alternative	Alternative A	Alternative B
Existing (2016) VMT	12,926,868	-	-
Opening Year (2023) VMT)	13,393,271	13,389,567	13,389,287
Percent Change from Existing (%)	3.6%	3.6%	3.6%
Percent Change from No Build (%)	-	-0.03%	-0.03%
Design Year (2040) VMT	15,725,284	15,721,813	15,722,280
Percent Change from Existing (%)	21.6%	21.6%	21.6%
Percent Change from No Build (%)	-	-0.04%	-0.04%
Note: The VMT analysis was prepared when 2020 was the estimated opening year. The current opening year estimate is 2023. Nevertheless, the traffic modeling forecast considered VMT through 2040, and indicates that VMT would decrease in the opening and horizon years. A 3-year delay in the opening date does not substantially alter this analysis. In addition, within the EMFAC2014 model, pollutant emissions decrease in future years due to fleet turnover and improvements in engine exhaust technology.			

Source: WVC Project Air Quality Study, 2018.

vehicle fleet continues to turn over to newer, more efficient vehicles and emission standards become more stringent; however, re-entrained dust emissions are a function of VMT. Regional VMT growth, unrelated to the proposed project, would generate a substantial amount of re-entrained dust from 2016 to 2023 and 2040. This growth distorts the true impact of particulate emissions associated with the proposed project, which is best assessed by comparing the build alternatives to the No Build Alternative.

Table 4.2-6 presents the results of operational emissions modeling for vehicular traffic based on speed distribution and fleet mix data provided in the traffic study, as well as employee trips and indirect energy-related emissions for the O&M facility. Table 4.2-7 shows the difference in emissions between the build alternatives and the No Build Alternative. Regardless of the build alternative, the change in emissions would be less than 1 percent for all pollutants, which is not considered substantial; therefore, the proposed project would not result in an adverse impact related to criteria air pollutants or O_3 precursor emissions.

Table 4.2.6 Daily Operational Emissions of BRT Corridor and O&M Facility

Scenario	ROG (lb/day)	CO (lb/day)	NO_X (lb/day)	PM_{10} (lb/day)	$PM_{2.5}$ (lb/day)
Existing (2016)	1,602	38,933	12,656	9,572	1,929
Opening Year (2023)					
No Build Alternative	1,030	26,511	8,860	9,922	1,945
Alternative A	1,032	26,514	8,869	9,925	1,945
Alternative B	1,032	26,516	8,875	9,931	1,945
Design Year (2040)					
No Build Alternative	537	12,679	2,907	11,916	2,257
Alternative A	538	12,683	2,903	11,918	2,258
Alternative B	539	12,683	2,909	11,926	2,259

lb/day – pounds per day

Note: The VMT analysis was prepared when 2020 was the estimated opening year. The current opening year estimate is 2023. Nevertheless, the traffic modeling forecast considered VMT through 2040, and indicates that VMT would decrease in the opening and horizon years. A 3-year delay in the opening date does not substantially alter this analysis. In addition, within the EMFAC2014 model, pollutant emissions decrease in future years due to fleet turnover and improvements in engine exhaust technology.

Source: WVC Project Air Quality Study, 2018.

Table 4.2-7 Change in Daily Operational Emissions Relative to No Build Alternative

Scenario	ROG (lb/day) (%)	CO (lb/day) (%)	NO_X (lb/day) (%)	PM_{10} (lb/day) (%)	$PM_{2.5}$ (lb/day) (%)
Opening Year (2023)					
Alternative A	2 (0.22%)	3 (0.01%)	9 (0.10%)	4 (0.04%)	1(0.05%)
Alternative B	2 (0.23%)	5 (0.02%)	16 (0.18%)	9 (0.10%)	2 (0.10%)
SCAQMD Threshold	55	550	55	150	55
Exceed CEQA Threshold?	**No**	**No**	**No**	**No**	**No**
Design Year (2040)					
Alternative A	1 (0.25%)	4 (0.03%)	-4 (-0.14%)	2 (0.02%)	1 (0.03%)
Alternative B	2 (0.32%)	4 (0.03%)	2 (0.07%)	10 (0.08%)	2 (0.09%)
SCAQMD Threshold	55	550	55	150	55
Exceed CEQA Threshold?	**No**	**No**	**No**	**No**	**No**

lb/day – pounds per day

Note: The VMT analysis was prepared when 2020 was the estimated opening year. The current opening year estimate is 2023. Nevertheless, the traffic modeling forecast considered VMT through 2040, and indicates that VMT would decrease in the opening and horizon years. A 3-year delay in the opening date does not substantially alter this analysis. In addition, within the EMFAC2014 model, pollutant emissions decrease in future years due to fleet turnover and improvements in engine exhaust technology.

Source: WVC Project Air Quality Study, 2018.

Mobile Source Air Toxics

Qualitative analysis is required for projects with low potential MSAT effects – projects that serve to improve operations of highway, transit, or freight without adding substantial new capacity or without creating a facility that is likely to meaningfully increase emissions.

The proposed project would implement a CNG-fueled 35-mile-long BRT line with 55 station platforms at 33 locations/major intersections and associated improvements. The proposed project would improve transit operations throughout the 35-mile-long corridor. Regardless of average annual daily traffic (AADT) on local roadways, the proposed project would not create or add significant roadway capacity, and there is low potential for increases in MSAT exposure. Furthermore, because the estimated VMT under the build alternatives are nearly the same in the design year, varying by less than 0.5 to 1 percent, it is expected that there would be no appreciable difference in overall MSAT

emissions among the build alternatives; therefore, a quantitative analysis is not required for this proposed project.

Regardless of the alternative chosen, emissions are certain to be lower than present levels in the design year because of ARB's statewide and EPA's national control programs that are projected to reduce annual MSAT emissions by more than 80 percent from 2010 to 2050. The magnitude of ARB- and EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area would almost certainly be lower in the future than they are today. The proposed project would not substantially increase diesel truck traffic along the proposed project corridor, and through the MSAT emissions reductions programs, it is anticipated that future air quality conditions near the proposed project would be improved; therefore, the proposed project would not result in an adverse effect related to MSAT emissions.

Odors

Land uses and industrial operations commonly associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project would include a new transit system. Any unpleasant odors from transit operations would be subject to management under the odor complaint tracking system mandated by SCAQMD Rule 402 (Nuisance), which prevents nuisance odor conditions. As a result, the proposed project would have a minor, if any, impact with respect to odors; therefore, the proposed project would result in a less than substantial impact related to operational odors.

4.2.5 Transportation Conformity

The conformity requirement is based on CAA Section 176(c), which prohibits the United States Department of Transportation (DOT) and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to the State Implementation Plan (SIP) for attaining the NAAQS. Transportation conformity applies to highway and transit projects and is enforced at the regional level, which is the planning and programmatic level, and the project level. The project must conform at both levels to be approved. Construction activities associated with the Build Alternatives would be temporary in nature and would not require more than five years to complete; therefore, construction emissions are not considered for conformity purposes, or included in regional- and project-level conformity analysis [40 CFR 93.123(c)(5)].

Regional Conformity

The regional conformity analysis was conducted by comparing the proposed project's design, concept, and scope to its description in the 2016 RTP/SCS and associated air quality analyses. The proposed project is included in the 2016 RTP/SCS Transportation System

Financially Constrained Project List as a San Bernardino County transit project under RTP ID 4120213. The proposed project is described as "WVC BRT from Pomona Metrolink Station to Sierra Ave." FTA and FHWA approved the 2016 RTP/SCS conformity analysis on June 1, 2016. No significant changes have been made to the proposed project design since the 2016 RTP/SCS was prepared and published, although the estimated opening year has changed from 2025 to 2023. SBCTA is coordinating with SCAG to amend the 2016 RTP/SCS, and the amendment will be completed in 2018 well before FTA issues the Record of Decision for the project. Therefore, the project's regional conformity determination requirement is satisfied.

It is noteworthy that the 2016 RTP lists the opening year of the project as 2025. The proposed Phase I/Milliken Alignment is currently scheduled to be operated in 2022. SBCTA will coordinate with SCAG to revise the opening year in the RTP to be consistent with the program implementation schedule.

Project-Level Conformity

Conformity requires demonstration that the proposed project would not result in a new local CO, PM_{10}, or $PM_{2.5}$ air quality standard violation or worsen existing violations.

Localized CO Hotspots

The portion of San Bernardino County in the Basin is designated as Maintenance-Serious for CO. SCAQMD air quality monitoring stations have not recorded a violation of the federal CO standards since at least 2003, when the CO maintenance plan for the Basin was approved. CO concentrations throughout California have steadily declined over time as vehicle engines have become more efficient and less polluting. In fact, since 2013, SCAQMD has ceased reporting of measured CO concentrations following a decade without a single air quality standard violation. SCAQMD acknowledges that on a regional level, CO concentrations are unlikely to increase.

The California Project-Level Carbon Monoxide Protocol (CO Protocol) may be used to determine the potential CO hot spots. The CO Protocol was published in 1997 when CO was a local pollutant of concern. The procedures and guidelines comply with the following regulations without imposing additional requirements: Section 176(c) of the 1990 FCAA Amendments, federal conformity rules, and State and local adoptions of the federal conformity rules.

Two conformity-requirement decision flow charts are provided in the CO Protocol. The flow charts are used to guide project-level conformity determinations. An explanatory discussion of the steps used to determine the conformity requirements that apply to the proposed project is provided below:

- 3.1.1. Is the project exempt from all emissions analyses? NO. The BRT project is not exempt from all Transportation Conformity requirements per 40 CFR 93.126.

- 3.1.2. Is the project exempt from regional emissions analysis? NO. The BRT is not exempt from regional emissions analysis per 40 CFR 93.127.

- 3.1.3. Is the project locally defined as regionally significant? YES. See previous response.

- 3.1.4. Is the project in a federal attainment area? NO. The proposed project is located within an attainment/maintenance area for the federal CO standard as of June 11, 2007.

- 3.1.5. Is there a currently conforming RTP and TIP? YES. The 2016–2040 RTP/SCS was found to conform by SCAG on April 7, 2016. FTA and FHWA approved the 2016 RTP/SCS conformity analysis on June 1, 2016.

- 3.1.6. Is the project included in the regional emissions analysis supporting the currently conforming RTP and TIP? YES. The design concept and scope of the proposed project is consistent with the project description in the 2016–2040 RTP/SCS. The open to traffic assumption is being amended through coordination between SBCTA and SCAG. As the proposed project is financially constrained, it would not require federal operations and maintenance funds. Financially constrained projects are those that have adequate revenue available to cover costs and are not included in the FTIP.

- 3.1.7. Has the project design concept and/or scope changed significantly from that in regional analysis? NO. See previous response.

- 3.1.9. Examine local impacts. Section 3.1.9 flowchart directs the project evaluation to Section 4 (Local Analysis) of the CO Protocol.

Assessment of the proposed project's effect on localized ambient air quality is based on analysis of CO. As stated in the CO Protocol, the determination of project-level CO impacts should be carried out according to the local analysis. The following discussion provides explanatory remarks for every step of the local analysis of the protocol (screening methodology):

- 4.1.1. Is the project in a CO nonattainment area? NO. The proposed project is located in a federal attainment/maintenance area for CO as of June 11, 2007.

- 4.1.2. Was the area redesignated as "attainment" after the 1990 Clean Air Act? YES. See previous response.

- 4.1.3. Has "continued attainment" been verified with the local Air District, if appropriate? YES. As shown in Table 4.2-4, above, monitored CO concentrations in the project area were below the NAAQS for the latest five-year period (2012–2016). Proceed to Level 7.

- 4.7.1. Does the project worsen air quality? Yes. Section 4.7.1 provides criteria that can be satisfied to demonstrate that a project would not worsen air quality. As can be seen in the explanation under criterion c) below, the proposed project has the potential to worsen the air quality.

  a) *The project may worsen air quality if it increases the percentage of vehicles operating in cold start mode by 2 percent or more in the affected area.*

  The CARB has defined cold starts in the EMFAC2014 Volume II - Handbook for Project-Level Analysis (April 30, 2014). Cold starts are defined as starts after the vehicle engine has been shut-off for more than 720 minutes (12 hours). It can reasonably be assumed that cold starts are by vast majority generated when residents leave their homes in the morning or employees leave work in the evening.

  The traffic study does not identify project-specific cold starts, which are not usually included or relevant for BRT projects. The CO Protocol identifies typical ranges for the percent of vehicles operating in cold mode in Table B.6 of Section B.3.2. For local/collector streets, the range is 5 to 15 percent. during the AM peak hours and 15 to 25 percent. during the PM peak hours. It is anticipated that cold starts in the project area would be within the suggested range of values in the CO Protocol. The precise number for the project area is of no consequence to the CO hot-spot analysis for this particular project. If there would be any effect it would be to less cold starts as the BRT may appeal to commuters and reduce cold starts associated with work commutes. There is no potential for the project to increase the percentage of vehicles operating in cold start mode.

  b) *The project may worsen air quality if it significantly increases travel volumes by 5* percent. *or more, or reduces average vehicle speeds in the affected area.*

  Table 4.2-5, above, shows that Alternatives A and B would reduce VMT in the project area between 0.03 and 0.04 percent. Therefore, there is no potential for the project to increase intersection volumes by 5 percent or more.

  c) *The project may worsen air quality if the project worsens traffic flow, causing a reduction in average speed or an increase in average delay at an intersection.*

  The traffic study identifies 5 intersections out of 129 studied where the project may significantly affect delay. Therefore, there is a potential for the project to worsen traffic flow, which would be

reflected by a reduction in average speed or an increase in average delay at an intersection.

- 4.7.2. Is the project suspected of resulting in higher CO concentrations than those existing within the region at the time of the attainment demonstration? NO. As shown in Table 4.2-4, above, maximum 8-hour CO concentrations in the project area were approximately 20 percent of the federal NAAQS during the period from 2012–2016. The CO maintenance plan for the Basin was approved in 2003, when the maximum 8-hour CO concentration at the Pomona monitoring station was 4.4 ppm, approximately 50 percent of the NAAQS and more than twice existing ambient concentrations.

The project would not be expected to cause or contribute to any new localized violations of the federal 1-hour or 8-hour CO ambient standards. The project would not worsen air quality, and no further analysis is needed in accordance with Level 7 in Figure 3 of the CO Protocol.

Localized PM Hot Spots

A quantitative hot-spot analysis is required only for a project that has been identified as a Project of Air Quality Concern (POAQC), as defined in 40 CFR 93.123(b)(1). As described below, the project does not meet the criteria that would classify it as a POAQC under the 2006 EPA Final Rule on PM hot spots analysis. The project would result in no adverse effect related to worsening existing conditions or contributing to new localized PM hot spots; therefore, the project is not considered to be a POAQC, and the project-level PM conformity determination requirements are satisfied. This finding was confirmed through interagency consultation with EPA, FHWA, and FTA.

The following criteria are used to determine if a project has the potential to be a POAQC. Projects that meet one or more of these criteria require a quantitative hot-spot analysis to demonstrate that the project will not result in localized PM hot spots.

- New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles;
- Projects affecting intersections that are at LOS D, E, or F with a significant number of diesel vehicles or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;
- New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;
- Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
- Projects in or affecting locations, areas, or categories of sites that are identified in the PM_{10} or $PM_{2.5}$ applicable implementation plan or

implementation plan submission, as appropriate, as sites of violation or possible violation.

The proposed project involves a 35-mile-long BRT line with 55 station platforms at 33 locations/major intersections and associated improvements. The proposed project is not a highway project, nor is it a new or expanded bus or rail terminal or transfer point with a significant number of diesel vehicles. Omnitrans buses are powered with CNG, which is not a significant source of diesel emissions. The bus transfer locations would operate similarly to existing bus stops on a local roadway; they are not considered significant terminals or transfer points with a significant number of diesel vehicles. For these reasons, the proposed project is not a POAQC, and the project-level PM conformity determination requirements are satisfied. There is no potential for a PM hot spot in the proposed project area.

The PM Conformity Hot-Spot Analysis Project Summary Form for Interagency Consultation was submitted to the Transportation Conformity Working Group (TCWG) on November 21, 2017. The TCWG members consisting of EPA, FHWA, and FTA concurred that the proposed project is not a POAQC on December 5, 2017.

O&M Facility

Both alternatives of the proposed project would include a new Level 2 O&M facility at one of the potential sites approximately 1 mile south of Holt Boulevard to provide servicing and inspection, washing and fueling, interior cleaning, fare collection, light maintenance (i.e., engine tune-up, lubrication, tire changing, brake repair, minor body work, and unit change out), and light repair. Heavy repair functions would remain at the existing EVVMF. No adverse impacts on air quality from operations of this facility are anticipated because the site would be located within the area designated for industrial use, would comply with all SCAQMD rules and regulations, and would be similar to the existing WVVMF, which is for light maintenance.

The combined daily operations emissions of the BRT Corridor and O&M facility were presented together in Table 4.2-7.

4.2.6 Avoidance, Minimization, and/or Mitigation Measures

The proposed project would comply with transportation conformity requirements and would not result in adverse effects under NEPA. Under CEQA, the proposed project would be consistent with the AQMP and would not generate significant regional emissions, toxic air contaminant (TAC) concentrations, or odors. Therefore, no mitigation measures are needed to reduce air pollutant emissions generated by operation of the proposed project.

Avoidance, minimization, and mitigation measures to minimize construction impacts associated with air quality are discussed in Section 5.3.2.

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4.3 Biological Resources

This section analyzes potential long-term environmental impacts related to biological resources along the WVC Project. The analysis describes the existing conditions and impacts to various biological resources as a result of the proposed project. Avoidance, minimization, and/or mitigation measures to minimize the impacts are identified. Short-term impacts during project construction and proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with biological resources are discussed in Sections 5.2.3 and 5.3.3, respectively.

The information contained in this section is summarized from the *West Valley Connector Project – Biological Study Report* (Parsons, 2018b) prepared for this proposed project.

4.3.1 Regulatory Setting

This section discusses regulatory requirements used to evaluate the project impacts and methods used to identify existing vegetation and wildlife communities present and to determine the potential for special-status species to be present within or adjacent to the Biological Study Area (BSA). A general biological plant and wildlife survey was conducted, as well as a jurisdictional assessment of waters and wetlands.

Federal

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) protects plants and animals that the government has listed as "endangered" or "threatened." A federally listed species is protected from unauthorized "take," which is defined in the FESA as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or attempt to engage in any such conduct."

Clean Water Act

The United States Army Corps of Engineers (USACE) Regulatory Branch regulates activities that discharge dredged or fill materials into wetlands and other "Waters of the U.S." under Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act.

Section 401 of the CWA gives the Regional Water Quality Control Board (RWQCB) the authority to regulate, through a Water Quality Certification, any proposed, federally permitted activity that may affect water quality. Development allowed within any identified jurisdictional areas in the BSA may be subject to requirements under Sections 401 and 404 of the CWA.

Executive Order 11990

Executive Order (EO) 11990 directs federal agencies to (1) minimize the destruction, loss, or degradation of wetlands and (2) preserve and enhance the natural and beneficial values of wetlands in carrying out the agencies' responsibilities.

Executive Order 13112

Under EO 13112, federal agencies cannot authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species.

Migratory Bird Treaty Act

Pursuant to the Migratory Bird Treaty Act (MBTA) of 1918, federal law prohibits the taking of migratory birds, their nests, or their eggs (16 *United States Code* [U.S.C.], Section 703).

In 1972, the MBTA was amended to include protection for migratory birds of prey, such as raptors.

State

California Endangered Species Act

Pursuant to the California Endangered Species Act (CESA) and Section 2081 of the *California Fish and Game Code,* an Incidental Take Permit from the California Department of Fish and Wildlife (CDFW) is required for projects that could result in the take of a state-listed threatened or endangered species. Under the CESA, "take" is defined as an activity that would directly or indirectly kill an individual of a species. A consistency finding per Section 2080.1 of the CESA is issued when the conditions of a federal incidental take statement (U.S. Fish and Wildlife Service [USFWS] Biological Opinion) are consistent with the CESA.

Porter-Cologne Act

The Porter-Cologne Act provides the State of California with very broad authority to regulate "Waters of the State," which are defined as any surface water or groundwater, including saline waters.

California Fish and Game Code Sections 1600-1616

Sections 1600–1616 of the *California Fish and Game Code* protect "Waters of the State." Activities of state and local agencies, as well as public utilities that are project proponents, are regulated by CDFW under Section 1602 of the code; this section regulates any work that would (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. For project activities (described above) that may affect stream channels and/or riparian vegetation regulated under Sections 1600 through 1603, CDFW notification is required and may require a Streambed Alteration Agreement.

Unlawful Take or Destruction of Nests or Eggs

Sections 3503 and 3503.5 of the *California Fish and Game Code* specifically protect nests and eggs of birds of prey.

Section 3513 of the *California Fish and Game Code* duplicates the federal protection of migratory birds and prohibits the take and possession of any migratory nongame bird, as designated in the MBTA.

California Environmental Quality Act—Treatment of Non-Listed Plant and Animal Species

Section 15380 of the CEQA Guidelines indicates that a lead agency can consider a non-listed species (e.g., California Native Plant Society [CNPS] List 1B and 2 plants) to be endangered, rare, or threatened for the purposes of CEQA if the species can be shown to meet the criteria in the definition of "rare" or "endangered."

Local

Habitat Conservation Plans

To respond to growing concerns over the conservation of coastal sage scrub (CSS) and other biological communities, federal, State, and local agencies have developed a multi-species approach to habitat conservation planning. There are no applicable Habitat Conservation Plans (HCPs) that apply to the project area. The nearest approved HCP is the Western Riverside Multi Species Habitat Conservation Plan (MSHCP), which is located more than 2.5 miles away at its closest occurrence to the project area. There are no HCPs applicable to this project.

4.3.2 Existing Conditions

Biological Study Area

The BSA is located in the United States Geological Survey (USGS) 7.5-minute San Dimas, Ontario, Guasti, and Fontana quadrangles.

The BSA is defined as the area within a 500-foot buffer from the proposed project centerline. The BSA is larger than the area directly or indirectly impacted by project construction activities.

Several channels are found within the BSA, including:

- San Antonio Channel (City of Montclair)
- West Cucamonga Channel (City of Ontario)
- Cucamonga Channel (City of Ontario)
- Day Creek Channel (City of Rancho Cucamonga)
- Etiwanda Creek Channel (City of Rancho Cucamonga)

Biological Survey

Parsons Biologist Arianne Preite (TE095858) and Parsons Senior Environmental Planner Uyenlan Vu conducted a general wildlife survey habitat assessment for special-status plant species and vegetation mapping on June 13, 2016, and Parsons Biologist Debra De La Torre, Associate Planner Katherine Ryan, and Senior Environmental Planner Uyenlan Vu conducted additional habitat assessments and vegetation mapping of the proposed project on October 10, 2016. In addition, each of the five channels in the BSA was walked to observe existing conditions and potential constraints. A windshield survey was completed on December 11, 2017 to assess existing site conditions and verify there had not been any changes since the initial surveys in 2016.

Vegetation Communities

The project is located within a relatively flat portion of San Bernardino County that is a developed area. Most of the study corridor has been developed by urban land uses, resulting in additional leveling off of topography. Vegetation communities in the BSA include developed/ornamental, disturbed/ruderal (including non-native grassland), agricultural/ vineyard, waterways (channels), and disturbed CSS (see Table 4.3-1). This section describes each of the vegetation communities and other areas observed in the BSA. The proposed project is an urban corridor in a developed area that is highly disturbed. Areas of compacted soils containing non-native grassland, typical of roadway shoulders, are found in the BSA.

Table 4.3-1
Vegetation Communities and Other Areas within the Biological Study Area

Vegetation Communities and Other Areas	Existing (acres)
Developed/Ornamental	3,363.93
Disturbed/Ruderal (includes Non-Native Grassland)	447.49
Agricultural/Vineyard	9.06
Waterways/Channels	8.3
Disturbed Coastal Sage Scrub	0.8
Total	**3,829.58**

The following describes each of the vegetation communities and other areas observed in the BSA.

Developed/Ornamental

Developed/ornamental areas consist of residential and commercial developments, paved roadways, compacted road shoulders, railroad tracks, and ornamental plantings including maintained turf grass. Developed/ornamental is the dominant community within the proposed project corridor and is the most prevalent vegetation type found along the alignment. Common plant species observed in these areas include oleander *(Nerium oleander),* American sweet gum *(Liquidambar styraciflua),* olive *(Olea europaea),* Mexican fan palm *(Washingtonia robusta),* and *Eucalyptus* (sp.). Developed areas and ornamental plants are found throughout the BSA and make up the primary vegetation type in the eastern portion of the BSA. The trees within the cities are ornamental and typical of urbanized, landscaped areas. There are no sensitive trees or trees of a heritage status within the BSA. The proposed O&M facility is a paved area considered developed/ornamental and not considered suitable habitat for sensitive species. Table 4.3-1 includes the area of developed/ornamental area located at the proposed O&M facility sites.

Disturbed/Ruderal

Disturbed/ruderal areas consist of recently graded or disked areas, dirt roads and trails, active oil fields, and cleared roadsides. These areas are generally devoid of vegetation or have a sparse cover of weedy species. They typically have compacted soils resulting from compaction by machinery used to grade, mow, or disk these parcels. Disturbed/ruderal contains areas of non-

native grasses dominated by non-native annual grasses with native and non-native herbs that are often mowed. Dominant species include red brome *(Bromus madritensis* ssp. *rubens),* ripgut grass *(Bromus diandrus),* foxtail barley *(Hordeum murinum* var. *jeporinum),* Arizona chess *(Bromus arizonicus),* Mediterranean schismus *(Schismus barbatus),* foxtail fescue *(Vulpia myuros),* telegraph weed *(Heterotheca grandiflora),* long-beaked filaree *(Erodium botrys),* red-stemmed filaree *(Erodium cicutarium),* and common fiddleneck *(Amsinckia menziesii* var. *intermedia).* In addition, Russian thistle *(Salsola tragus)* is frequently present. Most of these disturbed/ruderal areas contain dirt roads with compacted soils. These areas match Holland's description of non-native grassland (1986).

Disturbed/ruderal areas occur:

- At the intersection of N. Haven Avenue and 4th Street, in the City of Rancho Cucamonga, north and south of the intersection. The area south of the intersection also contains small patches of California buckwheat *(Eriogonum fasciculatum),* with the non-natives present at approximately 60-70% cover. The area is fenced with a "pending development" sign posted on the parcel.
- In the City of Rancho Cucamonga at N. Haven Avenue and 7th Street, N. Haven Avenue and Arrow Highway, Jersey Avenue and Milliken, Foothill Blvd and Elm, Mayhem and Foothill Boulevard, Foothill Boulevard and Victoria Commons/Promenade, Foothill Boulevard and Etiwanda.
- In the City of Fontana at Foothill Boulevard and East Avenue, Foothill Boulevard and Mulberry, Foothill Boulevard and Cherry, Foothill Boulevard and Hemlock, Foothill Boulevard and Sultana, Foothill Boulevard and Almeria, and Foothill Boulevard and Tokay. These areas are dominated by non-native annual grasses with native and non-native herbs, often mowed or containing large bare areas lacking vegetation.

Agricultural/Vineyard

There are agriculture areas within the BSA. A vineyard is located northeast of the intersection of N. Haven Avenue and 4th Street in Rancho Cucamonga. The soils of agricultural areas have been disturbed and vary in compaction depending on the crop. Mechanical harvesting of crops promotes the growth of weeds with seeds that can be disseminated by the machinery.

Waterways/Channels

There are five channelized drainage features within the BSA that may be considered aquatic resources. These channels are lacking vegetation and are concrete-lined culverts, lined with concrete on the sides and bottom. During the field visit, flowing water was observed in all five of the channels. Water was observed flowing, along the entire channel bottom, in the San Antonio Channel. In addition, water was observed, with minimal flows, in Cucamonga Channel,

Etiwanda Creek Channel, Day Creek, and West Cucamonga Channel.

The San Antonio Channel is located in the City of Montclair. It is an open channel that is lined with concrete on the sides and bottom. There is no vegetation in this channel where the project alignment crosses over the structure. During the general biological survey on June 13, 2016, flowing water was observed within this channel.

The West Cucamonga Channel is located in the City of Ontario. It is a triple box, open channel that is lined with concrete on the sides and bottom. There is no vegetation in this channel where the project alignment crosses over the structure. Ponded water was observed in the eastern and western portion during the general biological survey on June 13, 2016.

The Cucamonga Channel is located in the City of Ontario. It is an open channel that is lined with concrete on the sides and bottom. There is no vegetation in this channel where the project alignment crosses over the structure. During the general biological survey on June 13, 2016, flowing water was observed within the center of this channel.

The Day Creek Channel is located in the City of Rancho Cucamonga. It is an open channel that is lined with concrete on the sides and bottom. There is no vegetation in this channel where the project alignment crosses over the structure. Ponded water was observed in the channel during the general biological survey on June 13, 2016.

The Etiwanda Creek Channel is located in the City of Rancho Cucamonga. This channel contains six boxes as the project alignment crosses over the structure. The channel is lined with concrete on the sides and bottom. During the general biological survey on June 13, 2016, flowing water was observed in the eastern portion of this channel.

Disturbed Coastal Sage Scrub

There is a small patch of coastal scrub at the eastern portion of the project near Milliken Avenue and 8th Avenue. Common plant species observed in this area included California sagebrush *(Artemisia californica)* and California buckwheat *(Eriogonum fasciculatum)*, totaling 0.49 acres. This patch is isolated, disturbed, and small in nature and is located in an urban area that has been landscaped. A row of landscaping occurs between Milliken Avenue and the coastal sage scrub vegetation. The CSS is adjacent to urban development and is not contiguous with any other habitat.

There is a second patch of CSS at the southeast corner of Haven Avenue and 4th Street, totaling 0.31 acres. The CSS at this location contains primarily California buckwheat in the center of the parcel; however, it is surrounded by non-native grasses and shrubs along the perimeter of the parcel. In addition, the parcel is fenced and contains a sign that development is pending for this parcel.

Common Animal Species

As previously discussed, most of the BSA is highly urbanized, with development becoming less dense toward the east of the project alignment, with some disturbed/ruderal areas surrounded by urban development. Some urban-tolerant species can use ornamental vegetation or unvegetated areas within urban areas; however, most wildlife species in the BSA would generally be found on vacant lots. Within the BSA, most of the environment is heavily urbanized and paved roads that contain ornamental landscaping. The following discusses wildlife species that were observed in the open space areas within the BSA.

Reptiles and Amphibians

One reptile species was observed during the survey, the western fence lizard *(Sceloporus occidentalis).* There were no amphibians observed.

Birds

The bird species observed during the survey include red-tailed hawk *(Buteo jamaicensis),* killdeer *(Charadrius vociferous),* rock pigeon *(Columba livia),* mourning dove *(Zenaida macroura),* Anna's hummingbird *(Calypte anna),* black phoebe *(Sayornis nigricans),* American crow *(Corvus brachyrhynchos),* common raven *(Corvus corax),* bushtit *(Psaltriparus minimus),* house wren *(Troglodytes aedon),* northern mockingbird *(Mimus polyglottos),* European starling *(Sturnus vulgaris),* California towhee *(Pipilo crissalis),* song sparrow *(Melospiza melodia),* house finch *(Carpodacus mexicanus),* and house sparrow *(Passer domesticus).*

Mammals

California ground squirrel *(Spermophilus beecheyi)* was observed during the survey.

Bats occur throughout most of California and may forage in trees and shrubs within the BSA. There is no bat roosting habitat in the BSA, and bats are not anticipated to roost in the BSA. Any bats that could potentially forage in the BSA are inactive during the winter and either hibernate or migrate, depending on the species. Cavities in trees and human-made structures (e.g., channels or culverts) in the vicinity may provide potential roosting opportunities for several bat species. There were no bats observed during the survey.

Migration Corridors

There are no regional wildlife corridors in the BSA. The channels in the BSA are not anticipated to serve as wildlife movement corridors given that they are concrete lined on the sides and bottom and lack vegetation. There is no contiguous habitat on either side of the channels serving as a conduit for wildlife.

Invasive Species

Although non-native species (non-native grasses and ornamental species) occur throughout the BSA, invasive species are not prevalent within the BSA. Two listed invasive weed species from the California Invasive Plant Council List (2006) were identified in the BSA: foxtail chess

(Bromus madritensis ssp. rubens) and cheat grass (*Bromus tectorum*). No species on the Federal Weed List (U.S. Department of Agriculture Natural Resources Conservation Service, 2010) were identified within the BSA.

Regional Species and Habitats of Concern

These resources include plant and wildlife species that have been afforded special-status and/or other recognition by federal and state resource agencies and private conservation organizations. In addition, special-status biological resources include vegetation communities and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value.

Special-Status Plants

A total of 20 special-status plant species are known to occur or have potential to occur in the project region (the 5-mile radius surrounding the project centerline) (see Table 4-3.2). Table 4-3.2 was compiled from documents reviewed during the literature search, including those identified by the CNPS (CNPS 2018); the California Natural Diversity Database (California Department of Fish and Game 2018); the USFWS website; and species that may occur because suitable habitat is present within the BSA. Table 4.3-2 summarizes the listing status, habitat preferences, known or potential occurrence, and supporting rationale for each of the 20 species. Of these 20 special-status plant species, eight are either federally endangered or threatened and six special-status plant species are identified as state endangered or threatened.

Because of existing development, ongoing urbanization, absence of suitable habitat within the BSA and absence of special-status plant species during the biological surveys, these special-status plant species are not likely to occur within the project area and are not discussed further in the report.

Special-Status Animals

A total of 24 special-status animal species are known to occur or have potential to occur in the project region (the 5-mile radius surrounding the project centerline) (see Table 4-3.2). Table 4-3.2 summarizes the listing status, habitat preferences, known or potential occurrence, and supporting rationale for each of the 24 species. Of these 24 special-status animal species, 23 species are either federally or state threatened or endangered, including California Species of Special Concern.

Because of existing development, ongoing urbanization, absence of suitable habitat within the BSA, and absence of special-status animal species during biological surveys, most of the special-status animal species are not likely to occur within the project area and are not discussed further in the report. However, 2 of the 24 special-status animal species may occur within the BSA because limited potential habitat that may support special-status species is currently present within the BSA and is discussed below, including burrowing owl *(Athene cunicularia)* and Delhi Sands flower-loving fly.

Table 4.3-2 Special-Status Plant and Wildlife Species Known to Occur in the Project Vicinity

Scientific Name	Common Name	Status			General Habitat Description	Habitat present/ species present HP/P Habitat present/ species absent HP/A Habitat present/ species Unknown HP Habitat Absent A	Rationale* (Potential for Species to Occur)
		USFWS	CDFW	CNPS			
Plants							
Ambrosia pumila	San Diego Ambrosia	FE	None	1B.1	Upper floodplain fringes or adjoining depressions, vernal pools.	HA	No suitable habitat; not likely to occur.
Arenaria paludicola	Marsh Sandwort	FE	SE	1B.1	Freshwater marsh, marsh & swamp, wetland	HA	No suitable habitat; not likely to occur.
Astragalus brauntoni	Brauton's milk vetch	FE	None	1B.1	Carbonate soils in chaparral, coastal sage scrub, closed-cone forest, and grasslands.	HA	No suitable habitat; not likely to occur.
Berberis nevini	Nevin's barberry	FE	SE	1B.1	Mesic habitat such as alluvial woodland, coastal sage scrub.	HA	No suitable habitat; not likely to occur.
Brodiaea filifolia	Thread-leaved brodiaea	FT	SE	1B.1	Southern needlegrass grassland and alkali grassland in association with clay, loamy sand, or alkaline silty-clay soils.	HA	No suitable habitat; not likely to occur.
Calochortus weedii var. intermedius	Intermediate mariposa lily	None	None	1B.2 or S2	Chaparral, coastal scrub, valley and foothill grassland.	HA	No suitable habitat; not likely to occur.

Table 4.3-2 Special-Status Plant and Wildlife Species Known to Occur in the Project Vicinity

Scientific Name	Common Name	Status			General Habitat Description	Habitat present/ species present HP/P Habitat present/ species absent HP/A Habitat present/ species Unknown HP Habitat Absent A	Rationale* (Potential for Species to Occur)
		USFWS	CDFW	CNPS			
Calochortus plummerae	Plummer's mariposa lily	None	None	1B	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland open alluvial or granitic, rocky or sandy soils.	HA	No suitable habitat; not likely to occur.
California macrophylla	Round-leaved filaree	None	None	1B.2	Cismontane woodland, valley and foothill grassland. Elevation: 15 to 200 meters (~50 – 3,940 feet).	HA	No suitable habitat; not likely to occur.
Calystegia Felix	Lucky morning-glory	None	None	1B.1	Meadow & seep, riparian scrub	HA	No suitable habitat; not likely to occur.
Chorizanthe parryi var. parryi	Parry's spineflower	None	None	1B.1	Chaparral and coastal scrub in rocky/sandy openings.	HA	No suitable habitat; not likely to occur.
Chloropyron maritimum ssp. Maritimum	Salt Marsh Bird's-Beak	FE	SE	1B.2	Coastal dunes, marsh & swamp, salt marsh, wetland	HA	No suitable habitat; not likely to occur.
Dodecahema leptoceras	Slender-horned spineflower	FE	CE	1B.1	Alluvial scrub, washes, floodplains, loamy sandy soils.	HA	No suitable habitat; not likely to occur.

Table 4.3-2 Special-Status Plant and Wildlife Species Known to Occur in the Project Vicinity

Scientific Name	Common Name	Status			General Habitat Description	Habitat present/ species present HP/P Habitat present/ species absent HP/A Habitat present/ species Unknown HP Habitat Absent A	Rationale* (Potential for Species to Occur)
		USFWS	CDFW	CNPS			
Dudleya multicaulis	Many-stemmed dudleya	None	None	1B.2	Chaparral, coastal scrub, valley and foothill grassland.	HA	No suitable habitat; not likely to occur.
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	FE	SE	1B.1	Chaparral, coastal scrub, alluvial fan, sandy or gravelly soils.	HA	Not likely to occur; no suitable habitat in the BSA.
Horkelia cuneata var. puberula	Mesa horkelia	None	None	1B.1	Chaparral, cismontane woodland, coastal scrub.	HA	No suitable habitat; not likely to occur.
Lepidium virginicum var. robinsonii	Robinson's Pepper-grass	None	None	1B	Chaparral, coastal scrub.	HA	Not likely to occur; no suitable habitat in the BSA.
Lycium parishii	Parish's Desert-thorn	None	None	2B.3	Coastal scrub, Sonoran desert scrub.	HA	Not likely to occur; no suitable habitat in the BSA.
Monardella pringlei	Pringle's monardella	None	None	1A	Coastal scrub.	HA	Not likely to occur; no suitable habitat in the BSA.
Phacelia stellaris	Brand's star phacelia	None	None	1B.1	Coastal dunes, coastal scrub.	HA	Not likely to occur; no suitable habitat in the BSA.
Rorippa gambelli	Gambel's watercress	FE	CT	1B.1	Lakes, marshes.	HA	No suitable habitat; not likely to occur.

Table 4.3-2 Special-Status Plant and Wildlife Species Known to Occur in the Project Vicinity

Scientific Name	Common Name	Status			General Habitat Description	Habitat present/ species present HP/P Habitat present/ species absent HP/A Habitat present/ species Unknown HP Habitat Absent A	Rationale* (Potential for Species to Occur)
		USFWS	CDFW	CNPS			
Senecio aphanactis	Chaparral ragwort	None	None	2B.2	Chaparral, cismontane woodland, coastal scrub.	HA	No suitable habitat; not likely to occur.
Sidaleca neomexicana	Salt Spring Checkerbloom	None	None	2B.2	Alkali playa, chaparral, coastal scrub, lower montane coniferous forest, mojavean desert scrub, wetland	HA	No suitable habitat; not likely to occur.
Symphyotrichum defoliatum	San Bernardino aster	None	None	1B.2	Grasslands, disturbed areas.	HA	No suitable habitat; not likely to occur.
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	FE	SE	1B.1	Chaparral, coastal scrub, alluvial fan, sandy or gravelly soils.	HA	Not likely to occur; no suitable habitat in the BSA.
Birds							
Agelaius tricolor	Tricolored blackbird	None	CE/SSC		Forages in wet pastures, agricultural fields, and seasonal wetlands; nests in marsh vegetation.	HA	Not likely to occur; no suitable habitat in the BSA.

Table 4.3-2 Special-Status Plant and Wildlife Species Known to Occur in the Project Vicinity

Scientific Name	Common Name	Status			General Habitat Description	Habitat present/ species present HP/P Habitat present/ species absent HP/A Habitat present/ species Unknown HP Habitat Absent A	Rationale* (Potential for Species to Occur)
		USFWS	CDFW	CNPS			
Aimophilia ruficeps canescnes	Southern California rufous-crowned sparrow	None	None		Chaparral, coastal scrub	HA	Not likely to occur; no suitable habitat in the BSA.
Athene cunicularia	Burrowing owl	None	SSC		Uses large rodent burrows or other burrows in grasslands and agricultural areas.	HP	Marginal suitable habitat present in field areas, vacant lands in BSA. . No habitat within project footprint.
Buteo swainsoni	Swainson's Hawk	None	ST		Great Basin grassland, Riparian forest, riparian woodland, valley & foothill grassland	HA	Not likely to occur; no suitable habitat in the BSA.
Empidonax trailli extimus	Southwestern willow flycatcher	FE	SE		Dense riparian and scrub communities associated with rivers, swamps, and other wetlands.	HA	Not likely to occur; no suitable habitat in the BSA.
Falco columbarius	Merlin	None	None		Estuary, Great Basin grassland, valley & foothill grassland	HA	No suitable habitat; not likely to occur

Table 4.3-2 Special-Status Plant and Wildlife Species Known to Occur in the Project Vicinity

Scientific Name	Common Name	Status			General Habitat Description	Habitat present/ species present HP/P Habitat present/ species absent HP/A Habitat present/ species Unknown HP Habitat Absent A	Rationale* (Potential for Species to Occur)
		USFWS	CDFW	CNPS			
Polioptila californica	Coastal California gnatcatcher	FT	SSC		Coastal bluff scrub, coastal scrub in low-lying foothills and valleys in cismontane southwestern California and Baja California. May be found in coastal sage scrub below 2,500 feet; prefers low, coastal sage scrub in arid washes, mesas, and slopes.	HA	Not likely to occur in marginal habitat. Disturbed and fragmented sage scrub vegetation occurs in the BSA in a small area.
Amphibians							
Anaxyrus californicus	Arroyo Toad (southwestern)	FE	SSC		Washes, arroyos, sandy riverbanks, riparian areas and valleys; may be found in coastal sage scrub below 2,500 feet; prefers arid washes, mesas.	HA	No suitable habitat; not expected to occur.
Rana muscosa	Mountain yellow-legged frog	FE	SE		Mountain creeks, lakes, and lakeshores, streams.	HA	No suitable habitat; not expected to occur.

Table 4.3-2 Special-Status Plant and Wildlife Species Known to Occur in the Project Vicinity

Scientific Name	Common Name	Status			General Habitat Description	Habitat present/ species present HP/P Habitat present/ species absent HP/A Habitat present/ species Unknown HP Habitat Absent A	Rationale* (Potential for Species to Occur)
		USFWS	CDFW	CNPS			
Reptiles							
Anniella pulchra	Silvery legless lizard	None	SSC		Loose, sandy soils organic soils with plenty of leaf litter in chaparral, pine-oak woodland, beach, and riparian areas.	HA	No suitable habitat; not expected to occur.
Arizona elegans occidentalis	California glossy snake	None	SSC		Inhabits arid scrub, rocky washes, grasslands, and chaparral.	HA	No suitable habitat; not expected to occur.
Aspidoscelis tigris stejnegeri	Coastal whiptail	None	None		Chaparral, woodland, and riparian areas.	HA	No suitable habitat; not expected to occur.
Phrynosoma blainvillii	Coast horned lizard	None	SSC		Scrubland, grassland, forests, broadleaf woodlands; prefers friable, rocky, or shallow sandy soils. Requires harvester ants for food.	HA	No suitable habitat; not expected to occur.
Thamnophis hammondii	Two-striped gartersnake	None	None		Marsh & swamp, riparian scrub, riparian woodland, wetland	HA	No suitable habitat; not likely to occur.

Table 4.3-2 Special-Status Plant and Wildlife Species Known to Occur in the Project Vicinity

Scientific Name	Common Name	Status			General Habitat Description	Habitat present/ species present HP/P Habitat present/ species absent HP/A Habitat present/ species Unknown HP Habitat Absent A	Rationale* (Potential for Species to Occur)
		USFWS	CDFW	CNPS			
Mammals							
Antrozous pallidus	Pallid bat	None	SSC		Rocky, mountainous areas and near water. Found in a variety of habitats, from scattered desert scrub, grassland, shrubland, woodland, forests, from sea level through mixed conifer. Found over more open sparsely vegetated grasslands and seem to forage in open.	HA	No suitable habitat; not expected to occur.
Chaetodipus fallax	Northwestern San Diego pocket mouse	None	SSC		Chaparral, coastal scrub.	HA	No suitable habitat; not expected to occur.
Dipodomys merriami parvus	San Bernardino Merriam's kangaroo rat	FE	SSC		Chaparral and coastal sage scrub, sandy loam substrates, floodplains.	HP	Low Potential to occur. The BSA is highly developed. Areas of CH are approximately 5 miles from the BSA. The closest occurrence is 1.5 miles north of the BSA.

Table 4.3-2 Special-Status Plant and Wildlife Species Known to Occur in the Project Vicinity

Scientific Name	Common Name	Status			General Habitat Description	Habitat present/ species present HP/P Habitat present/ species absent HP/A Habitat present/ species Unknown HP Habitat Absent A	Rationale* (Potential for Species to Occur)
		USFWS	CDFW	CNPS			
Dipodomys stephensi	Stephens' kangaroo rat	FE	ST		Coastal scrub, valley and foothill grassland, chaparral; prefers sandy, herbaceous areas in rocks or coarse gravel.	HA	No suitable habitat; not expected to occur.
Eumops perotis californicus	Western mastiff bat	None	SSC		Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland; cliff dwelling.	HA	No suitable habitat; not expected to occur.
Lasiurus xanthinus	Western yellow bat	None	SSC		Desert wash, palm oases and riparian habitats in the Colorado Desert.	HA	No suitable habitat; not expected to occur.
Lepus californicus bennettii	San Diego blacktailed jack-rabbit	None	SSC		Inhabits deserts, grasslands, and open scrub habitat.	HA	The BSA is highly developed, and very marginal habitat exists in undeveloped areas outside the BSA and project footprint.

Table 4.3-2 Special-Status Plant and Wildlife Species Known to Occur in the Project Vicinity

Scientific Name	Common Name	Status			General Habitat Description	Habitat present/ species present HP/P Habitat present/ species absent HP/A Habitat present/ species Unknown HP Habitat Absent A	Rationale* (Potential for Species to Occur)
		USFWS	CDFW	CNPS			
Neotomalepida intermedia	San Diego desert woodrat	None	SSC		Alluvial fan scrub; moderate to dense canopies preferred. Abundant in rock outcrops and rocky cliffs and slopes.	HA	No suitable habitat; not expected to occur.
Nyctinomops femorosaccus	Pocketed free-tailed bat	None	SSC		Joshua tree woodland, pinyon and juniper woodlands, riparian scrub, Sonoran desert scrub.	HA	No suitable habitat; not expected to occur.
Nyctinomops macrotis	Big free-tailed bat	None	SSC		Rocky or cavernous areas; roosts in crevices.	HA	No suitable habitat; not expected to occur.
Perognathus longimembris brevinasus	Los Angeles pocket mouse	None	SSC		Coastal scrub, lower elevation grasslands and coastal sage communities; prefers open ground with fine sandy soils.	HP	Low potential to occur. The BSA is highly developed and only limited habitat exists outside the project footprint in vacant lands near the eastern portion of the project.

Table 4.3-2 Special-Status Plant and Wildlife Species Known to Occur in the Project Vicinity

Scientific Name	Common Name	Status			General Habitat Description	Habitat present/ species present HP/P Habitat present/ species absent HP/A Habitat present/ species Unknown HP Habitat Absent A	Rationale* (Potential for Species to Occur)
		USFWS	CDFW	CNPS			
Taxidea taxus	American badger	None	SSC		Grasslands and other open habitat with friable, uncultivated soils; needs sufficient foot and open, uncultivated ground.	HA	No suitable habitat; not expected to occur.
Fish							
Catostomus santaanae	Santa Ana sucker	FT	None		Rivers, streams. Endemic to Los Angeles basin south coastal streams. Habitat generalist preferring sand-rubble-boulder bottoms, cool, clear water, and algae.	HA	No suitable habitat; not expected to occur.

Table 4.3-2 Special-Status Plant and Wildlife Species Known to Occur in the Project Vicinity

Scientific Name	Common Name	Status			General Habitat Description	Habitat present/ species present HP/P Habitat present/ species absent HP/A Habitat present/ species Unknown HP Habitat Absent A	Rationale* (Potential for Species to Occur)
		USFWS	CDFW	CNPS			
Insects							
Rhaphiomidas terminates abdominalis	Delhi Sands flower-loving fly	FE	None		Found only in fine, sandy soils, often with wholly or partly consolidated dunes referred to as the Delhi Sands. The fly is typically found in relatively intact, open, sparse, native habitats with less than 50 percent vegetative cover.	Historic I Soils Present (Historic Delhi Soils)	Historic areas of Delhi soils in the BSA have been developed and are currently unsuitable for the DSF. Undeveloped areas of open space in BSA may be recoverable.

Table 4.3-2 Special-Status Plant and Wildlife Species Known to Occur in the Project Vicinity

Scientific Name	Common Name	Status			General Habitat Description	Habitat present/ species present HP/P Habitat present/ species absent HP/A Habitat present/ species Unknown HP Habitat Absent A	Rationale* (Potential for Species to Occur)
		USFWS	CDFW	CNPS			
Federal Designations FE= Listed by the federal government as an endangered species. FT= Listed by the federal government as a threatened species. **State Designations** CE= Candidate Endangered – Currently being considered for listing under CESA SE= Listed as endangered by the State of California. ST= Listed as threatened by the State of California. SSC= Species of Special Concern. FP= Fully Protected. **CNPS= California Native Plant Society Classifications** 1 = Rare in California and elsewhere 2 = Rare in California, but not elsewhere A = Presumed extirpated or extinct B = Rare, threatened, or endangered **Habitat Present/Absent within the BSA** HP= Present. HA= Absent.							

Source: WVC Project Biological Study Report, 2018.

Burrowing Owl

The burrowing owl (BUOW) is not a federally or State-listed species, but it is a State of California Species of Special Concern. This species is protected by an international treaty under the MBTA of 1918 (16 U.S.C. 703-711) and under Sections 3503 and 380 of the California Fish and Game Code. Sections 2503, 3503.5, and 2800 of the California Fish and Game Code prohibit the take, possession, or destruction of birds, their nests, or eggs.

BUOW use a variety of natural and modified habitats for nesting and foraging that is typically characterized by low growing vegetation. Burrowing owl habitat includes, but is not limited to, native and non-native grassland, interstitial grassland within shrub lands, shrub lands with low density shrub cover, golf courses, drainage ditches, earthen berms, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas. The owl can be found at elevations ranging from 200 feet below sea level to 9,000 feet above mean sea level (amsl). The owl commonly perches on fence posts or on top of mounds outside its burrow. These owls can be found at the margins of airports and golf courses and in vacant urban lots. They are active day and night but are usually less active during the peak of day. They nest in burrows in the ground, often in old ground squirrel burrows or badger dens. They can dig their own burrows but prefer deserted excavations of other animals. They are also known to use rock outcrops, artificial burrows, such as pipes, and concrete debris piles.

No burrowing owl or sign were observed within the BSA during the general biological surveys. Focused burrowing owl surveys were not conducted for the project. Marginal suitable habitat is found in areas of disturbed/ruderal toward the eastern section of the project, along Foothill Boulevard and Haven Avenue in the cities of Fontana and Rancho Cucamonga. This vegetation is marked in the Biological Resources Map as Disturbed/Ruderal (see *Biological Study Report,* Appendix C Sheet 28). One potentially suitable burrow was located by Senior Biologist Debra De La Torre during the October 2016 survey; however, this area will not be impacted by the project. The location of the burrow was field verified and photographed on December 11, 2017 (see *Biological Study Report*, Appendix B, Site Photos). Though this potentially suitable burrow is within the BSA, the burrow will not be impacted by Alternative B. The potentially suitable burrow will not be impacted by Alternative A. A preconstruction BUOW survey is needed given the presence of marginal suitable habitat in the BSA. Although no BUOW were observed during surveys, it is possible for them to move onto the site prior to construction. A total of 447.49 acres of potential habitat is found in the BSA in the form of disturbed/ruderal; however, the habitat is of poor quality and unlikely to contain BUOW.

Delhi Sands Flower-Loving Fly

Delhi sands flower-loving fly (DSF) is a federally-listed endangered species. DSF is only known to occur in association with Delhi sand deposits, presumably occupied

the once extensive dune system of the upper Santa Ana River Valley, including portions of what is now the City of Colton, west through portions of the City of Ontario, and south to the Santa Ana River. Today, DSF exists on only a few disjunct sites (USFWS, 1997) within a radius of about eight miles in southwestern San Bernardino and northwestern Riverside Counties (Colton, Rialto, Fontana, and Ontario). More than 95 percent of known DSF habitat was considered eliminated by development, agriculture and other land management practices by 1993 (Smith 1993, USFWS 1996 in Kingsley 1996), however, this proportion is now nearer 98 to 99 percent due to these ongoing processes (Osborne, 2015). Many of the last remaining fragments of DSF habitat are currently under pressure by land management efforts such as heavy disking, irrigation, manure dumping, and gravel dumping.

DSF is typically found in areas of unconsolidated sandy soils (Delhi series) supporting an open community of native and exotic plant species, including California buckwheat *(Eriogonum fasciculatum),* California croton *(Croton californicus),* telegraph weed *(Heterotheca grandiflora),* and deerweed *(Acmispon glaber).* Adult DSF are known to nectar at flowers of California buckwheat and California croton. Many other plant species are common, including Thurber's eriogonum *(Eriogonum thurberi),* autumn vinegar weed *(Lessingia glandulifera),* and sapphire eriastrum *(Eriastrum sapphirinum).* DSF habitat also supports other associated insects, such as flies and wasps, which are considered indicator species.

The Delhi Sands flower-loving fly is only known from Riverside and San Bernardino counties, with most occupied Delhi Sands flower-loving fly habitat located within a limited area of southwestern San Bernardino County. The closest recovery units to the project are the Ontario Recovery Unit (near the intersection of Greystone and Milliken Avenue, in the City of Ontario (USFWS, 2008).

The adult DSF flight period is typically mid-July through September, when individual adults emerge, reproduce, and die. The adult life span of an individual DSF lasts for a few days. DSF larvae are known to develop underground; however, the specific biology (i.e., larval biology, duration of the larval state, habits, and food requirements) are not yet known for DSF or any other Rhaphiomidas species.

Historical areas of Delhi sands are present in the BSA; however, these areas have been extensively developed or highly disturbed. Delhi sands are considered potential habitat for DSF; however, the project is located within a developed area with high levels of disturbance (including people and vehicles) and containing urban areas that are irrigated. Though the areas are historically dominated by Delhi sands, the area at Inland Empire Boulevard and Milliken Avenue is developed. Only small fragmented patches of DSF soils remain within the BSA. Any undeveloped and

open space areas with historic DSF soils located within the BSA may support this species through recovery and habitat restoration efforts and considered as potentially recoverable and/or suitable potential habitat for DSF. The location proposed for the O&M facility does not contain Delhi soils or suitable potential habitat for DSF.

Other Sensitive Animal Species

Nesting Birds and Swallows

Raptors and migratory birds potentially using shrubs, trees, and structures within the BSA could be affected by their removal and/or proximity to construction activities. Construction during the breeding season could disturb nesting activities, possibly resulting in nest abandonment, loss of young, and reduced health and vigor of eggs and/or nestlings. Project impacts to nesting birds are primarily limited to the removal of trees and shrubs within the BSA. No nests in trees or shrubs were observed during biological surveys. There were no swallow nests observed in any channels or on any structures within the BSA.

No raptor nests or other nests in trees, shrubs, or on structures were observed during biological surveys. The proposed project may require removal of ornamental trees in which birds may nest in this urban setting. A nesting survey shall be completed prior to the start of ground-disturbing activities associated with construction.

Critical Habitat

Critical habitat (CH) for coastal California gnatcatcher *(Polioptila californica californica)* (CAGN) and San Bernardino kangaroo rat *(Dipodomys merriami parvus)* (SBKR) is present within 5-miles of the project, but there is no CH within the BSA. No CH would be impacted by this project.

California Gnatcatcher

The CAGN is a small member of the thrush family. CAGN typically occur in or near sage scrub habitat, which is a broad category of vegetation that includes the following plant communities as classified by Holland (1986): Venturan CSS, Diegan CSS, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan sage scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub. There are no known occurrences of CAGN and an absence of CH in the vicinity of the BSA. CAGN is not expected to occur within the project footprint. CH for the CAGN is present approximately 5 miles from the project centerline. The two small patches of CSS within the BSA are not considered suitable for CAGN and is considered disturbed given that it is surrounded by urban areas and contains little species diversity. Because no suitable habitat occurs within the BSA, no focused surveys were completed for CAGN.

San Bernardino Kangaroo Rat

CH for the SBKR is present approximately 5 miles from the BSA. SBKR is typically found in Riversidean alluvial fan scrub on sandy loam soils, alluvial fans, and

floodplains and along washes with nearby sage scrub. Soil texture is a primary factor in the occurrence of this subspecies of the Merriam's kangaroo rat *(Dipodomys merriami).* Sandy loam substrates allow for the digging of simple, shallow burrows. The historic range for SBKR lies west of the desert divide of the San Jacinto and San Bernardino mountains and extends from the San Bernardino Valley in San Bernardino County to the Menifee Valley in Riverside County. In the BSA, the closest occurrence is in the Santa Ana River and upper Etiwanda Wash in San Bernardino County. The project alignment is composed primarily of paved areas and compacted soils typical of roadway shoulders considered not suitable for SBKR. Suitable habitat for SBKR is absent in the BSA.

Delhi Sands Flower-Loving Fly

CH has not been designated for the DSF; however, Delhi soils may correspond with the areas where this species can be found. Approximately 1,111 acres of historic Delhi fine soils are mapped within the BSA and occur within the BSA (see Figure 4.3-2); however, these areas have been developed and are highly disturbed. Any undeveloped and open space areas with historic DSF soils located within the BSA may support this species through recovery and habitat restoration efforts and are considered potentially recoverable and/or suitable potential habitat for DSF. Though developed areas may contain Delhi soils, but they are extensively and deeply covered by foreign soils, including gravel and concrete – these areas are considered previously impacted and determined unsuitable for DSF.

Jurisdictional Wetlands and Waters of the United States

Wetlands are defined as areas of land that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support – and that under normal circumstances do support – a prevalence of vegetation typically adapted for life in saturated soil conditions. To regulate activities in wetlands, federal and State agencies have developed specific definitions and methods for identifying wetland boundaries. Identification methods, which vary among the agencies, focus on hydrologic, soil, and vegetative parameters. For sites to be identified as wetlands, they must have specific indicators of wetland conditions for each of these three parameters. Areas that contain some but not all three parameters are considered "Waters of the U.S.," which are regulated by USACE, and "Waters of the State," which are regulated by CDFW.

Jurisdictional delineators based their field interpretation of the boundaries of jurisdictional areas on guidelines contained in the Corps of Engineers Wetlands Delineation Manual [Environmental Laboratory, 1987] and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Supplement Version 2.0 [USACE, 2008]. Waters of the United States that may be regulated by USACE

under Section 404 of the CWA include traditionally navigable waters, other Waters of the United States, and wetlands. Wetlands are a subset of Waters of the United States that meet specific vegetative, soil, and hydrologic criteria.

Survey Results

There are five channels within the proposed project area that all have potential to be jurisdictional according to USACE and CDFW guidelines. A jurisdictional delineation was not completed at this time and will be completed prior to applying for permits. Coordination with USACE was initiated in February 2018 and is ongoing. A total of 8.3 acres of potentially jurisdictional areas occurs within the proposed project area in the form of channels (see Table 4.3-3). The approximate limit of 8.3 acres was determined using the concrete banks as a potentially jurisdictional for mapping of biological resources. These areas were assessed using aerial photographs and then field verified for existing conditions.

Table 4.3-3 Drainages in the BSA

Channel Name	Acres within BSA (500-foot Buffer)
East Etiwanda Creek	1.33
Cucamonga Channel	3.47
Day Creek Channel	1.88
San Antonio Wash	0.71
West Cucamonga Channel (3 crossings)	0.58
	0.28
	0.01
TOTAL	8.26

4.3.3 Impacts

This section analyzes potential long-term environmental impacts of the proposed project on biological resources. The determination of impacts in this analysis was based on a comparison of existing site conditions and maps showing the project impact footpint, along with maps of biological resources in the BSA. Permanent project impacts are considered in areas that would be within the project's final ROW. Temporary project impacts include those necessary for grading, staging area, construction access, utility work, and construction within a concrete channel. Direct and indirect impacts on biological resources have been evaluated. Direct impacts are those that involve the initial loss of biological resources due to grading and construction. Indirect impacts are those that would be related to disturbance from construction or operation of the project and are discussed in Section 5.2.3.

No Build Alternative

Because no ground disturbance would occur under the No Build Alternative, there would be no impacts on biological resources.

Build Alternatives

Common to All Alternatives

The biological resource impacts common to Alternatives A and B are presented below, which includes impacts to the proposed O&M facility. Overall, the proposed project is in conformance with applicable habitat conservation and

natural community conservation plans and impacts to biological resources would not be adverse.

Special-Status Species

Special-status natural communities reported within 5 miles of the BSA include CSS. Approximately 0.8 acre of disturbed CSS occurs in the study area in two small, isolated patches, as discussed in further detail below.

No other vegetation communities that occur within the BSA are discussed in this section because they are not considered special status.

Coastal Sage Scrub

In total, 0.8 acre of disturbed CSS occurs in the BSA. These small fragments are isolated and not suitable habitat for such species as the CAGN. This habitat is outside the project impact area and would not be impacted during construction. The isolated patches are located near 8th Street and Milliken Avenue and within the parcel proposed for development at the southeast corner of N. Haven and 4th Street. These areas contain primarily California buckwheat. The disturbed CSS along N. Milliken occurs adjacent to a row of ornamental trees and is not contiguous with any other CSS.

There would be no permanent or temporary impacts to CSS habitat because it occurs outside the project alignment of both corridor alternatives and at either potential site of the proposed O&M facility. Temporary construction easements (TCEs) are not anticipated to impact CSS habitat within the BSA.

Natural Communities of Special Concern

Neither build alternative would impact the 0.5 acre of coastal sage scrub that occurs within the BSA.

Those species that need additional discussion are described in further detail below. BUOW and DSF may occur in the BSA; however, the habitat is marginal and of poor quality. USFWS should verify the survey recommendations for DSF.

Burrowing Owl

BUOW are not expected in the project impact area. Marginal suitable habitat is present within the BSA, outside of the project impact area, and in open areas along Foothill Boulevard in the cities of Fontana and Rancho Cucamonga as disturbed/ruderal. In the BSA, marginal suitable habitat in the form of disturbed/ruderal is found along W. Holt Boulevard where widening is proposed; however, this habitat is considered marginal given the surrounding urban environment.

A single potential burrow was located along an unnamed access road adjacent to a parking lot off Foothill Boulevard (between Elm Avenue and Milliken Avenue); however, no BUOW sign was associated with the burrow. No BUOW or sign were observed during the survey. A Phase I Habitat Assessment occurred where suitable habitat, considered disturbed/ruderal, was recorded. Any potential burrows encountered during the mapping of biological resources were recorded. A Phase II survey, according to California Burrowing Owl Consortium

Guidelines (1993), was not completed. To avoid direct project impacts to BUOW that may move into the project area prior to project construction, a preconstruction BUOW survey would be conducted in marginally suitable habitat, as discussed below. There are 447.49 acres of disturbed/ruderal within the BSA; however, the small linear sections of disturbed/ruderal habitat that would be impacted by the project are degraded and mowed/disked with compacted soils typical of roadway shoulders.

Under Alterative B, there would be 1.21 acres of permanent impact and 0.81 acre of temporary impact to potential BUOW habitat classified as disturbed/ ruderal. The habitat is marginally suitable for BUOW; however, BUOW is not anticipated to occur given the poor quality of habitat.

No impacts to any potential BUOW habitat would occur as a result of the O&M facility construction at any potential sites because they are located in the developed industrial use area.

Delhi Sands Flower Loving Fly

Any undeveloped and/or open areas where historic DSF soils have been identified is considered potentially suitable DSF habitat. Although there are small fragmented areas where DSF soils occur, Alternatives A and B would not result in temporary or permanent impacts to DSF and its habitat. Both alternatives would avoid permanent conversion of suitable DSF habitat into transportation uses or temporarily impact suitable DSF habitat during construction.

If project design plans change and result in impacts to undeveloped and/or open areas where historic DSF soils are identified, a habitat assessment should be conducted to assess the suitability of the impacted area to support DSF. Presence/absence surveys for DSF shall be conducted in areas identified by the habitat assessment as potentially suitable habitat and conform with the latest USFWS guidelines for conducting these surveys, which include DSF surveys two times per week from July 1 to September 20 for 2 consecutive years under suitable conditions (USFWS, 2014).

No impacts to any potential DSF habitat would occur as a result of the O&M facility construction at any potential sites because they are located in the developed industrial use area.

Nesting Birds

There were no nests, nesting birds, swallows, or bats observed during the general biological survey. Raptors and migratory birds potentially using shrubs and trees within the BSA could be affected by their removal and/or proximity to construction activities. The proposed project impacts to nesting birds would be limited to the removal of trees and shrubs within the BSA and exclusion of swallows from any nests associated with both build alternatives.

Alternative A

Vegetation

Under Alternative A, approximately 62 ornamental trees and shrubs would be removed to consruct side-running stations. No additional impacts to non-sensitive vegetation communities are anticipated for Alternative A since the proposed side-running stations would be constructed within existing paved areas and parkways which include sidewalks and urbanized, landscaped areas that lack vegetation.

Jurisdictional Wetlands and Waters of the United States

Project design has resulted in avoidance of the channels in the BSA for all side-running station construction. No impacts to jurisdictional wetlands and Waters of the U.S. would occur under Alternative A.

Alternative B

Vegetation

A total of 1.21 acres of disturbed/ruderal habitat is anticipated to be permanently impacted by Alternative B. This area of permanent impact is located along E. Holt Avenue at Pleasant Avenue, Holt and Grove Avenue, Holt and Allyn, Holt and South Cucamonga Avenue, and Holt and S. Oaks. These areas are cleared, lack vegetation, and/or contain ornamental or weedy species that are frequently mowed or disked. A total of 0.81 acre of disturbed/ruderal habitat is anticipated to be temporarily impacted by Alternative B. These areas are located along E. Holt Avenue and Benson, Holt and Pleasant, Holt and Allyn, Holt and South Cucamonga Avenue, Holt and Grove Avenue, Holt and N. Imperial, and Holt and S. Walker.

Jurisdictional Wetlands and Waters of the United States

Under Alternative B, construction of the dedicated lanes and the center-running station at Holt Boulevard and Grove Avenue in the City of Ontario would result in temporary impacts to approximately 0.2 acre to West Cucamonga Channel. Impacts on potential jurisdictional areas were determined by comparing engineering plans with maps of potential jurisdictional resources. Potential impacts to West Cucamonga Channel would occur as a result of construction access, maneuvering, and staging. There are no permanent impacts anticipated at any of the channels. All of the channels are concrete-lined and lack vegetation.

Authorization to work under a nationwide permit would be required in order to comply with Section 404 of the CWA. In order to apply for authorization to work under a nationwide permit, a jurisdictional delineation and report will be needed.

Coordination with USACE was initiated in February 2018. A coordination conference call with Ms. Shannon Pankratz, USACE Project Manager for Los Angeles and San Bernadino County areas, was arranged on April 4, 2018. Ms. Pankrats stated that a USACE Nationwide Permit (NWP) 33 will be needed for the temporary impact to the West Cucamonga Channel. A Preliminary jurisdictional delineation (PJD) shall be

submitted with the application when the work area is identified.

O&M Facility

No impacts to jurisdictional waters would occur as a result of the O&M facility construction at any potential sites because they are located in the developed industrial use area.

4.3.4 Avoidance, Minimization, and/or Mitigation Measures

Because the proposed project is expected to result in no operational effects on biological resources, no avoidance, minimization, or mitigation measures are required with incorporation of standard conditions described below.

Proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with biological resources are discussed in Section 5.3.10.

BR-1: Burrowing Owl Protection. To ensure that any BUOW that may occupy the site in the future are not affected by the construction activities, pre-construction BUOW surveys will be required within 7 to 10 days prior to any ground disturbing activities in the areas identified as potential BUOW habitat.

If any of the preconstruction surveys determine that BUOW are present, one or more of the following mitigation measures may be required: (1) avoidance of active nests and surrounding buffer areas during construction activities: (2) passive relocation of individual owls; (3) active relocation of individual owls; and (4) preservation of on-site habitat with long-term conservation value for the owl.

BR-2: Nesting Birds Protection. Avoid disturbance of any nests protected by the MBTA. If tree and shrub removal activities are scheduled to occur during the breeding season (February 1 through August 31), then SBCTA will implement the following measures to avoid potential adverse effects on birds covered by the MBTA:

- No more than 1 week prior to construction, a qualified wildlife biologist will conduct preconstruction survey of all potential nesting habitat within 500 feet of construction activities where access is available.
- If active nests are found during preconstruction surveys, then the project proponent will create a no-disturbance buffer [acceptable in size to CDFW] around active raptor nests and nests of other special-status birds during the breeding season, or until it is determined that all young have fledged. Typical buffers include 500 feet for raptors and 250 feet for other nesting birds. The size of these buffer zones and types of construction activities restricted in these areas may be further modified during coordination and in consultation with CDFW, and it will be based on existing noise and human disturbance levels at the project site. Nests initiated during construction are presumed to be unaffected, and no buffer would be necessary; however, the “take” (e.g.,

mortality, severe disturbance to) of any individual birds will be prohibited.

If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, then no further mitigation is required. Trees and shrubs within the construction footprint that have been determined to be unoccupied by birds covered by the MBTA or that are located outside the no-disturbance buffer for active nests may be removed.

BR-3: Coastal Sage Scrub Protection. During final design, the Project Engineer will coordinate with a qualified biologist to delineate all ESAs within the project footprint and immediately surrounding areas. ESAs are not identified as temporarily or permanently impacted in the environmental document.

Prior to clearing vegetation or construction within or adjacent to ESAs, the Contractor will install highly visible barriers (e.g., orange construction fencing) adjacent to the project impact area to designate ESAs to be preserved in place. No grading or fill activity of any type will be permitted within these ESAs. In addition, no construction activities, materials, or equipment will be allowed within the ESAs. All construction equipment will be operated in a manner to prevent accidental damage to nearby ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within the ESAs. Silt fence barriers will be installed at the ESA boundaries to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned grading activities. A qualified biologist will supervise the placement of ESA fencing.

BR-4: Delhi Sands Flower-Loving Fly Protection. In the event that design plans change and would impact undeveloped and/or open space areas, a habitat assessment shall be conducted to determine whether the impacted area is suitable to support DSF. If the findings of the habitat assessment indicate that the area could support DSF, a presence/ absence survey for the DSF should be conducted.

Permits

A jurisdictional delineation must be completed before permit applications are submitted. Permits are typically applied for at 65% design. Before any work begins at the West Cucamonga Channel, 404, 1602, and 401 permits will need to be obtained. Based on coordination with the San Bernardino County Flood Control District staff (Stacy Serrano, Engineering Technician IV) on April 4, 2018, a permit from San Bernardino County Flood Control District is required, but the 408 USACE construction permit is not required.

There are no anticipated impacts to the other channels in the BSA; therefore, permits are not required for San Antonio Channel, Cucamonga Channel, Etiwanda Channel, and Day Creek Channel. Typical conditions with permits may include, but are not limited to:

- Potentially jurisdictional areas (channels) adjacent to the proposed impact area shall be protected from

inadvertent disturbance by construction equipment and/or personnel, thus protecting plants and wildlife in the habitat next to the impact area. Before grading and/or construction-related activity within 50 feet of areas under the jurisdiction of USACE, the RWQCB, and/or CDFW, the Contractor shall install fencing or flagging to delineate the jurisdictional areas as an ESA. Placement of the fencing shall be done under the supervision of a qualified biologist. All personnel and equipment access to the ESA shall be prohibited unless approved by a qualified biologist.

- Construction activities within any channel will be designed and conducted to maintain downstream flow conditions. All construction activities will be effectively isolated from water flows to the greatest extent feasible. This may be accomplished by working in the dry season or dewatering the work area in the wet season. When work in standing or flowing water is required, structures for isolating the in-water work area and/or diverting the water flow must not be removed until all disturbed areas are cleaned and stabilized

4.4 Cultural and Paleontological Resources

This section discusses cultural and paleontological resources in the proposed project area for the proposed project and the associated impacts. It describes the legal and regulatory requirements governing the protection of archaeological, historical, and paleontological resources and efforts to comply with these regulations. This section documents consultation with the California Native American Heritage Commission (NAHC), Native American tribal contacts, local museums, and heritage societies during the identification of resources; the determination of effect; and mitigation and minimization measures to minimize harm.

The information presented in this section was obtained from the *West Valley Connector Project – Historic Property Survey Report* (HPSR) (Parsons, 2018d) and the *Paleontological Identification Report and Evaluation Report* (Paleo Solutions, 2018), prepared for this proposed project. The HPSR includes an *Archaeological Survey Report* (ASR) (Parsons, 2018a) and a *Historical Resources Evaluation Report* (HRER) (Parsons, 2018e).

Operation of the proposed project is not expected to have any adverse effects on archaeological or paleontological resources.

Impacts to cultural resources during construction are discussed in detail in Section 5.2.4 of Chapter 5 (Construction Period Impacts).

4.4.1 Regulatory Context

Federal

National Environmental Policy Act

NEPA, signed into law in 1970, requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions. Using the NEPA process, agencies evaluate the environmental and related social and economic effects of their proposed actions. Agencies also provide opportunities for public and stakeholder review and comment on those evaluations.

Section 106 of the National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) of 1966 requires federal agencies to take into account the effects of their actions on historic properties. Section 106 applies to any federal undertaking, defined as a project, activity or program funded in whole or in part under the direct or indirect jurisdiction of a federal agency, including (1) those carried out by or on behalf of a federal agency; (2) those carried out with federal financial assistance; and (3) those requiring a federal permit, license or approval.

The Section 106 process contains four basic steps: (1) a determination that the

proposed federal action is an undertaking; establishing the project's area of potential effects (APE); and initiating consultation, which includes inviting the State Historic Preservation Officer (SHPO) and other consulting parties to participate in the process; (2) identifying any historic properties within the project's APE that are listed in or eligible for the National Register of Historic Places (NRHP); (3) determining whether the project will have an adverse effect on any historic properties; and (4) resolving any adverse effects on those resources through execution of a Memorandum of Agreement.

The Section 106 regulations require federal agencies to make NRHP eligibility determinations and effects findings in consultation with the SHPO.

A historic property, defined as any "prehistoric or historic district, site, building, structure, or object" included in, or eligible for inclusion in the NRHP" [U.S. Department of Interior, National Park Service, National Register Criteria for Evaluation] must meet at least one of four significance criteria, and must retain sufficient integrity in terms of its location, design, setting, materials, workmanship, feeling, and association. The significance criteria are:

A. Is associated with events that have made a significant contribution to the broad patterns of our history (Criterion A); or
B. Is associated with the lives of significant persons in our past (Criterion B); or
C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C); or
D. Has yielded or may be likely to yield, information important in history or prehistory (Criterion D).

State

California Environmental Quality Act and Guidelines

Paleontological Resources

Under the CEQA Guidelines, Appendix G, a project would normally would have a significant impact on paleontological resources if it would "directly or indirectly destroy a unique paleontological resource or site."

Historical Resources

CEQA uses the term "historical resources" to include buildings, sites, structures, objects, or districts, each of which may have historical, pre-historical, architectural, archaeological, cultural, or scientific importance. The definition of "historical resources" is contained in Section 15064.5 of the CEQA Guidelines. Historical resources are properties that are listed in or eligible for listing in the California Register of Historical Resources (CRHR) and are considered part of the

environment. A project that may cause a substantial adverse effect on the significance of a historical resource is a project that may have a significant effect on the environment. If a project would result in significant adverse effects on historical resources, then alternative plans or mitigation measures must be considered; however, only significant historical resources need to be addressed.

California Register of Historic Resources

All resources listed in or formally determined to be eligible for the NRHP are eligible for the CRHR and thus are significant historical resources for the purposes of CEQA. The CRHR is a listing of resources that are significant within the context of California's history. The CRHR uses criteria that largely parallel those used by the NRHP. In addition, properties designated under municipal or county ordinances also are eligible for listing in the CRHR. A historical resource must be significant at the local, state, or national level under one or more of the criteria defined in CCR Title 14, Chapter 11.5, Section 4850. Any resource that meets the criteria defined in CCR Title 14 is considered a historical resource under CEQA.

California Public Resources Code, Sections 5024 and 5024.5

Public Resources Code (PRC), Sections 5024 and 5024.5, require each state agency to formulate policies to preserve and maintain, when prudent and feasible, all state-owned historical resources under its jurisdiction listed in or potentially eligible for inclusion in the NRHP or registered or eligible for registration as a state historical landmark pursuant to Section 5021. The SHPO shall provide advice and assistance to such agencies, as needed.

California Health and Safety Code – Treatment of Human Remains

Under Section 7003(a)(2) of the California Health and Safety Code, six or more human burials at one location constitute a cemetery. Disturbance of Native American cemeteries is a felony (Health and Safety Code Section 7052).

Section 7050.5 of the Health and Safety Code requires that construction or excavation be stopped near discovered human remains until the county coroner can determine whether the remains are those of a Native American. If the remains are determined to be Native American, the coroner must then contact the NAHC, which has jurisdiction pursuant to Section 5097 of the California PRC.

Assembly Bill 52 Tribal Cultural Resources

Assembly Bill (AB) 52 requires a lead agency to begin consultation with a California Native American Tribe that is traditionally and culturally affiliated with the geographic area of the proposed project, if the Tribe requested to the lead agency, in writing, to be informed by the lead agency of proposed projects in that geographic area and the Tribe requests

consultation, prior to determining whether a Negative Declaration, Mitigated Negative Declaration, or EIR is required for a project.

4.4.2 Identification of Paleontological Resources

The proposed project sits primarily at the eastern end of Los Angeles County in Pomona and at the southwestern end of San Bernardino County in Montclair, Ontario, Rancho Cucamonga, and Fontana. The proposed project site is generally located along Holt Boulevard/ Avenue and Foothill Boulevard. The proposed project is located within an urban setting with primarily residential and commercial development.

There are no documented paleontological localities within the boundaries of the proposed project site, and the younger Quaternary deposits mapped at the surface have low sensitivity for paleontological resources; however, the underlying older Quaternary (Pleistocene) sediments have high potential for producing significant paleontological resources. Therefore, project activities may potentially result in significant impacts to paleontological resources if these paleontologically sensitive sediments are encountered during excavation.

4.4.3 Identification of Historic Properties

Area of Potential Effects

The APE map was prepared in accordance with Section 106 of the NHPA (36 CFR § 800.4(a)(1)) and in consultation with the SHPO. FTA received concurrence from SHPO in its adequacy on November 17, 2017. Modifications were made to the APE to incorporate three alternative locations for a proposed O&M facility, with concurrence received from the SHPO on March 29, 2018.

The project APE includes two study delineations: an Architectural, or built environment APE, and an Archaeological APE. The Architectural APE is the larger of the two and encompasses all areas where potential direct and indirect effects may occur (it also encompasses the Archaeological APE). The Archaeological APE is defined as the area of direct impacts that could occur as a result of project construction and includes existing and proposed ROW for the side- and center-running stations, temporary construction easements (TCEs), proposed staging areas, and parcels proposed for full or partial acquisition for the build alternatives, and the proposed O&M facility. The Architectural APE delineation includes the archaeological APE, plus properties that may be subject to indirect impacts (i.e., impacts from noise, vibration, or changes to setting). Potential indirect impact areas are established as the legal parcel adjacent to where potential direct impacts would occur. If any part of a parcel would be temporarily or permanently impacted, then the whole parcel was included as part of the Architectural APE footprint.

From west to east, the alignment of both the Architectural and Archaeological APE

begins on the north side of the Pomona Transit Center, and travels north on Main Street, east on Monterey Avenue, north on Garey Avenue, and east along Holt Boulevard through the cities of Pomona, Montclair, and Ontario. Upon reaching Ontario International Airport, the Architectural APE travels north on Archibald Avenue, east on G Street, continues on Inland Empire Boulevard, and north on Haven Avenue through the City of Rancho Cucamonga. Both APEs include the parallel alignment of Milliken Avenue as part of the proposed Milliken Alignment. Upon reaching Foothill Boulevard in Rancho Cucamonga, the APE alignments travel east through Victoria Gardens (Church Street and Day Creek Boulevard) and continue eastbound until Sierra Avenue, where the alignment travels south through the city of Fontana before reaching a circular loop that travels west on Valley Boulevard, north on Juniper Avenue, and east on Marygold Avenue until reaching Sierra Avenue.

As mentioned previously, the Architectural APE is larger than that used for Archaeology and encompasses the ROW and parcels along proposed side- and center-running stations of the above-mentioned alignment. A conceptual design has been developed for the proposed 3.5 miles of dedicated BRT lanes along Holt Boulevard between Benson Avenue and Vine Avenue, and between Euclid Avenue and Vineyard Avenue, in Ontario. The dedicated lanes segment would require road widening to accommodate the five center-running stations and dedicated bus-only lanes, which would involve excavation and trenching.

Approximately 1 mile south from the proposed BRT corridor alignment on East Holt Boulevard, Ontario, where South Bon View Avenue intersects, the APE incorporates an area where construction of a new facility for bus operation and service maintenance is proposed. The same cultural resources survey approaches were taken for establishment of the APE for the O&M facility, defined as the geographical area where direct impacts could occur as a result of project construction on one of three sites of between 4.8 and 6.6 acres for the purposes of considering archaeological resources, and a larger area incorporating one property beyond the parcel site on which the O&M facility would be constructed to account for potential indirect impacts to architectural history resources from construction and operation of the new facility.

In terms of the vertical APE, only minor construction would be required to add or modify side-running stations along the proposed route, with a 2.5-foot maximum excavation depth mainly involving the disturbance of existing sidewalk and roadway features to construct the shelters, electrical and communication equipment units, and bus pads, and a 4-foot maximum excavation depth to install the pylon pole for the pole stations. The APE map delineates where each of these different station types are located, and the architectural APE has been expanded around each. The Holt

Boulevard widening is 3.5 miles in length and involves construction within the existing pavement, sidewalk, gutter, and developed parcels to accommodate the center-running stations and BRT dedicated lanes. As the topography is consistently flat throughout this segment of the proposed project, excavation would be shallow (less than 2.5 feet), with some exceptions, as noted below. The road widening segment along Holt Boulevard would involve trenching in the areas near the five proposed center-running stations to accommodate utility relocations and installing conduits for new electrical/ communication services. The maximum excavation depth for wet and dry utility relocation would be 6 feet. The maximum excavation depth for relocation of storm drain laterals that feed into the main line would be 15 feet. In all, extensive ground disturbance is not anticipated as part of the proposed project construction. No extensive backfill or grading is expected given the relatively flat elevation of the proposed project alignments.

With respect to the vertical APE for the proposed O&M facility in Ontario, the maximum depth of ground disturbance is estimated to be 12 feet below current ground surface for maintenance shop and administrative building construction. The 12-foot excavation depth is based on the potential need for an elevator bank and/or maintenance trench. The building foundation is anticipated to be above the 12-foot depth. The utilities needed for the project will typically be built within a 2- to 3-foot depth. These requirements are the same for each of the three sites being considered for placement of the O&M facility.

Records Search

Information on existing archaeological and architectural history resources within the study area was gathered through a series of cultural resources literature and records searches conducted at the South Central Coastal Information Center (SCCIC) at California State University Fullerton by Parsons and Paleo Solutions cultural resources professionals. SCCIC is a branch of the California Historical Resources Information System, which maintains the State of California's official information and database of previously recorded cultural resources studies and recorded archaeological sites. SCCIC maintains the records for Los Angeles and San Bernardino counties. The record searches were conducted at the SCCIC on April 16 and 17, May 7, and September 12, 2016, with supplemental records searches conducted on October 12, 2017, and February 21, 2018. The records searches included a check of the NRHP, CRHR, California Historical Landmarks, California Points of Historical Interest (CPHI), and the California Office of Historic Preservation Historic Property Data File. The records searches covered a 0.25-mile radius around the APE boundary for architectural resources.

Two archaeological resources were previously recorded within the proposed project APE. One was a residential site (P-36-007144) that no longer exists, and the other is the NRHP-listed National Old

Trails Road/Route 66 (P-36-002910) (now Foothill Boulevard in Fontana). There are an additional four resources that are archaeological in nature that were recorded within 0.25 mile of the APE, all of which were historic-age (i.e., 50 years old or older) resources. No prehistoric resources were recorded within 0.25 mile of the APE.

Of the 91 cultural resources identified through the records searches, 70 are situated outside of, but within 0.25 mile of the APE, 9 of which have been previously listed in or have been determined eligible for the NRHP: (P-19-180713, Edison Historic District; P-36-015979, Euclid Avenue Railroad Grade Separation properties; P-36-0111281, Cucamonga Pioneer Winery District; P-36-016223, Frankish Building; P-36-016233, Dr. Orville S. Ensign House; P-36-016226, Ontario State Bank Block; The Pomona Fox Theater; Pomona YMCA Building; and Bono's Restaurant and Deli).

Of those 21 cultural resources identified in the records searches to be situated within the APE, 5 have been previously listed in, or have been determined eligible for the NRHP: (P-19-189200, Southern Pacific Railroad Depot; Lincoln Park Historic District; P-36-015982, Euclid Avenue/SR 83; P-36-002910, National Old Trails Road/Route 66; and P-36-015397, Malaga Underpass Bridge).

Field Surveys

Archaeological Resources

Methodology

An intensive pedestrian survey of all open accessible areas of the archaeological APE was conducted on July 26, 27, and 28, 2016; September 15, 2016; October 13, 2017; and February 28, 2018.

Existing disturbances (e.g., rodent burrows, ditches) were examined for artifacts or buried cultural deposits. Paved areas were not surveyed because there was no ground visibility. All open ground areas, including unpaved shoulders, vacant lots, trails, and paths, were intensively surveyed using parallel 10-meter transects. If access to a lot could not be obtained, then a visual survey of the area was conducted. A windshield survey was conducted for the remaining portions of the APE for which there was no ground visibility and/or was considered entirely built environment.

Results

The pedestrian field surveys conducted between July 2016 and February 2018 resulted in the recordation of 11 newly identified archaeological resources in the APE. All are historic-age sites with limited surface manifestations of building foundation pads and remnants of parking lots. None of these 11 new archaeological sites are eligible for the NRHP under Section 106 of the NHPA or the CRHR for the purposes of CEQA. In addition, 2 previously recorded resources were identified within the project's archaeological APE: (P-36-007144),

which is no longer extant and has been evaluated as not eligible for inclusion in the NRHP or CRHR; and (P-36-002910), the National Old Trails Road/Route 66, which is listed on the NRHP and is eligible for the CRHR.

Architectural Resources

Methodology

In addition to undertaking the records search at SCCIC as discussed above, prior to conducting field reviews, Parsons cultural resources staff conducted background research into secondary literature to gain a general understanding of the history of the cities of Pomona, Ontario, Montclair, Rancho Cucamonga, and Fontana, and Los Angeles and San Bernardino counties. The background research focused on various themes, including settlement, town development, transportation, and local industries to provide a context for specific properties in the survey area. Property-specific research was undertaken at the Ontario Public Library, San Bernardino County Public Library, Pasadena Public Library, San Bernardino County Assessor-Recorder-County Clerk's Office, and Los Angeles County Registrar-Recorder/ County Clerk's Office. Parsons also searched the following online repositories: USGS Topographic Maps, Sanborn Fire Insurance Maps, and California Digital Newspaper Collection.

An intensive survey of the architectural APE was conducted on May 5 and 6, September 7 and 15, and November 7, 2016, October 13, 2017, February 28 and March 6, 2018. These surveys, conducted by Monica Corpuz and Jill Vesci of Parsons and Michael Kay and Kristin Lindgren of Paleo Solutions, included formal recordation of properties built in or prior to 1968, with photographs taken of the built environment. NRHP evaluations were prepared using California Department of State Parks and Recreation (DPR) 523 Primary Record and Building, Structure, Object forms, and were either prepared by, or reviewed by, Greg King, Parsons Senior Architectural Historian. The previously unevaluated properties were also analyzed in conformity with Section 15064.5(a) (2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California PRC. In addition, 12 built-environment properties in the APE (all commercial), constructed in the five years between 1969-1973, were investigated in the field and for which research was conducted; none appear to be eligible for the NRHP and are identified in a table in the HPSR and HRER.

Results

Of the 496 parcels located within the APE, 163 contained buildings, groups of buildings, or structures that were constructed in or before 1968, including Holt Avenue/Boulevard, which were formally evaluated. Of these, four were found to be eligible for inclusion in the NRHP: 1206 W. Holt Boulevard, Ontario (Vince's Spaghetti); 961 W. Holt Boulevard, Ontario (A.C. Moorhead House); 541 E. Holt Boulevard, Ontario (Jacob Lerch House); and 724 W. Holt Boulevard, Ontario (The Grinder Haven).

In addition to these four properties found eligible as a result of the survey, the project team conducted a field visit to the 5 previously NRHP-listed or eligible properties in the APE and confirmed each continues to possess sufficient integrity to meet the established National Register criteria as historic properties.

Below are short summaries of the nine NRHP-listed or eligible properties located within the APE.

Southern Pacific Railroad Depot (P-19-189200)

Located at 100 W. Commercial Street in the City of Pomona, the Southern Pacific Railroad Depot in 2004 was determined eligible for the NRHP under Criteria A and C at the State level of significance. Built in 1940, and in a design reflecting a Mission Revival architectural style, the station still serves as a rail station and provides an example of the importance of rail lines in the western United States as a means of transporting people and goods.

Lincoln Park Historic District

This historic district was listed in the NRHP in 2003 and is located in Pomona and is bound roughly by McKinley Avenue, Towne Avenue, Pasadena Street, and Garey Avenue. The main contributors to the district are late nineteenth and 20th century American architectural styles, primarily from the 1880s to 1945. Prominent designs include residences reflecting the Queen Anne, Shingle, Craftsman Bungalow, Spanish Colonial Revival, Tudor Revival, Mission Revival, and Minimal Tradition architectural styles, among others.

1206 W. Holt Boulevard, Vince's Spaghetti

Vince's Spaghetti, at 1206 W. Holt Boulevard, Ontario, has been determined eligible for listing in the NRHP under Criteria A and C. It is a property associated with the important theme of roadside-serving uses along a stretch of former U.S. Highway 99 and has had a continuous presence and been under the same family ownership at this location since 1945. The building at 1206 W. Holt Boulevard reflects the significant architectural characteristics of a type and period; therefore, it also appears eligible under Criterion C. It is a good example of Mid-Century modern commercial architecture, largely pioneered in southern California, with its character-defining irregular shape, flat roof with overhanging canopy, steel I beam supports, and the mixed use of building materials. In addition, the building's low one-story entry and the fenestration pattern and dominance of large windows, together unite the façade and combine to emphasize the horizontality of the building which, when paired with its prominent original 1950s era roadside neon sign, are all a hallmark of the Mid-Century Modern design aesthetic. The property retains integrity of location, design, setting, materials, feeling, and association.

961 W. Holt Boulevard, A.C. Moorhead House

The A.C. Moorhead House at 961 W. Holt Boulevard has been determined eligible for the NRHP under Criteria A and C, at the local level of significance, for the period 1893-1939, which reflects its date of construction in 1893, when it was built as a residence of an orange orchardist, into the period it began serving, in 1939, as the Orange Grove Inn/Southern House, a once popular roadside stop and local landmark attracting motorists traveling along what was then the state highway and U.S. Highway 99. In terms of its architecture, the property is an excellent example of the Queen Anne style. Under Criterion C, the building embodies many of the character-defining features of the style, including a conical tower, steep pitched gable roof, shingles for exterior walls, a large recessed porch, spindle work friezes, and decorative brackets. The A.C. Moorhead House retains much of its original integrity from its period of significance, notwithstanding alterations made to the building when it was converted to commercial office purposes, and to the landscaping and yard areas. The property's integrity of location, design, materials, and workmanship remain largely intact despite the modifications;

the original setting, feeling, and association have been slightly compromised over time.

724 W. Holt Boulevard, The Grinder Haven

The commercial building located at 724 W. Holt Boulevard in Ontario has been determined eligible for listing in the NRHP under Criterion C at the local level of significance for its architectural character reflecting a type and period. The period of significance is 1958, its year of construction. The building possesses the significant characteristics of an example of Mid-Century Modern roadside architecture. D'Elia's Grinder Haven was constructed as a drive-in restaurant, a grinder being an old-fashioned name for an Italian submarine sandwich. The building appears to be a good example of the "Googie" type, named after a popular 1950s era southern California coffee shop that employed expressive shapes and materials as character-defining design elements. The Grinder Haven has signature triple A-structural steel beams projecting through the roofline and an original neon sign located near the front edge of the parcel, the sign featuring a swooping arrow. The Grinder Haven, in its intent to attract the passing motorist's attention, has two primary characteristic features reflecting the Googie style: it uses atypical geometric shapes to stand out among other nearby buildings to garner a driver's attention and it uses colorful neon signage. The property retains integrity of location, design, setting, materials, feeling, and association.

Euclid Avenue/State Route 83 (P-36-015982)

Euclid Avenue/SR-83 in Upland and Ontario was formally determined eligible for listing in the NRHP by the Keeper of the Register (Keeper) in 1977, was formally nominated for listing in the NRHP in 1979 and was listed in the NRHP in 2005 under Criteria A and C. Contributing features of the historic property include the landscape, the road itself, two fountains, and a statue. A bandstand and two reconstructed features were identified as noncontributing features. Euclid Avenue/SR-83 has also been designated a local historic district by the City of Ontario. The boundary of this district is I-10 to the north and G Street to the south. All properties that front this section of

Euclid Avenue were included in the locally designated historic district. The contributing features of the locally designated historic district also include the median and street trees, consisting of silk oak and coast live oak trees. Other contributing features include the scored sidewalks, stone and concrete curbs, King Standard lampposts, and front yard setbacks and open space in the residential areas of the district.

541 E. Holt Boulevard, Jacob Lerch House

The Jacob Lerch House located at 541 E. Holt Boulevard in Ontario has been determined eligible for listing in the NRHP under Criterion C at the local level of significance as a distinctive example of the Shingle style of architecture. Built in 1901, its period of significance, the two-story building is a distinctive example of the style, with character-defining features such as the uniform covering of wood shingle siding, including an enclosed wraparound porch, steeply pitched and multi-planed gable roofs, louvered vents, and small casement and sash windows grouped into twos. The Jacob Lerch House retains a good degree of integrity. The location, setting, materials, association, and workmanship remain. The building retains most of its early 20th century scale, massing, and historic feeling to its original use, though it has had alterations. Period landscaping is considered a contributing element of the property.

National Old Trails Road/ Historic Route 66 (P-36-002910; CA-SBR-2910H)

This is an NRHP property that is a historic road corridor composed of two roads, largely overlapping: the National Old Trails Road that originally ran between Baltimore, Maryland, and San Diego, California, and U.S. Highway 66, known colloquially as Route 66, which originally ran from Chicago, Illinois, to Santa Monica, California. Built and designated in 1926, the road was part of the first nationally designated highway system. The route is significant under Criteria A and C as a representative example of important state and local trends in 20th century transportation development and highway design and construction. The road segment is part of a 300-mile-long

linear resource in California with many associated properties considered as contributors. These may include the physical features of the road (e.g., bridges, culverts and guard rails) and other road-related structures. Property contributors also include associated resources purposely located along the highway during its period of significance, such as gasoline service stations, mechanics garages, motels, restaurants, and original signage.

Malaga Underpass Bridge (P-36-015397)

This bridge was constructed on a 30-degree skew alignment across Route 66/Foothill Boulevard, immediately adjacent to Fontana in 1931 to accommodate trains passing through the area. The bridge was found eligible for listing in the NRHP under Criterion A by Caltrans due to its importance as a railroad grade separation and its association with historic Route 66. The bridge retains integrity of location and design.

4.4.4 Consultation and Outreach

Native American Consultation and Outreach

Three searches of the Sacred Lands File, conducted by the Native American Heritage Commission (NAHC) in March 2016, October 2017, and February 2018, indicated they had no record of Native American cultural resources or sacred lands in the APE. In March 2016, the NAHC identified 11 individuals or contacts representing 10 Native American groups to be contacted about the project. In October 2017, that list had been expanded to 25 individuals or contacts representing 19 Native American groups, and the NAHC provided the same list when contacted again in February 2018. Tribes subsequently identified cultural resources and sacred lands to be in the project area, which led to a request for further consultation. In compliance with Assembly Bill (AB) 52, on May 13, 2016, Parsons sent a notification letter regarding the proposed project on behalf of Omnitrans (former CEQA Lead Agency for the WVC Project) to the 11 original Native American contacts identified by the NAHC in March 2016.

Following the proposed project modifications to divide the proposed corridor alignment in two phases in late 2017 and to incorporate the potential O&M Facility sites into the WVC Project environmental document in early 2018, the NAHC was contacted to request a SLF search for additional project footprints in October 2017 and February 2018, respectively. To continue the AB 52

outreach effort, on April 11, 2018, SBCTA (current CEQA lead agency) sent a notification letter regarding the proposed project to all 14 new contacts representing 9 new Native American groups provided by the NAHC in October 2017 and February 2018. On April 25, 2018, SBCTA also sent follow-up letters to the nine original Native American groups who had been contacted in 2016 but had not responded to that contact. The follow-up letters provided an update on the project and a new invitation to consult under AB 52.

FTA has also initiated Native American and Tribal consultation under Section 106 of the NHPA and its implementing regulations, 36 CFR § 800.2 (c)(4) and 36 CFR § 800.2 (c)(5). On August 10, 2016, FTA sent an invitation letter to all original 11 Native American contacts identified by the NAHC in March 2016.

FTA also sent follow-up letters to the 9 original Native American groups who had been contacted in 2016 but had not responded to that contact. The follow-up letters provided an update on the project and a new invitation to consult under Section 106 of the NHPA. In addition, FTA also sent an invitation letter to the 14 new contacts representing 9 new Native American groups identified by the NAHC in February 2018. The Tribes were invited to consult on the project under Section 106 of the NHPA.

SHPO Consultation

Coordination and consultation with the SHPO on the APE mapping was initiated by FTA on December 22, 2016, with SHPO concurring in the adequacy of the APE on November 14, 2017. Further consultation with the SHPO on a revision to the APE to incorporate potential O&M facility sites in Ontario occurred on March 5, 2018, with concurrence received on March 29, 2018. The HPSR, the technical document used for purposes of identifying historic properties, was submitted to SHPO on May 15, 2018. SHPO responded with a letter to FTA on June 14, 2018 stating they could not concur with the determinations of eligibility because the identification efforts were not yet complete regarding 11 lot sites in the APE. In addition, the SHPO requested clarification regarding the depth of artificial fill in the WVC Project APE and the extent of previous ground disturbance. FTA provided additional information to the SHPO in a letter response and submitted additional information on the 11 lots in a revised ASR, on July 19, 2018. A letter from SHPO with subsequent concurrence on the identification efforts was received on August 7, 2018. Further consultation with SHPO on the effects determination are ongoing. Coordination and consultation with the SHPO, and potentially other interested parties under Section 106, will continue throughout the environmental phase of the proposed project. For the final environmental document, the SHPO concurrence letters will be included as an appendix.

Local Historic Group/Local Government Consultation

In compliance with Section 106 (36 CFR § 800.4(3)), letters were sent out on May 13, 2016, to eight historical associations, municipalities, and other potentially interested parties that are likely to have knowledge of or concerns with historic properties in the area.

The letters briefly described the proposed project and requested information about cultural resources near the proposed project area. Only Ontario Heritage responded, in which they asked that their mailing address be updated. They provided no comments on the proposed project.

On April 27, 2018, letters were sent to these same organizations informing them of changes in the proposed project, including the revised APE due to the addition of the O&M facility, and inviting them to express any concerns, comments or a desire for further consultation under Section 106. An e-mail response was received from Petrina Delman, President, Ontario Heritage, on June 5, 2018, expressing that the organization had no objections to the project. No additional responses have been received to date. Copies of letters sent to interested parties are provided in Appendix D of the HPSR.

4.4.5 Impacts

No Build Alternative

Paleontological Resources

The No Build Alternative would not result in any ground disturbance; therefore, it would not result in any impacts on paleontological resources.

Archaeological Resources

The No Build Alternative would not result in any ground disturbance; therefore, it would not result in any impacts on archaeological resources.

Historic Architectural Resources

No project improvements are proposed under the No Build Alternative; therefore, no project impacts are expected from the No Build Alternative.

Build Alternatives

Alternative A

Paleontological Resources

BRT Corridor

Alternative A would have the potential to result in significant impacts on paleontological resources. Impacts to sediments with the potential to contain paleontological resources are anticipated to be limited to excavations that exceed 5 feet in depth, including excavations for utility relocations (6-foot depth), an elevator shaft and/or maintenance trench (12-foot depth) at the O&M facility site, and storm drains (15-foot depth). The remaining excavations for roadway widening, bus shelters, bus pads, and pylon installation are expected to be

shallow (2.5- to 4-foot depth) and are anticipated to be entirely within low-sensitivity younger Quaternary deposits. The potential impacts on paleontological resources associated with excavations at the greater depths noted above can be reduced to a less than significant level with incorporation of Mitigation Measure CI-CR-6. During the operational phase of the proposed project, no impacts to paleontological resources are expected by Alternative A.

O&M Facility

An O&M facility would be constructed under Alternative A near the project corridor to service the new BRT fleet. Although no site has yet been selected, three sites in Ontario are being considered. No impacts to paleontological impacts are anticipated.

Archaeological Resources

BRT Corridor

Two previously recorded archaeological resources are located in the APE. One of these resources (P-36-00144) is no longer extant and has been evaluated as not eligible for inclusion in the NRHP or CRHR. Therefore, there would be no effect to this resource from the proposed project, and no mitigation measures are needed for it.

The other previously recorded resource, National Old Trails Road/Route 66 (P-36-002910), is listed on the NRHP and is eligible for the CRHR. No original materials associated with the historic road remain within the proposed project APE. Although the proposed project would involve construction along the original alignment of Route 66, there would be no direct effect to any historic built component of this resource. Because the proposed transit-improvement project is consistent with the current setting and use of the historic roadway, there would be no indirect effect to this Historic Property from the proposed project. No mitigation measures are required for this resource.

Four additional historic-age archaeological resources have been recorded within 0.25 mile of the APE, but which are outside of the APE. These four resources will not be subject to impacts from the proposed project.

As part of the pedestrian survey completed for the West Valley Connector ASR (June 2018), 11 new historic archaeological sites were identified and recorded during the surveys. These were primarily vacant lots with remnants of asphalt or concrete from former use as parking lots or the sites of residences or businesses that are no longer extant. Detailed information regarding these 11 new cultural resources is provided in Appendix A of the ASR. All 11 newly identified sites have been evaluated as not eligible for inclusion in the NRHP or CRHR. Because these 11 resources are not Historic Properties under Section 106 of the NHPA and are not Historical Resources under CEQA, there would be no effect on them from the proposed project, and no mitigation measures are needed for these 11 resources. Given the nature of these sites and the level of disturbance within the APE, the potential

for discovering other significant, intact subsurface historic archaeological deposits is considered low.

Intensive pedestrian surveys did not identify any previously unrecorded prehistoric archaeological resources. The results of the literature search, pedestrian surveys, geological landform considerations, and expected depths of disturbance, combined with the disturbed nature of the proposed project footprint, suggest that most of the proposed project footprint has low sensitivity for prehistoric archaeological resources. However, if resources are encountered during project construction activities, a potential exists to damage or destroy previously unidentified and potentially significant archaeological resources within the project area. Disturbance of any archaeological deposits that have the potential to yield information data important to prehistory or history would be considered a significant impact. Implementation of Mitigation Measure CI-CR-2 would avoid or minimize potential impacts.

Human remains have not been previously discovered in the APE. However, project construction would involve ground-disturbing activities, and it is possible that human remains may be discovered, possibly in association with archaeological sites. Compliance with regulatory requirements and implementation of Mitigation Measure CI-CR-3 would avoid or minimize potential impacts on any human remains that are found during ground-disturbing activities.

During the operational phase of the proposed project, no impacts to archaeological resources are expected by Alternative A.

O&M Facility

Three potential sites in the City of Ontario are being considered for construction of the O&M facility, all of which are located within the industrial zoned area and owned by the City of Ontario. All three sites have been heavily disturbed with previous construction and uses. A search of records, the Sacred Lands Files, and a pedestrian survey did not identify any archaeological or cultural resources located in or within 0.25 mile of the three facility sites. No impacts to archaeological resources are anticipated as a result of the O&M facility construction.

Historic Architectural Resources

BRT Corridor

Under Alternative A, there would be effects on two built-environment NRHP eligible or listed historic properties in the APE: the Southern Pacific Railroad Depot and the National Old Trails Road/Route 66. It does not appear that the proposed activities would diminish the integrity of setting, design, materials, or workmanship in a manner that the properties would no longer qualify for the NRHP. The effects finding for the project under 36 CFR 800.5 will be determined in consultation with the California SHPO and potentially other Interested Parties under Section 106. Effects on these historic properties are summarized as follows:

Southern Pacific Railroad Depot

Alternative A would involve modifying and acquiring an area of approximately 4,356 square feet of the Southern Pacific Railroad Depot parcel in Pomona, which consists of a portion of a lawn, sidewalk, a small sliver of the parking lot that is used for motorcycles, and approximately four trees, to accommodate a BRT station platform, a new bus pad, and sidewalks with ramps. The temporary construction area footprint would be approximately 7,841 square feet.

The alterations would not materially impair the station building (i.e., demolish or substantially alter its physical characteristics). The building would continue to convey its historic and architectural significance without any impacts to its integrity, with respect to its setting, location, design, materials, feeling, association or workmanship, materials, workmanship, feeling, or association. A TCE would be required. Access to the Southern Pacific Railroad Depot would be maintained at all times during project construction. Visual impacts during construction would be typical of roadway construction projects, including construction fencing, construction equipment, material stockpiles, and vegetation removal, which would collectively temporarily disturb the Southern Pacific Railroad Depot's existing landscape aesthetic.

The project would not damage or destroy any character-defining materials or features associated with the historic property, or substantially alter or destroy any primary views of the historic property.

National Old Trails Road/ Historic Route 66

The affected area of the historic property consists of using a temporary construction area footprint of approximately 9,239 square feet, including small pavement areas of Route 66 to construct bus pads at 14 proposed side-running stations along Foothill Boulevard between Haven Avenue and Sierra Avenue. The 14 proposed side-running stations on Route 66 are located at the following 8 intersections:

- Haven Avenue/Foothill Boulevard (1 side-running)
- Foothill Boulevard/Spruce Avenue (2 side-running)
- Foothill Boulevard/Mayten Avenue (2 side-running)
- Foothill Boulevard/Day Creek Boulevard (2 side-running)
- Foothill Boulevard/Mulberry Avenue (2 side-running)
- Foothill Boulevard/Cherry Avenue (2 side-running)
- Foothill Boulevard/Citrus Avenue (2 side-running)
- Foothill Boulevard/Sierra Avenue (1 side-running)

The size of a typical bus pad totals approximately 660 square feet. The excavation depth to install a bus pad is approximately 2.5 feet depending on the existing pavement conditions. This minor work on a large linear historic property would not change the overall character-

defining features or integrity of historic Route 66. Project features would not damage or destroy any character-defining materials or features associated with the historic property or substantially alter or destroy any primary views of the historic property.

During the operational phase of the proposed project, no impacts to historic architectural resources are expected by Alternative A.

O&M Facility

A records search and architectural survey did not identify any historic properties near any of the three potential sites. No impacts to historic architectural resources are anticipated.

Alternative B

Paleontological Resources

Alternative B would have the same impacts on paleontological resources as described for Alternative A for both the BRT corridor and O&M facility.

Archaeological Resources

Alternative B would have the same impacts as described for Alternative A for both the BRT corridor and O&M facility.

Historic Architectural Resources

BRT Corridor

Under Alternative B, there would be effects on six built-environment NRHP eligible or listed historic properties in the APE: Southern Pacific Railroad Depot; Vince's Spaghetti; A.C Moorhead House; Grinder Haven; Jacob Lerch House; and the National Old Trails Road/Route 66. It does not appear that the proposed activities would diminish the integrity of setting, location, design, materials, feeling, association, or workmanship in a manner that the properties would no longer qualify for the NRHP. The effects finding for the project under 36 CFR 800.5 will be determined in consultation with the California SHPO and potentially other Interested Parties under Section 106. Effects on these historic properties are summarized below. Mitigation Measures CI-CR-4 and CI-CR-5 are proposed to minimize impacts to the NRHP-eligible or listed properties.

Southern Pacific Railroad Depot

Alternative B would have the same impacts as described under Alternative A.

National Old Trails Road/
Historic Route 66

Alternative B would have the same impacts as described under Alternative A.

Vince's Spaghetti

Alternative B would involve constructing in a footprint area of approximately 2,222 square feet on two adjoining parcels on which Vince's Spaghetti sits to reconstruct two driveways and the sidewalks fronting Holt Boulevard and a small sliver portion of the parking lot. This minor work is not expected to have an adverse effect on the historic property as it does not alter any of the character-defining features of the property, including the historic neon pole sign. A TCE would be required. Access to the restaurant would be maintained at all times during project implementation. No

permanent impacts to parking spaces within the two lots are anticipated.

Visual impacts during construction would be temporary and typical of roadway construction projects, including construction fencing, construction equipment, and material stockpiles, which would collectively and temporarily disturb a small portion of the parking lot area.

According to the *Noise and Vibration Technical Study* (Parsons, 2018g), no BRT operational noise or vibration impacts are anticipated. During construction, the project would generate noise and vibration impacts that are typical from construction activities and from using construction equipment and vehicles. It is anticipated that ground-borne vibration from construction activities could exceed the building damage criteria under Alternative B. Mitigation Measure CI-NC-2 (in Section 5.3.10 of Chapter 5, Construction Period Impacts) addresses vibration impacts to the NRHP-eligible or listed properties, with the exception of the National Old Trails Road/Route 66.

A.C. Moorhead House

Alternative B would require acquisition of a 274-square-foot strip of the A.C. Moorhead House parcel and would use a construction footprint area of approximately 1,363 square feet, which consists of a portion of two driveways, the front lawn, and landscaping, which is not itself considered historic, to reconstruct the sidewalk on Holt Boulevard and to reconstruct the two driveways. The current lot size of the historic property is 0.5539 acre; the new lot size would become 0.5476 acre after the work is completed. A TCE would be required. Project features would not be in close proximity to the historic building, and they would not damage or destroy any character-defining materials or features associated with the historic property or substantially alter or destroy any primary views of the historic property.

Access to the A.C. Moorhead House would be maintained at all times during project construction. The work is not expected to have an adverse effect on any character-defining features of the A.C. Moorhead House. Alternative B would not materially impair the building (i.e., demolish or substantially alter the physical characteristics), as the property is eligible for the NRHP for its architectural significance. The building would continue to convey its significance without any substantive impairment to the property's overall integrity with respect to its location, design, setting, materials, workmanship, feeling, or association.

The Grinder Haven

Alternative B would require acquisition of a 1,747-square-foot strip from The Grinder Haven parcel and would also require a temporary construction area footprint of approximately 1,721 square feet.

The project area consists of a portion of the driveway and surface parking lot area, which is not currently used for parking, to accommodate a new sidewalk and driveway reconstruction adjacent to Holt Boulevard. The Grinder Haven, a building

that is set back more than 75 feet from the proposed construction work, would not be affected. The current lot size of the drive-in restaurant is 0.5165 acre; the new lot size would be 0.4764 acre after work is completed. A TCE would be required. Access to The Grinder Haven would be maintained at all times during project construction. No impacts to parking spaces within the lot are anticipated. The historic neon pole sign may need to be relocated as a result of the driveway improvements, but it would be re-established in close proximity and with the same street orientation as present. The property would continue to convey its significance without any substantive impacts to the property's overall integrity with respect to its location, design, setting, materials, workmanship, feeling, or association

Jacob Lerch House

Alternative B would require acquisition of approximately 35 square feet of the Jacob Lerch House parcel and require a temporary construction area footprint of approximately 353 square feet. This area consists of a portion of the front lawn to accommodate a curb return located northeast of the intersection of Holt Boulevard/Pleasant Avenue. The original lot size of the Jacob Lerch House is 0.1652 acre, and the new lot size would be 0.1644 acre. This minor proposed direct use would not adversely affect any activities or historic features or attributes of the Jacob Lerch House. Alternative B would not materially impair the building (i.e., demolish or substantially alter the physical characteristics). The building would continue to convey its significance without any substantive impacts to the property's overall integrity, with respect to its location, design, setting, materials, workmanship, feeling, or association.

Historical Resources under CEQA

Alternative B would also require acquisition of 11 partial and 7 full properties that have been determined to not meet the NRHP eligibility significance criteria and/or lack sufficient integrity as described in Section 4.4.1, but have been locally designated by the City of Ontario as historically significant; therefore, they are considered historical resources under CEQA.

Locally designated historically significant properties subject to partial acquisition:

- 545 E. Holt Boulevard (residential building)
- 635 W. Holt Boulevard (residential building)
- 741 E. Holt Boulevard (former residential building, current commercial building)
- 748 E. Holt Boulevard (residential building)
- 745 E. Holt Boulevard (residential building)
- 745 W. Holt Boulevard (former residential building, current commercial building)
- 765 E. Holt Boulevard (residential building)
- 1101 E. Holt Boulevard (former warehouse building, current religious institution)
- 1300 E. Holt Boulevard (commercial building)

- 1670 E. Holt Boulevard (residential/mixed-use commercial building)
- 1744 E. Holt Boulevard (commercial building)

Locally designated historically significant properties subject to full acquisition:

- 204 E. Holt Boulevard (commercial building)
- 212-214 E. Holt Boulevard (warehouse and residential building)
- 220-222 E. Holt Boulevard (commercial building)
- 444 E. Holt Boulevard (commercial building)
- 616 E. Holt Boulevard (residential and commercial building)
- 639 E. Holt Boulevard (commercial building)
- 754 E. Holt Boulevard (commercial building)

The City of Ontario's historic preservation policies to avoid demolition of historic structures are broken down into a three-tier system, with the most important building categorized as Tier 1, and less consideration given to Tier II and Tier III properties, though these are all still considered locally historical resources. None of the properties subject to full acquisition listed above are believed to fall into the Tier I category.

The demolition of locally significant properties cannot be mitigated to the level of less than significant under CEQA. However, CEQA requires that all feasible mitigation be undertaken even if it does not mitigate below a level of significance. Mitigation Measure CI-CR-7 has been developed to mitigate the impacts if the properties cannot be avoided or relocated.

Because these locally designated historical properties have been found ineligible for the NRHP, they are not considered as adverse impacts under Section 106 or NEPA.

In summary, during the construction phase, Alternative A would result in fewer impacts to historic architectural resources compared to implementation of Alternative B. The extent of these effects on historic properties will be determined in consultation with the California SHPO, and potentially other Interested Parties under Section 106.

During the operational phase of the proposed project, no impacts to historic architectural resources are expected by Alternative B.

O&M Facility

No impacts to historic architectural resources are anticipated, as described under Alternative A.

4.4.6 Avoidance, Minimization, and/or Mitigation Measures

Paleontological Resources

No long-term or operational impacts on paleontological resources have been identified; however, avoidance, minimization, and/or mitigation measures to prevent or minimize impacts during project construction are provided in Section 5.3.4 of Chapter 5 (Construction Period Impacts):

CI-CR-6: Prepare and implement a Paleontological Monitoring Plan (PMP), which will include the following:

- Workers Environmental Awareness Program (WEAP). The WEAP shall be presented to all construction personnel prior to the start of ground-disturbing activities.
- Periodic paleontological spot checks shall be conducted by a qualified paleontologist in any location along the alignment where excavation exceeds depths of 5 feet into the younger Quaternary deposits to check for the presence of older, more paleontologically sensitive geologic units (including older Quaternary alluvium). The specific locations where excavation will exceed the 5-foot threshold will be determined once final construction plans are available and will be included in the PMP. If paleontologically sensitive geologic units are observed during spot checking, full-time monitoring shall be implemented during excavations into the sensitive sediments. The 5-foot depth at which spot checking shall be triggered will initially be implemented, but it shall be modified as needed by the qualified paleontologists, in consultation with SBCTA and FTA, based on the sediment types, depths, and distributions observed during monitoring during the life of the project.
- If unanticipated paleontological resources are discovered during project-related activities, work must be halted within 100 feet of the discovery until it can be evaluated by a qualified paleontologist.

Upon completion of ground-disturbing activities, a Paleontological Monitoring Report (PMR) shall be prepared and submitted to SBCTA, FTA, and the fossil repository.

Archaeological Resources

Because the proposed project is expected to result in no operational effects on archaeological resources, no avoidance, minimization, or mitigation measures are required; however, impacts may occur in the construction phase. Three Native American Tribes, the Gabrieleno Band of Mission Indians – Kizh Nation, the San Manuel Band of Mission Indians and the Soboba Band of Luiseño Indians, have requested Native American monitoring during ground-disturbing construction activities. As a result, the following measures will be implemented:

CI-CR-1: Archaeological and Native American monitoring shall be limited to any project-related, ground-disturbing construction activities (e.g., grading, excavation, drilling) that may affect previously undisturbed sediments anticipated within the Holt Avenue Corridor to be between 3 feet and 5 feet below the existing ground surface where electrical and communication utilities have been placed, and up to 20 feet below ground surface in areas in which the sewer main is located. Project activities involving utility relocation and establishment of storm drain laterals along

Holt Avenue may involve previously undisturbed sentiments as would construction activities associated with the proposed O&M facility in Ontario. Archaeological monitoring, when applicable, shall be conducted by a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for Archaeology. Tribal monitor(s) shall be retained and compensated and are required to be approved by the consulting Tribal Government(s) listed under the NAHC's Tribal Contact list for the area of the project location. That list of individuals, however, would need to be provided to SBCTA for review and final selection. A Cultural Resources Monitoring and Mitigation Plan (CRMMP) shall be finalized prior to the start of ground-disturbing activities outlining the roles and responsibilities of the monitors, describing the protocols and procedures for monitoring, identifying locations or construction activities requiring monitoring, and defining the procedures for the recordation and treatment of new finds. No information regarding the discovery of human remains shall be publicized.

CI-CR-2: If previously unidentified cultural materials are unearthed during construction, work shall be halted within 100 feet of the find and the area clearly delineated as a restricted area by flagging and/or fencing until the resource can be fully documented and evaluated by a qualified archaeologist meeting the Secretary of Interior's *Professional Qualification Standards.* All discoveries shall be treated as significant until a formal evaluation can be made. If the cultural materials are determined to be Native American in origin, additional consultation with the appropriate Tribe(s) will be conducted, and whose representative(s) will be permitted to perform a site visit when the archaeologist makes their assessment on the resource, so as to provide Tribal input. If it is determined by SBCTA's qualified archaeologist that an inadvertently discovered archaeological resource constitutes a historical resource or a unique archaeological resource as defined by CEQA, an appropriate time allotment and sufficient funding to allow for implementation of avoidance measures or other appropriate mitigation shall be available. Avoidance and preservation in place is the preferred manner of mitigation. As identified in CEQA Section 21083.2(b), preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. SBCTA, the lead agency under CEQA, shall determine if avoidance and preservation in place is feasible. If it is determined that data recovery through excavation is the only feasible mitigation available, then a Cultural Resources Treatment Plan that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource will be prepared by a qualified archaeologist in consultation with the appropriate Tribal representatives. The qualified

archaeologist(s) will consult with appropriate Native American Tribal representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond that which is scientifically important, are considered.

CI-CR-3: If human remains are encountered during ground-disturbing activities, work shall be halted within 100 feet of the find, and the area clearly delineated as a restricted area by flagging and/or fencing, or other suitable approaches, and protected by posting a monitor or construction worker to ensure no additional disturbance occurs. If the human remains cannot be fully assessed, documented, and housed on the same day, the area will be secured by posting a guard onsite outside of working hours or by covering the discovery area with muslin cloth and heavy metal plates (if the human remains are found below grade) or with other impervious material, or by making other provisions commonly accepted by professional archaeologists to prevent damage or vandalism to the remains.

The San Bernardino or Los Angeles County Coroner shall be contacted within 24 hours of discovery of human remains in compliance with CEQA Guidelines Section 15064.5(e), California Health and Safety Code Section 7050.5(b), and PRC 5097.98. Work will continue to be diverted while the County Coroner determines whether the remains are Native American. If the remains are determined to be Native American, the County Coroner will contact the NAHC, which will designate a Most Likely Descendant (MLD) to offer guidance on the appropriate and respectful treatment and disposition of the remains per California PRC 5097.98. Human remains and any associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation with the MLD has taken place and a plan of action has been developed.

If an MLD cannot be identified, or the MLD fails to make a recommendation regarding the treatment of the remains within 48 hours after being granted access to the project area to examine the remains, SBCTA, in coordination with FTA, shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance. After the appropriate actions are taken, as outlined above, the excavation work associated with project construction may resume.

Historic Architectural Resources

Because impacts to historic architectural properties would occur under either build alternative, coordination and consultation with the SHPO, and potentially other interested parties under Section 106, will continue to occur throughout the environmental phase of the proposed project to develop and implement appropriate avoidance, minimization, and mitigation measures and strategies. At this time, the effects on historic properties

do not appear to be adverse under 36 CFR 800.5.

CI-CR-4: SBCTA will include an environmentally sensitive buffer in the plans and specifications to alert contractors to avoid character-defining features of each built environment historic property. Should any proposed project activities change in a manner that would be expected to cause an impact to character-defining features of the resource, SBCTA will be responsible for consulting with FTA and SHPO to develop and apply appropriate treatment measures under the Secretary of the Interior's Standards for the Treatment of Historic Properties, as determined by a qualified Architectural Historian (as defined at 36 CFR 61). No project construction work will occur within 50 feet of any of the character-defining features of the specific historic property in question until agreement has been reached among consulting parties under Section 106.

CI-CR-5: Alterations to each of the historic properties will adhere to the Secretary of the Interior's Standards (SOIS) for the Treatment of Historic Properties (36 CFR 68). The Standards provide guidance for making alterations to historic resources, including related landscape features and the building's site and environment. The historic character of each property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a historic property will be avoided. The new work will protect the historic integrity of each historic property and its environment.

BMPs would be incorporated to minimize short-term, temporary noise and vibration impacts to each of the following historic properties, with the exception of the National Old Trails Road/Route 66 (see Mitigation Measure CI-NC-2). These include provisions for vibration monitoring by the contractor and having a plan in place before construction begins for the use of alternative equipment and techniques when established thresholds may be exceeded. In addition to the common measures stated above that will applied to the historic properties, additional property-specific measures to minimize harm to these properties are specified below.

Southern Pacific Railroad Depot (100 W. Commercial Street, Pomona)

The existing sidewalks at the railroad station property will be connected to the new sidewalk area so as to match pre-project conditions. Any disturbed turf grass and landscaping not used by the project will be replaced to match pre-project conditions in consultation with the property owner, the City of Pomona, during and at the completion of construction.

National Old Trails Road/ Historic Route 66 (Rancho Cucamonga; Fontana)

The affected area of the historic linear property consists of small pavement areas

needed to construct bus pads. The removal of historic materials or alteration of features and spaces that characterize a property will be avoided. The new work will protect the historic integrity of the property and its environment.

Vince's Spaghetti (1206 W. Holt Boulevard, Ontario)

A historic neon sign near the edge of the easternmost driveway will be retained. The driveways will be reconstructed to pre-project conditions in consultation with the property owner during and at the completion of construction. The new work will protect the historic integrity of the property and its environment. Temporarily disturbed surface areas would be returned to pre-project conditions once construction is completed; therefore, the visual changes associated with the project are considered minor, and the project would not substantially alter or destroy any primary views of the historic property.

A.C. Moorhead House (961 W. Holt Boulevard, Ontario)

The affected area of the historic property consists of the two driveway areas, the front lawn, and landscaping. The two driveways will be reconstructed, and turf grass and landscaping will be replaced. Original landscaping on the property will be retained. The new work will protect the historic integrity of the property and its environment.

The Grinder Haven (724 W. Holt Boulevard, Ontario)

A historic neon sign near the edge of the property, between the two driveways, will be retained. The new work will protect the historic integrity of the property and its environment. Project features will not damage or destroy character-defining materials or features associated with the historic property, or substantially alter or destroy any primary views of the historic property.

Access to The Grinder Haven would be maintained at all times during project construction. No impacts to parking spaces within the lot are anticipated. The historic neon sign may be relocated as a result of the driveway improvements but would be re-established in close proximity and with the same street orientation as present.

Jacob Lerch House (541 E. Holt Boulevard, Ontario)

The affected area of the historic property consists of a sliver portion, which is currently lawn. Turf grass will be replaced in areas to match pre-project conditions in consultation with the property owner during and at the completion of construction. Original landscaping on the property will be retained. The new work will protect the historic integrity of the property and its environment. Project features will not be close to the historic residential building, and they will not damage or destroy character-defining materials or features associated with the historic property, or substantially alter or

destroy any primary views of the historic property.

Historical Resources Under CEQA

For addressing potential impacts to locally designated historical resources that do not meet NRHP-eligibility criteria, but are considered historical resources under CEQA, SBCTA has developed the following mitigation measure:

CI-CR-7: One or more of the following activities would be implemented to mitigate impacts on the City of Ontario's locally designated historical resources if Alternative B is selected and the historical resources cannot be avoided or relocated: preparing a contextual history of Holt Boulevard, with a focus on its historic resources; preparing photographic documentation of the CRHR-eligible buildings to be demolished; installing plaques in cases where historic buildings are removed; developing short videos consisting of oral interviews of persons associated with the area's history for the City of Ontario to post on their website; and installing historical information kiosks located at sbX bus stops.

4.5 Geology, Soils, and Seismicity

Earthquakes and soil liquefaction are prime considerations in the design of transportation projects. This section discusses site geology, soil conditions, and seismic concerns as they relate to the project design. The analysis conducted for the proposed project included development of seismic design criteria, determination of liquefaction potential, foundation design, pavement structural section design, and soil corrosion evaluation.

Short-term impacts during project construction and proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with geology, soils, and seismicity are discussed in Sections 5.2.5 and 5.3.5, respectively.

The information contained in this section is summarized from the *West Valley Connector Project – Preliminary Geotechnical Report* (EMI, 2016), prepared for this proposed project.

4.5.1 Existing Regional Conditions

The proposed project is located in the Upper Santa Ana River Valley, commonly referred to as the San Bernardino Valley. The Upper Santa Ana River Valley is a broad, relatively flat, gently southerly sloping plain. The major river in the area is the Santa Ana River, which flows westerly from the San Bernardino Mountains along the southern margin of the Upper Santa Ana River Valley approximately 9 miles to the south of the proposed project. Major tributaries to the Santa Ana River are Lytle Creek and Cajon Wash, which flow from the north; Warm Creek, which flows from the San Bernardino Mountains in the east; and San Timoteo Creek, which flows from the south.

The floor of the Upper Santa Ana River Valley is underlain by non-indurated Quaternary alluvial sediments. These alluvial deposits are generally derived from the San Gabriel Mountains, which are approximately 5 miles to the north of the proposed project alignment. The alluvial deposits generally consist of cobbles and boulders closer to the mountains with the sediments becoming finer (sand and gravel) toward the south.

The Santa Ana River Valley lies between the Western Transverse Ranges physiographic province on the north (San Gabriel Mountains) and the Peninsular Ranges province on the south. The Peninsular Ranges are characterized by northwest-southeast trending strike-slip faults such as the Whittier-Elsinore-Chino fault system and the San Jacinto fault system. The Western Transverse Ranges are characterized by east-west trending reverse faults that thrust the mountains southerly up and over the alluvium of the Upper Santa Ana River Valley. The intervening area (Upper Santa Ana River Valley) is bound by the Whittier-Chino-Elsinore Fault on the west and the San Jacinto Fault on the east. Faults within the valley are poorly defined, short northeast-

southwest trending faults and northwest-southeast trending faults.

4.5.2 Impacts

This section analyzes potential environmental impacts related to geology, soils, and seismicity along the WVC Project. Short-term impacts during project construction are discussed in Section 5.4.5.

No Build Alternative

With the No Build Alternative, there would be no construction or excavation; therefore, no new impacts from geologic, soils, and seismic issues would occur.

Build Alternatives

The proposed project site is located in seismically active southern California near the boundary between the Pacific and the North American tectonic plates. The principal faults of the plate boundary are the San Andreas and San Jacinto fault zones. Seismicity maps indicate several dense clusters of earthquakes in the Upper Santa Ana River Valley region, as well as more widely distributed events throughout the area.

There are no known mapped faults along the proposed project alignment or in the immediate proximity. No Alquist-Priolo Earthquake Fault Zones have been designated along the alignment, and most of the alignment has not been evaluated for seismic hazards by the California Geologic Survey. The proposed project alignment is not considered for further study of susceptibility to earthquake-induced liquefaction and landslides caused by a seismic event.

The proposed project area has potential to be subjected to strong earthquake shaking. The design ground motions will vary along the length of the corridor due to variable ground conditions and variable distances to the nearest earthquake faults. Microseismicity may cause ground shaking along the proposed project alignment; however, the potential for ground rupture is low. Due to the relatively flat terrain, the lack of loose saturated sands in the upper 50 feet below existing grades, the entire proposed project corridor is considered to have a low potential for earthquake-induced liquefaction and seismically induced ground settlement. The proposed project corridor has low potential for slope instability, landslides, and tsunamis.

Alternative A

Alternative A would be constructed within existing roadway ROWs. This alternative includes construction of 60 station platforms with associated improvements. The platforms would be subject to potential ground motion with related ground rupture and liquefaction. Potential impacts related to geology, soils, and seismicity could occur without mitigation.

Alternative B

Alternative B would have similar impacts as discussed above under Alternative A for the side-running stations. In addition, it would include center-running stations and dedicated lanes. To accommodate the

center-running stations and dedicated lanes, roadway widening would be required. Potential impacts related to geology, soils, and seismicity could occur without mitigation.

O&M Facility

As described earlier, the proposed project corridor has low potential for slope instability, landslides, and tsunamis. However, there is potential for the O&M facility site to experience strong earthquake shaking during operation. As a result, Potential impacts related to geology, soils, and seismicity could occur without mitigation.

4.5.3 Avoidance, Minimization, and/or Mitigation Measures

Most of the proposed project consists of changes to roadway surfaces, which are generally not designed for earthquake shaking because they can be repaired quickly and do not constitute a loss-of-life hazard. Any important facilities that will house groups of people for any substantial period of time (station platforms) will need to be designed to withstand ground motion. The liquefaction potential and resulting seismically induced settlement will be confirmed during the plans, specifications, and estimate (PS&E) phase using site-specific borehole and groundwater data. The proposed project requires only shallow excavations. As a result, static groundwater is not considered an issue for the proposed project.

While there are unfavorable conditions in some areas, the proposed project involves use of existing roads. Structures such as station shelters, pylons, variable message boards and structures at the O&M facility would be constructed. Following standard design practices that meet City and State requirements, the impacts would not be significant or adverse.

GSS-1: Station platforms and structures at the O&M facility shall be designed to withstand ground motion in accordance with City, State, and geotechnical industry standards and guidelines.

Avoidance, minimization, and mitigation measures to minimize construction impacts associated with geology, soils, and seismicity are discussed in Section 5.3.5.

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4.6 Hazardous Waste/ Materials

Hazardous materials are defined as substances that by their nature and reactivity have the capacity for causing harm or health hazards during normal exposure or an accidental release or mishap. They are characterized as being toxic, corrosive, flammable, reactive, an irritant, or a strong sensitizer. The term "hazardous substances" encompasses chemicals regulated by DOT and EPA, including emergency response. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment.

This subsection discusses potential human health hazards due to exposure to existing and possible future sources of hazardous materials and wastes as a result of the proposed project operation.

Short-term impacts during project construction and proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with hazardous waste/materials are discussed in Sections 5.2.6 and 5.3.5, respectively.

The information contained in this section is summarized from the *West Valley Connector Project – Initial Site Assessment (ISA)* (Group Delta, 2018a) and *West Valley Connect Project – ISA Addendum* (Group Delta, 2018b) prepared for the proposed project. The ISA was prepared using the American Society for Testing and Materials (ASTM) Designation E1527-13: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process as guidance.

As part of the ISA, an environmental database query was conducted to search applicable regulatory agency list and standard environmental record sources to identify locations of potential concern within a 1-mile search radius from the proposed project alignment. Topographical maps of the proposed project alignment and surrounding area were reviewed for the years 1896-1897, 1898-1900, 1901, 1903-1904, 1928, 1933, 1942, 1943, 1953-1954, 1966-1967, 1973, 1980-1981, and 2012. Aerial photographs of the proposed project alignment and surrounding areas were reviewed for the years 1938, 1948, 1959, 1966, 1975, 1985, 1989, 1994, 2002, 2005, and 2010. Sanborn® fire insurance map coverage for the proposed project was not available. A site reconnaissance was also conducted by foot and windshield survey, specifically for areas where parcels will be acquired, proposed road widening areas along Holt Boulevard, and where side-running stations are proposed. City ROW and adjoining properties, where possible, were also surveyed.

The proposed project would need a new O&M facility to be constructed. It is anticipated that a site of approximately 5.16 acres would be required to house the facility structures and parking area for buses, employee vehicles, and visitors' vehicles. The maintenance, inspection,

and storage areas would be housed in a low-rise, one-story industrial facility with a two-story portion or adjacent building to house office and personnel areas. Smaller, adjacent satellite structures would house fuel and wash facilities and a guard house. The site would be clear of hazardous materials prior to occupation. Hazardous materials within any structures would be removed prior to demolition. Where necessary, construction sites would be fenced at this point for public safety.

4.6.1 Regulatory Setting

Many State and federal laws regulate hazardous materials and hazardous wastes. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health, and land use.

The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The purpose of CERCLA, often referred to as "Superfund," is to clean up contaminated sites so that public health and welfare are not compromised. RCRA provides for "cradle to grave" regulation of hazardous wastes. Other federal laws include:

- Community Environmental Response Facilitation Act of 1992
- CWA
- CAA
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act
- Federal Insecticide, Fungicide, and Rodenticide Act

In addition, EO 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved. Hazardous waste in California is regulated primarily under the authority of the federal RCRA and the California Health and Safety Code. Other California laws regarding hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

4.6.2 Existing Conditions

The purpose of the ISA was to review, evaluate, and document present and past land uses and practices, and visually examine project site conditions to identify Recognized Environmental Conditions (RECs). An REC is defined as the presence or likely presence of any hazardous substances or petroleum hydrocarbons on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum hydrocarbons into structures or into the ground, groundwater, or surface water of the subject property. A historical recognized environmental condition (HREC) is

defined as a past release of any hazardous substances or petroleum products that has occurred in connection with a property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. Environmental Areas of Concern (AOCs) that do not represent RECs, but will require further attention during construction or additional investigation, are also identified in the ISA.

The scope of the ISA included site reconnaissance; historical research related to use, storage, disposal, or release of hazardous materials or petroleum hydrocarbons; review of environmental databases; interviews; and a summary of findings. The area investigated by the ISA encompasses City and private ROWs identified on the Project Impact Boundary Exhibit, as shown in Appendix F). The ISA also addresses 263 parcels that are anticipated to be impacted by Alternative B, which include 37 full acquisition parcels, 168 partial acquisition parcels, 58 TCE parcels, including 65 impacted parking parcels. The ISA Addendum also addressed an additional five parcels for the three potential O&M facilities.

Site reconnaissance for the Phase I/ Milliken Alignment was performed on June 13, 14, 15, and 27, 2016. The site reconnaissance for the Phase II/Haven Alignment was performed on October 6, 2016. Site reconnaissance for the potential O&M facilities was performed on March 14, 2018.

The site reconnaissance was conducted with specific attention given to the following three components of the proposed project:

- Acquisition parcels
- Proposed BRT side-running stations
- Area of proposed Holt Boulevard widening under Alternative B
- Potential O&M facilities

Observations of the City ROW were made in conjunction with the above-referenced portions of the site reconnaissance.

The purpose of the site reconnaissance was to observe the present site use and conditions as they relate to the possible presence of potentially hazardous substances and petroleum products. Additionally, adjoining properties were observed from the site and adjacent public roads to identify land uses and the potential presence of structures, operations, activities, or environmental conditions that may involve the use, treatment, storage, disposal, or generation of hazardous wastes and/or petroleum products that may pose an environmental concern to the site. An inspection of the interior of structures was not performed. Photographic documentation of the site reconnaissance was carried out.

Results of Phase I ISA for BRT Corridor

Alternative A

No AOC was identified along the Alternative A study area in the ISA.

Alternative B

The ISA identified four AOCs associated with Alternative B; two are within the City of Ontario ROW and two are within the private properties.

The AOCs identified within the City of Ontario ROW are described below:

- Utility poles exist along the proposed project alignment that may require removal in support of Alternative B construction. The poles consist of treated wood and are considered an AOC. If removed during the proposed project, the poles should be managed as treated wood waste (TWW) in accordance with the Department of Toxic Substances Control (DTSC) Alternative Management Standards (AMS) for TWW. It should be noted that testing is not required to determine the presence of treated wood, regardless of the treatment chemicals used. The DTSC requires that TWW either be disposed of as a hazardous waste, or if not tested, the generator may presume that TWW is a hazardous waste (to avoid the time and expense involved in completing laboratory testing) and manage the waste by AMS. The AMS are described in CCR Title 22, Division 4.5, Chapter 34.
- Overhead transformers appear to be mounted on multiple utility poles along Holt Boulevard and may require removal in support of the proposed project under Alternative B. Historically, pole-mounted transformers have contained polychlorinated biphenyls (PCBs) which will need to be profiled and managed appropriately, if present.

The AOCs that are situated outside of the City of Ontario's ROW or on private acquisition properties are described below:

- A fallen utility pole was observed on the eastern portion of the proposed partial acquisition address of 545 E. Holt Boulevard. The pole consists of treated wood and is considered an AOC with impact to Alternative B.
- Under Alternative B, multiple building structures will be removed in support of the proposed project. In addition, Alternative B would also require improvements at the West Cucamonga Channel, including roadway widening, grading, and culverts. Depending on the structures' age, they may contain asbestos containing materials (ACM) and lead-based paint (LBP). The presence of these materials will need to be investigated prior to removal of the structures to comply with environmental and worker safety regulatory requirements for ACM and LBP. Regardless of the age of building structures, an ACM survey is required per the National Emissions Standards

for Hazardous Air Pollutants (NESHAP), 40 CFR, Part 61.145 (c). These structures are considered an AOC to the proposed project.

Results of Phase I ISA Addendum for O&M Facility

The three potential O&M Facility sites and adjacent properties were assessed as part of the ISA Addendum. One REC and one AOC associated with potential O&M facility sites were identified.

AOC – Site 1: 1516 S. Cucamonga Avenue, Ontario, CA (APN 1050-131-03 and APN 1050-131-02)
This site appears to have undergone limited development since it was used for agricultural purposes, and the likelihood of removal or redistribution and dilution of any soil possibly contaminated by agricultural use is considered low. Due to the historical agricultural usage of Site 1, the potential for residual pesticides including organochlorine pesticides (OCPs) and arsenic is considered an AOC.

REC – Site 3: 1333 S. Bon View Avenue, Ontario, CA (APN 1049-421-01 and north-adjacent APN 1049-421-02)
Various industrial activities were conducted on the site beginning as early as 1961. These activities included repair of motor homes, painting, plating, casting, machining, and wood staining. Between 1988 and 2008, several site investigations were performed on the site (known as Oakwood Interiors Site), which currently has oversight from DTSC.

As of December 2008, the site has a land use restriction prohibiting day care centers, elder care centers, hospital use, excavation of contaminated soils without agency review and approval, public or private schools for persons under 21, and residential use.

The site was investigated and certified with a land use covenant due to contamination left in place with Land Use Control (LUC) inspections conducted annually to ensure that the contamination under the cap is not disturbed.

Chemicals of potential concern for the site are as follows: arsenic, chromium, hexavalent chromium (Cr+6), and nickel in soil and air as particulates and chloroform, dibromochloromethane, PCE, and TCE in air as vapor.

City of Ontario and DTSC agreed to identify the following areas in the LUC and that DTSC would be notified when excavation activities are planned for these areas:

- three truck wells
- former small paint line immediately behind the main office building
- former foundry area
- former 1,000-gallon gasoline UST (previously closed by San Bernardino County Department of Environmental Health [DEH])
- former 12,000-gallon diesel UST (previously closed by San Bernardino DEH)
- former welding shop

- former Building 8, including the former plating shop
- former catch basin in former Building 6

The main building at Site 3 is currently used by the Ontario Municipal Utilities Company utility and customer service center. The main office is on the northwest portion of the site. The remainder of Site 3 is used for indoor storage of City materials and is divided into three warehouses (2, 3, and 4).

Warehouse 2 is east-adjacent to the main office and is used for City storage surplus and storage of concrete and metal casings for the utility department. On the south side of Warehouse 2, an awning extends over additional outdoor storage for trucks and materials. Next to the southeast corner of Warehouse 2 is an enclosed vault where two propane tanks formerly were placed.

Warehouse 3 is on the east portion of Site 3 and is used for storage of City surplus and new empty solid waste bins.

Warehouse 4 is on the southeast portion of Site 3 and is used for storage of cables for Verizon telephone lines.

4.6.3 Impacts

This section analyzes potential long-term environmental impacts related to hazardous waste/materials along the WVC Project alignment and at the proposed O&M facility. Short-term impacts during project construction are discussed in Section 5.2.6.

No Build Alternative

There would be no operational impacts associated with hazardous wastes/ materials under the No Build Alternative.

Alternatives A and B

BRT Corridor

No impacts to the build alternatives are anticipated from the prior releases associated with properties adjacent to the proposed project alignment.

The proposed project's fleet would be comprised of 60-foot-long articulated CNG propulsion buses. Under Alternatives A and B, the number of new buses required to meet the 10-minute peak headway and to have sufficient spare vehicles is 22 to 25 vehicles.

Station locations would not require the use or storage of hazardous materials or hazardous wastes. Cleaning materials and paints would be brought to the stations for cleaning and station maintenance, and they would be removed once cleaning and maintenance was complete. Standard household solvents and cleaners and paints necessary for station upkeep and maintenance would be used by Omnitrans staff or contract maintenance workers. These materials would be transported and used in accordance with applicable local, State, and federal regulation. None of the materials used onsite would be considered acutely hazardous. No significant or adverse impacts are anticipated from maintenance and

cleaning of station locations associated with the proposed project.

O&M Facility

Based on the ISA Addendum, Site 1 has been determined as an AOC. Due to the historical agricultural usage of Site 1 (APN 1050-131-03-0000 and APN 1050-131-02-0000), a limited soil screening would be undertaken to assess for the presence of residual pesticides, including arsenic and OCPs, in Site 1's soil to identify an appropriate cleanup method before any construction activities would commence.

Site 3 has been determined as an REC. The following actions would be undertaken before any construction activities would commence.

- DTSC must be engaged and notified of the proposed project. Any changes to the responsible party, cleanup liability, and/or the Voluntary Cleanup Agreement for the DTSC case will need to be determined during the property acquisition process.
- A Final Soil Management Plan (SMP) must be developed for the site. The plan must be reviewed and approved by DTSC. Note that an SMP template has been approved by DTSC, which would facilitate this process.
- DTSC will provide oversight during earthwork activities for the LUC areas on the site. The process will likely involve reporting to DTSC on the status of construction and remediation.
- Following remediation, the status of the case and land use restrictions will be revisited with DTSC.

Once the O&M site is selected from the three potential sites, site clearing would be performed to ensure it is clear of hazardous materials.

The ultimate Level 2 O&M facility would be used to provide servicing and inspection, washing and fueling, interior cleaning, fare collection, light maintenance (i.e., engine tune-up, lubrication, tire changing, brake repair, minor body work, and unit change out), and light repair. Heavy repair functions would remain at the existing EVVMF. No adverse impacts related to hazardous waste/materials are anticipated because the site is located in an area designated for industrial use. Normal maintenance and monitoring would ensure that buses are operated correctly and safely and would reduce the potential for leaks of hazardous material substances. No significant or adverse impacts to the proposed project area are expected from O&M activities or fueling of the new buses for the proposed project.

4.6.4 Avoidance, Minimization, and/or Mitigation Measures

Hazardous materials within any structures will be removed prior to demolition. Where necessary, construction sites will be fenced at this point for public safety. Because no hazardous materials or hazardous waste are expected to be stored at parking lots or station locations, no mitigation is required.

If Site 1 is selected for use as the O&M Facility, a limited soil screening would be undertaken to assess for the presence of

residual pesticides, including arsenic and OCPs, to identify an appropriate cleanup method before any construction activities would commence.

If Site 3 is chosen, SBCTA will prepare the SMP and coordinate with DTSC to determine the soil cleanup level prior to use of the site.

Avoidance, minimization, and mitigation measures to minimize impacts prior to and during construction associated with hazardous waste are discussed in Section 5.3.6.

4.7 Hydrology, Water Quality, and Floodplains

This section identifies potential long-term environmental impacts on hydrology, water quality, and floodplains that could result from implementation of the proposed WVC Project and discusses avoidance, minimization, and mitigation measures to minimize those impacts. Short-term impacts during project construction and proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with hydrology and water quality are discussed in Sections 5.2.7 and 5.3.7, respectively.

The information contained in this section is summarized from the *West Valley Connector Project – Water Quality Report* (Parsons, 2018h) and *West Valley Connector Project – Floodplain Evaluation Report* (Parsons, 2019), available under separate cover.

4.7.1 Regulatory Setting

Federal, State, regional, and local regulations, plans, and policies that apply to the proposed project are described in the following paragraphs.

Federal Laws and Requirements

Clean Water Act (33 U.S.C. 1251 et seq.)

The Clean Water Act (CWA) is the primary federal law protecting the nation's surface waters, including lakes, rivers, and coastal wetlands. The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Important CWA sections are listed below.

National Pollutant Discharge Elimination System Program (Section 402)

Section 402 establishes a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. It requires a National Pollutant Discharge Elimination System (NPDES) permit for discharges to water. EPA has delegated the authority to issue NPDES permits in California to the State Water Resources Control Board (SWRCB).

State-Wide NPDES Permits

To facilitate compliance with federal regulations, the SWRCB has issued two statewide general NPDES permits for stormwater discharges: one for stormwater from industrial sites (NPDES No. CAS000001, General Industrial Activity Storm Water Permit [IGP]) and the other for stormwater from construction sites (NPDES No. CAS000002, NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities [Order No. 2009-0009-DWQ], adopted on September 2, 2009, and amended by Order 2010-0014-DWQ and Order 2012-0006-DWQ [Construction General Permit] [CGP]). Facilities discharging stormwater from construction projects with a disturbed soil area (DSA) of 1 acre or more are required to be covered by the CGP by completing and filing a Notice of Intent (NOI) with the SWRCB (SWRCB, 2012).

The IGP, Order No. 2014-0057-DWQ, was reissued on April 1, 2014, and became effective on July 1, 2015 (SWRCB, 2014). Facilities discharging stormwater associated with industrial activities are required to obtain individual NPDES permits for stormwater discharges or to be covered by a statewide general permit by completing and filing an NOI with SWRCB. The IGP requires a broad range of industrial facilities to be permitted. These facilities include manufacturing facilities, mining operations, disposal sites, recycling yards, and transportation facilities. Category 8, Attachment A, of the IGP identifies the applicable transportation facilities as transportation facilities that fall under Standard Industrial Classification (SIC) 40, 41, 42 (except 4221-25), 43, 44, 45, and 5171, which have vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility involved in vehicle maintenance, including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication, or other operations identified in the IGP that are associated with industrial activity, would require coverage.

Because the proposed project falls under SIC 41 and the proposed new O&M facility would be involved in vehicle maintenance activities and equipment cleaning operations, the proposed project would be required to submit a Site Map and Industrial Storm Water Pollution Prevention Plan (SWPPP) for the new O&M facility.

Regional NPDES Permits

Dewatering Permit

Care is required for removal of nuisance water resulting from construction activities such as dewatering because of the high turbidity and other pollutants associated with this activity. The WVC Project may require dewatering during construction. The Los Angeles RWQCB's permit for discharges of groundwater from construction and project dewatering to surface waters is identified as No. R4-2013-0095 (NPDES No. CAG994004). The Santa Ana RWQCB's Dewatering Permit Order is identified as R8-2009-0003 (NPDES No. CAG998001). These permits cover General Waste Discharge Requirements for Discharges to Surface Water Which Pose an Insignificant *(De Minimis)* Threat to Water Quality from dewatering activities. If temporary excavations, such as those associated with construction of the bus shelters, require dewatering, there is the potential of discharging pollutants (primarily by entraining silt and clay, but also from encountering chemicals and other contaminants) through releases of construction water directly to the environment, which could violate the WQOs of the Los Angeles and Santa Ana RWQCBs.

Municipal Separate Storm Sewer System Permit

The Los Angeles RWQCB has issued a Municipal Separate Storm Sewer (MS4) NPDES permit (Order No. R4-2012-0175, NPDES No. CAS004001) with the County

of Los Angeles, and the City of Pomona is listed as a co-permittee. Likewise, the Santa Ana RWQCB has issued an MS4 NPDES permit with the County of San Bernardino (Order No. R8-2010-0036, NPDES No. CAS618036), and the Cities of Montclair, Ontario, Rancho Cucamonga, and Fontana are listed as permittees. The purpose of these NPDES permits is to prohibit non-stormwater discharges and to reduce pollutants in discharges to the "maximum extent practicable" to maintain or attain WQOs that are protective of beneficial uses or receiving waters. Omnitrans is identified in Attachment 3 of Order No. R8-2010-0036 as a potential discharger of urban runoff in the permitted area. Per the NPDES permit, Omnitrans would work cooperatively with the permittees to manage urban runoff. Provisions of the San Bernardino County and Los Angeles County permits require implementation of management practices to address stormwater runoff quality. The management practices represent best practicable treatment and control of urban runoff discharges. The NPDES permits promote implementation of low impact development (LID) best management practices (BMPs), where feasible. LID BMPs reduce stormwater pollutant discharges by intercepting rainfall on vegetative canopies. LID BMPs can also reduce stormwater runoff by capturing and infiltrating runoff into existing or amended soils.

Clean Water Quality Certification (Section 401)

Section 401 requires an applicant for a federal license or permit for project construction, operation, or maintenance activities that would result in a discharge to waters of the U.S. to obtain state certification that the discharge complies with other provisions of the CWA. The Regional Water Quality Control Boards (RWQCBs) administer the certification program in California.

Water Quality Impairments (Section 303[d])

Section 303(d) requires each state to provide a list of impaired waters that do not meet or are expected not to meet state water quality standards. It also requires each state to develop total maximum daily loads (TMDLs) from the pollution sources for such impaired water bodies. Table 3-13 in the *Water Quality Report* (Parsons, 2018h) lists the impairments and established TMDLs for impaired waters within the WVC Project area. These impaired waters include San Antonio Creek, Chino Creek (Reaches 1A, 1B, and 2), Cucamonga Creek (Reach 1), Santa Ana River (Reach 3), and Huntington Beach State Park.

National Flood Insurance Program (NFIP)

The Federal Emergency Management Agency (FEMA) developed the NFIP to assist communities across the country with floodplain management. The NFIP provides federally backed flood insurance to homeowners, renters, and business owners in participating communities. In addition to providing flood insurance and reducing flood damage through floodplain management regulations, the NFIP identifies and maps the nation's floodplains. Mapping flood hazards

creates a broad-based awareness of the flood hazards and provides the data needed for floodplain management programs and to actuarially rate new construction for flood insurance.

Executive Order (EO) 11988 directs all federal agencies to refrain, to the extent practicable and feasible, all short-term and long-term adverse impacts associated with floodplain modification and to refrain from direct and indirect support of development within 100-year floodplains wherever a practicable alternative is available and to restore and preserve the natural and beneficial values served by floodplains. Projects that encroach upon 100-year floodplains must be supported with additional specific information. The U.S. Department of Transportation Order 5650.2, Floodplain Management and Protection, prescribes "policies and procedures for ensuring that proper consideration is given to the avoidance and mitigation of adverse floodplain impacts in agency actions, planning programs, and budget requests." The Order does not apply to areas with Zone C (areas of minimal flooding as shown on FEMA Flood Insurance Rate Map [FIRMs]).

State Laws and Requirements

SWRCB allocates water rights, adjudicates water rights disputes, develops statewide water protection plans, and establishes water quality standards. It also guides the nine RWQCBs in the state's major watersheds.

Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act requires projects that are discharging or proposing to discharge wastes that could affect the quality of the State's water to file a Report of Waste Discharge with the appropriate RWQCB. The RWQCBs are responsible for implementing CWA Sections 401, 402, and 303(d). The Act also provides development and periodic review of the basin plans that designate beneficial uses of California's major rivers and groundwater basins and establish water quality objectives (WQOs) for those waters. Projects primarily implement basin plans using the NPDES permitting system to regulate waste discharges so that WQOs are met.

California Fish and Game Code (Section 1601 through 1603)

The *California Fish and Game Code* requires agencies to notify CDFW prior to implementing any project that would divert, obstruct, or change the natural flow or bed, channel, or bank of any river, stream, or lake. If CDFW determines that the activity may adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement would be prepared. The Lake or Streambed Alteration Agreement includes reasonable conditions necessary to protect those resources and must comply with CEQA. Based on a survey, the proposed project area has no fish or wildlife resources that are under the jurisdiction of CDFW.

Regional and Local Requirements

The proposed project spans two watersheds, Chino Creek and Middle Santa Ana River, under the jurisdiction of the Los Angeles and Santa Ana RWQCBs. Thus, the WVC Project is subject to water quality controls that pertain to the receiving water bodies and tributaries of those water bodies. Beneficial uses and WQOs have been identified in the Los Angeles Basin Plan (Los Angeles RWQCB, 1994) and the Santa Ana River Basin Plan (Santa Ana RWQCB, 1995).

4.7.2 Affected Environment

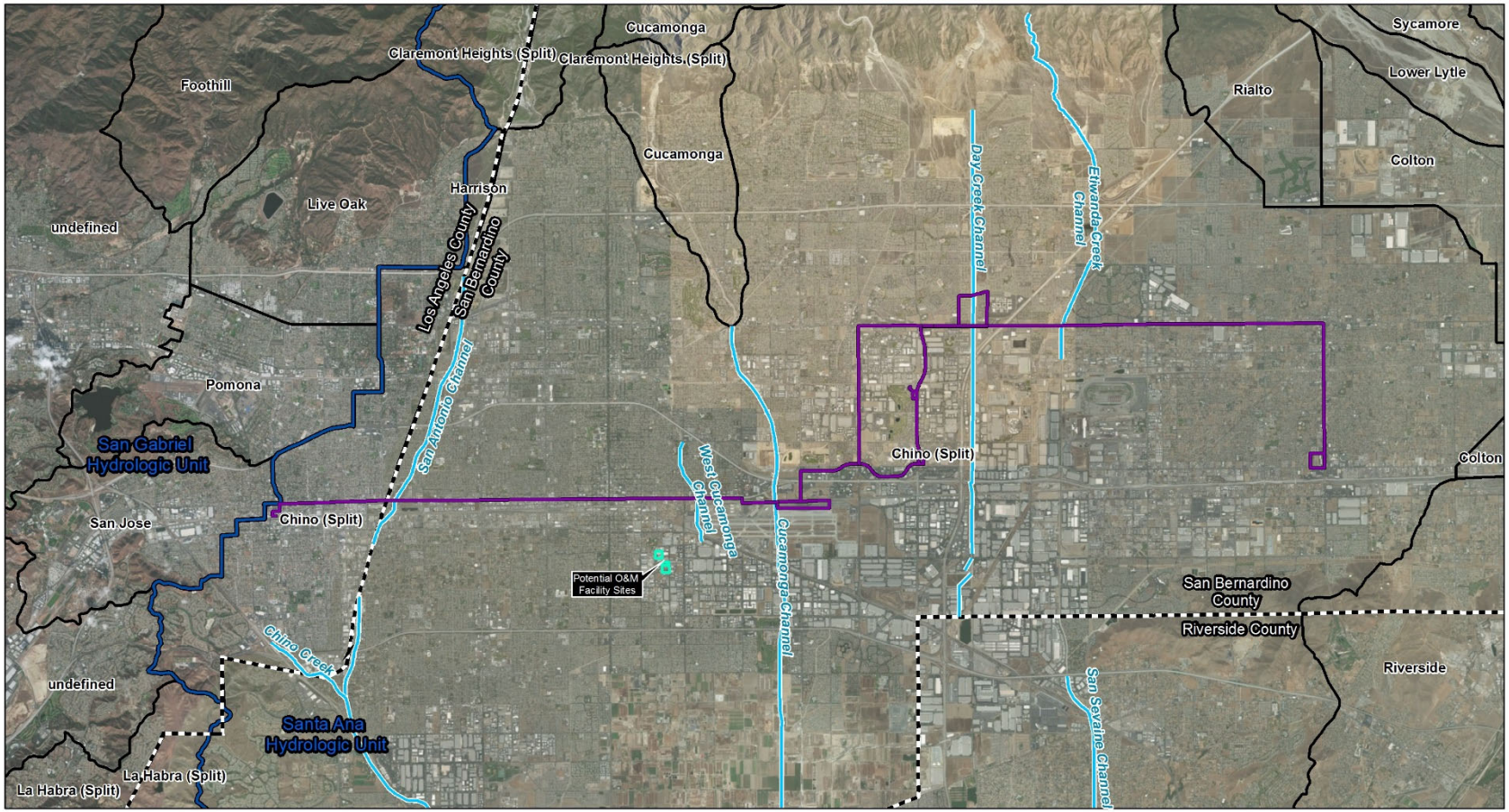
Surface Hydrology and Water Quality

The proposed project is located within the Santa Ana River hydrologic unit and in the Chino Split hydrologic subarea (HSA), as shown in Figure 4.7-1. The Chino Split HSA covers approximately 190,515 acres. Offsite receiving water bodies that ultimately drain to the Pacific Ocean include:

- San Antonio Creek
- West Cucamonga Creek
- Cucamonga Creek Reach 1
- Day Creek
- East Etiwanda Creek
- San Sevaine Channel
- Chino Creek Reach 2 (beginning of concrete channel to confluence with San Antonio Creek)
- Chino Creek Reach 1B (Mill Creek confluence to start of concrete-lined channel)
- Chino Creek Reach 1A (Santa Ana River Reach 5 confluence to just downstream of confluence with Mill Creek)
- Santa Ana River Reach 3
- Santa Ana River Reach 2
- Santa Ana River Reach 1
- Huntington Beach State Park

The offsite water bodies associated with the proposed project (San Antonio Creek, Chino Creek, Cucamonga Creek, Santa Ana River, and Huntington Beach State Park) have been designated as impaired on the CWA 303(d) list and have TMDLs established for several pollutants. The potential pollutants of concern for this proposed project, however, would only be those associated with storm runoff from paved surfaces.

Beneficial uses of receiving waters within the proposed project corridor are MUN (Municipal and Domestic Supply), AGR (Agricultural Supply), IND (Industrial Service Supply), POW (Hydropower Generation), PROC (Industrial Process Supply), GWR (Groundwater Recharge), REC1 (Water Contact Recreation), REC2 (Non-Contact Water Recreation), WARM (Warm Freshwater Habitat), LWRM (Limited Warm Freshwater Habitat), COLD (Cold Freshwater Habitat), BIOL (Preservation of Biological Habitats of Special Significance), MAR (Marine Habitat), SPWN (Spawning, Reproduction and Development), WILD (Wildlife Habitat), and RARE (Rare, Threatened or Endangered Species).



West Valley Connector Corridor

Hydrologic Map

Created By: Parsons, 2018
Data Source: Calwater, 2018
Map Created On: 5/1/2018

Figure 4.7-1 Regional Hydrology and Surface Water Body Map

The affected environment is primarily built out and has been substantially altered by human activity; it no longer functions as a natural hydrologic system.

Groundwater Quality

The proposed project overlies the Raymond Groundwater Basin in Los Angeles County and the Chino Basin in San Bernardino County. The Raymond Basin is located in the northwestern part of the San Gabriel Valley, in eastern Los Angeles County. The Chino Basin is one of the largest groundwater basins in southern California, covering approximately 235 square miles of the Upper Santa Ana River Valley. Groundwater elevation contours evaluated in spring 2014 indicate that groundwater flows in a south-southwest direction from the primary areas of recharge in the northern parts of the Chino Basin toward the Prado Basin in the south (Inland Empire Utilities Agency, 2016). According to the Chino Basin Watermaster, groundwater is encountered at depths in excess of 250 feet below ground surface (bgs) near the proposed project site (ISA, 2018). Recently reported groundwater depths to the west and south of the proposed project site are approximately 260 to 320 feet bgs on average.

Groundwater beneficial uses for both the Raymond Basin and Chino Basin are MUN (Municipal and Domestic Supply), AGR (Agricultural Supply), IND (Industrial Service Supply), and PROC (Industrial Process Supply).

Floodplains

FEMA designates Special Flood Hazard Areas according to zones. The base flood elevation (BFE) is the water surface elevation of the 1 percent annual chance of flood. The zones are described as:

Zone A – Corresponds to the 100-year floodplains that are determined in the Flood Insurance Study (FIS) by approximate methods. No BFEs or depths have been determined.

Zone AE – Corresponds to the areas of 100-year floodplains that are determined in the FIS by detailed methods. In most instances, BFEs have been derived from detailed hydraulic analyses and are shown within this zone.

Zone AH – Corresponds to the areas of 100-year shallow flooding with a constant water surface elevation. Flood depths are 1 to 3 feet (usually areas of ponding); BFEs are derived from detailed hydraulic analyses and are shown at selected intervals within this zone.

Zone AO – Corresponds to the areas of 100-year shallow flooding. Flood depths are 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities are also determined.

Zone AR – Depicts areas protected from flood hazards by flood control structures such as levees that are being restored.

Zone X (dotted) – Other flood areas. Areas of 0.2 percent annual chance flood; areas of 1 percent annual chance flood

with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1 percent annual chance flood.

Zone X – Areas determined to be outside the 0.2 percent annual chance floodplain.

There are five existing channels located along the 35-mile corridor alignment, including:

- San Antonio Channel (within City of Montclair)
- West Cucamonga Channel (within City of Ontario)
- Deer Creek Channel (within City of Ontario)
- Day Creek Channel (within City of Rancho Cucamonga)
- Etiwanda Creek Channel (within City of Rancho Cucamonga)

Five bridges exist at each of these channels, including: (1) Holt Boulevard over San Antonio Channel, (2) Holt Boulevard over West Cucamonga Channel, (3) Airport Drive over Cucamonga Channel, (4) Foothill Boulevard over Day Creek Channel, and (5) Foothill Boulevard over Etiwanda Creek Channel.

Based on the FEMA's FIRM, the project corridor is only encroached in the West Cucamonga Channel's Zone X (dotted) flood area designation.

4.7.3 Impacts

This section analyzes potential environmental impacts related to hydrology and water quality along the WVC Project alignment and at the O&M facility. The analysis documents potential permanent impacts on hydrology and water quality caused by project implementation. Short-term impacts during project construction are discussed in Section 5.2.7.

Water Quality Impacts

The proposed project would not physically disturb offsite water bodies, but the site discharge could affect downstream water bodies. Implementation of the project and the increase in runoff resulting from the increase in impervious area could cause or contribute to an alteration in water quality and could affect the beneficial uses of the water bodies.

No Build Alternative

The No Build Alternative would not include BRT system improvements or other construction along the subject corridor or at the site to be selected for an O&M facility; therefore, water quality impacts with the proposed action would not occur under this alternative. Degradation of water quality due to pollutant discharges from the existing transportation system within the study area would continue under this alternative.

Build Alternatives

The following discussion addresses each alternative's potential to introduce water pollutants into the environment, with a focus on stormwater runoff. Table 4.7-1 summarizes the new impervious area to be created as a result of project implementation. For either of the build alternatives, the maximum net new area of impervious surface contributed to the 190,515-acre Chino Split HSA would be less than 1 percent.

Table 4.7-1 Amount of New Impervious Surfaces per Build Alternative (acres)

Area (acres)	Disturbed Soil Area (from construction activities)		Impervious Surfaces	
	Alternative A	Alternative B	Alternative A	Alternative B
Corridor Alignments and Stations	3.10	60.64	0.00	1.81
O&M Facility Site 1	9.60	9.60	8.56	8.56
O&M Facility Site 2	4.77	4.77	0.00	0.00
O&M Facility Site 3	8.93	8.93	0.47	0.47
Total area	7.87-12.70	65.41-70.24	0.0 – 8.56	1.81 – 10.37
Chino Split area			190,515	190,515
Proposed Increase (%)			<1	<1

Source: WVC Water Quality Report, 2018.

BRT Corridor

During project operation, stormwater runoff from the Omnitrans ROW could degrade water quality. Runoff from the new impervious area resulting from project implementation would be directed to project design features, including water quality control measures consistent with design criteria identified in the MS4 NPDES permits. No runoff from the WVC Project alignment would be discharged directly to any surface water.

Water quality impacts specific to the two build alternatives are discussed below.

Alternative A

Construction of the Alternative A alignment and stations would not increase areas of impervious surfaces. The total DSA resulting from construction activities is estimated at 3.10 acres within the existing ROW. Because there would be no increase in the amounts of impervious surfaces with implementation of Alternative A, no long-term impacts on the characteristics of the aquatic environment are expected.

Alternative A would include construction of side-running stations. Pollutants of concern from the new sources of runoff structures would include sediment, trash, hydrocarbons, oil, and grease, which could adversely affect water quality through discharges downstream; however, runoff would be directed to project design features that would include water quality control measures. Alternative A is not expected to have an adverse impact on water quality.

Alternative B

Construction of Alternative B would increase impermeable surfaces by approximately 1.81 acres, primarily due to the road-widening segment along Holt Boulevard to accommodate the dedicated lanes and center-running stations and new parking facilities. Construction of Alternative B would result in a total DSA of approximately 60.64 acres.

The additional areas of impervious surfaces required under Alternative B could increase stormwater runoff. In addition, water pollutants of concern from the new sources of runoff (e.g., center- and side-running stations) would include sediment, trash, hydrocarbons, oil, and grease, which could adversely affect water quality through discharges downstream. However, stormwater runoff from new impervious surfaces would be directed to project design features that would include water quality control measures. Alternative B thus would not adversely impact water quality.

O&M Facility

An O&M facility under both alternatives would be constructed near the project corridor to service the new BRT fleet. Although no site has yet been selected, three sites in Ontario are being considered (see Section 2.6, Operational and Maintenance). The maintenance facility would include bus and employee vehicle parking, parts and material storage, repair bays for 40-foot-long buses, a tire shop, a bus wash building, a fueling area, and a bus maintenance building.

Construction of the O&M facility would create an additional DSA of either 9.60, 4.77, or 9.40 acres, depending on which potential site is selected. The increase in the amounts of impervious surfaces for the O&M facility would be 0.00, 0.47, or 8.56 acres, depending on the site selected. Increased stormwater runoff from the selected site would be contained onsite by conveying surface flows to engineered infiltration zones.

No new potential water pollution sources would be created by this facility. All BRT vehicle services would be managed and controlled in accordance with the Industrial SWPPP, which would identify the water quality controls that would be necessary to minimize pollutant discharges associated with vehicle service activities. Water quality controls, such as engineered infiltration areas or other stormwater BMPs, along with implementation of the Industrial SWPPP, would be ongoing throughout the lifespan of the O&M facility, such that impacts on water quality would be negligible. Thus, runoff would not pose a risk to water quality because all potential pollutants would be controlled and managed onsite.

Groundwater Impacts

No Build Alternative

The No Build Alternative would not include BRT system improvements along the subject corridor or on the optional O&M facility sites. Hence, groundwater impacts associated with the proposed action would not occur under this alternative.

Build Alternatives (BRT Corridor and O&M Facility)

According to the Chino Basin Watermaster, groundwater is encountered at depths in excess of 250 feet bgs near the proposed project site. Recently reported groundwater depths to the west and south of the proposed project site are approximately 260 to 320 feet bgs on

average. Alternative A and B improvements within the project corridor would only require shallow excavation (less than 6 inches) in most areas. Installation of side-running stations throughout the proposed project footprint would extend to a maximum depth of 2.5 feet, utility relocations would be 6 feet maximum depth, and storm drain construction would have a 15-foot maximum excavation depth. Impacts on groundwater and groundwater quality within the project corridor are not anticipated under Alternatives A and B. No adverse impacts on groundwater from construction of the O&M facility are anticipated.

Floodplain Impacts

No Build Alternative

The No Build Alternative would not include BRT system improvements along the subject corridor or at the potential O&M facility sites. Therefore, floodplain impacts associated with the proposed project would not occur under this alternative.

Build Alternatives

BRT Corridor

No adverse changes in hydraulic conveyance capacity are anticipated under both alternatives; therefore, there would be no impacts on flood channels from the proposed project. Culverts and other drainage facilities would be designed to maintain or provide greater hydraulic conveyance capacity, no adverse impact on surface hydrology would occur.

Construction of the proposed WVC Project would not result in floodplain encroachment impacts at four out of five water bodies crossing the corridor, including San Antonio Channel, Cucamonga Channel, Day Creek Channel, and Etiwanda Creek Channel because improvements at these locations would be minor, such as restriping efforts, and would not include roadway widening.

Both of the build alternatives would require some improvements at West Cucamonga Channel, including roadway widening, grading, and culvert installation. Floodplain encroachment at West Cucamonga Channel would occur where the existing culvert crosses under Holt Boulevard. This culvert would be extended to accommodate the proposed roadway widening. The proposed work would not substantially alter the floodplain because the culvert crossing would only be extended by approximately 30 feet total (15 feet on each side). Furthermore, the 100-year flood event would still be contained in the channel under the proposed conditions.

O&M Facility

The proposed O&M facility would increase the amount of impervious surface on the site (to be selected) by zero to 8.56 acres. Runoff would be conveyed to engineered onsite infiltration zones designed to accommodate project-related increases in peak storm runoff. This proposed new facility would not affect flood heights or flood channel capacity.

4.7.4 Avoidance, Minimization, and/or Mitigation Measures

This section presents avoidance, minimization, and mitigation measures for any long-term impacts associated with hydrology and water quality that may result from project implementation. Avoidance, minimization, and mitigation measures to minimize construction impacts associated with hydrology and water quality are discussed in Section 5.3.7.

During operation, SBCTA would ensure that the permit requirements and project design features are implemented to minimize or prevent water quality impacts. Consequently, because the combination of construction site and maintenance BMPs and project design features incorporated in response to regulatory requirements would effectively minimize water quality impacts, no additional mitigation measures are required.

Water Quality

WQ-1: All construction of the side-running stations under both Alternatives A and B shall be undertaken within the existing impervious areas along the proposed corridor, resulting in no additional impervious areas.

WQ-2: Additional stormwater runoff from the new impervious area along the 3.5-mile dedicated lane segment under Alternative B shall be treated at the infiltration basin to be constructed as part of the proposed Alternative B project.

WQ-3: Additional stormwater runoff from the new impervious area created by the proposed O&M facility under either Build Alternative shall be treated at the on-site infiltration basins to be constructed as part of the proposed project.

Floodplains

The project will be designed to minimize impacts to floodplains, where possible, by limiting the grading and structural encroachments at designated floodplain and floodways areas. The following measures shall be incorporated into the design and construction phases to minimize potential floodplain impacts:

FP-1: Implement recommended BMPs as identified in the Storm Water Data Report prepared for this project.

FP-2: Develop a contingency plan for unforeseen discovery of underground contaminants in the SWPPP.

FP-3: Provide adequate conveyance capacity at bridge crossings to ensure no net increase in velocity. A more detailed hydraulic analysis shall be completed to assess existing and post-hydraulic conditions.

4.8 Land Use and Planning

This section describes the current land uses and local plans and policies relevant to the proposed project. It also addresses changes in current land uses that would result from the direct conversion of land within the proposed project corridor, as well as the consistency of these changes with regionally adopted land use plans and policies.

Short-term impacts during project construction and proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with land use and planning are discussed in Sections 5.2.8 and 5.3.8, respectively.

The information contained in this section is summarized from the *West Valley Connector Project – Community Impact Report* (Parsons, 2018c) prepared for the proposed project.

4.8.1 Existing Land Use

The 35-mile-long project corridor traverses the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. Existing land use is based on 2012 parcel level land use data from SCAG. Generalized land uses include single- and multi-family residential, mobile homes and trailer parks, general office, commercial and services, public and special use facilities, education, industrial, transportation and utilities, mixed commercial and industrial, mixed residential and commercial, open space and recreation, agriculture, vacant, water, and under construction.

Table 4.8-1 provides a breakdown of the types of land use by parcel identified within the study area (defined as the area within 300 feet of the centerline of the proposed alignment and within 0.5 mile from proposed BRT stations) in each city.

As shown in Table 4.8-1, the predominant land use within the study area is single-family residential at 54.1 percent followed by multi-family residential at 16.9 percent. Commercial and services make up 6.8 percent of the study area land use. According to the County of San Bernardino General Plan Housing Element (2014), residential neighborhoods in San Bernardino County are comprised of mostly detached single-family units (approximately 71 percent of the total housing units).

City of Pomona Land Use

Starting in the west, the Pomona Metrolink Station/Transit Center is surrounded largely by medical and auto-related uses. Garey Avenue, the primary north-south arterial adjacent to the transit center, is considered the gateway into Pomona's Downtown to the south and is surrounded by civic uses and commercial/retail properties. In addition to the Transit Center, the YMCA building on Garey Avenue anchors the area. Holt Avenue between Garey Avenue and Mills Avenue is primarily dominated by older retail and auto-related uses and the Indian Hill Mall on the eastern end of Pomona.

Table 4.8-1 Existing Land Use Types within the Study Area

Land Use	Number of Parcels						Total Parcels	Percent
	Pomona	Montclair	Ontario	Rancho Cucamonga	Fontana	Unincorporated San Bernardino County		
Single-Family Residential	2,042	1,231	3,507	1,493	5,830	670	14,773	54.1
Multi-Family Residential	676	565	1,032	1,553	759	25	4,610	16.9
Mobile Homes and Trailer Parks	5	18	10	0	127	7	167	0.6
Mixed Residential	1	0	222	0	0	0	223	0.8
General Office	102	24	387	174	91	3	781	2.9
Commercial and Services	349	192	463	265	541	49	1,859	6.8
Public and Special Use Facilities	163	11	71	43	88	6	382	1.4
Education	28	19	8	8	30	0	93	0.3
Industrial	164	226	415	319	115	81	1,320	4.8
Transportation, Communications, and Utilities	43	38	335	45	50	12	523	1.9
Mixed Commercial and Industrial	0	0	0	120	2	0	122	0.5
Mixed Residential and Commercial	14	0	0	0	0	0	14	0.1
Open Space and Recreation	4	8	103	12	44	0	171	0.6
Agriculture	0	0	23	2	1	3	29	0.1
Vacant	290	46	0	175	256	30	2	0.01
Water	0	0	0	2	0	0	656	2.4
Under Construction	0	0	793	612	44	0	1,590	5.8
Total Parcels	**3,881**	**2,378**	**7,369**	**4,823**	**7,978**	**886**	**27,315**	**100**

Source: SCAG 2012 Land Use Data.

City of Montclair Land Use

Holt Boulevard, between Mills Avenue and Benson Avenue, is comprised primarily of commercial and industrial uses dominated by older retail and auto-related business.

City of Ontario Land Use

On the east end of Holt Boulevard, there are numerous vacant lots and older commercial uses as one approaches historic downtown Ontario. Most of the vacant and underused parcels are located along the proposed project corridor east of Sultana Avenue. Near Ontario International Airport, a few high-density residential developments located immediately east of Euclid Avenue (a major north-south arterial) and close to downtown Ontario were recently constructed. Hospitality uses dominate the eastern edge of this segment along Holt Boulevard. The Ontario Convention Center and several hotels are located in the immediate vicinity of the Holt Boulevard and Vineyard Avenue intersection. These uses are complemented by surrounding restaurants, auto uses, and Ontario International Airport.

Land uses along Airport Drive, on the northern edge of Ontario International Airport, include airport parking lots and service roads to the south and railroad tracks to the north. Access to the airport is from Airport Drive and Archibald Avenue. The former Guasti winery property, northeast of the airport entry, currently has vacant land surrounding the historic structures onsite, but it is planned for future mixed-use development that would complement airport uses. Along Archibald Avenue, there are vacant and industrial properties.

Inland Empire Boulevard is surrounded by multi-family residential developments on the north side and industrial and commercial uses on the south side. The intersection of Inland Empire Boulevard and Haven Avenue is predominantly office buildings, along with a hotel on the southeast corner and vacant lots on the northwest corner. Inland Empire Boulevard, near Milliken Avenue, is dominated by restaurants, 5- to 10-story office towers and hotels with surface parking, the adjacent I-10, Founder's Garden, a large formal park dedicated to the founding of the City of Ontario, and Ontario Mills, a major regional shopping center east of Milliken Avenue.

City of Rancho Cucamonga

The Phase II/Haven Alignment follows Haven Avenue north through Rancho Cucamonga. Many vacant lots adjacent to the west side of Haven Avenue are zoned for light industrial uses. Overall, land uses along Haven Avenue are predominantly general office, auto-oriented commercial plazas, and light industrial uses. Approaching the intersection of Haven Avenue and Foothill Boulevard, the land uses are mostly multi-family residential and large commercial shopping plazas. The Rancho Cucamonga Superior Court, Rancho Cucamonga Civic Center, and Terra Vista Town Center are near the Haven Avenue and Foothill Boulevard

intersection. As the proposed project alignment continues east onto Foothill Boulevard, land uses remain largely general office space and large shopping plazas. The Phase II/Haven Alignment travels east along Foothill Boulevard, passing primarily shopping plazas and hotels, turning north onto Day Creek Boulevard before terminating at the Victoria Gardens Shopping Center. The Victoria Gardens area is a key commercial destination with department stores, a variety of restaurants, and a movie theater. Victoria Gardens Cultural Center is located within the center as well. Multi-family residential uses surround Victoria Gardens. North of Church Street, land uses are primarily single-family residences. Several new apartment and townhome developments are at Church Street and Mayten Avenue, including a senior living center.

The Phase I/Milliken Alignment traverses through Rancho Cucamonga via Milliken Avenue between 4th Street and Foothill Boulevard. Some commercial plazas and office buildings are near 4th Street. As the alignment gets closer to 6th Street and the Rancho Cucamonga Metrolink Station, land uses are predominantly industrial. More commercial plazas with shopping and other services are at the intersection with Foothill Boulevard. As the route continues east on Foothill Boulevard, numerous vacant lots are adjacent to the alignment.

The remaining portion of the proposed project alignment in Rancho Cucamonga runs along Foothill Boulevard into Fontana and features primarily commercial uses and vacant parcels of land.

City of Fontana Land Use

The proposed project corridor in Fontana begins from East End Avenue going eastward along Foothill Boulevard. Along this portion of the corridor, general commercial/retail and auto-related activities are the primary uses, comprised of mechanic shops, restaurants, banks, and some small-scale and big-box retail. Vacant/undeveloped land dominates the proposed project corridor between Cherry Avenue and Citrus Avenue. East of Citrus Avenue, along Foothill Boulevard to Sierra Avenue, major cross streets are lined with commercial uses with single-family and medium- and high-density housing located behind the commercial.

Turning south onto Sierra Avenue, the proposed project corridor traverses the Fontana Civic Center, the Pacific Electric Bike Trail, Fontana Metrolink Station, and historic Downtown Fontana. Kaiser Permanente Medical Center is the major commercial node on Sierra Avenue near Valley Boulevard. Other land uses along Sierra Avenue between Foothill Boulevard and Valley Boulevard include retail, auto-related uses, and vacant/undeveloped land. Newer high-density residential senior housing fronts Sierra Avenue on both sides between Ceres Avenue and the Union Pacific Railroad (UPRR) railroad tracks.

Overall, the proposed project corridor has a strong market for transit. This is because the corridor is home to several

important employment, educational, and activity centers where public transit demand by workers, shoppers, students, visitors, and others is concentrated. The proposed project corridor adds Victoria Gardens, an upscale shopping center in Rancho Cucamonga, as a potential destination to be connected to Ontario Mills, Ontario International Airport, and Kaiser Permanente Medical Center and provides new direct connections between three Metrolink stations. It also provides local service and regional connectivity for the residential uses located in the study area.

4.8.2 Existing Plans and Policies

The General Plans and associated Specific Plans, Strategic Plans, and Community Plans for the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana, and the General Plans for the County of Los Angeles and County of San Bernardino, guide development within the proposed project study area.

Other relevant plans discussed in this section include the SCAG Regional Comprehensive Plan (RCP), SCAG RTP/SCS, and SCAG Compass Blueprint.

The following discussion describes the adopted plans within the proposed project study area and goals, policies, or objectives of those plans that are applicable to this proposed project.

City of Pomona

City of Pomona General Plan (Update 2014)

Pomona is surrounded by the cities of Claremont, La Verne, San Dimas, Walnut, Diamond Bar, Chino, and Montclair. The area contained within the City of Pomona boundaries comprises 22.84 square miles. Pomona has excellent transportation access, positioned at the confluence of I-10, SR-57, SR-71, and SR-60, as well as two UPRR/Metrolink rail lines.

The City of Pomona General Plan's guiding themes include maintaining its diverse land uses, embracing development changes, economic prosperity by way of varied development patterns, maintaining neighborhood character and cohesion, protecting cultural resources and open spaces, and public safety.

The General Plan identifies Strategic Action Areas, place types, and high-density/low-density uses throughout the city. The proposed project is adjacent to the following strategic action areas and approaches:

- Downtown Planning Approach: Promote the restructuring of new development into higher intensity, transit-oriented districts with a mix of uses in a pedestrian-oriented environment with a wide variety of pedestrian amenities, connected streets, and public spaces.
- Transit-Oriented District Planning Approach: Promote the restructuring

of new development into higher intensity, higher activity, transit-oriented districts with a mix of uses in a pedestrian-oriented environment with a wide variety of pedestrian amenities, connected streets, and public spaces.

- Activity Centers Planning Approach: Retain existing neighborhood centers and Downtown retail core and support their intensification and mix; encourage the eventual transition of properties to greater land use efficiency and mixture of complementary uses; restructure areas in strategic locations to accommodate new or renovated regional retail centers.
- Corridors Planning Approach: Encourage the gradual transition to more pedestrian/transit-oriented and distinctive building types and site treatments, as well as increasingly efficient land use.
- Mixed-Use Neighborhoods/Cluster Planning Approach: Encourage the gradual transition to more pedestrian-oriented and distinctive building types and site treatments that are increasingly efficient in land use and are compatible with existing adjacent low-density residential development.

The following General Plan goals are directly relevant to the proposed project:

- **Goal 6B.G2.** Locate higher intensity TOD around existing and future Metrolink, Metro Gold Line, high-speed rail, BRT, and other transit stations.
- **Goal 6B.G12.** Create evenly spaced and well-distributed activity cluster destinations that anchor the east and west ends of the Holt Avenue corridor and SR-60/SR-71 to strengthen the gateway function of these locations.
- **Goal 6B.G13.** Locate the most intense development along Holt Avenue in clusters that can take advantage of potential future BRT.
- **Goal 6B.G14.** Continue transformation of the Indian Hill Pomona Unified School District (PUSD) Center into an active mixed-use, walkable environment.
- **Goal 7D.G2.** Strengthen Pomona's position as an important regional center through quality transportation planning.
- **Goal 7D.G3.** Support regional efforts to the extent feasible, to reduce GHG emissions from cars and light trucks.
- **Goal 7D.G6.** Support the expansion of existing regional transit (bus and light rail) and development of a statewide high-speed rail network.
- **Goal 7D.G7.** Promote a multimodal transportation system that serves and is served by the future City structure.
- **Goal 7D.G9.** Expand the choices of available transportation modes to effectively increase the freedom of movement for Pomona's residents and reduce reliance on the automobile.
- **Goal 7D.G13.** Promote transportation access and connectivity between neighborhoods, Downtown, and activity centers.
- **Goal 7D.G16.** Encourage the use of public transportation, especially for

commuter trips, and increase citywide transit ridership.

- **Goal 7D.G18.** Make transit centers and facilities more visible and accessible throughout the community.
- **Goal 7E.G1.** Achieve the City's vision for Pomona Tomorrow without adverse environmental impacts that compromise the ability of future generations to meet their needs.
- **Goal 7E.G10.** Contribute to attainment of regional goals by improving ambient air quality levels within Pomona.

Pomona Corridors Specific Plan (2013)

The Pomona Corridors Specific Plan was established to orchestrate private and public investment activities along the Garey Avenue, Holt Avenue, Mission Boulevard, and Foothill Boulevard corridors, and to support and promote the type of investment that will enhance the beauty and vitality of the City's primary commercial corridors. One of the specific goals of the plan is to develop the corridors and connected street network into pedestrian, transit, and bicycle friendly "Complete Streets," linked with the City's promenades, trails, parks, and future transit stations.

Downtown Specific Plan (Update 2013)

The Downtown Pomona Specific Plan contains a vision and a practical implementation program to create an appealing Downtown Shopping, dining, entertainment, and educational district with community facilities serving the City of Pomona and the region. The plan area consists of 380 acres bound by Holt Avenue, Towne Avenue, Mission Boulevard, and White Avenue. The Transit Center district area is well suited for future mixed-use development and features a distinct Spanish Revival style.

City of Montclair

City of Montclair General Plan (1999)

The western boundary of Montclair is contiguous with the Los Angeles County line, which also includes the cities of Pomona and Claremont. Upland borders Montclair on the north and east, Ontario on the east, and an unincorporated portion of San Bernardino County to the south. The Montclair planning area consists of approximately 6.48 square miles.

Holt Boulevard is designated in the City of Montclair General Plan as a commercial corridor and a major arterial. Almost 50 percent of Montclair is designated for low-density residential (3.7 units per acre), very low-density residential (zero to 2 units per acre), and medium-density residential (8 to 14 units per acre), with some senior housing and planned development permitted at higher densities. Montclair Plaza and associated land uses located north of Holt Boulevard along I-10 are designated as Regional Commercial, and areas south of Holt Boulevard lining the UPRR/Southern Pacific railroad ROW are designated industrial.

The following General Plan goals are directly relevant to the proposed project:

Goal LU-1.1.4. Participate in and support regional activities of SCAG, SANBAG, City/County Planning Commissioners Conference, and other such agencies.

CE-1.1.0. To promote a circulation and transportation system, including freeways, all classes of streets, accommodations for public mass transportation and pedestrian walkways, and bicycle routes that will serve traffic needs efficiently and safely, and be attractive in appearance.

CE-1.1.10. Promote the provision of public modes of transportation between strategic locations such as the Montclair Plaza Shopping Center, and other traffic generators, such as the Montclair Transcenter and potential Metrolink station on the Riverside Line.

Goal AQ-2.0.0. To achieve a diverse and efficient ground transportation system which generates the minimum feasible pollutants.

Holt Boulevard Specific Plan (1991)

The Holt Boulevard Plan planning area extends approximately 2.2 miles along Holt Boulevard from Mills Avenue on the west to Benson Avenue on the east. Improvements to the boulevard's physical appearance aim to bring commercial, retail, and auto-related uses back to this area of Montclair.

City of Ontario

City of Ontario General Plan (2007)

Ontario is comprised of approximately 50 square miles. It is bordered by unincorporated San Bernardino County; cities of Montclair, Upland, Rancho Cucamonga, and Fontana to the north; and City of Chino and Riverside County to the south. I-10, I-15, and SR-60 run through the City limits.

Updated in 2010, the vision of the Ontario General Plan, or the Ontario Policy Plan, includes goals and policies to create and maintain distinct neighborhoods and activity centers; encourage diverse residential uses; a mix of employment, retail, entertainment, community, and recreational services; and world-class airport, which are connected through a unified mobility system.

Most of the WVC corridor is designated in the Land Use Plan for Mixed Use, General Commercial, Hospitality, and Business Park. The proposed project would pass through eight separate mixed-use designations. Densities range from 14 to 125 dwelling units per acre, and intensities range from 1.0 to 3.0 floor area ratio (FAR) in mixed-use corridors.

A BRT corridor is shown in the General Plan along Holt Boulevard, from Benson Avenue to Vineyard Avenue, to the future Multimodal Transit Center, which would serve Metro Gold Line, high-speed rail, Metrolink, and bus services. The BRT then turns north on Archibald Avenue, from Guasti Road to Inland Empire

Boulevard, and west on 4th Street, from Milliken Avenue to Etiwanda Avenue. North-south BRT corridors are shown crossing the WVC corridor on Euclid Avenue and Haven Avenue. A future downtown Metrolink station is shown on Euclid Avenue just south of Holt Boulevard. Existing bus transfer centers are on Holt Boulevard/ Euclid Avenue and Inland Empire Boulevard/Milliken Avenue.

The following General Plan goals and/or policies are directly relevant to the proposed project:

Goal M3. A public transit system that is a viable alternative to automobile travel and meets basic needs of the transit dependent.

Goal M3-4. BRT Corridors. We work with regional transit agencies to implement BRT service to target destinations and along corridors.

Goal M5. A proactive leadership role to help identify and facilitate implementation of strategies that address regional transportation challenges.

Goal CE1-12. Circulation. We continuously plan and improve public transit and nonvehicular circulation for the mobility of all, including those with limited or no access to private automobiles.

Goal CD1-4. Transportation Corridors. We will enhance our major transportation corridors within the City through landscape, hardscape, signage, and lighting.

Goal CD3. Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing, and safe during all hours.

Goal CD3-7. Transit Stops. We require transit stops be well lit, safe, appealing to, and accessible by pedestrians.

Meredith International Centre Specific Plan (Adopted 1981, Updated 2008)

The Meredith International Centre Specific Plan is a major mixed-use development on approximately 250 acres. A key amenity to the proposed project is the Cucamonga/Guasti Regional Park, which occupies the northeast corner of the site. It is bound by I-10 to the south, Archibald Avenue to the east, 4th Street to the north, and Vineyard Avenue to the west in Ontario. The land uses proposed for the plan are primarily office, hotel, and retail/commercial with some residential uses.

Ontario Festival Specific Plan (Adopted 2012)

The Ontario Festival Specific Plan is a comprehensive plan for the development of a planned residential site that could accommodate up to 472 dwelling units on approximately 37.6 acres. This proposed project would be located along Inland Empire Boulevard between Archibald Avenue and Turner Avenue, just below Guasti Regional Park.

Wagner Properties Specific Plan (Adopted 1982, Amended 2012)

The Wagner Properties Specific Plan contains approximately 54 acres. The plan is to guide creation of a commercial center with commercial and residential uses. It is bound by I-10 to the south, Turner Avenue to the west, 4th Street to the north, and Haven Avenue to the east in Ontario. A looped circulation network encouraging public transit opportunities will be included with the individual site plan.

Ontario Center Specific Plan (Amended 2006)

The Ontario Center Specific Plan consists of a mix of uses, including commercial, residential, and open space, covering 549 acres. It is bound by I-10 to the south, Turner Avenue to the west, 4th Street to the north, and Milliken Avenue to the east in Ontario. The plan represents an integrated, balanced urban form with the inclusion of a looped circulation network encouraging public transit opportunities, as well as pedestrian walkways and bicycle routes.

Ontario Mills Specific Plan (Adopted 1996)

The Ontario Mills Specific Plan consists primarily of commercial and office land uses and encompasses approximately 251 acres. It is generally bound by 4th Street to the north, Milliken Avenue to the west, I-15 to the east, and I-10 to the south in Ontario. The site is located at the interchange of two freeways, frontage on major arterials, and within close proximity of Ontario International Airport. The plan specifies that all parcel maps and site plans proposed in the area will be submitted to SBCTA for review. Bus turnouts and shelter facilities will be provided as required by SBCTA.

Guasti Plaza Specific Plan (Adopted 1996, Updated 2011)

The Guasti Plaza Specific Plan area has a long history as an Italian agricultural/ agrarian, working environment. It is bound by I-10 to the north, Turner Avenue to the east, Old Guasti Road to the south, and Archibald Avenue to the west in Ontario. It is approved for the exclusive development of light industrial uses. The plan includes the provision of bus turnouts and bus shelters on the south sides of Guasti Road.

Holt Boulevard Mobility and Streetscape Strategic Plan (2013)

This strategic plan for Ontario applies to a 5-mile stretch of Holt Boulevard from the west City limits at Benson Avenue to the connector ramps of I-10. The Ontario Plan classifies Holt Boulevard as a six-lane arterial, with a proposed ROW of 120 feet. The plan accommodates alternative modes of transportation, including potential BRT concepts.

Transpark Specific Plan (Adopted 1981, Updated 2008)

This specific plan, located in the southeastern corner of G Street and Turner Avenue in Ontario, plans for a 35-acre business park that is nearly built out with a mixture of low-rise office

buildings, light industrial, and distribution uses.

The Exchange Specific Plan (Adopted 2003, Amended 2007)

This approximately 23.60-acre commercial development is planned as a destination location for customers and visitors traversing Ontario along I-15 or traveling on 4th Street and Inland Empire Boulevard.

Crossroads Business Park (Adopted 1990, Amended 2009)

This specific plan encompasses 305.3 acres of planned light industrial uses in the northeastern portion of Ontario and is generally bound by Ontario Mills Parkway and I-10 to the south; Day Creek Channel to the west; Etiwanda Avenue to the east; and 4th Street to the north.

City of Rancho Cucamonga

City of Rancho Cucamonga General Plan (2010)

Rancho Cucamonga is located at the base of the San Gabriel Mountains in western San Bernardino County and is bound by the cities of Upland, Ontario, and Fontana; the San Bernardino National Forest; and parts of unincorporated areas of San Bernardino County. Major transportation facilities in and near Rancho Cucamonga include SR-210, I-15, I-10, Foothill Boulevard, and Ontario International Airport.

The City of Rancho Cucamonga's General Plan emphasizes protection of existing residential neighborhoods and targets new residential, office, and commercial growth along major corridors. Rancho Cucamonga celebrates its storied heritage while fostering a spirit of innovation and enterprise, reflected by the City's commercial, industrial, and service providers. A variety of neighborhood and community centers meets local and regional needs. The General Plan guides the City's vision of tomorrow and defines the steps necessary to maintain the high quality of life on a sustainable level into the future.

The General Plan recommends relocating the Metrolink station to Haven Avenue to provide more convenient access to employment centers and to allow coordination with bus transit, including a possible BRT route along Haven Avenue. The City has no funding for this relocation; therefore, the feasibility of this recommendation is unknown. The plan also recognizes the need to increase bicycle, trail, and pedestrian use and recommends policies to expand those networks. Three major transit corridors – an east-west transit spine along Foothill Boulevard, an east-west spine along 4th Street between Milliken Avenue and Etiwanda Avenue at the southern boundary of the City, and a north-south transit spine along Haven Avenue – will form the backbone of bus transit service in Rancho Cucamonga. BRT could operate along these corridors. Milliken Avenue and 4th Street, west of Milliken Avenue, are designated as Secondary Transit Corridors.

The following General Plan goals are directly relevant to the proposed project:

Goal LU-4: Establish a pedestrian-friendly Foothill Boulevard corridor that facilitates transit use and provides a range of commercial destinations to serve both local and regional needs.

Goal LU-12: Foster a variety of travel routes that are enjoyable ways to experience Rancho Cucamonga.

Goal CM-1: Provide an integrated and balanced multimodal transportation network of Complete Streets to meet the needs of all users and transportation modes.

Goal CM-2: Plan, implement, and operate transportation facilities to support healthy and sustainable community objectives.

Goal CM-3: Provide a transportation system that includes connected transit, bicycle, and pedestrian networks.

Goal CM-5: Require that new development mitigate transportation impacts and contribute to the improvement of the City's transportation system.

Goal PS-4: Provide a high level of public safety services throughout Rancho Cucamonga.

Goal PS-11: Reduce the volume of pollutants generated by motorized vehicles.

Rancho Cucamonga City Development Code (Amended 1999)

The Development Code describes and guides the zoning districts in Rancho Cucamonga and establishes the development requirements, standards, guidelines, and policies for the City.

Rancho Cucamonga Foothill Boulevard BRT Corridor Study (2013)

This SCAG study prepared for the City of Rancho Cucamonga provides recommendations on regulatory documents and design concepts to promote multimodal travel, including transit, along the entire length of Foothill Boulevard from Grove Avenue on the west to East Avenue on the east. The BRT study emphasizes the distinction between the mobility of Historic Route 66, where "personal, individual mobility was king and considered an outward sign of freedom and individuality," and the perspective of today's mobility needs and wants. Alternative modes of mobility go hand in hand with alternative modes of experiencing the public realm within a unique and intimate corridor. The study closely coincides with the *Omnitrans System-Wide Transit Corridor Plan* but instead extends BRT service to Victoria Gardens and turns the route back south along Etiwanda Avenue to Foothill Boulevard.

Industrial Area Specific Plan (Amended 2016)

This 5,000-acre area is bound on the north by Foothill Boulevard, on the south by San Bernardino Avenue, on the west by Baker Avenue, and on the east by East Avenue. The plan guides the development of the City of Rancho Cucamonga's industrial base. It is divided into 3 zones and 19 subareas. The subareas represent specific land use characteristics and development constraints that are handled on a subarea basis rather than through the application of broadly applied development standards. The purpose of the specific plan is to establish specific standards and guidelines that will be used for development throughout the City's industrial area.

Industrial Area Specific Plan Subarea 18 Plan (Empire Lakes Specific Plan) (2016)

This Specific Plan would develop the privately owned 160-acre Empire Lakes Golf Course that is bound on the south by 4th Street, on the east by Milliken Avenue, on the north by 8th Street and the railroad, and on the west by Cleveland Avenue. This area would be developed to include a combination of residential, commercial, recreational, and office uses in an urban setting near transit services, including the Rancho Cucamonga Metrolink Station, and local regional activity centers. The intent of this mixed- use, TOD project is to reduce the reliance on automobiles and encourage walking, bicycling, and the use of mass transit such as Metrolink.

Foothill Boulevard Specific Plan (Adopted 1987)

This specific plan placed importance on Foothill Boulevard's function as a commercial corridor. It implements a blueprint for future development along Foothill Boulevard with the added intention of enhancing the historical significance of Route 66 (Foothill Boulevard). The plan identified Foothill Boulevard as an essential element of the regional roadway system and placed a traffic volume burden on Foothill Boulevard, directly affecting its mixed-use development potential. In 1999, the Rancho Cucamonga Development Code was amended to incorporate the Foothill Boulevard Specific Plan, which is no longer a stand-alone document.

Foothill Boulevard Visual Improvement Plan (VIP) (Adopted 2002)

The purpose of the Foothill Boulevard/ Historic Route 66 VIP is to develop a design specification plan that would set forth design concepts for the streetscape improvements within the public ROW and entry areas along the entire length of Route 66 in Rancho Cucamonga.

Terra Vista Community Plan (Amended 1995)

The Terra Vista Community Plan is centrally located in Rancho Cucamonga and encompasses 1,321 acres. It is comprised of four distinct neighborhoods, with a greenway serving as the backbone connector. The area is planned for a mix

of residential and commercial uses, with a large concentration of commercial and office uses along Foothill Boulevard and Haven Avenue that serves as a community-wide activity center. The plan includes a suggested internal transit route within Terra Vista that connects the key travel destinations and activity centers within the proposed project. These internal transit routes will conveniently connect to external regional and Citywide bus routes and stops at major intersections around and through Terra Vista.

Victoria Community Plan (Adopted 1981)

The Victoria Community Plan is generally bound by Etiwanda Avenue to the east, I-15 and Foothill Boulevard to the south, Deer Creek and Day Creek Channel to the west, and SR-210 to the north. The plan area encompasses 2,150 acres and provides a series of residential villages and a vibrant mixed-use urban center, designed around a central spine called Victoria Park Lane. The Victoria Community Plan includes the Victoria Arbors Master Plan and the Victoria Gardens Master Plan. Foothill Boulevard is designated for Regional Bus Circulations with connections serving the local community at Foothill Boulevard and Day Creek Boulevard.

Victoria Arbors & Victoria Gardens Master Plans (January 2002)

Victoria Gardens is the mixed-use center of the Victoria Arbors community, which is defined as Area 4 (Victoria Lakes Village) of the Victoria Community Plan. Victoria Gardens Master Plan introduces a diverse mixture of uses that includes retail, office, hotel, residential, civic, and cultural activities surrounding the heart of Victoria Gardens, the successful regional retail environment of its shopping center. The result of the master plan is a vibrant downtown atmosphere with a traditional Main Street framework.

City of Fontana

City of Fontana General Plan (2003)

Fontana is positioned as a gateway into southern California's economy and the Inland Empire from I-15. I-10, SR-66, and SR-210 also run through Fontana.

Fontana can play an important role in linking to the critical goods movement system known as the Alameda Corridor East due to the City's level of rail service. With a large amount of undeveloped land and its incorporated boundaries and sphere of influence, Fontana has many opportunities for developing its economy.

The Circulation Master Plan includes the following:

- Foothill Boulevard and Sierra Avenue are both designated as major highways.
- A regional network of multimodal transportation facilities, including an improved citywide public transit system, is provided that ensures the safe and efficient movement of vehicles, people, and goods throughout the City of Fontana and to and from the region, and provides

mobility to all City residents and helps reduce vehicular trips Citywide.

- Provide appropriate transportation terminal facilities for inter-City and regional travel by public and private transportation modes.
- Continue to support the regional bus system to provide intra-City service, inter-City service to major employment centers, and connection to other regional transportation transfer points.
- To encourage transit ridership and transportation demand management including carpooling, required vanpool parking spaces, plan for the provision of additional transportation centers to be used as a park-and-ride for ridesharing, high-occupancy vehicle lanes, regional bus, and passenger rail services.
- Recognize alternative and private transportation services (vans, buses, shuttles, taxis and limousines) as an integral part of public transportation.
- Where needed and appropriate, require new development to provide transit facilities and accommodations, such as bus shelters and turn-outs, consistent with regional agency plans and existing and anticipated demands.
- Encourage commuters and employers to reduce vehicular trips by offering incentives such as reduced-price transit passes and preferential parking for ridesharing.

The following General Plan goals are directly relevant to the proposed project:

Land Use Goal #3: Our community is developing in a unified, orderly, logical, environmentally sound manner, which ensures that the City is unified and accessible to all residents, and results in economically sound commercial areas, vibrant neighborhoods, and jobs rich centers.

Land Use Goal #5: Our downtown is a vibrant, pedestrian-friendly, economically healthy, safe, convenient, and accessible district that serves as the true heart and focal point of the community.

Circulation Goal #1. A balanced transportation system for Fontana is provided that meets the mobility needs of current and future residents and ensures the safe and efficient movement of vehicles, people, and goods throughout the City.

Circulation Goal #2. A regional network of multimodal transportation facilities, including an improved citywide transportation system, is provided that ensures the safe and efficient movement of vehicles, people, and goods throughout the City of Fontana and to and from the region, and provides mobility to all City residents and helps reduce vehicular trips Citywide.

Circulation Goal #3. A circulation system is provided that reduces conflicts between commercial trucking, private/public transportation, and land uses.

Community Design Goal #4. We have a vibrant, identifiable downtown that serves the diverse needs of its residents and readily attracts visitors.

Air Quality Goal #2. Our City has a diverse and efficiently operated ground transportation system that generates the minimum feasible pollutants.

West End Specific Plan (Update 2003)

The West End Specific Plan contains approximately 1,296 acres in Fontana and is bound on the west by East Avenue, on the north by the Southern Pacific Rail ROW above Baseline Avenue, on the east by Cherry Avenue, and on the south by Foothill Boulevard. The plan calls for a mixed-use community, including a business park, commercial/office areas, industrial, and 3,549 residential dwelling units. Land uses and intensities are logically placed near basic public facilities and services in such a relationship to their user groups as to promote maximum opportunity for transit usage.

Northgate Specific Plan (1984)

The Northgate Specific Plan is an 87-acre mixed-use specific plan bound by Miller Avenue on the north, Oleander Avenue on the east, Foothill Boulevard on the south, and Citrus Avenue on the west. The plan is an internally oriented mixed-use community that includes residential, commercial, and open space uses.

Southwest Industrial Park (SWIP) Specific Plan (1984)

The proposed project area is located in the southwest portion of Fontana between I-10 and the San Bernardino/Riverside county line. The Specific Plan is generally bound by Jurupa Avenue on the south, Etiwanda Avenue on the west, the county line on the north, and Citrus Avenue on the east.

Other Applicable Plans and Policies

SCAG 2008 Regional Comprehensive Plan

The SCAG RCP, adopted in 2008, provides a vision for the southern California region that addresses future needs while recognizing the interrelationship between economic prosperity, natural resource sustainability, and quality of life. Through measured performance, the RCP serves as a voluntary action plan with short-term guidance and strategic long-term initiatives. The RCP complements SCAG's Compass Blueprint and the RTP/SCS, which are also discussed in this document. The following goals from the RCP are particularly relevant for implementation of the proposed project.

Land Use and Housing Chapter: The Land Use and Housing Chapter goals that relate to the proposed project include:

- Focusing growth in existing and emerging centers and along major transportation corridors.

- Protecting important open space, ESAs, and agricultural lands from development.

Transportation Chapter: The Transportation Chapter goals that relate to the proposed project include:

- A more efficient transportation system that reduces and better manages vehicle activity.
- A cleaner transportation system that minimizes air quality impacts and is energy efficient.

SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

The 2016 RTP contains goals and policies that are pertinent to the proposed project, and the SCS is incorporated into the RTP, per Senate Bill (SB) 375. The SCS will demonstrate how the region will meet its GHG reduction targets. The RTP/SCS's vision is for a thoughtfully planned, maturing region in which people benefit from increased mobility, more active lifestyles, increased economic opportunity, and an overall higher quality of life.

The 2016 RTP/SCS maintains a significant investment in public transportation across all transit modes and calls for new household and employment growth to be targeted in areas that are well served by public transportation to maximize the improvements. These include extensive local bus, rapid bus, BRT, and express service improvements. An expanded point-to-point express bus network would take advantage of the region's carpool and Express Lane network. New BRT service, limited stop service, and increased local bus service along key corridors, in coordination with TOD and land use, would encourage greater use of transit for short local trips. The WVC Project is included among selected transit capital projects in the RTP.

SCAG Sustainability Planning Grant

The fundamental goal of the SCAG Sustainability Planning Grant (formerly known as the Compass Blueprint) effort is to help the SCAG region build long-lasting partnerships and foster innovative transportation and land use planning. The Sustainability Planning Grant Program combines Compass Blueprint assistance for integrated land use and transportation planning with new Green Region initiative assistance aimed at local sustainability and Active Transportation assistance for bicycle and pedestrian planning efforts. The program will focus on voluntary efforts that meet local needs and contribute to implementing the SCS, reducing GHG emissions, and providing the range of local and regional benefits outlined in the SCS.

Los Angeles County General Plan

Los Angeles County is bordered to the east by Orange County and San Bernardino County, to the north by Kern County, and to the west by Ventura County. The county also includes two offshore islands: Santa Catalina Island and San Clemente Island. The unincorporated areas of the county

account for approximately 65 percent of the total land area of the county (approximately 2,650 square miles), while the total land area is 4,083 square miles. It includes the city of Pomona within the proposed project area.

The major policies of the General Plan include expanding Transit-Oriented Districts, promoting mixed use, expanding Significant Ecological Areas (SEA), creating Employment Protection Districts (EPDs), and protecting Agricultural Resource Areas (ARAs). The following General Plan goals are directly relevant to the proposed project.

Goal M 1. Street designs that incorporate the needs of all users.

Goal M 2. Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths, and trails that promote active transportation and transit use.

Goal M4. An efficient multimodal transportation system that serves the needs of all residents.

Goal M5. Land use planning and transportation management that facilitates the use of transit.

Goal C/NR 1. Open space areas that meet the diverse needs of Los Angeles County.

Goal P/R 3. Acquisition and development of additional parkland.

San Bernardino County General Plan (Adopted 2007, Amended 2013)

San Bernardino County is bordered by Los Angeles County, Orange County, and Kern County on the west; the Colorado River and the states of Arizona and Nevada on the east; Riverside County on the south; and Inyo County and the southwest corner of Clark County, Nevada, on the north. The County of San Bernardino includes the following cities located within the proposed project area: Montclair, Ontario, Rancho Cucamonga, and Fontana.

The following General Plan goals are directly relevant to the proposed project:

Goal CI 1. The County will provide a transportation system, including public transit, which is safe, functional, and convenient; meets the public's needs; and enhances the lifestyles of county residents.

Goal CI 2. The County's comprehensive transportation system will operate at regional, countywide, community, and neighborhood scales to provide connectors between communities and mobility between jobs, residences, and recreational opportunities

Goal CI 3. The County will have a balance between different types of transportation modes, reducing dependency on the automobile and promoting public transit and alternate modes of transportation, in order to minimize the adverse impacts of automobile use on the environment.

Goal CI 4. The County will coordinate land use and transportation planning to ensure adequate transportation facilities to support planned land use and ease congestion.

Goal CI 5. The County's road standards for major thoroughfares will complement the surrounding environment appropriate to each geographic region.

Goal CI 6. The County will encourage and promote greater use of nonmotorized means of personal transportation. The County will maintain and expand a system of trails for bicycles, pedestrians, and equestrians that will preserve and enhance the quality of life for residents and visitors.

Goal CI 10. Ensure timely development and the maintenance of adequate service levels for these facilities to meet the needs of current and future County residents.

Goal CI 13. The County will minimize impacts to stormwater quality in a manner that contributes to improvement of water quality and enhances environmental quality.

Goal V/CI 1. Ensure a safe and effective transportation system that provides adequate traffic movement.

4.8.3 Impacts

This section analyzes potential environmental impacts related to land use and planning along the WVC Project.

In addition, the consistency of the No Build Alternative and build alternatives with the adopted goals, policies, or objectives of relevant local and regional planning documents described above is presented.

Short-term impacts during project construction are discussed in Section 5.2.8.

No Build Alternative

The No Build Alternative would not lead to any physical improvements that would convert existing land uses to transportation uses. The effects of other transportation improvement projects that are planned within the proposed project area would be analyzed in separate environmental documents.

Build Alternatives

BRT Corridor

The proposed project alignment would traverse areas where there is a variety of existing residential, commercial, industrial, and recreational land uses.

Indirect impacts (e.g., changes in regional development and growth-related changes) to land use patterns are not anticipated with implementation of the build alternatives. The area subject to ROW acquisition is urbanized, containing few vacant parcels. It is possible that the presence of a new premium transit service corridor could result in localized changes in adjacent land parcels; however, the ROW acquisition process would consider this potential, and the post-project land use pattern is expected to foster continuing stability to those land uses through such methods as avoiding

unusable small remnant parcels and providing adequate buffer space for sensitive land uses. Given these considerations, implementation of any of the build alternatives would not result in indirect adverse effects on land use.

Alternative A

Construction of the BRT corridor under Alternative A would require a partial acquisition of land along the corridor to accommodate the reconfiguration, relocation, or extension of adjacent driveways, curbs, medians, sidewalks, parking lots, and local bus stops. These minor partial acquisitions (of less than 0.1 acre) are not anticipated to adversely affect public or privately owned properties along the alignment. Some TCEs (of approximately 0.1 acre in total) would be required to support the construction activities along the corridor, especially around the proposed bus stations.

In conclusion, Alternative A would not convert any existing land uses to a transportation use.

Alternative B

Construction of the BRT corridor under Alternative B would require a partial acquisition of land and some TCE along the corridor similar to that described under Alternative A. These minor partial acquisitions and small amount of TCE are not anticipated to adversely affect public or privately owned properties along the alignment.

Construction of the 3.5-mile-long dedicated lanes would result in conversion of existing land uses and directly affect public and privately owned properties along Holt Boulevard. In this area (between Benson Avenue and Vineyard Avenue in Ontario), project compatibility with existing land uses is considered high because the proposed project is in an urban setting that would connect major activity centers. The proposed project alignment would generally stay within the city ROW. ROW and temporary easements required to construct the proposed project would require partial and full acquisitions of numerous parcels. As shown in Table 4.8-2 and Figure 4.8-1, 263 parcels would be affected under Alternative B, specifically for the 3.5-mile-long segment along Holt Boulevard, to accommodate the dedicated bus-only lanes and center-running stations. Approximately 4.22 acres of land would be temporarily impacted for construction easements. Approximately 11.01 acres of land along the dedicated lanes segment would be permanently converted to a transportation use. In addition, an approximately 6-acre site near the alignment would be acquired for construction of the O&M facility. See Section 4.12 for additional information regarding acquisitions.

O&M Facility

Construction of the O&M Facility would require a permanent acquisition of an approximately 6-acre site of existing commercial/industrial land use near the alignment. No impacts to land use conversion would occur.

Table 4.8-2 Temporary and Permanent Impacts to Land Use along 3.5-mile-long Dedicated Lanes Segment under Alternative B

Land Use	Temporary Impacts (Acres)	Permanent Impacts (Acres)	Total Number of Impacted Parcels
Single-Family Residential	0.11	0.36	8
Multi-Family Residential	0.62	0.65	43
Mobile Homes and Trailer Parks	0.07	0.06	4
Mixed Residential	0.05	0.07	3
General Office	0.33	1.49	23
Commercial and Services	0.67	5.15	61
Public and Special Use Facilities	0.13	0.11	4
Industrial	1.02	0.92	54
Transportation, Communications, and Utilities	0.18	0.21	11
Agriculture	0.02	0.04	1
Vacant	1.00	1.95	51
Total	**4.22**	**11.01**	**263**

Source: WVC Project Community Impact Report, 2018.

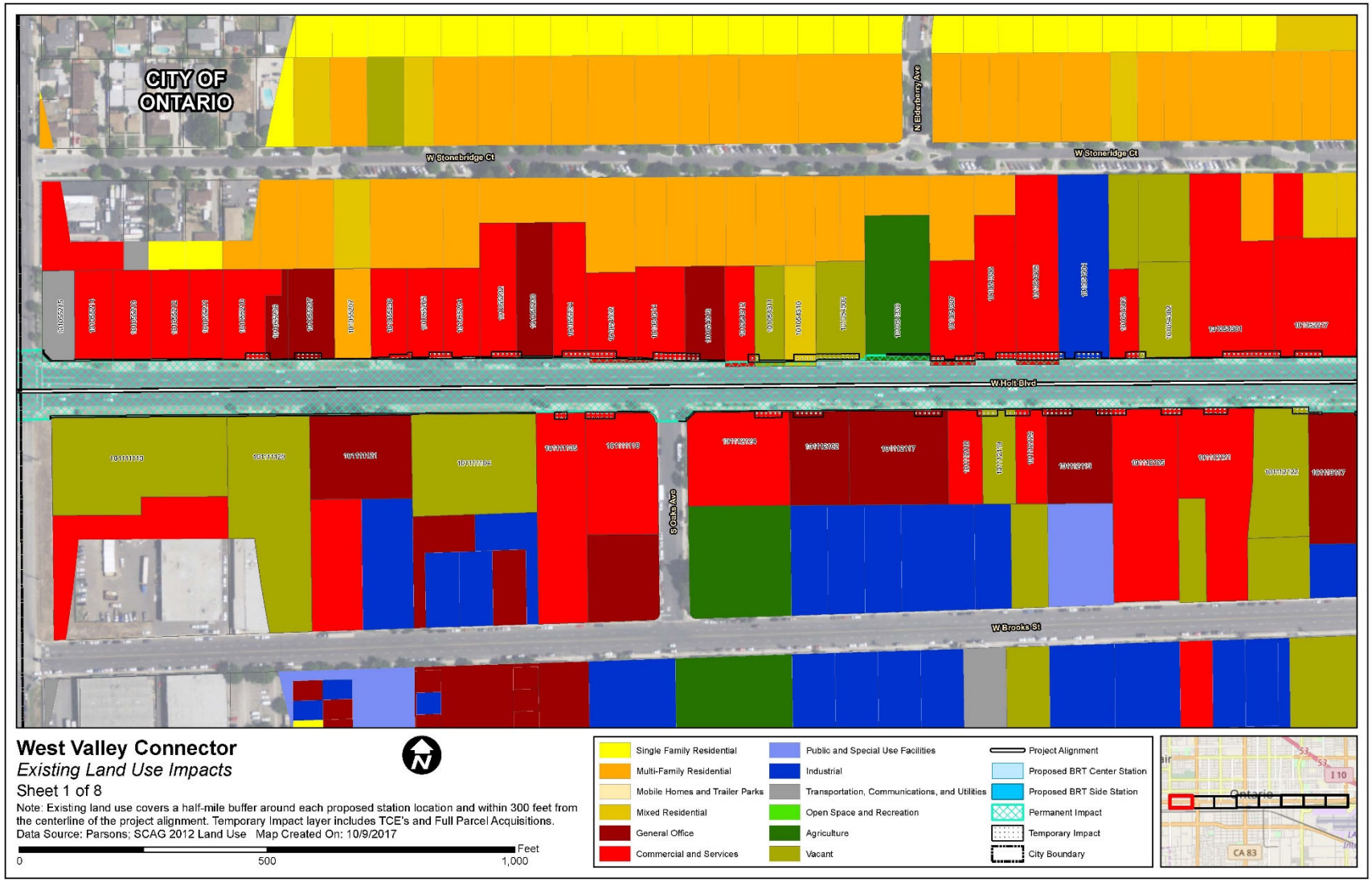


Figure 4.8-1 Land Use Impacts for Alternative B (Sheet 1 of 8)

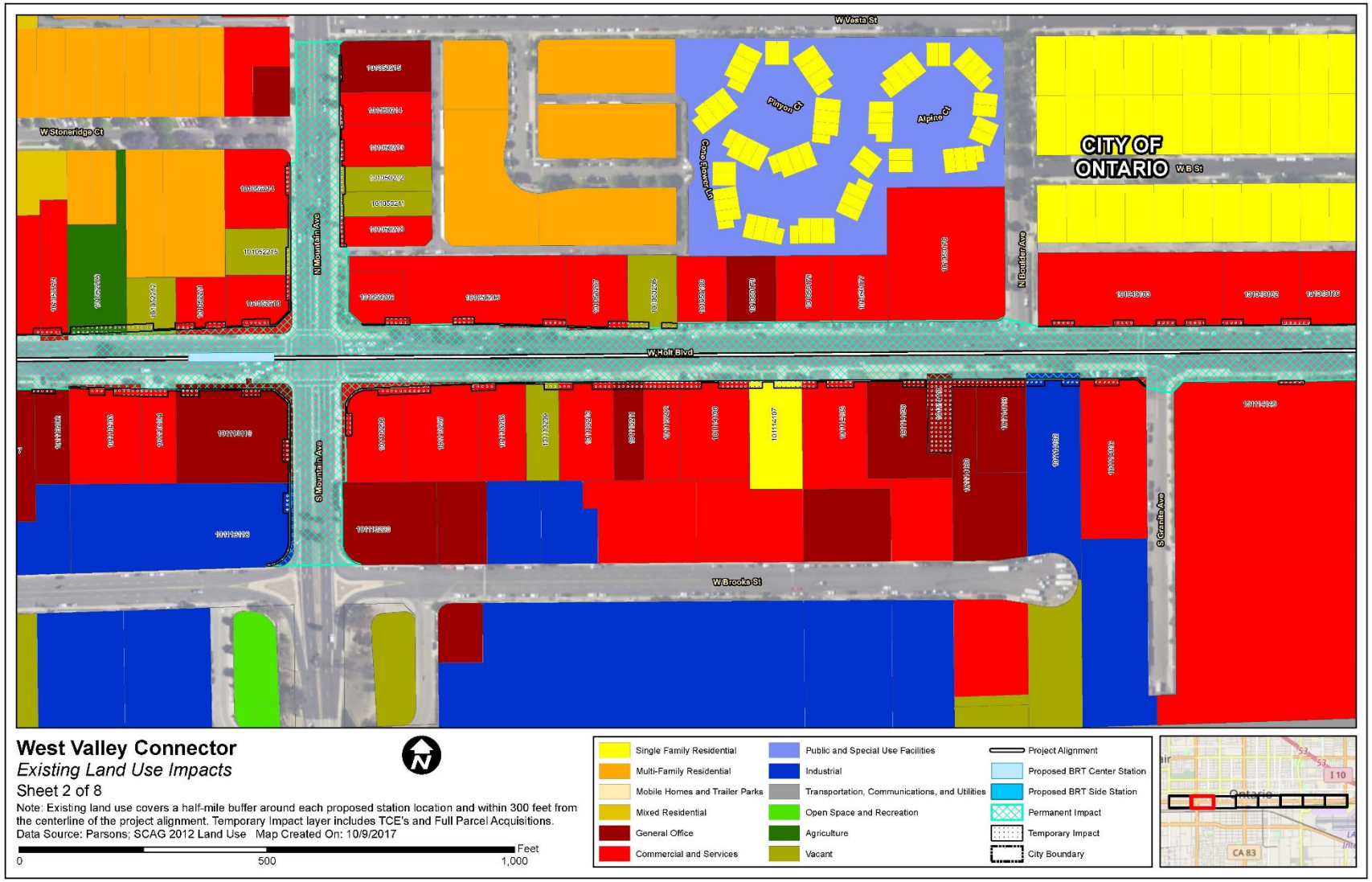


Figure 4.8-1 Land Use Impacts for Alternative B (Sheet 2 of 8)

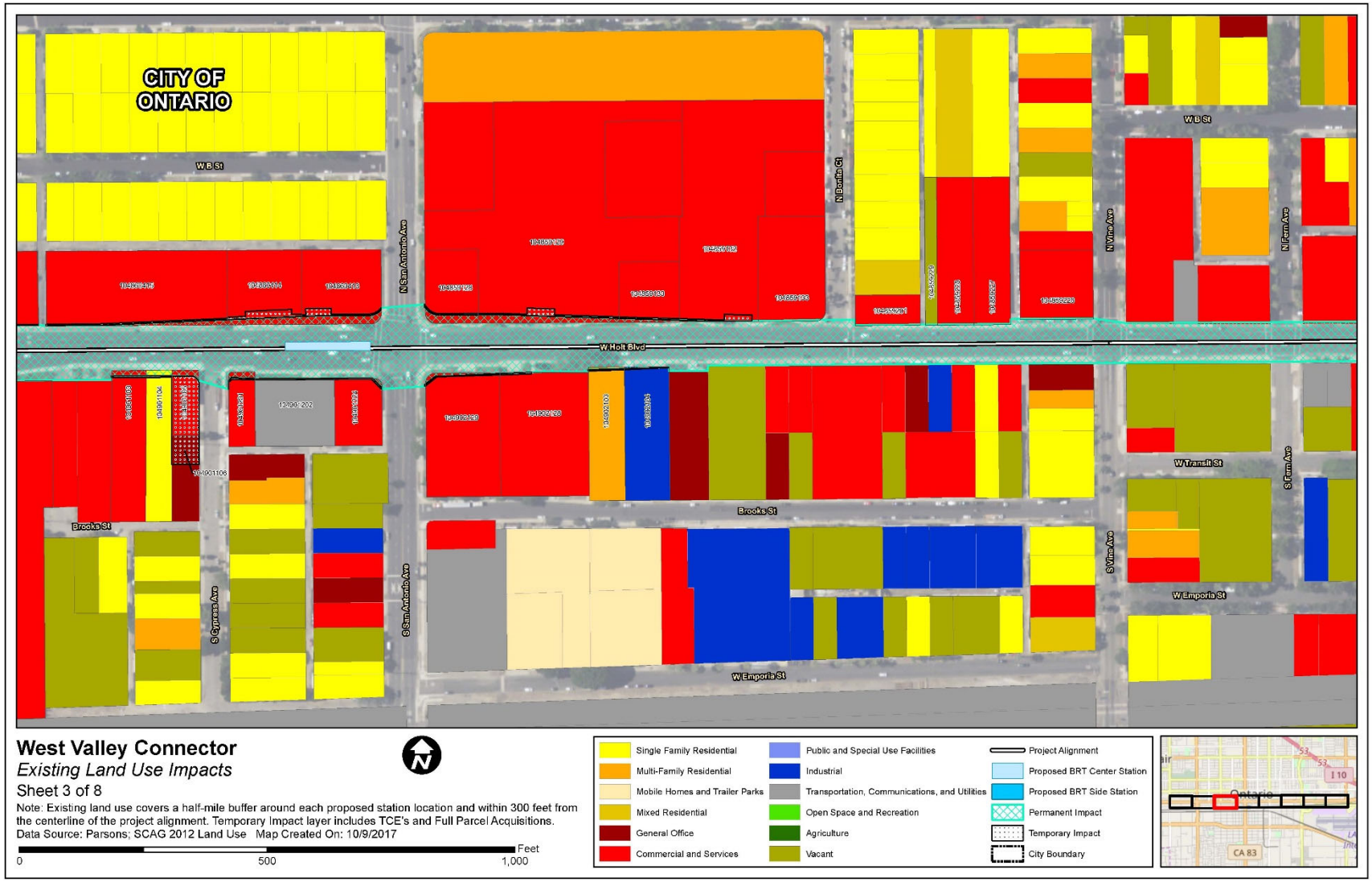


Figure 4.8-1 Land Use Impacts for Alternative B (Sheet 3 of 8)

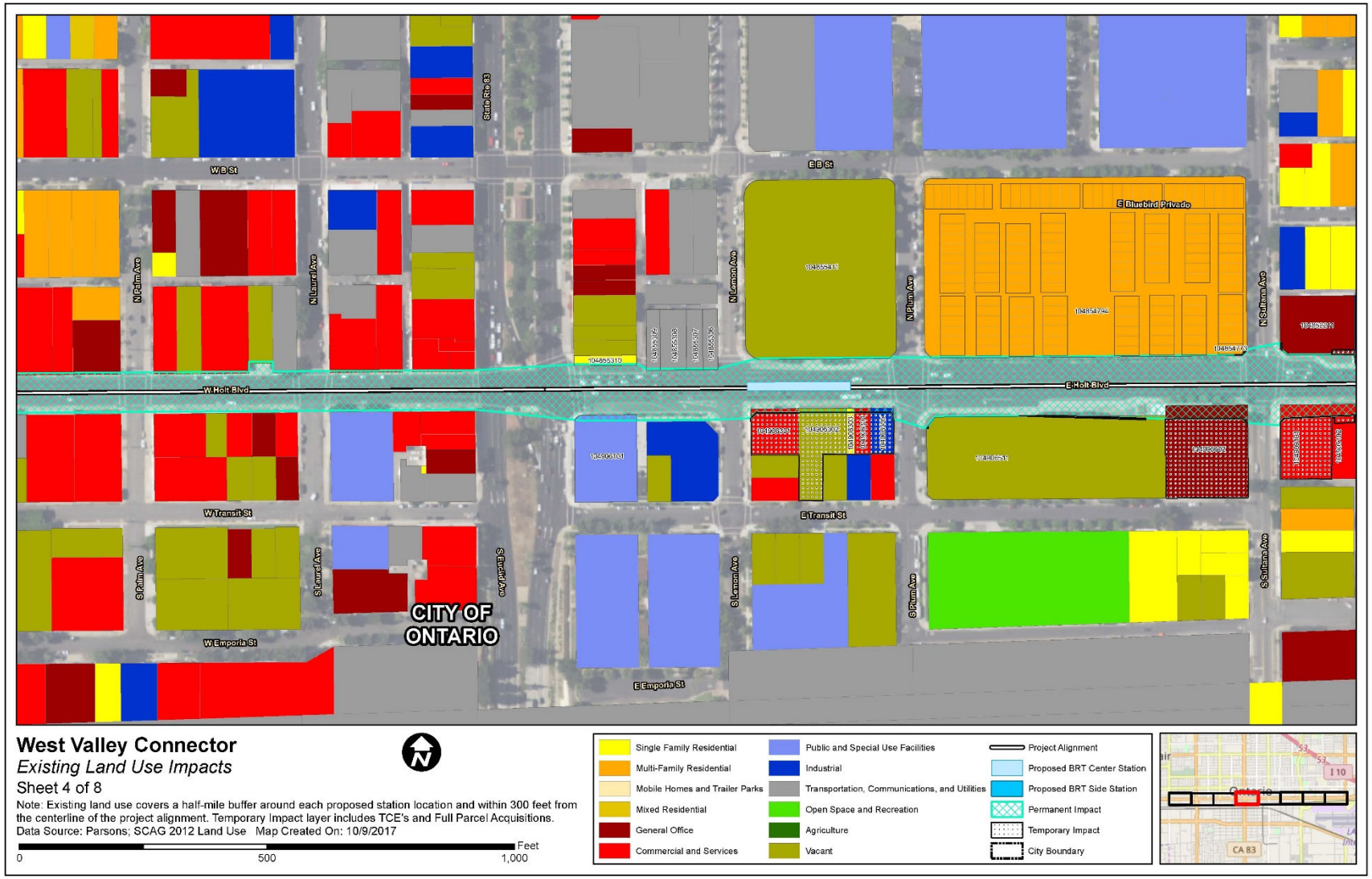


Figure 4.8-1 Land Use Impacts for Alternative B (Sheet 4 of 8)

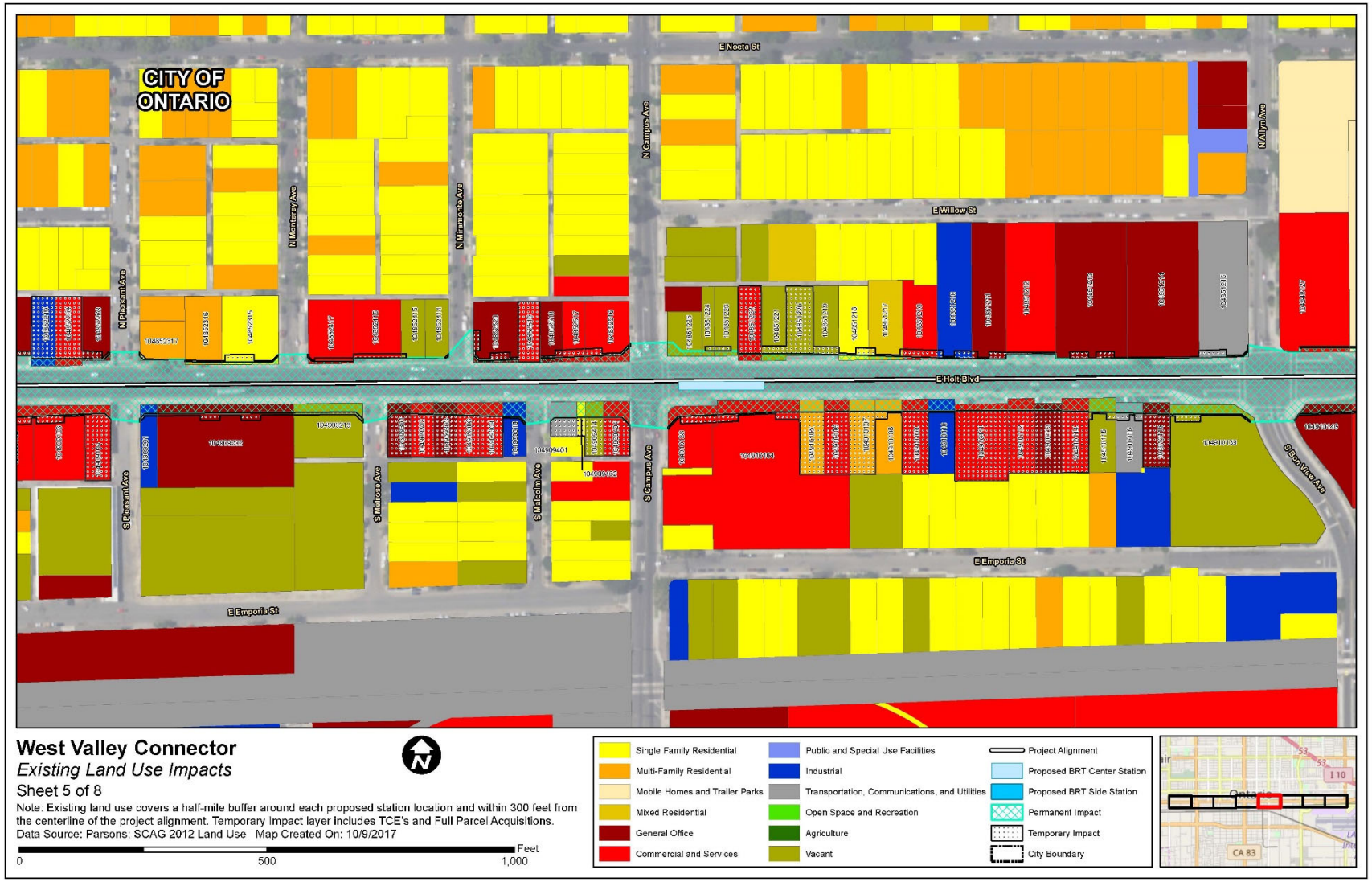


Figure 4.8-1 Land Use Impacts for Alternative B (Sheet 5 of 8)

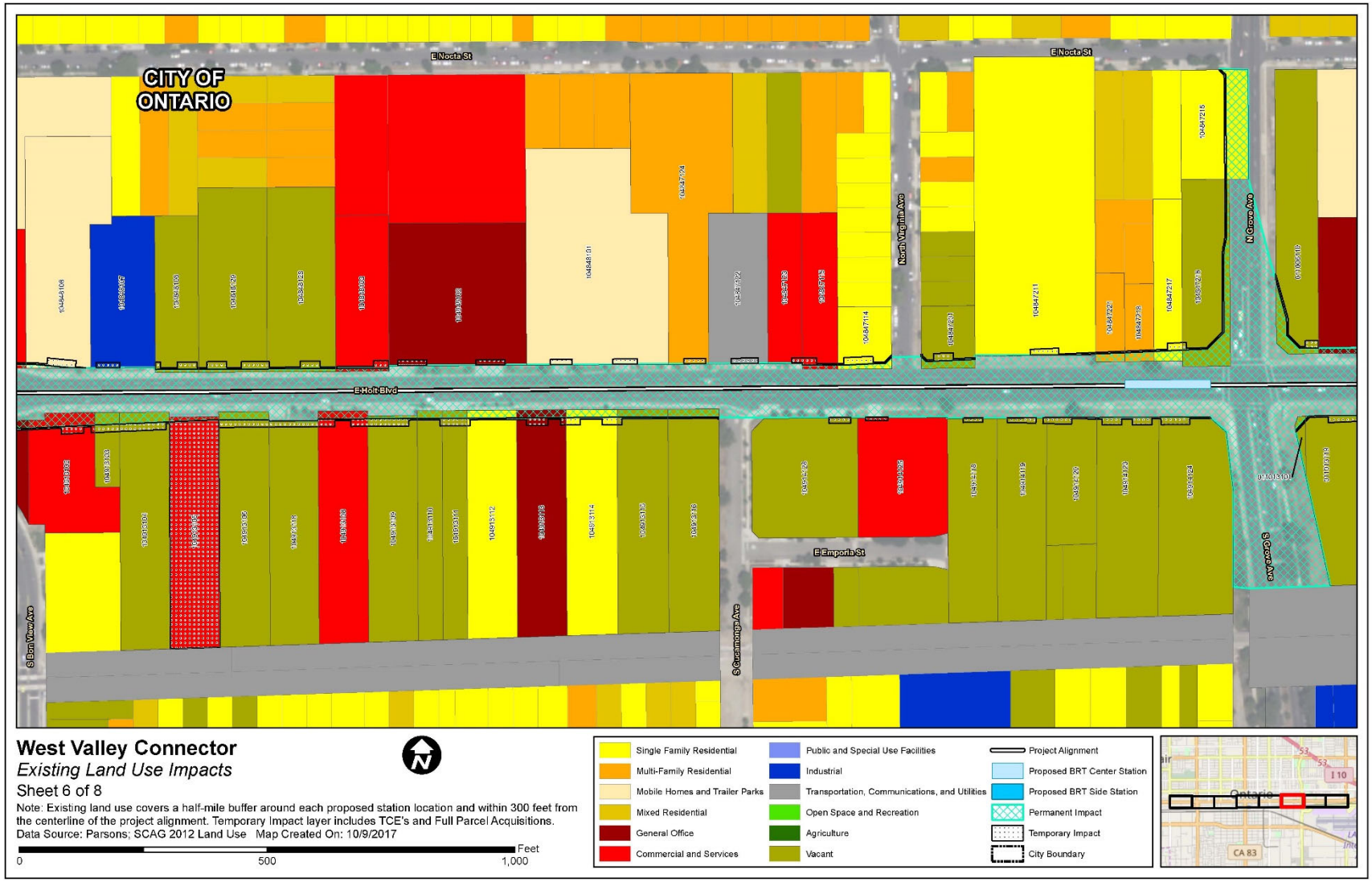


Figure 4.8-1 Land Use Impacts for Alternative B (Sheet 6 of 8)

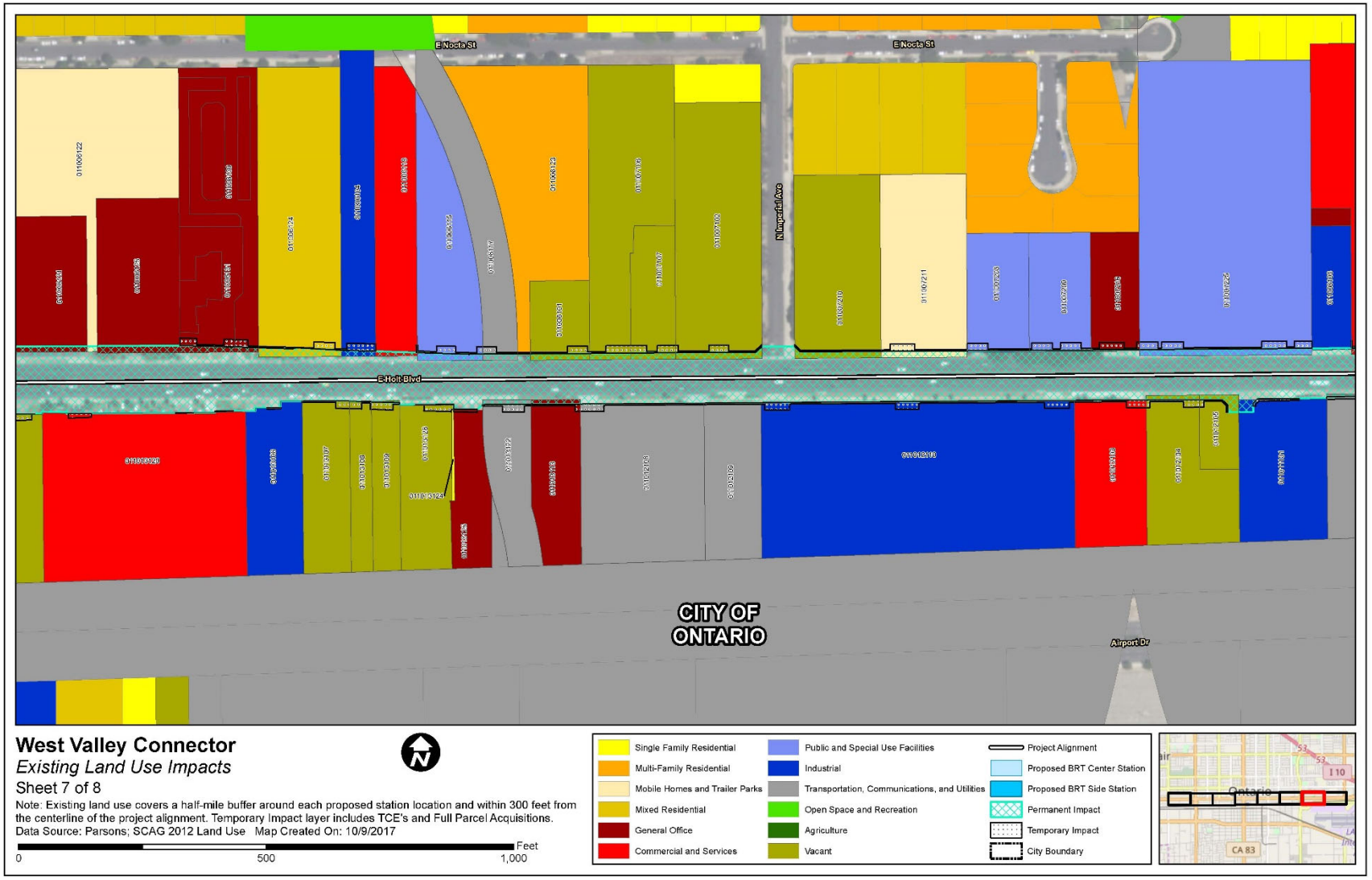


Figure 4.8-1 Land Use Impacts for Alternative B (Sheet 7 of 8)

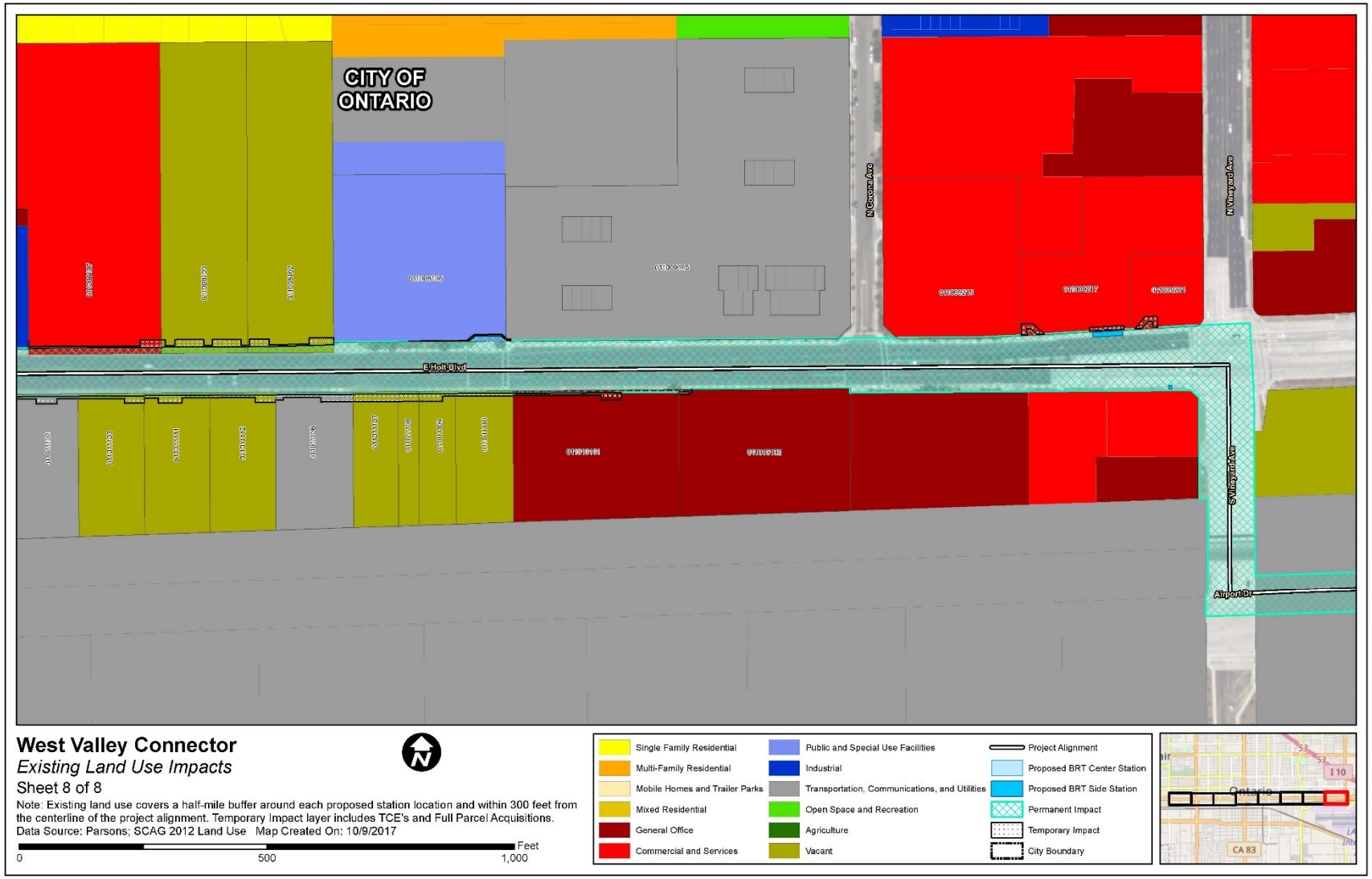


Figure 4.8-1 Land Use Impacts for Alternative B (Sheet 8 of 8)

Consistency with Existing and Future Land Uses

SCAG. The SCAG RTP primarily spotlights the need to maximize productivity of the transportation system through increasing the region's mobility in a manner that is sustainable for future generations. The project would be consistent with the regional goals because it would enhance transit access by providing a premium service that connects users to key regional transportation connectors, while reducing auto trips, VMT, and air emissions, thereby improving air quality, reducing GHG emissions, and promoting energy efficiency. In addition, growth would be managed because the project would support TOD and mixed land use development around station areas. Consistency with SCAG plans and polices is identified in Table 4.8-3.

City and County General Plans. The build alternatives are generally consistent with each of the County and City General Plans. These plans anticipate growth within the study area and have adopted goals to provide more multimodal transportation accessibility for residents to reduce automobile reliance and to reduce impacts associated with automobile reliance. Some of the plans specifically refer to the establishment of BRT services along corridors included in the build alternatives. Transit use would increase with implementation of the proposed project and strengthen efforts to improve the quality of life for area residents and businesses, thus satisfying many goals of planning for a more multimodal transportation system.

The proposed project would provide interconnectivity of residential uses with key activity centers and uses along the proposed project corridor. The proposed project would provide intermodal transfers to various Metrolink stops, the Pomona Transit Center, and Ontario International Airport. Transit stops would be located at major existing activity centers or in areas with potential for transit-supportive uses. The proposed project would improve air quality by reducing auto trips and VMT, and create opportunities for residents to have an alternative means of transportation. The vehicles, as well as stations, would be designed to be accessible to all users. The build alternatives would construct new stations and enhance existing ones to be lit, safe, and appealing through the provision of elements such as shelter, lighting fixtures, and branding.

Many of the existing and local regional land use and transportation planning policies actively promote transit-supportive policies, including TOD. The proposed project could also serve as a catalyst for revitalization and stimulate joint development and TOD in the future, particularly near stations. In turn, new development could foster increased transit usage, although the intensity of such developments is speculative at this time. Overall, the proposed project would have a beneficial impact by providing a new transportation mode and by encouraging residents to live and work in or adjacent to the station areas in the future. As such,

the build alternatives are generally consistent with the goals of regional and local planning documents, particularly with goals associated with improved transit services. Consistency with County and City General Plans is discussed in Table 4.8-4.

Specific Plans. The build alternatives are generally consistent with each of the Specific Plans discussed in Section 4.8.3. Implementation of the proposed project would promote transit use and provide transit connectivity to the various plan areas. Though the proposed project may lead to minor adjustments to transit designations or land uses in some specific plans, these modifications would not significantly alter the original intentions of the goals and purposes of those elements. Many of the plans actively promote transit-supportive policies and could also serve as a catalyst for revitalization and stimulate development, assisting in the realization of plan goals.

Table 4.8-3 Consistency of WVC Project with SCAG RCP and RTP/SCS

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
SCAG 2008 RCP			
Land Use and Housing Chapter: Focusing growth in existing and emerging centers and along major transportation corridors.	Consistent	Consistent	The build alternatives would improve transit service and support land use and transportation integration policies in existing and local plans. The No Build Alternative would not induce growth because there would be no construction.
Land Use and Housing Chapter: Protecting important open space, ESAs, and agricultural lands from development.	Consistent	Consistent	The build alternatives would avoid open space impacts, but they would result in 0.05 acre of temporary impacts and 0.04 acre of permanent impacts to two parcels zoned as agricultural land. The two affected parcels are located entirely within an urban setting, immediately adjacent to land uses designated for commercial and services uses. Field surveys indicate that both parcels are concrete paved and are currently used as vehicle storage lots by auto dealerships. No lands used for agricultural purposes would be impacted under the build alternatives. No open spaces, ESAs, or agricultural lands would be affected as a result of the No Build Alternative.

Table 4.8-3 Consistency of WVC Project with SCAG RCP and RTP/SCS

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
Transportation Chapter: A more efficient transportation system that reduces and better manages vehicle activity.	Inconsistent	Consistent	Transit use would increase with the build alternatives, which would result in a reduction of auto trips and VMT, and create opportunities for residents to have alternative means of transportation. Under the No Build Alternative, traffic conditions would continue to worsen without implementation of the proposed project.
Transportation Chapter: A cleaner transportation system that minimizes air quality impacts and is energy efficient.	Inconsistent	Consistent	Transit use would increase with the build alternatives, which would result in a reduction of auto trips, VMT, and air emissions, thereby improving air quality and promoting energy efficiency. Under the No Build Alternative, traffic conditions would continue to worsen, resulting in continued degradation of air quality and decreasing energy efficiency.
SCAG 2016-2040 RTP/SCS			
Goal: Maximize mobility and accessibility for all people and goods in the region.	Inconsistent	Consistent	The build alternatives would help improve mobility of residents by providing access to key activity centers along the corridor. Implementation of the project would also provide opportunities for intermodal transfers to Metrolink stations and the Pomona Transit Center to connect with various cities within the region. Under the No Build Alternative, traffic conditions would continue to worsen without implementation of the proposed project.

Table 4.8-3 Consistency of WVC Project with SCAG RCP and RTP/SCS

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
Goal: Ensure travel safety and reliability for all people and goods in the region.	Inconsistent	Consistent	The build alternatives would ensure safety and reliability (on-time performance). The 35-mile-long proposed project would provide a fast and reliable service with TSP and exclusive lanes to traverse portions of the project corridor. The new O&M facility would assure that buses were properly maintained and promptly repaired. Under the No Build Alternative, traffic conditions would continue to worsen without implementation of the proposed project, thereby worsening safety and trip reliability.
Goal: Preserve and ensure a sustainable regional transportation system.	Inconsistent	Consistent	The build alternatives would serve as a sustainable transportation system in the proposed project corridor cities by reducing travel time, easing congestion, and decreasing automobile reliance. The proposed project would stimulate joint development and TOD in the future, though this is speculative at this time and is dependent on market conditions. Under the No Build Alternative, existing transit services would continue to degrade as road conditions worsen.
Goal: Maximize the productivity of our transportation system.	Inconsistent	Consistent	With implementation of the build alternatives, improving average bus speeds and limiting the number of stops would create a stronger sense of reliability, leading to more efficient operations, and would allow Omnitrans to serve more passengers at a lower cost per passenger. The proposed new maintenance facility would have some excess capacity to allow further expansion of bus service. Under the No Build Alternative, traffic conditions would continue to worsen without implementation of the proposed project.

Table 4.8-3 Consistency of WVC Project with SCAG RCP and RTP/SCS

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
Goal: Protect the environment and health of our residents by improving air quality and encouraging active transportation (i.e., nonmotorized transportation, such as bicycling and walking).	Inconsistent	Consistent	Transit use would increase with the build alternatives, which would result in a reduction of auto trips, VMT, and air emissions, thereby improving air quality and promoting energy efficiency. Under the No Build Alternative, traffic conditions would continue to worsen without implementation of the proposed proposed project, thereby increasing air quality impacts and decreasing energy efficiency.
Goal: Actively encourage and create incentives for energy efficiency, where possible.	Inconsistent	Consistent	See above response.
Goal: Encourage land use and growth patterns that facilitate transit and nonmotorized transportation	Inconsistent	Consistent	The build alternatives would provide enhanced transit support, which would support TOD and mixed-use land development around station areas, though such future development is dependent on market conditions. No changes to transit or nonmotorized transportation would result from the No Build Alternative.
SCAG Sustainability Planning Grant			
Increase the region's mobility: Encourage transportation investments and land use decisions that are mutually supportive.	Inconsistent	Consistent	The build alternatives would improve transit service and support land use and transportation integration policies in existing and local plans. No changes to transit or nonmotorized transportation would result from the No Build Alternative.
Increase the region's mobility: Encourage TOD.	Inconsistent	Consistent	The build alternatives would provide enhanced transit support, which would support TOD and mixed-use land development around station areas. No changes to transit or nonmotorized transportation would result from the No Build Alternative.

Table 4.8-3 Consistency of WVC Project with SCAG RCP and RTP/SCS

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
Increase the region's mobility: Promote a variety of travel choices.	Inconsistent	Consistent	The build alternatives would increase transit reliability, making it a viable alternative to automobile use, thus serving as another transportation alternative for users. No changes to transit or nonmotorized transportation would result from the No Build Alternative.
Enable Prosperity: Ensure environmental justice regardless of race, ethnicity, or income class.	Consistent	Consistent	Neither the build alternatives nor the No Build Alternative would result in an impact to any environmental justice populations.
Promote sustainability for future generations: Develop strategies to accommodate growth that uses resources efficiently and minimize pollution and GHG emissions.	Inconsistent	Consistent	The build alternatives would minimize GHG emissions by reducing VMT, auto trips, and air emissions. The No Build Alternative would not develop additional methods for accommodating growth or minimizing pollution or GHG emissions.
Promote sustainability for future generations: Preserve rural, agricultural, recreational, and ESAs.	Consistent	Consistent	The build alternatives would avoid open space impacts, but they would result in 0.05 acre of temporary impacts and 0.04 acre of permanent impacts to two parcels currently zoned as agricultural land. The two affected parcels are located entirely within an urban setting, immediately adjacent to land uses designated for commercial and services uses. Field surveys indicate that both parcels are concrete paved and are currently used as vehicle storage lots by auto dealerships. No lands used for agricultural purposes would be impacted under the build alternatives. No rural, agricultural, recreational, or ESAs would be affected as a result of the No Build Alternative.

Table 4.8-4 Consistency of WVC Project with County and City General Plans

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
San Bernardino County General Plan			
Goal CI 2. The County's comprehensive transportation system will operate at regional, countywide, community, and neighborhood scales to provide connectors between communities and mobility between jobs, residences, and recreational opportunities.	Consistent	Consistent	The build alternatives would promote interconnectivity of residential uses with commercial centers, civic uses, open spaces, educational facilities, and recreational uses. The project improves on existing transit facilities; as such, connectivity even with the No Build Alternative would exist, albeit to a lesser degree.
Goal CI 3. The County will have a balance between different types of transportation modes, reducing dependency on the automobile and promoting public transit and alternate modes of transportation, in order to minimize the adverse impacts of automobile use on the environment.	Inconsistent	Consistent	The project would create opportunities for residents to have an accessible means of transit that would reduce auto trips and VMT, thus reducing congestion and air pollution. Under the No Build Alternative, automobile use would continue to increase.
Goal CI 5. The County's road standards for major thoroughfares will complement the surrounding environment appropriate to each geographic region.	Inconsistent	Consistent	The build alternatives would be designed to conform to the General Plan's roadway designations as stated in the Circulation Element of the General Plan. Barring its conformation under a separate project, no changes to the roadways would occur under the No Build Alternative.
Goal CI 6. The County will encourage and promote greater use of nonmotorized means of personal transportation. The County will maintain and expand a system of trails for bicycles, pedestrians, and equestrians that will preserve and enhance the quality of life for residents and visitors.	Inconsistent	Consistent	New ADA-compliant sidewalks would be constructed in and around the vicinity of proposed bus stations, thereby increasing opportunities for safer walking and bicycling. The No Build Alternative would not enhance or expand nonmotorized transportation facilities.

Table 4.8-4 Consistency of WVC Project with County and City General Plans

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
Goal CI 13. The County will minimize impacts to stormwater quality in a manner that contributes to improvement of water quality and enhances environmental quality.	Consistent	Consistent	BMPs would be incorporated into the proposed project design to comply with the County Municipal Stormwater NPDES Permit. No changes to stormwater would result from the No Build Alternative.
Los Angeles County General Plan			
Goal M 1. Street designs that incorporate the needs of all users.	Consistent	Consistent	With the No Build Alternative and build alternatives, existing street designs would be maintained for most of the corridor. Any modifications would be designed to meet the needs of potential users, to the greatest extent possible.
Goal M 2. Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths, and trails that promote active transportation and transit use.	Inconsistent	Consistent	New ADA-compliant sidewalks would be constructed in and around the vicinity of proposed bus stations, thereby increasing opportunities for safer walking, bicycling, and access to transit use. The No Build Alternative would not improve any of these facilities.
Goal M4. An efficient multimodal transportation system that serves the needs of all residents.	Inconsistent	Consistent	The build alternatives would enhance the public transit system in the project area, providing a system that is more safe, functional, and convenient for the public through the provision of project features. The No Build Alternative would not enhance the public transit system.
Goal C/NR 1. Open space areas that meet the diverse needs of Los Angeles County.	Consistent	Consistent	No open space would be affected within Los Angeles County with implementation of the build alternatives because project improvements would be limited to transportation facilities. The No Build Alternative would not result in any impacts to open space.

Table 4.8-4 Consistency of WVC Project with County and City General Plans

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
Goal P/R 3. Acquisition and development of additional parkland.	Consistent	Consistent	None of the alternatives are anticipated to have impacts to parkland nor would new parks likely be affected because most of the project ROW is within existing transit routes.
City of Pomona General Plan			
Goal 6B.G2. Locate higher-intensity TOD around existing and future Metrolink, Metro Gold Line, High-Speed Rail, BRT, and other transit stations.	Inconsistent	Consistent	The build alternatives would provide a quality BRT system and associated transit systems that would serve as nodes around which the City may locate future TODs. The No Build Alternative would not encourage TOD.
Goal 6B.G12. Create evenly spaced and well-distributed activity cluster destinations that anchor the east and west ends of the Holt Avenue corridor and the SR-60/SR-71 to strengthen the gateway function of these locations.	Inconsistent	Consistent	The build alternatives would traverse the Holt Avenue corridor in this area, transporting users in and out of Pomona, thus strengthening the gateway function of this location. Activity clusters would likely remain the same under the No Build Alternative.
Goal 6B.G13. Locate the most intense development along Holt Avenue in clusters that can take advantage of potential future BRT.	Inconsistent	Consistent	The build alternatives would provide the BRT system around which development along Holt Avenue can cluster. The No Build Alternative would not implement a BRT system.
Goal 6B.G14. Continue transformation of the Indian Hill PUSD Center into an active mixed-use, walkable environment.	Inconsistent	Consistent	The build alternatives would provide a transit stop at the Indian Hill PUSD Center, thereby contributing to the transformation of the center into an active mixed-use, walkable environment. The No Build Alternative would not encourage mixed-use development.

Table 4.8-4 Consistency of WVC Project with County and City General Plans

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
Goal 7D.G3. Support regional efforts to the extent feasible, to reduce GHG emissions from cars and light trucks.	Inconsistent	Consistent	The project would create opportunities for residents to have an accessible means of transit that would reduce auto trips and VMT, thus reducing congestion and air pollution. The No Build Alternative would not reduce GHG emissions.
Goal 7D.G6. Support the expansion of existing regional transit (bus and light rail) and development of a statewide high-speed rail network.	Inconsistent	Consistent	The build alternatives would expand the existing regional transit system. The No Build Alternative would not expand regional transit service.
Goal 7D.G7. Promote a multimodal transportation system that serves and is served by the future City structure.	Inconsistent	Consistent	The build alternatives would provide a quality transit system that would enhance the current multimodal transportation system in Pomona. The No Build Alternative would not enhance the multimodal transportation system.
Goal 7D.G9. Expand the choices of available transportation modes to effectively increase the freedom of movement for Pomona's residents and reduce reliance on the automobile.	Inconsistent	Consistent	See above response.
Goal 7D.G13. Promote transportation access and connectivity between neighborhoods, Downtown, and activity centers.	Inconsistent	Consistent	The build alternatives would promote interconnectivity of residential uses with commercial centers, civic uses, open spaces, educational facilities, and recreational uses. The No Build Alternative would not promote connectivity between neighborhoods and activity centers.

Table 4.8-4 Consistency of WVC Project with County and City General Plans

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
Goal 7D.G16. Encourage the use of public transportation, especially for commute trips, and increase Citywide transit ridership.	Inconsistent	Consistent	The build alternatives would provide a public transportation system that is safer and more reliable through the provision of enhanced bus stations, shorter headways, and TSP. The No Build Alternative would not alter the existing public transportation system.
Goal 7D.G18. Make transit centers and facilities more visible and accessible throughout the community.	Inconsistent	Consistent	The build alternatives would construct new stations and enhance existing ones to include elements such as shelter, lighting fixtures, and branding, making them more visible. Improvements in the general vicinity of stations would make them more accessible to all potential users.
Goal 7E.G1. Achieve the City's vision for Pomona Tomorrow without adverse environmental impacts that compromise the ability of future generations to meet their needs.	Inconsistent	Consistent	The project would enhance Pomona's vision for a multimodal transportation system while simultaneously reducing congestion and air pollution. The No Build Alternative would not enhance the City's vision.
Goal 7E.G10. Contribute to attainment of regional goals by improving ambient air quality levels within Pomona.	Inconsistent	Consistent	The project would create opportunities for residents to have an accessible means of transit that would reduce auto trips and VMT, thus reducing congestion and air pollution. The No Build Alternative would not improve ambient air quality.
City of Montclair			
Goal LU-1.1.4. Participate in and support regional activities of SCAG, SANBAG, City/County Planning Commissioners Conference, and other such agencies.	Consistent	Consistent	Coordination is ongoing between the multiple regional and local government agencies involved in the proposed project to provide improved transit services through the jurisdictions located in the project area.

Table 4.8-4 Consistency of WVC Project with County and City General Plans

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
CE-1.1.0. To promote a circulation and transportation system, including freeways, all classes of streets, accommodations for public mass transportation and pedestrian walkways, and bicycle routes that will serve traffic needs efficiently and safely, and be attractive in appearance.	Inconsistent	Consistent	The build alternatives would accommodate public mass transportation and pedestrian improvements that would improve mobility and accessibility along the project corridor. Travel behaviors would likely remain the same under the No Build Alternative.
CE-1.1.10. Promote the provision of public modes of transportation between strategic locations such as the Montclair Plaza Shopping Center, and other traffic generators, such as the Montclair Transcenter and potential Metrolink station on the Riverside Line.	Inconsistent	Consistent	The build alternatives would provide a high-quality public transportation mode servicing the Metrolink station on the San Bernardino Line. The No Build Alternative would not provide such connectivity via one cohesive singular public transportation route.
Goal AQ-2.0.0. To achieve a diverse and efficient ground transportation system which generates the minimum feasible pollutants.	Inconsistent	Consistent	The project would create opportunities for residents to have an accessible means of transit that would reduce auto trips and VMT, thus reducing congestion and air pollution. Under the No Build Alternative, pollutant emissions would continue to increase over time.
City of Ontario			
Goal M3. A public transit system that is a viable alternative to automobile travel and meets basic needs of the transit dependent.	Inconsistent	Consistent	The build alternatives would provide a more accessible means of transit for households near the project corridor. Decreased headways and improved reliability would help establish public transportation as a viable alternative to automobile travel. The existing transit system would not be a viable alternative under the No Build Alternative.

Table 4.8-4 Consistency of WVC Project with County and City General Plans

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
Goal M3-4. BRT Corridors. We work with regional transit agencies to implement BRT service to target destinations and along corridors.	Inconsistent	Consistent	The build alternatives would establish a BRT corridor within Ontario, including 3.5 miles of dedicated, center-running BRT lanes along Holt Boulevard. No coordination would occur under the No Build Alternative.
Goal CE1-12. Circulation. We continuously plan and improve public transit and nonvehicular circulation for the mobility of all, including those with limited or no access to private automobiles.	Inconsistent	Consistent	Public transit mobility would be improved with the build alternatives. More than 4,400 households with no access to an automobile in the study area corridor would have access to this premium public transit service. Under the No Build Alternative, existing transit services and resident travel behavior would likely stay the same.
Goal CD1-4. Transportation Corridors. We will enhance our major transportation corridors within the City through landscape, hardscape, signage, and lighting.	Inconsistent	Consistent	Signage, lighting, and other pedestrian improvements in and around the planned bus stations would be included with the build alternatives. No such improvements would occur under the No Build Alternative.
Goal CD3. Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.	Inconsistent	Consistent	The build alternatives would provide linkages between key activity centers within Ontario and provide visually appealing and safe transit stops. The No Build Alternative would not contribute to the vibrancy of the existing built environment.

Table 4.8-4 Consistency of WVC Project with County and City General Plans

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
Goal CD3-7. Transit Stops. We require transit stops be well lit, safe, appealing to, and accessible by pedestrians.	Inconsistent	Consistent	All planned transit stops associated with the build alternatives would be visually appealing and include a shelter/ canopy, emergency phone, security cameras, a bench, light fixtures, trash can, and branded pylon. No transit stop improvements would take place with the No Build Alternative.
City of Rancho Cucamonga			
Goal LU-4: Establish a pedestrian-friendly Foothill Boulevard corridor that facilitates transit use and provides a range of commercial destinations to serve both local and regional needs.	Consistent	Consistent	The build alternatives would provide a premium public transportation service along Foothill Boulevard in Rancho Cucamonga that would be in line with the City's goal of establishing the corridor as a pedestrian-friendly destination. Under the No Build Alternative, existing Route 66 services would continue without any transit improvements.
Goal LU-12: Foster a variety of travel routes that are enjoyable ways to experience Rancho Cucamonga.	Inconsistent	Consistent	The build alternatives would run along Milliken Avenue, Haven Avenue, and Foothill Boulevard in Rancho Cucamonga, which provides improved transit connection to key destinations in Rancho Cucamonga. The build alternatives would improve service reliability over traditional bus service through the introduction of dedicated lanes, TSP, and short headways. Increased connections and more frequent service would improve the existing transit network for users. Under the No Build Alternative, connectivity along multiple primary arterials would require transfers.

Table 4.8-4 Consistency of WVC Project with County and City General Plans

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
Goal CM-1: Provide an integrated and balanced multimodal transportation network of Complete Streets to meet the needs of all users and transportation modes.	Inconsistent	Consistent	The build alternatives would increase multimodal connectivity along the project corridor. The No Build Alternative would not change existing conditions.
Goal CM-2: Plan, implement, and operate transportation facilities to support healthy and sustainable community objectives.	Inconsistent	Consistent	Community objectives relevant to this project include facilitating bicycling and walking, reducing total VMT, and using low/zero-emission vehicles. The build alternatives would create opportunities for residents to have an accessible means of transit that would help contribute to meeting a community objective of reducing auto trips and VMT, thus reducing congestion and air pollution. In addition, the project would connect to key destinations within the city, thus helping to facilitate bicycling and walking. The project's fleet would be comprised of 60-foot-long articulated CNG propulsion buses. No new features would be implemented under the No Build Alternative.
Goal CM-3: Provide a transportation system that includes connected transit, bicycle, and pedestrian networks.	Inconsistent	Consistent	Implementation of the build alternatives would not discontinue any existing sidewalk and bike trail networks or substantially limit existing plans to expand the networks. Where possible, the existing network would be improved to encourage pedestrians and bicyclists to use the WVC.

Table 4.8-4 Consistency of WVC Project with County and City General Plans

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
Goal CM-5: Require that new development mitigate transportation impacts and contribute to the improvement of the City's transportation system.	Consistent	Consistent	The build alternatives would relieve congestion along the project corridor while relieving some air pollution associated with automobile usage. Implementation of a Traffic Management Plan (TMP) and advance noticing to businesses, residents, and emergency service providers would minimize transportation impacts during the construction phase. The proposed project also plans to implement a mitigation measure at the Day Creek Boulevard/Foothill Boulevard intersection to minimize traffic congestion that would occur during project operation phase. No new features would be implemented under the No Build Alternative, and the City's transportation system would continue to become more congested under the No Build Alternative.
Goal PS-4: Provide a high level of public safety services throughout Rancho Cucamonga.	Consistent	Consistent	Coordination with local public safety providers would ensure that their operations would not be disrupted under the build alternatives. No changes to public safety services would be associated with the No Build Alternative.
Goal PS-11: Reduce the volume of pollutants generated by motorized vehicles.	Inconsistent	Consistent	The build alternatives would relieve congestion along the project corridor while relieving some air pollution associated with automobile usage. Congestion would likely increase under the No Build Alternative.

Table 4.8-4 Consistency of WVC Project with County and City General Plans

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
City of Fontana			
Land Use Goal #3: Our community is developing in a unified, orderly, logical, environmentally sound manner, which ensures that the City is unified and accessible to all residents, and results in economically sound commercial areas, vibrant neighborhoods, and jobs rich centers.	Consistent	Consistent	The build alternatives would provide improved public transit services that would make key destinations within Fontana and surrounding areas more accessible to residents. The corridor would also support future economic development and TOD opportunities. Such developments could happen with the No Build Alternative.
Land Use Goal #5: Our downtown is a vibrant, pedestrian-friendly, economically healthy, safe, convenient and accessible district that serves as the true heart and focal point of the community.	Consistent	Consistent	The build alternatives would run through the heart of downtown Fontana, providing a premium public transit service to the district. Improvements to downtown can happen apart from this project under the No Build Alternative.
Circulation Goal #1. A balanced transportation system for Fontana is provided that meets the mobility needs of current and future residents and ensures the safe and efficient movement of vehicles, people, and goods throughout the City.	Inconsistent	Consistent	The build alternatives would create opportunities for residents to have an accessible means of transit that would reduce auto trips and VMT, thus reducing congestion and air pollution. Reliance on the automobile would continue under the No Build Alternative.
Circulation Goal #2. A regional network of multimodal transportation facilities, including an improved Citywide transportation system, is provided that ensures the safe and efficient movement of vehicles, people, and goods throughout the City of Fontana and to and from the region, and provides mobility to all City residents and helps reduce vehicular trips Citywide.	Inconsistent	Consistent	See above response.

Table 4.8-4 Consistency of WVC Project with County and City General Plans

Goal/Policy	Project Consistent with Plan, Goal, Objective, or Policy		Consistency Analysis
	No Build Alternative	Build Alternatives	
Circulation Goal #3. A circulation system is provided that reduces conflicts between commercial trucking, private/ public transportation and land uses.	Consistent	Consistent	None of the alternatives would conflict with commercial trucking, land uses, or other transportation, rather by relieving congestion along the corridor, the build alternatives should complement such activities.
Community Design Goal #4. We have a vibrant, identifiable downtown that serves the diverse needs of its residents and readily attracts visitors.	Consistent	Consistent	All of the build alternatives run through the heart of downtown Fontana, providing a premium public transit service to the district.
Air Quality Goal #2. Our City has a diverse and efficiently operated ground transportation system that generates the minimum feasible pollutants.	Inconsistent	Consistent	The build alternatives would create opportunities for residents to have an accessible means of transit that would reduce auto trips and VMT, thus reducing congestion and air pollution. Travel behavior would stay the same under the No Build Alternative.

O&M Facility

The new O&M facility would be located in a nearby industrial zone within the City of Ontario under either Alternative A or B. The three potential sites under study are owned by the City of Ontario. No impacts to land use would occur.

4.8.4 Avoidance, Minimization, and/or Mitigation Measures

The build alternatives have been designed to minimize inconsistencies with State, regional, and local plans and programs to the extent feasible. During final design, efforts will continue to minimize impacts of both build alternatives to avoid existing built land uses to the extent practicable while adhering to transit design and operational criteria to maintain a safe roadway. For acquisitions that cannot be reasonably avoided, fair and just compensation under the Uniform Relocation Act of 1987, as amended, would be provided to those affected properties. No other avoidance, minimization, or mitigation measures are proposed related to land use and planning.

Avoidance, minimization, and mitigation measures to minimize construction impacts associated with land use and planning are discussed in Section 5.3.8.

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4.9 Noise and Vibration

This section describes the existing noise and vibration environments at sensitive receptor locations along the project corridor, the potential noise and vibration effects/changes that would result from implementation of the project, and determines whether those changes would result in any noise and vibration impacts per FTA guidelines. Short-term impacts during project construction and proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with aesthetic and visual resources are discussed in Sections 5.2.10 and 5.3.10, respectively.

The information contained in this section is summarized from the *West Valley Connector Project – Noise & Vibration Technical Study* (Parsons, 2018f).

4.9.1 Noise and Ground-Borne Vibration Concepts

Fundamentals of Noise

This section discusses the basic concepts of transit noise and ground-borne vibration.

1) Amplitude

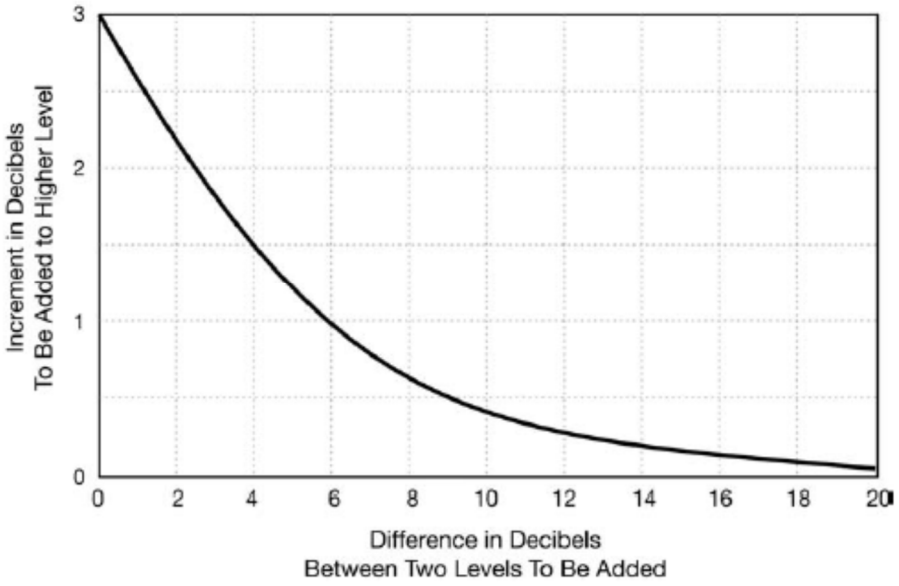
Loudness of a sound depends on the amplitude of the fluctuations above and below atmospheric pressure associated with a particular sound wave. The mean value of the alternating positive and negative pressure fluctuations is the static atmospheric pressure, not a useful descriptor of sound. However, the effective magnitude of the sound pressure in a sound wave can be expressed by the "root-mean-square" (rms) of the oscillating pressure measured in Pascals. In calculation of the 'rms', the values of sound pressure are squared to make them all positive and time-averaged to smooth out variations. The 'rms' pressure is the square root of this time-averaged value.

The quietest sound that can be heard by most humans, the "threshold of hearing," is a sound pressure of approximately 20 microPascals, and the loudest sounds typically found in our environment range up to 20 million microPascals. Because of the difficulty in dealing with such an extreme range of numbers, acousticians use a compressed scale based on logarithms of the ratios of the sound energy contained in the wave related to the square of sound pressures instead of the sound pressures themselves, resulting in the "sound pressure level" in decibels (dB).

2) Decibel Addition

The combination of two or more sound pressure levels at a single location involves 'decibel addition' or the addition of logarithmic quantities. The quantities that are added are the sound energies. For example, a doubling of identical sound sources results in a 3-dB increase:

For example, if the noise from one bus resulted in a sound pressure level of 70 dB, the noise from two buses would be 73 dB. Figure 4.9-1 provides a graph that can be used to add sound levels in decibels. For example, if two sound levels of 64 dB and 60 dB are to be added, the difference in decibels between the two levels to be added is 4 dB. The curve intersects the "4" where the increment to be added to the higher level is "1.5." Therefore, the sum of the two levels is 65.5 dB.



Source: FTA, 2006.

Figure 4.9-1 Graph to Approximate Decibel Addition

3) Frequency

Sound is a fluctuation of air pressure. The number of times the fluctuation occurs in one second is called its frequency. In acoustics, frequency is quantified in cycles per second, or Hertz (abbreviated Hz). Some sounds, like whistles, are associated with a single frequency; this type of sound is called a "pure tone." Most often, however, noise is made up of many frequencies, all blended together in a spectrum. Human hearing covers the frequency range of 20 to 20,000 Hz. If the spectrum is dominated by many low frequency components, the noise will have a characteristic like the rumble of thunder.

Our human hearing system does not respond equally to all frequencies of sound. For sounds normally heard in our environment, low frequencies below 250 Hz and very high frequencies above 10,000 Hz are less audible than the frequencies in between. Acoustical scientists measured and developed frequency response functions that characterize the way people respond to different frequencies. These are the so-called A-, B-, and C-weighted curves, representing the way people respond to sounds of normal, very loud, and extremely loud sounds, respectively. Environmental noise generally falls into the "normal" category so that the A-weighted sound level is considered best to represent the human response.

4) Time Pattern

The third important characteristic of noise is its variation in time. Environmental noise generally derives, in part, from a conglomeration of distant noise sources. Such sources may include distant traffic,

wind in trees, and distant industrial or farming activities, all part of our daily lives. These distant sources create a low-level "background noise" in which no particular individual source is identifiable. Background noise is often relatively constant from moment to moment, but varies slowly from hour to hour as natural forces change or as human activity follows its daily cycle. Superimposed on this low-level, slowly varying background noise is a succession of identifiable noisy events of relatively brief duration. These events may include single-vehicle passbys, aircraft flyovers, screeching of brakes, and other short-term events, all causing the noise level to fluctuate significantly from moment to moment.

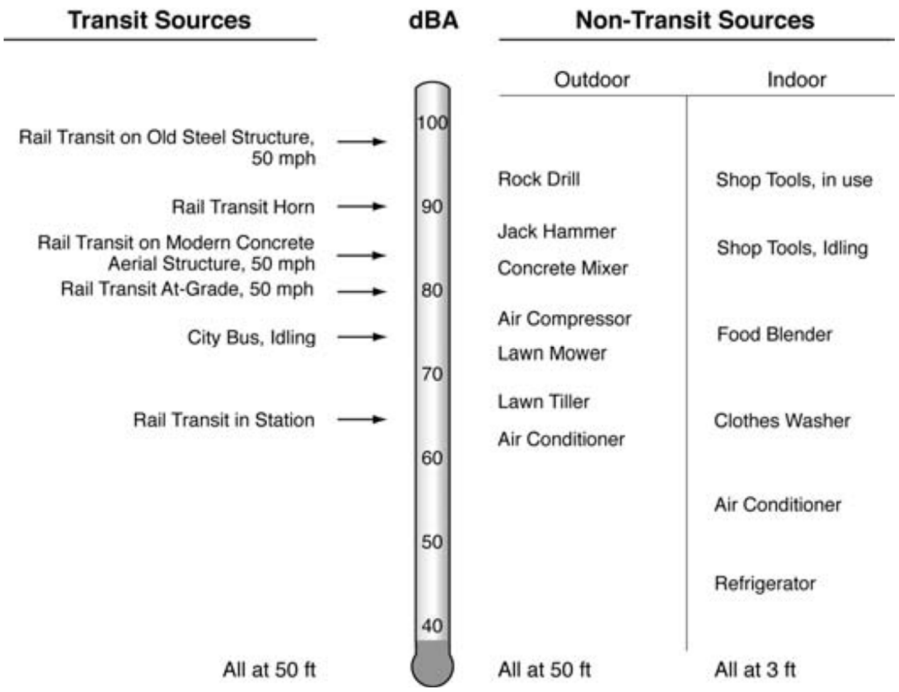
It is possible to describe these fluctuating noises in the environment using single-number descriptors. To do this allows manageable measurements, computations, and impact assessment. The search for adequate single-number noise descriptors has encompassed hundreds of attitudinal surveys and laboratory experiments, plus decades of practical experience with many alternative descriptors.

Descriptors for Transit Noise

The following noise descriptors are for the computation and assessment of transit noise:

1) A-weighted Sound Level

The basic noise unit for transit noise is the A-weighted sound level. It describes a receiver's noise at any moment in time. Figure 4.9-2 shows some typical A-weighted sound levels for transit and non-transit sources.



Source: FTA, 2006.

Figure 4.9-2 Typical A-Weighted Sound Levels

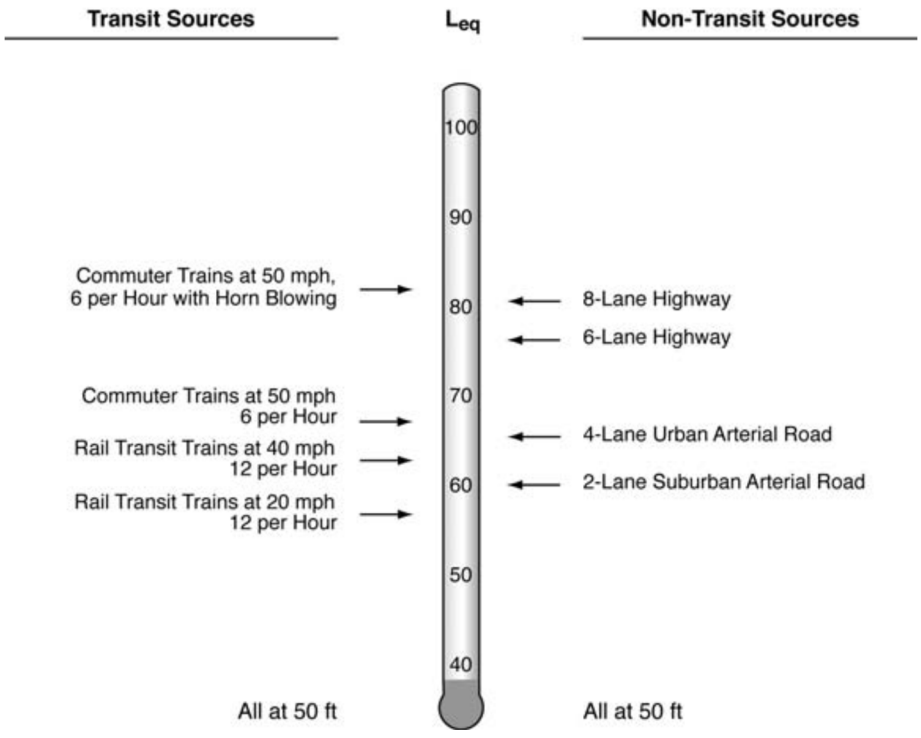
2) Maximum Sound Level (L_{max})

As a transit vehicle approaches, passes by, and then recedes into the distance, the A-weighted sound level rises, reaches a maximum, and then fades into the background noise. The maximum A-weighted sound level reached during this passby is called the Maximum Sound Level, abbreviated here as "L_{max}."

3) Hourly Equivalent Sound Level ($L_{eq}(h)$)

The descriptor for cumulative 1-hour exposure is the Hourly Equivalent Sound Level, abbreviated here as "$L_{eq}(h)$." It is an hourly measure that accounts for the moment-to-moment fluctuations in A-weighted sound levels due to all sound sources during that hour, combined. Hourly L_{eq} is adopted here as the measure of cumulative noise impact for nonresidential land uses (those not involving sleep).

Figure 4.9-3 shows some typical hourly L_{eq}s for transit and non-transit sources. As is apparent from the figure, typical hourly L_{eq}s range from the 40s to the 80s.



Source: FTA, 2006.

Figure 4.9-3 Typical Hourly L_{eq}s

4) Day-Night Sound Level (L_{dn})

The descriptor for cumulative 24-hour exposure is the Day-Night Sound Level, abbreviated here as "L_{dn}." It is a 24-hour measure that accounts for the moment-to-moment fluctuations in A-Levels due to all sound sources during 24 hours, combined.

It may be thought of as a noise dose, totaled after increasing all nighttime A-Levels (between 10:00 p.m. and 7:00 a.m.) by 10 dB. Every noise event during the 24-hour period increases this dose, louder ones more than quieter ones, and ones that stretch out in time more than shorter ones. L_{dn} is adopted here as the measure of cumulative noise impact for residential land uses (those involving sleep).

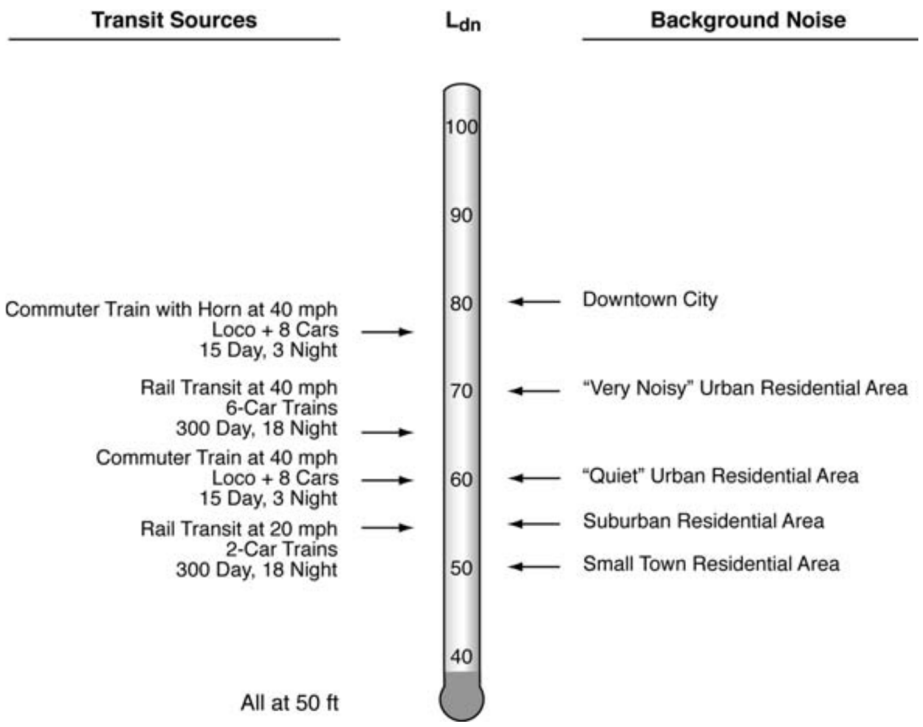
Figure 4.9-4 shows some typical L_{dn}s, for transit and non-transit sources. As is apparent from the figure, typical L_{dn}s range from the 50s to the 70s – where 50 is a quiet 24-hour period and 70 is an extremely loud one.

Descriptors of Ground-Borne Vibration

The following noise descriptors are for the computation and assessment of ground-borne vibration:

1) Vibratory Motion

Vibration is an oscillatory motion that can be described in terms of the displacement, velocity, or acceleration. Because the motion is oscillatory, there is no net movement of the vibration element, and the average of any of the motion



Source: FTA, 2006.

Figure 4.9-4 Typical L_{dn}s

descriptors is zero. Displacement is the easiest descriptor to understand. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement and acceleration is the rate of change of the speed.

2) Amplitude Descriptors

Vibration consists of rapidly fluctuating motions with an average motion of zero. Several descriptors can be used to quantify vibration amplitude.

The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak of the vibration signal. PPV is often used in monitoring of blasting vibration because it is related to the stresses that are experienced by buildings.

Although PPV is appropriate for evaluating the potential of building damage, it is not suitable for evaluating human response. It takes some time for the human body to respond to vibration signals. In a sense, the human body responds to an average vibration amplitude. Because the net average of a vibration signal is zero, the rms amplitude is used to describe the "smoothed" vibration amplitude. The rms of a signal is the square root of the average of the squared amplitude of the signal. The average is typically calculated over a 1-second period. The rms amplitude is always less than the PPV and is always positive.

The PPV and rms velocity are normally described in inches per second in the United States and meters per second in the rest of the world. Although it is not universally accepted, the abbreviation "VdB" is commonly used for vibration decibels to reduce the potential for confusion with sound decibels. Decibel notation acts to compress the range of numbers required to describe vibration.

3) Ground-Borne Noise

The rumbling sound caused by the vibration of room surfaces is called ground-borne noise. The annoyance potential of ground-borne noise is usually characterized with the A-weighted sound level. Although the A-weighted level is almost the only metric used to characterize community noise, there are potential problems when characterizing low-frequency noise using A-weighting. This is because of the non-linearity of human hearing, which causes sounds dominated by low-frequency components to seem louder than broadband sounds that have the same A-weighted level. The result is that ground-borne noise with a level of 40 dBA sounds louder than 40-dBA broadband noise. This is accounted for by setting the limits for ground-borne noise lower than would be the case for broadband noise.

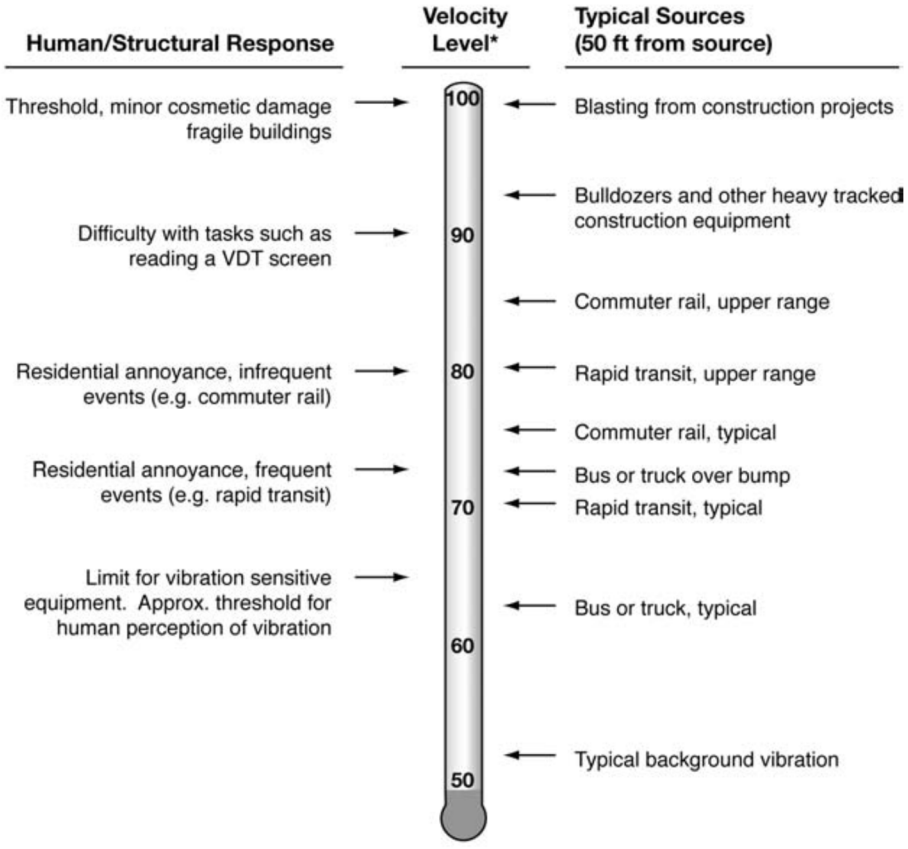
Human Perception of Ground-Borne Vibration and Noise

1) Typical Levels of Ground-Borne Vibration and Noise

In contrast to airborne noise, ground-borne vibration is not a phenomenon that

most people experience every day. The background vibration velocity level in residential areas is usually 50 VdB or lower, well below the threshold of perception for humans, which is around 65 VdB. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible.

Figure 4.9-5 illustrates common vibration sources and the human and structural response to ground-borne vibration. The range of interest is from approximately 50 to 100 VdB. Background vibration is usually well below the threshold of human perception and is of concern only when the vibration affects very sensitive manufacturing or research equipment.



Source: FTA, 2006.

Figure 4.9-5 Typical Levels of Ground-Borne Vibration

Although the perceptibility threshold is approximately 65 VdB, human response to vibration is not usually significant unless the vibration exceeds 70 VdB. Rapid transit or light rail systems typically generate vibration levels of 70 VdB or more near their tracks. On the other hand, buses and trucks rarely create vibration that exceeds 70 VdB unless there are bumps in the road. Because of the heavy locomotives on diesel commuter rail systems, the vibration levels average approximately 5 to 10 dB higher than rail transit vehicles.

The relationship between ground-borne vibration and ground-borne noise depends on the frequency content of the vibration and the acoustical absorption of the receiving room. The more acoustical absorption in the room, the lower will be the noise level. For a room with average acoustical absorption, the unweighted sound pressure level is approximately equal to the average vibration velocity level of the room surfaces. Hence, the A-weighted level of ground-borne noise can be estimated by applying A-weighting to the vibration velocity spectrum. Since the A-weighting at 31.5 Hz is -39.4 dB, if the vibration spectrum peaks at 30 Hz, the A-weighted sound level will be approximately 40 dB lower than the velocity level. Correspondingly, if the vibration spectrum peaks at 60 Hz, the A-weighted sound level will be about 25 dB lower than the velocity level.

2) Quantifying Human Response to Ground-Borne Vibration

Table 4.9-1 describes the human response to different levels of ground-borne noise and vibration. The first column is the vibration velocity level, and the next two columns are for the corresponding noise level assuming that the vibration spectrum peaks at 30 or 60 Hz. As discussed above, the A-weighted noise level will be approximately 40 dB less than the vibration velocity level if the spectrum peak is around 30 Hz, and 25 dB lower if the spectrum peak is around 60 Hz. Table 4.9-1 illustrates that achieving either the acceptable vibration or acceptable noise levels does not guarantee that the other will be acceptable. For example, the noise caused by vibrating structural components may be very annoying even though the vibration cannot be felt. Alternatively, a low-frequency vibration could be annoying while the ground-borne noise level it generates is acceptable.

Table 4.9-1 Human Response to Different Levels of Ground-Borne Noise and Vibration

Vibration Velocity Level	Noise Level		Human Response
	Low Frequency[1]	Mid Frequency[2]	
65 VdB	25 dBA	40 dBA	Approximate threshold of perception for many humans. Low-frequency sound usually inaudible; mid-frequency sound excessive for quiet sleeping areas.
75 VdB	35 dBA	50 dBA	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find transit vibration at this level annoying. Low-frequency noise acceptable for sleeping areas; mid-frequency noise annoying in most quiet occupied areas.
85 vdB	45 dBA	60 dBA	Vibration acceptable only if there are an infrequent number of events per day. Low-frequency noise annoying for sleeping areas; mid-frequency noise annoying even for infrequent events with institutional land uses such as schools and churches.
Notes: 1. Approximate noise level when vibration spectrum peak is near 30 Hz. 2. Approximate noise level when vibration spectrum peak is near 60 Hz.			

Source: FTA, 2006.

4.9.2 Regulatory Setting

This section presents the guidelines, criteria, and regulations used to assess noise and vibration impacts associated with the proposed project.

Operation Noise Impact Criteria

The criteria in the *Transit Noise and Vibration Impact Assessment* (FTA, 2006) were used to assess existing ambient noise levels and future noise impacts from BRT operations. They are founded on well-documented research on community reaction to noise and are based on change in noise exposure using a sliding scale. The amount that transit projects can change the overall noise environment is reduced with increasing levels of existing noise.

The FTA Noise Impact Criteria applicable to three categories of land use are summarized in Table 4.9-2.

Table 4.9-2 Land Use Categories and Metrics for Transit Noise Impact Criteria

Land Use Category	Noise Metric, dBA	Description of Land Use Category
1	Outdoor $L_{eq}(h)$*	Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor use.
2	Outdoor L_{dn}	Residences and buildings where people normally sleep. This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.
3	Outdoor $L_{eq}(h)$*	Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material. Buildings with interior spaces where quiet is important, such as medical offices, conference rooms, recording studios, and concert halls fall into this category. Places for meditation or study associated with cemeteries, monuments, and museums. Certain historical sites, parks, and recreational facilities are also included.
Note: * L_{eq} for the noisiest hour of transit-related activity during hours of noise sensitivity.		

Source: FTA, 2006.

Day night average noise level (L_{dn}) is used to characterize noise exposure for residential areas, hotels, and hospitals (Category 2). The maximum 1-hour hourly equivalent noise level (L_{eq}) during the period that the facility is in use is used for other noise-sensitive land uses such as schools, libraries, churches, and parks (Category 3). The noise impact criteria for human annoyance are based on comparison of the existing outdoor noise levels and the future outdoor noise levels from a proposed transit project. They incorporate activity interference caused by the transit project alone and annoyance due to the change in the noise environment caused by the project. There are two levels of impact included in the FTA criteria, as shown in Figure 4.9-6. The interpretations of these two levels of impact are summarized as follows:

- Severe Impact: Project noise above the upper curve is considered to cause Severe Impact because a significant percentage of people would be highly annoyed by the new noise. This curve flattens out at 75 dB for Category 1 and 2 land use, a level associated with an unacceptable living environment.
- Moderate Impact: The change in the cumulative noise level is noticeable to most people, but it may not be sufficient to cause strong, adverse reactions from the community. In this transitional area, other project-specific factors must be considered to determine the magnitude of the impact and the need for mitigation, such as the existing level, predicted level of increase over existing noise levels, and the types and numbers of noise-sensitive land uses affected.

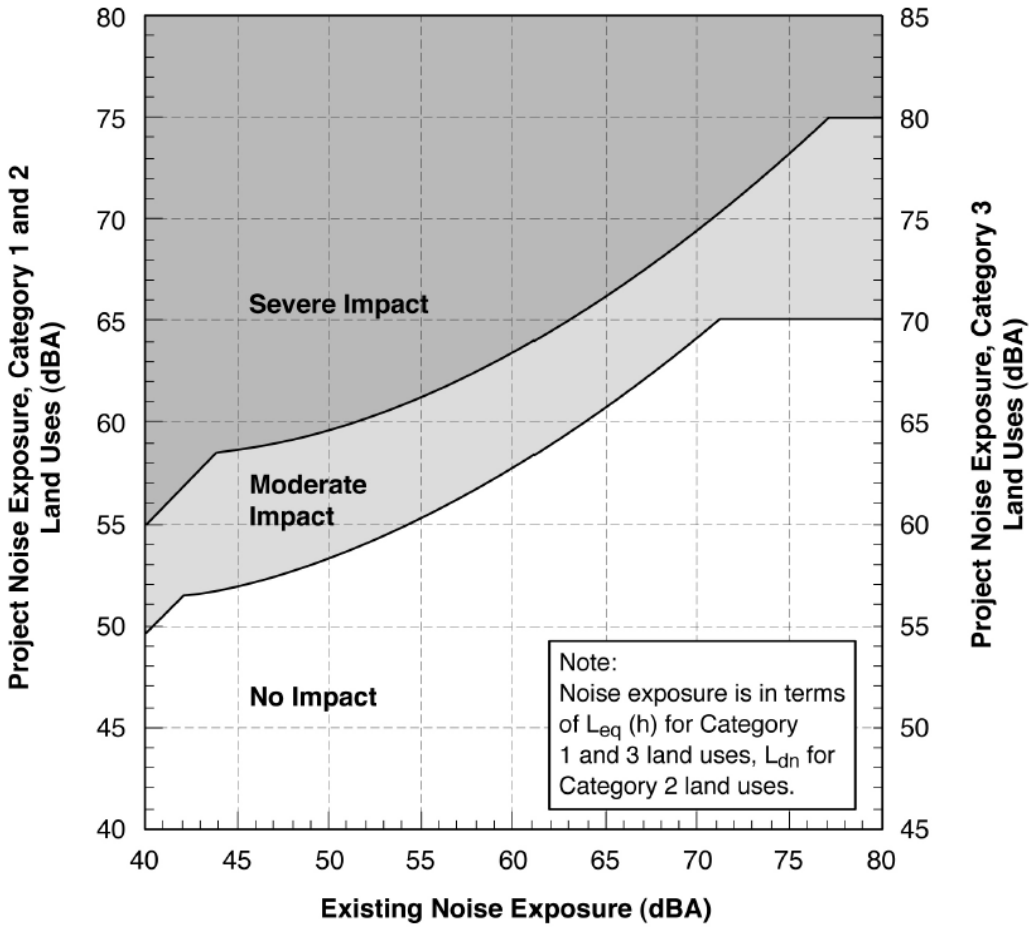


Figure 4.9-6 Noise Impact Criteria for Transit Projects

The horizontal axis in Figure 4.9-6 is the existing L_{dn} or L_{eq} without any project-related noise. The vertical axis on the left side is the L_{dn} at residential land uses and hotels caused by a project, whereas the axis on the right side is the L_{eq} at schools, churches, and parks. Figure 4.9-6 illustrates that a project noise level of L_{dn} of 61 dBA at a Category 2 receptor would be considered as "moderate impact" if the existing L_{dn} of a selected residence is 65 dBA. If the project noise level reaches an L_{dn} of 67 dBA, the project noise level would be considered as "severe impact" to the Category 2 receptor.

Although the curves in Figure 4.9-6 are defined in terms of the project noise exposure and the existing noise exposure, it is important to emphasize that the increase in the cumulative noise – when the project noise is added to existing noise – is the basis for the criteria. Figure 4.9-6 shows the noise impact criteria for Category 1 and 2 land uses in terms of the allowable increase in the cumulative noise exposure.

Figure 4.9-7 shows that the criterion for moderate impact allows a noise exposure increase of 10 dB, if the existing noise exposure is 42 dBA or less, but only a 1-dB increase when the existing noise exposure is 70 dBA. As the existing level of ambient noise increases, the allowable level of project noise increases, but the total allowable increase in community noise exposure is reduced. This reduction accounts for the unexpected result – project noise exposure levels that are less than the existing noise exposure can still cause moderate impact.

For residential land use, the noise criteria are to be applied outside the building locations at noise-sensitive areas with frequent human use, including outdoor patios, decks, pools, and play areas. If none is present, the criteria should be applied near building doors and windows.

For parks and other significant outdoor use, the criteria are to be applied at the property lines; however, for locations where land use activities are solely indoors, noise impact may be less significant if the outdoor-to-indoor reduction is greater than for typical buildings (approximately 25 dB with windows closed or 12 dBA with windows open); therefore, if it can be demonstrated that there will only be indoor activities, mitigation may not be needed.

Operation Vibration Impact Criteria

The criteria in the *Transit Noise and Vibration Impact Assessment* (FTA, 2006) were used to evaluate vibration impacts from transit operations. The evaluation of vibration impacts can be divided into two categories: (1) human annoyance, and (2) building damage.

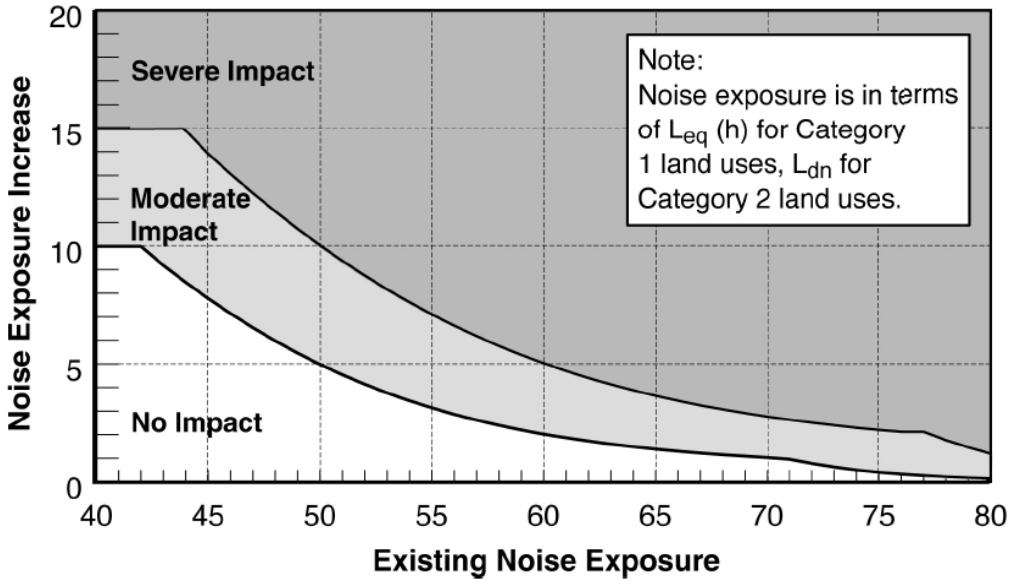


Figure 4.9-7 Increase in Cumulative Noise Levels Allowed by Criteria

Generally, human annoyance criteria are used to assess potential impacts associated with operational vibration, whereas building damage criteria are used to estimate vibration impacts due to construction activities.

1) Human Annoyance Criteria

The ground-borne vibration impact criteria describe human response to vibration and potential interference as it relates to the operation of vibration-sensitive equipment. The criteria for acceptable ground-borne vibration are expressed in terms of rms VdB and are based on the L_{max}. Table 4.9-3 presents the criteria for various land use categories, as well as the frequency of events.

Sensitive receptors within the project boundary include residences, hotels, and hospitals. These fall under Category 2, places where people normally sleep, and Category 3, schools, churches, and parks with primarily daytime use. There are no Category 1 land uses within the project study area. Because the number of proposed operations is 128 buses per weekday, FTA classifies the proposed service under "Frequent Events." According to Table 4.9-3, the maximum vibration level cannot exceed 72 VdB for Category 2 land uses and 75 VdB for Category 3 land uses.

Table 4.9-3 Ground-Borne Vibration Impact Criteria for Human Annoyance

Land Use Category	Ground-Borne Vibration Impact Levels, VdB*		
	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]
Category 1: Buildings where vibration would interfere with interior operations.	65[4]	65[4]	65[4]
Category 2: Residences and buildings where people normally sleep.	72	75	80
Category 3: Institutional land uses with primarily daytime use.	75	78	83

Notes:

1. "Frequent Events" is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.
2. "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have these many operations.
3. "Infrequent Events" is defined as more than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines.
4. This criterion limit is based on levels that are acceptable for most moderately sensitive equipment, such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the heating, ventilation, and air conditioning (HVAC) systems and stiffened floors.
5. Vibration sensitive equipment is generally not sensitive to ground-borne noise.

* Root-mean-square velocity in decibels (VdB) re: 1 micro-inch per second.

Source: FTA, 2006.

2) Building Damage Criteria

Normally, vibration resulting from bus operations would not cause building damage.

Construction activities can also result in varying degrees of ground vibration, depending on the equipment and method employed. The vibration associated with typical bus transit construction is not likely to damage building structures, but it could cause cosmetic building damage.

Vibrations generated by surface transportation and construction activities are mainly in the form of surface or Raleigh waves. Studies have shown that the vertical component of transportation-generated vibrations is the strongest, and that PPV correlates best with building damage and complaints. Table 4.9-4 summarizes the construction vibration limits shown in FTA guidelines for structures located near the ROW of a transit project.

4.9.3 Existing Conditions

The project is located within an urban setting with primarily residential and commercial development. Land uses in the project vicinity include residential, commercial, airport, educational institutions, recreation, utility, civic, public service facilities (e.g., fire stations and hospitals), industrial, and vacant land.

The existing noise along the proposed BRT corridor is largely dominated by local traffic on surface roads. Other sources of noise include local business-related activities, such as public announcements near automobile dealerships, and some light industrial facilities.

Noise-sensitive receivers that may be affected by the project include single- and multi-family residences, schools, churches, hotels, and public recreation areas located near the project corridor and operations and maintenance (O&M) facility. Noise monitoring was conducted at various sites to assess the existing noise conditions throughout noise-sensitive regions along the alignment.

Table 4.9-4 Construction Vibration Damage Criteria

Building Category	Peak Particle Velocity, in/sec	Approximate Lv*, VdB
I. Reinforced-concrete, steel, or timber (no plaster)	0.50	102
II. Engineered concrete and masonry (no plaster)	0.30	98
III. Non-engineered timber and masonry buildings	0.20	94
IV. Buildings extremely susceptible to vibration damage	0.12	90
Note: * Root-mean-square velocity in decibels (VdB) re: 1 micro-inch per second.		

Source: FTA, 2006.

Existing Environment – Noise

Noise measurements were taken at 49 locations within the project limits. The primary objectives of the measurements are to evaluate the existing noise environment and determine the appropriate impact criteria per FTA guidelines. Transit projects can change the overall noise environment in a community only to the extent established by FTA based on existing noise levels. The impact criteria published by FTA dictate the suitability and noise mitigation needs of a project.

Short-term noise measurements, each lasting 1 hour in duration, were conducted at 29 measurement sites. Long-term noise measurements were conducted at 20 locations for a minimum of 24 hours. The L_{dn} levels at long-term measurement locations were calculated subsequently by applying nighttime-hour noise weightings to the measured data. Nighttime noise weightings are the addition of 10 dB from the hours of 10:00 p.m. through 7:00 a.m. At short-term locations, L_{dn} levels were estimated by comparing the short-term measured noise levels to results obtained from nearby long-term measurement locations that were in progress concurrently or from long-term measurement sites with similar land use makeup. The difference or delta between the measured short-term levels and the simultaneous nearby long-term 20-minute intervals is applied to the calculated L_{dn} of the long-term measurement site to estimate the L_{dn} of the short-term site. The peak-hour noise levels (L_{eq}) for the short-term measurement sites were also estimated by applying the delta to the peak-hour noise level of the nearby long-term measurement site.

Results for the long-term and short-term measurements are presented in Table 4.9-5. Also included in the table are the date, time, and duration of each measurement.

Table 4.9.5 Measured Existing Noise Levels

Measurement Site[1,W]	Date (mm/dd/yy)	Start Time[2]	Duration (hh:mm)	Measured L_{eq} (dBA)	Ref[3]	L_{dn} / (L_{eq}[4]) (dBA)
LT1	06/07/16 – 06/08/16	09:00	24:00	--	--	65 / (69)
ST1	06/07/16	14:00	1:00	67	LT2	70 / (69)
LT2[W]	06/07/16 – 06/08/16	10:00	26:00	--	--	67 / (66)
ST2	06/07/16	14:00	1:00	62	LT2	65 / (64)
LT3[W]	06/07/16 – 06/08/16	11:00	27:00	--	--	63 / (63)
ST3	06/07/16	15:40	1:00	67	LT4	68 / (70)
LT4[W]	06/07/16 – 06/08/16	12:00	26:00	--	--	65 / (66)
ST3A	06/07/16	15:20	1:00	61	LT4	62 / (64)
LT6[W]	06/09/16 – 06/10/16	12:00	25:00	--	--	61 / (58)
ST4	06/09/16	12:00	1:00	66	LT8	69 / (68)
ST5[W]	06/09/16	13:20	1:00	61	LT8	63 / (62)
ST5A	06/09/16	14:40	1:00	70	LT8	72 / (70)
ST6	06/08/16	16:00	1:00	70	LT8	72 / (71)
LT8	06/08/16 – 06/19/16	10:00	30:00	--	--	70 / (68)
ST7[W]	06/18/16	10:40	1:00	62	LT8	65 / (63)

Table 4.9.5 Measured Existing Noise Levels

Measurement Site[1,W]	Date (mm/dd/yy)	Start Time[2]	Duration (hh:mm)	Measured L_{eq} (dBA)	Ref[3]	L_{dn} / (L_{eq}[4]) (dBA)
ST8	06/29/16	14:40	1:00	67	LT9	64 / (66)
LT9	06/29/16	11:00	26:00	--	--	66 / (69)
LT10[W]	06/09/16 – 06/10/16	11:00	26:00	--	--	66 / (64)
ST9	06/10/16	08:40	1:00	67	LT10	70 / (67)
LT11W	07/26/16 – 07/27/16	08:00	32:00	--	--	67 / (66)
ST10W	06/10/16	08:20	1:00	56	LT12	61 / (59)
LT12W	06/09/16 – 06/10/16	12:00	27:00	--	--	63 / (61)
ST11	06/13/16	15:00	1:00	62	LT13	65 / (63)
ST12	06/13/16	15:00	1:00	68	LT13	70 / (69)
LT13W	06/13/16 – 16/14/16	14:00	27:00	--	--	64 / (63)
LT14W	06/13/16 – 16/14/16	14:00	27:00	--	--	56 / (59)
ST13	06/14/16	08:00	1:00	63	LT13	65 / (64)
ST14	06/14/16	08:00	1:00	65	LT16	66 / (65)
LT15	06/09/16 – 06/10/16	15:00	26:00	--	--	57 / (59)
ST15	06/14/16	09:20	1:00	66	LT16	68 / (66)
ST16	06/14/16	09:20	1:00	53	LT16	54 / (53)
LT16	06/13/16 – 06/14/16	10:00	30:00	--	--	59 / (68)
ST17	06/14/16	11:00	1:00	55	LT16	56 / (55)
LT17	06/29/16	12:00	26:00	--	--	63 / (62)
ST18	06/29/16	13:00	1:00	73	LT17	76 / (77)
ST19	06/14/16	12:40	1:00	66	LT19	69 / (69)
ST20	06/14/16	13:00	1:00	59	LT19	63 / (62)
ST21	06/14/16	14:00	1:00	61	LT19	65 / (65)
LT19W	06/13/16 – 06/14/16	12:00	30:00	--	--	58 / (58)
ST22W	06/14/16	16:40	1:00	56	LT19	58 / (57)
LT20	10/05/16 – 10/06/16	9:00	28:00	--	--	68 / (65)
ST23	10/05/16	12:40	1:00	67	LT20	73 / (70)
LT21[W]	09/20/17 – 09/21/17	16:00	24:00	--	--	60/ (61)
LT21A[W]	09/20/17 – 09/21/17	17:00	24:00	--	--	59/ (59)
ST25	10/06/16	10:20	1:00	63	LT22	67 / (64)
LT22	10/05/16 – 10/06/16	12:00	26:00	--	--	66 / (64)
ST26	10/06/16	9:00	1:00	65	LT22	69 / (67)
ST27	02/22/18	8:00	1:00	68	LT8	70 / (68)
		12:00		66		
		16:00		67		
ST28	02/23/18	8:00	1:00	63	LT8	66 / (64)

Notes:
1. LT = long-term noise measurement site, ST = short-term noise measurement site
2. Start time for long-term measurements corresponds to first full hour of recorded data.
3. Long-term measurement result used to estimate L_{dn} for the short-term measurement site.
4. Peak-hour L_{eq} is provided for nearby Category 3 receptors.
W. Measurement was located behind a property wall.

Source: WVC Noise Study Report, 2018.

Existing Environment – Vibration

No significant vibration sources exist along most of the proposed BRT corridor. Typical bus or truck pass-by on the rough surface along local roadways would be the only perceptible vibration source along most of the alignment.

The FTA vibration impact criteria are not based on the existing vibration levels measured at adjacent structures to the proposed alignment. They are based on the frequency of the proposed transit service and the type of proposed transit vehicle only. This contrasts with the FTA noise impact criteria, which are directly determined by the existing measured ambient noise. Therefore, no background vibration measurements were conducted along the project alignment.

4.9.4 Noise and Vibration Impact Analysis Methodology

Noise

In calculating the noise impacts associated with the proposed BRT service, the entire service alignment was screened to determine if a significant increase to the overall noise level in the vicinity would be expected using future projected traffic volumes for the year 2023 and year 2040 obtained from the WVC Corridor Traffic Operation Analysis (Iteris, 2018). A noise simulation model was developed to assess potential noise impacts to the surrounding neighborhoods with the addition of proposed BRT service.

FHWA's Traffic Noise Model (TNM) Version 2.5 was used to estimate the noise effects of the proposed BRT service at peak service hours. The peak-hour scenario was selected to provide an evaluation of the worst-case scenario given the greater number of operating buses and vehicles during peak hours.

A simple TNM roadway model was created to simulate traffic noise with and without the proposed peak-hour BRT operations. The model was then manipulated to determine the maximum hourly roadway traffic volume for which the proposed additional peak-hour BRT service would result in a 1 dB overall noise level increase along each roadway segment on which the BRT service would operate. The models were segmented by posted speed limits. The maximum speed for buses is 45 mph, as defined in the *Basis of Design Report.*

The vehicle type distribution of the modeled traffic volumes is based on existing vehicle classification percentages of the entire corridor, provided by Iteris , the traffic analysis team for the WVC Corridor Project. Because lower truck percentages would result in a higher volume at the modeled speed, the lowest truck percentage identified for each segment at each speed was used for the analysis. This is the conservative approach. For example, four segments of the corridor on four different roadways of the corridor, each with a unique vehicle mix, would be traveling at 45 mph. For analysis purposes, the vehicle mix of the segment which would yield the highest volume traveling at 45 mph was used.

The results of the simulation are tabulated in Table 4.9-6.

The TNM model demonstrated that an addition of 12 buses per hour would increase the noise levels by 1 dB for traffic volumes of 400 vehicles per hour or less operating at 30 mph. Alternatively, roadways with existing traffic volumes of more than 400 vehicles per hour would have a sufficiently high overall traffic-generated noise level (without any buses) that would not be perceivably increased by the addition of 12 buses per hour.

Similarly, it was shown that overall noise levels resulting from maximum traffic volumes of 300, 220, 150, and 110 vehicles per hour would increase by 1 dB if an addition of 12 buses per hour operating at 40 and 45 mph were to occur, respectively. An addition of six buses per hour would increase the noise levels by 1 dB for maximum traffic volumes of 260, 170, 140, 100, 70, and 40 vehicles per hour at speeds of 30, 35, 40, 45, 50, and 55 mph, respectively.

To facilitate the traffic volume screening process, the BRT service route was divided into 21 sections based on posted speed limits. The lowest projected traffic volume within each segment was selected to reflect the segment's future traffic noise environment. The reason for this decision is that roadway segments with lower traffic volumes would have a noise environment that is more vulnerable to an increase in noise caused by the addition of new bus traffic.

The entire roadway network of the BRT service route was subsequently reviewed by comparing opening year (year 2023) and future projected (year 2040) peak-hour traffic volumes with impact thresholds as previously calculated.

Table 4.9-6 Simulated Noise Impact of Additional Buses

Roadway Hourly Traffic Volume	Percent Cars	Percent Medium Trucks	Percent Heavy Trucks	Speed (mph)	Additional Number of Buses/ hour	Overall Noise Level (L_{eq}) at 90 feet from Center of Roadway (dBA)		
						No Buses	with Buses	Change
400	98.1	1.4	0.5	35	12	54.4	55.4	400
300	98.5	1.2	0.3	40	12	54.8	55.8	300
220	99.1	0.6	0.3	45	12	55.0	56.0	220
260	99.1	0.6	0.3	30	6	50.9	51.9	260
170	98.1	1.4	0.5	35	6	51.1	52.1	170
140	98.5	1.2	0.3	40	6	51.9	52.9	140
100	99.1	0.6	0.3	45	6	52.2	53.2	100
70	99.1	0.6	0.3	50	6	52.3	53.3	70
40	99.1	0.6	0.3	55	6	51.9	52.9	40

Source: WVC Noise Study Report, 2018.

As an additional dimension of the operational noise impact analysis, the conventional FTA transit noise impact analysis procedure was used. The posted speed limits were used in the FTA analysis except in areas where the speed limit exceeds 45 mph, in which the maximum operating speed of the BRT vehicles would be 45 mph.

Articulated bus pass-by noise measurements were conducted to determine the reference noise levels for the actual buses that would be in operation for this project. The L_{max} was measured at 25 feet at various speeds. This L_{max} was then converted to the single event level reference (SEL_{ref}) because the *FTA Noise and Vibration Assessment Manual* uses SEL_{ref} to calculate noise impacts. The average SEL_{ref} level at 50 feet for bus noise was determined to be 83 dBA, which is the same SEL_{ref} for hybrid buses listed in the FTA noise assessment manual; therefore, in determining noise impacts using FTA procedures, the hybrid bus option was selected in the FTA general noise assessment spreadsheet. The results of the articulated bus pass-by noise measurements and SEL_{ref} calculations are shown in Table 4.9-7.

Vibration

FTA's Generalized Ground Surface Vibration Curves were used for this assessment. These generalized curves are based on measurements of ground-borne vibration at representative North American transit systems, and they are shown in Figure 4.9-8.

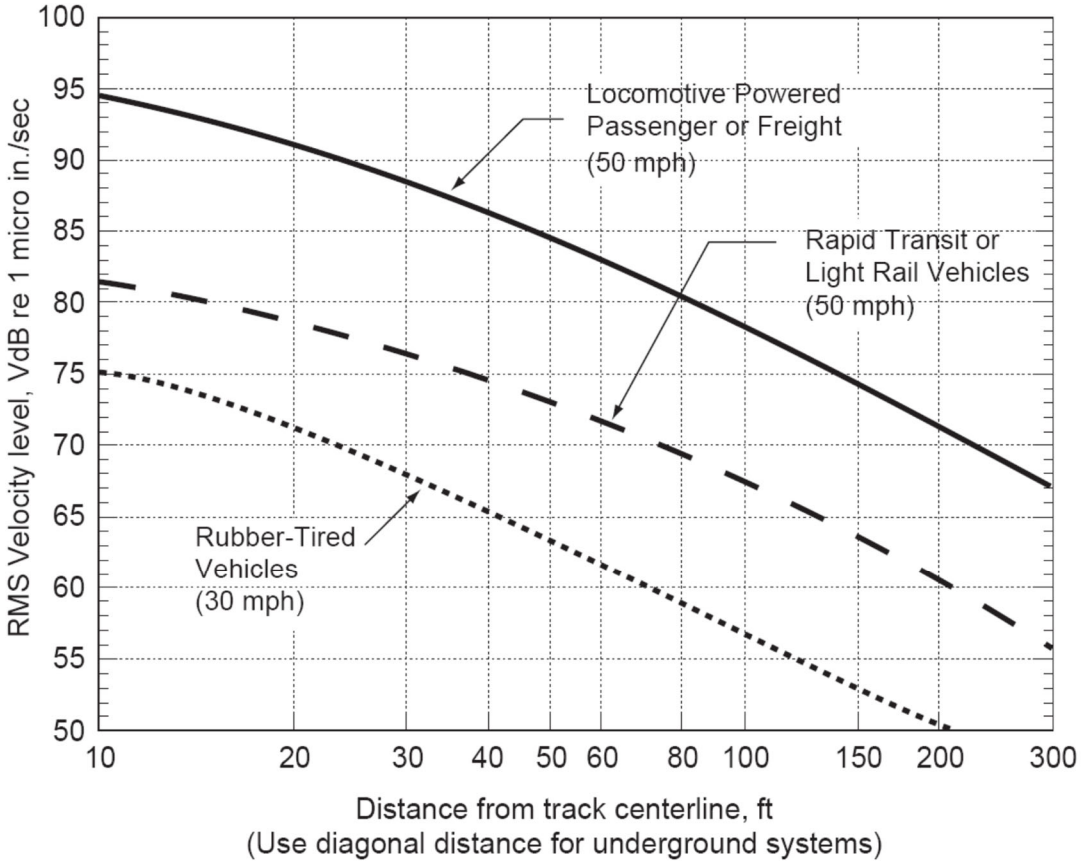
In assessing transit operation vibration impact, Figure 4.9-8 would be used to determine the average unadjusted vibration level to be expected at a specified distance for the appropriate transit vehicle type. Adjustment factors for maximum operational speed would then be applied to determine the predicted average vibration level at the sensitive receptor. The final calculated vibration level would determine if vibration impact is anticipated when interpreted against FTA's vibration impact threshold for human annoyance provided in Table 4.9-3.

Table 4.9-7 Bus Pass-by Noise Measurement Results

Bus Pass-by Event[1]	Distance (feet)	Speed (mph)	Measured Maximum Noise Level (L_{max}), dBA	Calculated Reference SEL (SEL_{ref}), dBA	Average Reference SEL (SEL_{ref}), dBA
1	25	24	78.0	83.2	83
2	25	27	78.1	82.1	
3	25	32	80.0	82.1	
4	25	33	80.7	82.5	
6	25	35	82.4	83.6	
8	25	35	82.7	83.9	
9	25	35	82.1	83.3	
10	25	25	77.7	82.5	

Note: [1]Pass-by events 5 and 7 have been removed due to interruption of bus pass-by by an outlier noise.

Source: WVC Noise Study Report, 2018.



Source: FTA, 2006.

Figure 4.9-8 Generalized Ground Surface Vibration Curves

The FTA guidelines state that actual levels of ground-borne vibration will sometimes differ from the projections, and some care must be taken when interpreting the projections; therefore, interpretation of results should adhere to the following guidelines:

- "No Impact" – Project vibration is below the impact threshold. Vibration impact is unlikely to occur in this case.
- "Impact" with zero to 5 dB greater than the impact threshold – In this range, there is still a significant chance that actual ground-borne vibration levels would be below the impact threshold.
- "Impact" with 5 dB or more greater than the impact threshold – Vibration impact is probable.

4.9.5 Impacts

This section analyzes potential long-term environmental impacts related to noise and vibration along the WVC Project alignment and at a nearby O&M facility. Short-term impacts during project construction are discussed in Section 5.2.10.

No Build Alternative

The No Build Alternative would not implement any significant changes to existing bus services in the proposed corridor. There would be no changes to the existing bus vehicles, service hours, route(s), or frequency. According to FTA's transit operation noise impact criteria, no noise or vibration impact would result if existing conditions are maintained.

Build Alternatives

Operational Noise of BRT Corridor

Alternative A

Under Alternative A, the proposed BRT service includes a proposed bus route spanning the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana, and construction of an O&M facility near the bus route to provide bus maintenance.

sbX buses would operate from 6:00 a.m. to 8:00 p.m. with peak headways for 4 hours and off-peak headways for 10 hours per day for a total span of service of 14 hours per day, Monday through Friday. From the Pomona Metrolink Transit Center station to Inland Empire Boulevard, the sbX buses would operate on 10-minute peak headways and 15-minute off-peak headways. From Inland Empire Boulevard to Victoria Gardens, the sbX buses would operate on 20-minute peak headways and 30-minute off-peak headways. From Inland Empire Boulevard to Kaiser Permanente, the sbX buses would operate on 20-minute peak headways and 30-minute off-peak headways. Additional service hours, including weekend service, may be added if additional operating funds become available in the future.

The results from the traffic volume impact threshold screening process are provided in Tables 4.9-8 and 4.9-9 for opening year 2023 and horizon year 2040 volumes under project Alternative A. The results show that the proposed BRT alignment, in areas near all noise-sensitive receptors, would include sufficiently high levels of non-BRT traffic in both year 2023 and 2040, respectively, such that the addition of the proposed bus service would not result in an appreciable increase in overall noise levels for all of the alignment. Only roadways with adjacent noise-sensitive receptors have been included in this analysis. Less than 1-dB increases in the overall noise level are expected along most of the screened portions of the proposed BRT alignment. This suggests that the addition of the proposed BRT service would not modify the noise environment in 2040 in any appreciable manner.

The conventional FTA transit noise impact analysis procedure was also applied to the alignment using the measured existing noise levels along the project corridor. The results of this assessment are provided in Table 4.9-10. Results of this assessment show that no BRT operational noise impacts are anticipated at any of the receptors along the proposed alignment; therefore, no noise impacts from the proposed WVC Project bus operations are anticipated.

Table 4.9-8 Opening Year 2023 Roadway Traffic Volume Screening for Potential BRT Noise Impact – Alternative A

Alignment Segment	Roadway	Segment		Peak-Hour 2023 Traffic Volume		Number of Proposed Buses per Hour	Minimum Roadway Speed, mph	Hourly Traffic Threshold Volume[a]	Potential Noise Impact[b]
		From	To	AM	PM				
1	Monterey Avenue	Main Street	Garey Avenue	539	533	12	35	400	No
2	Holt Avenue	Garey Avenue	Mills Avenue	1,451	1,870	12	35	400	No
3	Holt Boulevard	Mills Avenue	San Antonio Avenue	1,282	1,508	12	45	220	No
4	Holt Boulevard	San Antonio Avenue	Grove Avenue	1,645	1,511	12	40	300	No
5	Holt Boulevard	Grove Avenue	Vineyard Avenue	2,127	1,881	12	45	220	No
6	Inland Empire Boulevard	Archibald Avenue	Milliken Avenue	622	1,073	6	45	100	No
7	Milliken Avenue	Inland Empire Boulevard	Foothill Boulevard	1,367	2,877	6	50	70	No
8	Foothill Boulevard	Milliken Avenue	Etiwanda Avenue	1,878	2,621	6	50	70	No
9	Foothill Boulevard	Etiwanda Avenue	East Avenue	2,135	2,218	6	55	40	No
10	Foothill Boulevard	East Avenue	Hemlock Avenue	1,800	2,023	6	50	70	No
11	Foothill Boulevard	Hemlock Avenue	Sierra Avenue	1,386	1,970	6	45	100	No
12	Sierra Avenue	Foothill Boulevard	Merrill Avenue	1,386	1,821	6	30	260	No
13	Sierra Avenue	Merrill Avenue	Valley Boulevard	1,665	2,333	6	35	170	No
14	Marygold Avenue	Sierra Avenue	Juniper Avenue	410	1,008	6	30	260	No
15	Juniper Avenue	Marygold Avenue	Valley Boulevard	2,652	3,192	6	35	170	No
16	Valley Boulevard	Juniper Avenue	Sierra Avenue	1,107	1,879	6	40	140	No
17	Haven Avenue	Inland Empire Boulevard	Foothill Boulevard	2,445	2,921	6	50	70	No
18	Foothill Boulevard	Haven Avenue	Milliken Avenue	1,613	2,707	6	50	70	No

Table 4.9-8 Opening Year 2023 Roadway Traffic Volume Screening for Potential BRT Noise Impact – Alternative A

Alignment Segment	Roadway	Segment		Peak-Hour 2023 Traffic Volume		Number of Proposed Buses per Hour	Minimum Roadway Speed, mph	Hourly Traffic Threshold Volume[a]	Potential Noise Impact[b]
		From	To	AM	PM				
19	Day Creek Boulevard	Foothill Boulevard	Church Street	1,134	1,616	6	45	100	No
20	Church Street	Day Creek Boulevard	Rochester Avenue	1,297	1,609	6	45	100	No
21	Rochester Avenue	Church Street	Foothill Boulevard	1,427	1,697	6	45	100	No

Notes:
a - Maximum background traffic volume at vehicle speed shown for which noise impact from proposed BRT service could be anticipated.
b - Noise impact is determined if one or both values under Peak-Hour 2023 Traffic Volume does not exceed the corresponding Maximum Hourly Traffic Volume figure shown in the table.

Source: WVC Noise Study Report, 2018

Table 4.9-9 Future Year 2040 Roadway Traffic Volume Screening for Potential BRT Noise Impact – Alternative A

Alignment Segment	Roadway	Segment		Peak-Hour 2040 Traffic Volume		Number of Proposed Buses per Hour	Minimum Roadway Speed, mph	Hourly Traffic Threshold Volume[a]	Potential Noise Impact[b]
		From	To	AM	PM				
1	Monterey Avenue	Main Street	Garvey Avenue	616	607	12	35	400	No
2	Holt Avenue	Garey Avenue	Mills Avenue	1,668	2,145	12	35	400	No
3	Holt Boulevard	Mills Avenue	San Antonio Avenue	1,473	1,726	12	45	220	No
4	Holt Boulevard	San Antonio Avenue	Grove Avenue	1,891	1,721	12	40	300	No
5	Holt Boulevard	Grove Avenue	Vineyard Avenue	2,400	2,053	12	45	220	No
6	Inland Empire Boulevard	Archibald Avenue	Milliken Avenue	710	1,233	6	45	220	No
7	Milliken Avenue	Inland Empire Boulevard	Foothill Boulevard	1,495	3,076	6	50	150	No
8	Foothill Boulevard	Milliken Avenue	Etiwanda Avenue	2,148	2,893	6	50	150	No
9	Foothill Boulevard	Etiwanda Avenue	East Avenue	2,457	2,338	6	55	110	No
10	Foothill Boulevard	East Avenue	Hemlock Avenue	2,072	2,173	6	50	150	No
11	Foothill Boulevard	Hemlock Avenue	Sierra Avenue	1,593	2,201	6	45	220	No
12	Sierra Avenue	Foothill Boulevard	Merrill Avenue	1,549	2,026	6	30	510	No
13	Sierra Avenue	Merrill Avenue	Valley Boulevard	1,916	2,549	6	35	400	No
14	Marygold Avenue	Sierra Avenue	Juniper Avenue	470	1,162	6	30	510	Yes

Table 4.9-9 Future Year 2040 Roadway Traffic Volume Screening for Potential BRT Noise Impact – Alternative A

Alignment Segment	Roadway	Segment		Peak-Hour 2040 Traffic Volume		Number of Proposed Buses per Hour	Minimum Roadway Speed, mph	Hourly Traffic Threshold Volume[a]	Potential Noise Impact[b]
		From	To	AM	PM				
15	Juniper Avenue	Marygold Avenue	Valley Boulevard	3,055	3,515	6	35	400	No
16	Valley Boulevard	Juniper Avenue	Sierra Avenue	1,273	2,165	6	40	300	No
17	Haven Avenue	Inland Empire Boulevard	Foothill Boulevard	2,891	3,228	6	50	70	No
18	Foothill Boulevard	Haven Avenue	Milliken Avenue	1,907	3,160	6	50	70	No
19	Day Creek Boulevard	Foothill Boulevard	Church Street	1,301	1,860	6	45	100	No
20	Church Street	Day Creek Boulevard	Rochester Avenue	1,491	1,853	6	45	100	No
21	Rochester Avenue	Church Street	Foothill Boulevard	1,639	1,930	6	45	100	No

Notes:
a - Maximum background traffic volume at vehicle speed shown for which noise impact from proposed BRT service could be anticipated.
b - Noise impact is determined if one or both figures under Peak-Hour 2040 Traffic Volume does not exceed the corresponding Maximum Hourly Traffic Volume figure shown in the table.

Source: WVC Noise Study Report, 2018

Alternative B

The results from the traffic volume impact threshold screening process for the dedicated lane segment under Alternative B for opening year 2023 and horizon year 2040 are provided in Tables 4.9-11 and 4.9-12, respectively. Similar to Alternative A, the addition of the proposed BRT service under Alternative B would not modify the noise environment in 2040 in any appreciable manner.

The conventional FTA transit noise impact analysis procedure was also applied to the alignment using the measured existing noise levels along the project corridor. The results of this assessment are provided in Table 4.9-13. Results of this assessment show that no BRT operational noise impacts are anticipated at any of the receptors along the proposed alignment; therefore, no noise impacts from the proposed WVC Project bus operations are anticipated.

O&M Facility

The O&M facility would be used for light maintenance activities, with buses arriving and parking at the facility after their operating day and departing from the facility prior to the start of bus operations in the morning. Vehicle traffic to and from the facility also would include approximately 50 bus operators and approximately 36 facility employees, as well as vendors and visitors. These small numbers of low-speed vehicle operations are not expected to adversely affect noise levels near the O&M facility.

Buses would be moved at low speed to and from parking areas to the maintenance shop and to and from the washing and fueling facilities for servicing. These operations would result in periodic minor noise levels from bus engines. All maintenance would occur indoors, so exterior noise levels would not be adversely affected. The location of the O&M facility in an industrial district would greatly limit the number of nearby sensitive receptors, especially during late night and early morning hours.

Stationary Sources

Common to All Build Alternatives

Stationary noise sources can sometimes result in noise complaints from nearby residents. These sources may include public address (PA) systems at passenger stations and an O&M facility.

PA systems, a considered station feature, could generate sufficient noise to affect nearby noise-sensitive land uses. This is especially applicable in areas where stations abut residential properties. Depending on the exact placement of the PA system, these residences could be exposed to intermittent noise.

Two stations are located adjacent to residential land uses where a PA system could cause adverse effects. These stations are located on westbound Foothill Boulevard just east of East Avenue and on northbound Sierra Avenue between Orange Way and Ceres Avenue; both stations are in Fontana. The City of Fontana defines the maximum allowable exterior noise limits as specified in their municipal code to be 65 dBA for all hours of the day.

Table 4.9-10 Operational Noise Impact Analysis at Representative Receptors – Alternative A

Receptor Number	Land Use Category[1]	Distance to Bus Lane Near Lane / Far Lane (feet)	Existing Noise Level L_{dn} (L_{eq})[2], dBA	Criteria, Moderate / Severe, dBA	Project Noise Level, L_{dn} (L_{eq})[2], dBA	Cumulative Noise, L_{dn} (L_{eq})[2], dBA	Increase in Cumulative Noise, dB	Noise Impact (FTA Criteria)
R1	3	32 / 55	(69)	69-74 / >74	(56)	(69)	0	No
R2 / LT1	2	47 / 67	66	62-67 / >67	54	66	0	No
R3	2	56 / 114	66	62-67 / >67	52	66	0	No
R4	2	57 / 97	70	65-69 / >69	52	70	0	No
R4A	3	39 / 80	(69)	69-74 / >74	(55)	(69)	0	No
R5 / ST1	2	57 / 97	70	65-69 / >69	52	70	0	No
R6 / LT2	2	38 / 79	67	63-67 / >67	49	67	0	No
R7	2	40 / 83	70	65-69 / >69	54	70	0	No
R8	2	40 / 83	70	65-69 / >69	54	70	0	No
R9 / ST2	3	90 / 137	(64)	66-70 / >70	(50)	(64)	0	No
R10	2	40 / 83	70	65-69 / >69	54	70	0	No
R11	3	90 / 137	(64)	66-70 / >70	(50)	(64)	0	No
R12A	3	85 / 145	(70)	70-74 / >74	(52)	(70)	0	No
R12	2	70 / 125	68	63-68 / >68	53	68	0	No
R13 / LT3	2	51 / 108	63	60-65 / >65	50	63	0	No
R14 / ST3	2	70 / 125	68	63-68 / >68	53	68	0	No
R15 / LT4	2	47 / 100	65	61-66 / >66	50	65	0	No
R16	3	85 / 145	(70)	70-74 / >74	(52)	(70)	0	No
R17 / ST3A	2	92 / 147	63	60-65 / >65	51	63	0	No
R18	2	40 / 98	68	63-68 / >68	56	68	0	No
R19	3	85 / 145	(70)	70-74 / >74	(52)	(70)	0	No
R20	2	60 / 119	63	60-65 / >65	54	63	0	No
R21	2	40 / 98	68	63-68 / >68	56	68	0	No
R22 / LT6	2	212 / 259	61	59-64 / >64	46	61	0	No
R23	2	42 / 76	72	66-71 / >71	55	72	0	No

Table 4.9-10 Operational Noise Impact Analysis at Representative Receptors – Alternative A

Receptor Number	Land Use Category[1]	Distance to Bus Lane Near Lane / Far Lane (feet)	Existing Noise Level L_{dn} (L_{eq})[2], dBA	Criteria, Moderate / Severe, dBA	Project Noise Level, L_{dn} (L_{eq})[2], dBA	Cumulative Noise, L_{dn} (L_{eq})[2], dBA	Increase in Cumulative Noise, dB	Noise Impact (FTA Criteria)
R24 / ST4	2	75 / 120	70	65-69 / >69	52	70	0	No
R25	3	36 / 78	(70)	70-74 / >74	(56)	(70)	0	No
R26	3	50 / 94	(68)	68-73 / >73	(55)	(68)	0	No
R27 / ST5	2	57 / 112	64	61-65 / >65	48	64	0	No
R28 / ST5A	2	27 / 63	72	66-71 / >71	57	72	0	No
R29	2	42 / 76	72	66-71 / >71	55	72	0	No
R30	2	42 / 82	72	66-71 / >71	55	72	0	No
R31 / ST6	2	33 / 72	72	66-71 / >71	56	72	0	No
R32	3	36 / 78	(70)	70-74 / >74	(56)	(70)	0	No
R33	2	42 / 82	72	66-71 / >71	55	72	0	No
R34	2	54 / 100	70	65-69 / >69	54	70	0	No
R35 / LT8	2	46 / 94	70	65-69 / >69	55	70	0	No
R36	2	54 / 100	70	65-69 / >69	54	70	0	No
R37 / ST7	2	136 / 188	65	61-66 / >66	49	65	0	No
R38 / ST8	2	60 / 110	64	61-65 / >65	50	64	0	No
R39	2	60 / 110	64	61-65 / >65	50	64	0	No
R40 / LT9	2	65 / 127	66	62-67 / >67	50	66	0	No
R41	2	222 / 300	66	62-67 / >67	43	66	0	No
R42	2	112 / 178	66	62-67 / >67	47	66	0	No
R43 / LT10	2	45 / 122	66	62-67 / >67	52	66	0	No
R44	2	104 / 182	66	62-67 / >67	47	66	0	No
R45 / ST9	2	69 / 93	70	65-69 / >69	50	70	0	No
R46 / LT11	2	28 / 109	67	63-67 / >67	49	67	0	No
R47	2	81 / 155	65	61-66 / >66	48	65	0	No
R48 / ST10	2	88 / 147	61	59-64 / >64	43	61	0	No

Table 4.9-10 Operational Noise Impact Analysis at Representative Receptors – Alternative A

Receptor Number	Land Use Category[1]	Distance to Bus Lane Near Lane / Far Lane (feet)	Existing Noise Level L_{dn} (L_{eq})[2], dBA	Criteria, Moderate / Severe, dBA	Project Noise Level, L_{dn} (L_{eq})[2], dBA	Cumulative Noise, L_{dn} (L_{eq})[2], dBA	Increase in Cumulative Noise, dB	Noise Impact (FTA Criteria)
R49 / LT12	2	42 / 111	63	60-65 / >65	47	63	0	No
R50 / ST11	2	65 / 126	65	61-66 / >66	50	65	0	No
R51 / ST12	2	47 / 126	70	65-69 / >69	51	70	0	No
R51A	2	47 / 126	70	65-69 / >69	51	70	0	No
R52 / LT13	2	68 / 146	64	61-65 / >65	44	64	0	No
R53	2	50 / 129	65	61-66 / >66	51	65	0	No
R54 / LT14	2	260 / 344	56	56-62 / >62	37	56	0	No
R55 / ST13	2	50 / 129	65	61-66 / >66	51	65	0	No
R56	2	30 / 84	69	64-69 / >69	54	69	0	No
R57 / ST14	2	77 / 125	66	62-67 / >67	49	66	0	No
R58	2	42 / 85	66	62-67 / >67	53	66	0	No
R59	2	42 / 85	66	62-67 / >67	53	66	0	No
R60 / LT15	2	200 / 278	57	57-62 / >62	43	57	0	No
R61	2	61 / 114	68	63-68 / >68	50	68	0	No
R62 / ST15	2	61 / 114	68	63-68 / >68	50	68	0	No
R63 / ST16	2	192 / 240	55	55-61 / >61	44	56	1	No
R64 / LT16	2	49 / 97	69	64-69 / >69	52	69	0	No
R65 / ST17	2	275 / 325	56	56-62 / >62	41	56	0	No
R66 / LT17	2	89 / 133	63	60-65 / >65	45	63	0	No
R66A	3	52 / 95	(62)	64-69 / >69	(49)	(62)	0	No
R67	3	52 / 95	(62)	64-69 / >69	(49)	(62)	0	No
R68	2	49 / 94	76	66-74 / >74	48	76	0	No
R69 / ST18	2	77 / 122	76	66-74 / >74	45	76	0	No
R70	3	80 / 124	(75)	71-78 / >78	(46)	(75)	0	No
R71	2	49 / 94	76	66-74 / >74	48	76	0	No

Table 4.9-10 Operational Noise Impact Analysis at Representative Receptors – Alternative A

Receptor Number	Land Use Category[1]	Distance to Bus Lane Near Lane / Far Lane (feet)	Existing Noise Level L_{dn} (L_{eq})[2], dBA	Criteria, Moderate / Severe, dBA	Project Noise Level, L_{dn} (L_{eq})[2], dBA	Cumulative Noise, L_{dn} (L_{eq})[2], dBA	Increase in Cumulative Noise, dB	Noise Impact (FTA Criteria)
R72	2	52 / 99	63	60-65 / >65	49	63	0	No
R73	3	39 / 83	(62)	64-69 / >69	(52)	(62)	0	No
R73A	3	39 / 83	(62)	64-69 / >69	(52)	(62)	0	No
R74	2	144 / 203	63	60-65 / >65	43	63	0	No
R75 / ST19	2	37 / 110	69	64-69 / >69	52	69	0	No
R76 / ST20	2	61 / 96	63	60-65 / >65	48	63	0	No
R77 / ST21	2	39 / 67	65	61-66 / >66	51	65	0	No
R78 / LT19	2	98 / 122	58	57-62/ >62	46	58	0	No
R79 / ST22	2	101 / 127	58	57-62/ >62	39	58	0	No
R80 / LT20	2	82 / 183	68	63-68 / >68	48	68	0	No
R81 / ST23	3	50 / 125	(70)	70-74 / >74	(52)	(70)	0	No
R86 / LT21	2	45 / 81	60	58-63 / >63	47	60	0	No
R87 / LT21A	2	48 / 82	59	58-63 / >63	47	59	0	No
R88 / ST25	2	68 / 111	67	63-67 / >67	50	67	0	No
R89	2	57 / 100	68	63-68 / >68	51	68	0	No
R90	2	52 / 96	61	59-64 / >64	46	61	0	No
R91	2	61 / 141	66	62-67 / >67	45	66	0	No
R92 / LT22	2	80 / 164	66	62-67 / >67	48	66	0	No
R93 / ST26	2	56 / 138	69	64-69 / >69	50	69	0	No

Notes:

1. Category 2 – Includes residences, hotels/motels, and hospitals; Category 3 – Includes schools, parks, churches, and library.
2. Noise levels shown within parentheses represent 1-hour L_{eq}. L_{eq} is applied rather than L_{dn} for Category 3 land uses. The L_{eq} values provided here represent 1-hour periods.

Source: WVC Noise Study Report, 2018

Table 4.9-11 Opening Year 2023 Roadway Traffic Volume Screening for Potential BRT Noise Impact – Alternative B

Alignment Segment	Roadway	Segment		Peak Hour 2040 Traffic Volume		Number of Proposed Buses per Hour	Minimum Roadway Speed, mph	Maximum Hourly Traffic Volume*	Potential Noise Impact**
		From	To	AM	PM				
3	Holt Boulevard	Benson Avenue	San Antonio Avenue	1,358	1,559	12	45	220	No
4	Holt Boulevard	San Antonio Avenue	Grove Avenue	1,655	1,580	12	40	300	No
5	Holt Boulevard	Grove Avenue	Vineyard Avenue	2,127	1,881	12	45	220	No

Notes:
a - Maximum background traffic volume at vehicle speed shown for which noise impact from proposed BRT service could be anticipated.
b - Noise impact is determined if one or both values under Peak-Hour 2040 Traffic Volume does not exceed the corresponding Maximum Hourly Traffic Volume figure shown in the table.
c - Alternative B would be the same as Alternative A except for the segment of Holt Boulevard from Benson Avenue to Vineyard Avenue where there would be a dedicated bus lane constructed for this segment of the alignment. Therefore, only this area is considered for Alternative B.

Source: WVC Noise Study Report, 2018

Table 4.9-12 Future Year 2040 Roadway Traffic Volume Screening for Potential BRT Noise Impact – Alternative B

Alignment Segment[c]	Roadway	Segment		Peak Hour 2040 Traffic Volume		Number of Proposed Buses per Hour	Minimum Roadway Speed, mph	Maximum Hourly Traffic Volume[a]	Potential Noise Impact[b]
		From	To	AM	PM				
3	Holt Boulevard	Benson Avenue	San Antonio Avenue	1,560	1,777	12	45	220	No
4	Holt Boulevard	San Antonio Avenue	Grove Avenue	1,901	1,721	12	40	300	No
5	Holt Boulevard	Grove Avenue	Vineyard Avenue	2,400	2,053	12	45	220	No

Notes:

a - Maximum background traffic volume at vehicle speed shown for which noise impact from proposed BRT service could be anticipated.

b - Noise impact is determined if one or both figures under Peak-Hour 2040 Traffic Volume does not exceed the corresponding Maximum Hourly Traffic Volume figure shown in the table.

c - Alternative B would be the same as Alternative A except for the segment of Holt Boulevard from Benson Avenue to Vineyard Avenue where there would be a dedicated bus lane constructed for this segment of the alignment. Therefore, only this area is considered for Alternative B.

Source: WVC Noise Study Report, 2018

Table 4.9-13 Operational Noise Impact Analysis at Representative Receptors – Alternative B

Receptor Number[3]	Land Use Category[1]	Distance to Bus Lane Near Lane / Far Lane (feet)	Existing Noise Level L_{dn} (L_{eq})[2], dBA	Criteria, Moderate / Severe, dBA	Project Noise Level, L_{dn} (L_{eq})[2], dBA	Cumulative Noise, L_{dn} (L_{eq})[2], dBA	Increase in Cumulative Noise, dB	Noise Impact (FTA Criteria)
R22 / LT6	2	226 / 246	61	59-64 / >64	45	61	0	No
R23	2	57 / 81	72	66-71 / >71	54	72	0	No
R24 / ST4	2	93 / 112	70	65-69 / >69	51	70	0	No
R25	3	45 / 62	(70)	70-74 / >74	(56)	(70)	0	No
R26	3	64 / 80	(68)	68-73 / >73	(54)	(68)	0	No
R27 / ST5	2	72 / 102	64	61-65 / >65	47	64	0	No
R28 / ST5A	2	45 / 68	72	66-71 / >71	55	72	0	No
R29	2	62 / 82	72	66-71 / >71	53	72	0	No
R30	2	45 / 66	72	66-71 / >71	55	72	0	No
R31 / ST6	2	45 / 66	72	66-71 / >71	55	72	0	No
R32	3	51 / 73	(70)	70-74 / >74	(55)	(70)	0	No
R33	2	47 / 73	72	66-71 / >71	55	72	0	No
R34	2	56 / 77	70	65-69 / >69	54	70	0	No
R35 / LT8	2	56 / 77	70	65-69 / >69	54	70	0	No
R36	2	67 / 92	70	65-69 / >69	53	70	0	No
R37 / ST7	2	143 / 188	65	61-66 / >66	48	65	0	No

Notes:

1. Category 2 – Includes residences, hotels/motels, and hospitals; Category 3 – Includes schools, parks, churches, and library.
2. Noise levels shown within parentheses represent 1-hour L_{eq}. L_{eq} is applied rather than L_{dn} for Category 3 land uses. The L_{eq} values provided here represent 1-hour periods.
3 - Alternative B would be the same as Alternative A except for the segment of Holt Boulevard from Benson Avenue to Vineyard Avenue where there would be a dedicated bus lane constructed for this segment of the alignment. Therefore, only receptors located in this area are considered for Alternative B.

Source: WVC Noise Study Report, 2018

Using the maximum allowable noise level of 65 dBA at the property line and the distance between the station and property line of the residences, it was determined that the noise level of the PA system should not exceed 74 dBA at 10 feet from the PA system in the direction of the residential land uses at the station on Foothill Boulevard. The noise level of the PA system should not exceed 71 dBA at 10 feet from the PA system in the direction of the residential land uses at the station on Sierra Avenue. These levels are calculated based on a 6-dB noise reduction per doubling of distance from point sources.

The proposed O&M facility could also generate sufficient noise that would affect nearby noise-sensitive land uses. Proposed O&M Sites 1 and 2, located at 1440 and 1516 South Cucamonga Avenue, respectively, would be positioned near the Baldy View ROP Career Training Center. Proposed Site 3, located at 1333 South Bon View Avenue, would be situated across the street from single-family residences. All three proposed O&M facility sites could generate noise levels that would disrupt normal activities. Figure 25 in Appendix A of the *Noise and Vibration Technical Report* shows the proposed O&M facility sites.

The conventional FTA transit noise impact analysis procedure was applied to the career center and residences near the proposed O&M facilities using the measured existing noise levels and operational assumptions based on existing O&M facilities. It is assumed that the average number of buses that would be washed and possible preventive maintenance and repairs conducted in a given hour would be six buses, and that the hours in which most of the buses would be washed and maintained after the buses returned from service between 10:00 p.m. and 6:00 a.m. It is also assumed that the O&M facility would have a perimeter wall.

The results of this assessment are provided in Table 4.9-14. Figure 25 in Appendix A of the *Noise and Vibration Technical Report* shows the noise sensitive receptors. Results of this assessment show that no O&M operational noise impacts are anticipated at any of the receptors closest to the proposed O&M facilities; therefore, no noise impacts would occur as a result of operations of the proposed O&M facility.

Vibration

BRT Corridor

Procedures outlined in FTA's *Transit Noise and Vibration Impact Assessment* (FTA, 2006) were used to predict WVC operation vibration levels along the proposed alignment. Building damage due to operation of the BRT would be highly improbable; however, annoyance due to its operation would warrant closer examination.

Vibration impact from rubber tire-fitted vehicles is extremely rare. This is because rubber tire-fitted vehicles are not as massive as railway vehicles. Additionally, they are typically well isolated by the vehicle suspension design and rubber

Table 4.9-14 O&M Noise Impact Analysis at Representative Receptor

Receptor Number[3]	Land Use Category[1]	Nearest O&M Site No.	Distance to Center of Bus Wash and Maintenance Stations (feet)	Existing Noise Level L_{dn} (L_{eq})[2], dBA	Criteria, Moderate / Severe, dBA	Project Noise Level, L_{dn} (L_{eq})[2], dBA	Cumulative Noise, L_{dn} (L_{eq})[2], dBA	Increase in Cumulative Noise, dB	Noise Impact (FTA Criteria)
R94	3	1	290	(68)	68-73 / >73	46	68	0	No
		2	500	(68)	68-73 / >73	40	68	0	No
R95 / ST27	2	3	535	70	65-69 / >69	45	70	0	No

Notes:

1 - Category 2 – Includes residences, hotels/motels, and hospitals; Category 3 – Includes schools, parks, churches, and library.

2 - Noise levels shown within parentheses represent 1-hour L_{eq}. L_{eq} is applied rather than L_{dn} for Category 3 land uses. The L_{eq} values provided here represent 1-hour periods.

Source: WVC Noise Study Report, 2018

tires, which act as a highly effective barrier to vibration transmission from the vibration-generating carriage and the main propagation medium for vibration excitation, the ground. Potential vibration impact for building damage from rubber tire-fitted vehicles such as those proposed for the WVC Project can be reasonably dismissed under general conditions. No further assessment is needed.

In terms of vibration impact for human annoyance, the RMS velocity level from a rubber-tired transit vehicle at 30 mph is given in Figure 4.9-8 at 63 VdB, at 50 feet from the alignment centerline. Compensating for the maximum operating speed (45 mph) of the proposed BRT service, the estimated RMS vibration velocity level ranges from 65.5 to 67.4 VdB at 50 feet. Referring to Table 4.9-3, which establishes the vibration impact threshold for human annoyance, the estimated RMS velocity levels for a rubber-tired transit vehicle at 45 mph are more than 4 dB below the impact threshold for human annoyance vibration impact for residential (Land Use Category 2) buildings and more than 7 dB below the impact threshold for institutional (Land Use Category 3) buildings without any adjustments for environmental factors such as effective propagation soil conditions. Although these conditions sometimes exist, they are not typically presumed unless evidence demonstrating the contrary is apparent.

Under general geologic conditions, erosion of an impact margin of 4 dB is highly unlikely, especially considering the conservative building-to-alignment distance used in this estimation; therefore, it is reasonable to conclude that human annoyance vibration impact would not be anticipated as a result of the proposed WVC Project.

O&M Facility

The O&M facility would be located within the industrial zoned land use within the City of Ontario. It is located away from the residences or buildings susceptible to vibration effect. No adverse impacts are anticipated.

4.9.6 Avoidance, Minimization, and/or Mitigation Measures

NOI-1: To avoid noise impacts from the public address (PA) systems, the noise level from the PA system at the station on Foothill Boulevard should not exceed 74 dBA at 10 feet in the direction of the residential land uses and the noise level of the PA system at the station on Sierra Avenue should not exceed 71 dBA at 10 feet in the direction of the residential land use.

The proposed BRT service under both Alternatives A and B is not expected to cause any operational vibration impacts to sensitive receptors adjacent to the proposed alignment or near the proposed O&M facility. Therefore, no mitigation measures would be necessary.

Proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with noise and vibration are discussed in Section 5.3.10.

4.10 Energy

This section addresses the project's consistency with energy conservation plans, compares energy consumption between the alternatives, and discusses potential long-term impacts to existing energy facilities along the project corridor as a result of project operations.

Short-term impacts during project construction and proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with energy consumption and facilities are discussed in Sections 5.2.11 and 5.3.11, respectively.

The information contained in this section is summarized from the *West Valley Connector Project – Energy Study Report* (Terry A. Hayes and Associates, 2017b) prepared for the project.

4.10.1 Regulatory Setting

The California Energy Commission (CEC) published the *2015 Integrated Energy Policy Report* (IEPR) and released it to the public in February 2016. The IEPR was prepared in response to SB 1389, Chapter 568, Statutes of 2002, which requires that the CEC prepare a biennial IEPR. This report contains an integrated assessment of major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the State's economy; and protect public health and safety.

SCAG is required by State and federal mandates to prepare an RTP every 3 years. The 2016-2040 RTP/SCS is a long-range document that provides a blueprint to help achieve a coordinated and balanced regional transportation system over a 20+ year time horizon. The SCAG 2016-2040 RTP/SCS provides a framework for future development of the regional transportation system through the year 2040 and addresses all modes of transportation within the region.

4.10.2 Existing Conditions

The physical boundaries established for the existing conditions are loosely defined as south of I-210, east of Garey Avenue, north of SR-60, and west of Sierra Avenue.

On-road transportation energy consumption in the project area includes the fuel required for passenger vehicles (i.e., automobiles, vans, and light trucks), heavy trucks (i.e., three or more axles), and transit buses. A mix of natural gas, electricity, gasoline, and diesel fuel provide the energy source for transportation within the Geary corridor. Passenger vehicles primarily use gasoline as fuel, where heavy trucks primarily use diesel fuel. Omnitrans Express and local buses, which traveled 9,207,000 miles in Fiscal Year 2015-2016, are powered by CNG.

Based on VMT data obtained from the project team and fuel use data from the ARB EMFAC2014 model, automobiles and trucks in the project area combine to use 196,483,761 gallons of fuel per year.

CNG buses average approximately 3.0 miles per diesel gallon equivalent (DGE). The Omnitrans DGE value for Express and local buses is approximately 3,069,000. Studies indicate that 1.0 DGE equals 114,000 British thermal units (BTU). Therefore, the Omnitrans Express and local buses consume approximately 349,866 million BTU per year.

Passenger vehicles in the project area and Omnitrans Express and local buses combine to consume approximately 23,085,572 million BTU per year.

Omnitrans provided data indicating that the existing West Valley O&M facility uses 546,832 kilowatt-hours of electricity per year and 12,080 therms (1,208 million BTU) of natural gas per year.

4.10.3 Impacts

According to Council on Environmental Quality (CEQ) regulations (40 CFR §§ 1500-1508), the determination of an adverse impact is a function of context and intensity. To determine significance, the severity of the impact must be examined in terms of the type, quality, and sensitivity of the resource involved; the location of the proposed project; the duration of the effect (short- or long-term); and other consideration of context. Adverse impacts will vary with the setting of the proposed action and the surrounding area.

In accordance with Appendix F of the CEQA Guidelines, the project would result in a significant impact related to energy if it would:

- Conflict with adopted energy conservation plans;
- Use nonrenewable resources in a wasteful or inefficient manner; and/or
- Result in a need for energy supplies and distribution infrastructure or capacity-enhancing alterations to existing power or natural gas facilities.

No Build Alternative

The No Build Alternative would not implement any significant changes to existing bus services in the proposed corridor. There would be no changes to the existing bus vehicles, service hours, route(s), or frequency; therefore, the No Build Alternative would not result in an adverse impact related to energy use.

Build Alternatives

The quantification of mobile source energy use for comparison between the alternatives was based on the VMT shown in Table 4.10-1.

The VMT was translated to gasoline and diesel fuel use and then converted to BTU based on the energy content of the fuel. The ARB EMFAC2014 model provides existing and future VMT and fuel consumption by County and year. EMFAC2014 was used to obtain gallons per mile of fuel use in 2016, 2023, and 2040. The fuel economy of automobiles and trucks for each year is shown in Table 4.10-2. The analysis used energy contents of 116,090 BTU per gallon of gasoline and 114,000 BTU per gallon of diesel.

Table 4.10-1 Vehicle Miles Traveled

Scenario and Year	Automobiles	Trucks	Total
CEQA Baseline (2016)	12,077,347	849,522	12,926,868
2023			
No Build Alternative	12,496,047	897,224	13,393,271
Alternative A	12,491,817	897,308	13,389,125
Alternative B	12.491,045	898,157	13,389,202
2040			
No Build Alternative	14,589,549	1,135,735	15,725,284
Alternative A	14,585,971	1,135,842	15,721,813
Alternative B	14,584,599	1,137,681	15,722,280
Note: The VMT analysis was prepared when 2020 was the estimated opening year. The current opening year estimate is 2023. Nevertheless, the traffic modeling forecast considered VMT through 2040 and indicates that VMT would decrease in the opening and horizon years. A 3-year delay in the opening date does not substantially alter this analysis. In addition, within the EMFAC2014 model, pollutant emissions decrease in future years due to fleet turnover and improvements in engine exhaust technology.			

Source: WVC Project Energy Study, 2018.

Table 4.10-2 Vehicles and Fuel Economy

Year	Vehicle Classification	Fuel Economy (miles per gallon)
2016	Automobile	0.03858
2016	Truck	0.15989
2023	Automobile	0.03421
2023	Truck	0.15404
2040	Automobile	0.02384
2040	Truck	0.13918

Source: WVC Project Energy Study, 2018.

The energy analysis also considered energy use associated with bus VMT. Energy use related to CNG buses was estimated using a CNG-equivalence factor of 3.0 miles per gallon of diesel fuel. Existing and no-build bus VMT were obtained from Omnitrans. The bus VMT for the build alternatives was estimated using a 35-mile-long corridor with 10-minute peak and 15-minute off-peak headways. The estimation included 18 service hours per day on weekdays and 12 service hours per day on weekends. The peak periods were assumed to be 6 hours on weekdays and no peak periods on weekends.

The energy use for the proposed O&M facility was estimated using the energy use for the existing West Valley O&M facility. The existing energy use was calculated using the ratio of buses at the existing facility and buses at the proposed facility.

Alternative A

The long-term change in energy use associated with the proposed project was estimated in terms of BTU and gasoline consumption. The BTU analysis accounts for CNG use by Omnitrans buses while the change in fuel consumption is only estimated for passenger vehicles and trucks. Table 4.10-3 shows the BTU comparison between the alternatives. Alternative A would marginally decrease BTU consumption in 2023 and 2040 compared to the No Build Alternative. When compared to the No Build Alternative as required under NEPA, Alternative A would not result in a substantial change in BTU consumption; therefore, the proposed project would not result in an adverse effect related to BTU consumption.

Table 4.10-3 British Thermal Unit Comparison

Scenario and Year	Total BTU (Million)	Change between Build and No Build Alternatives	Percent Change	Change between Build Alternatives and CEQA Baseline	Percent Change
CEQA Baseline (2016)	23,085,572	--	--	--	--
2023					
No Build Alternative	21,613,507	--	--	-1,472,065	-6.38
Alternative A	21,608,262	-5,245	-0.024	-1,477,309	-6.40
Alternative B	21,611,094	-2,413	-0.011	-1,474,478	-6.39
2040					
No Build Alternative	19,007,867	--	--	-4,077,705	-17.7
Alternative A	19,005,063	-2,803	-0.015	-4,080,509	-17.7
Alternative B	19,011,366	3,500	0.018	-4,074,205	-17.6
Note: The VMT analysis was prepared when 2020 was the estimated opening year. The current opening year estimate is 2023. Nevertheless, the traffic modeling forecast considered VMT through 2040 and indicates that VMT would decrease in the opening and horizon years. A 3-year delay in the opening date does not substantially alter this analysis. In addition, within the EMFAC2014 model, pollutant emissions decrease in future years due to fleet turnover and improvements in engine exhaust technology.					

Source: WVC Project Energy Study, 2018.

Table 4.10-4 shows the change in gasoline consumption associated between the scenarios. Alternative A would marginally decrease gasoline consumption in 2023 and 2040 compared to the No Build Alternative. When compared to the No Build Alternative as required under NEPA, Alternative A would not result in a substantial change in gasoline consumption; therefore, the proposed project would not result in an adverse effect related to gasoline consumption.

Alternative B

As shown in Table 4.10-1, the estimated VMT for Alternatives A and B are nearly identical; however, Alternative B would marginally decrease BTU consumption in 2023 but marginally increase BTU consumption in 2040, and it would marginally decrease gasoline consumption in 2023 but marginally increase gasoline consumption in 2040. The BTU and gasoline increase in 2040 is primarily due to the increased truck VMT associated with slight trip diversions. The truck VMT is shown in Table 4.10-1. Nevertheless, when compared to the No Build Alternative, Alternative B would not result in substantial changes in BTU or gasoline consumption; therefore, the proposed project would not result in an adverse effect related to gasoline consumption.

Table 4.10-4 Gasoline Consumption Comparison

Scenario and Year	Total Gallons	Change between Build and No Build Alternatives	Percent Change	Change between Build Alternatives and CEQA Baseline	Percent Change
CEQA Baseline (2016)	196,483,761	--	--	--	--
2023					
No Build Alternative	183,814,562	--	--	-13,289,947	-6.74
Alternative A	183,767,932	-46,630	-0.025	-13,336,577	-6.77
Alternative B	183,792,938	-21,624	-0.012	-13,311,574	-6.75
2040					
No Build Alternative	161,462,891	--	--	-35,641,618	-18.08
Alternative A	161,437,300	-25,591	-0.160	-35,667,209	-18.10
Alternative B	161,492,800	29,908	0.019	-35,611,709	-18.07
Note: The VMT analysis was prepared when 2020 was the estimated opening year. The current opening year estimate is 2023. Nevertheless, the traffic modeling forecast considered VMT through 2040 and indicates that VMT would decrease in the opening and horizon years. A 3-year delay in the opening date does not substantially alter this analysis. In addition, within the EMFAC2014 model, pollutant emissions decrease in future years due to fleet turnover and improvements in engine exhaust technology.					

Source: WVC Project Energy Study, 2018.

O&M Facility

Based on energy use from the existing O&M facility, the proposed O&M facility would use 1,260 million British thermal units (MMBtu) per year of energy resources. This increased energy use is not considered a wasteful or inefficient use of energy resources as the energy is being used to operate and maintain a mass transit system, which has been identified by State and regional agencies as an efficient method of reducing cumulative energy use. The energy used at the proposed O&M facility is a very small amount of the total energy associated with the new mass transit system, as shown in Table 4.10-3. The 1,260 MMBtu represents less than 0.0059 percent of the estimated 21,500,000 MMBtu consumed in 2023 for regional mobile source energy use. For 2040, the 1,260 MMBtu represents less than 0.0066 percent of the estimated 19,000,000 MMBtu consumed for regional mobile source energy use. Based on this analysis, the proposed O&M facility would not result in a wasteful or inefficient use of energy.

The proposed O&M facility would require approximately 224,200 kilowatt-hours of electricity per year. SCE provides electricity to the project area. SCE generated 87 billion kilowatt-hours per year in 2015. The proposed O&M facility would require 0.00026 percent of regional electricity generation. The electricity used by the proposed O&M facility would have no effect on regional or local energy supply or facilities.

The proposed O&M facility would require approximately 485,568 cubic feet of natural gas per year. The Southern California Gas Company provides natural gas to the project. The area is served by a complex system of underground pipelines. The proposed O&M facility may require new connections to natural gas pipelines. However, the O&M facility would not require the construction of substantial offsite facilities. The Southern California Gas Company throughput in 2016 was 2,511,000,000 cubic feet per day. The proposed O&M facility would require 0.000053 percent of Southern California Gas Company throughput. The natural gas used by the proposed O&M facility would have no effect on regional or local natural gas supply or facilities.

4.10.4 Avoidance, Minimization, and/or Mitigation Measures

No adverse impacts have been identified; therefore, no mitigation or control measures are necessary to reduce excessive energy use.

Avoidance, minimization, and mitigation measures to minimize construction impacts associated with energy consumption are discussed in Section 5.3.11.

4.11 Demographics and Neighborhoods

This section analyzes potential long-term environmental impacts related to community demographics and neighborhoods through which the WVC Project would pass. This section also presents a discussion of socioeconomic characteristics and describes methods used to identify minority and low-income populations, and evaluates potential environmental justice considerations.

Short-term impacts during project construction and proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with aesthetic and visual resources are discussed in Sections 5.2.12 and 5.3.12, respectively.

The information contained in this section is summarized from the *West Valley Connector Project – Community Impact Report* (Parsons, 2018c), prepared for the project.

4.11.1 Existing Conditions

Socioeconomic Characteristics

U.S. Census Bureau 2010-2014 American Community Survey 5-year data and 2016 SCAG data were used to characterize the demographic nature of the project corridor. In this section, the study area is defined as the area located within 0.5 mile on either side of the alignments evaluated in the draft environmental document. This study area buffer allows for assessing construction and operation of the project. All Census blocks and block groups that intersected the buffer for each alternative were selected for analysis; therefore, the proposed project study area intersects with 45 Census tracts (see Figure 4.11-1). This socioeconomic profile also analyzes the demographic characteristics of the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana, in addition to the counties of Los Angeles and San Bernardino, to provide a contextual backdrop for the Census data.

SCAG Growth Forecast Data

The project study area, as well as the greater southern California region, has experienced dramatic growth in the last 30 years, and this trend is expected to continue. During the past several decades, the SCAG region, including Orange, Imperial, Riverside, San Bernardino, Los Angeles, and Ventura counties, has been one of the fastest-growing regions in the nation. By 2015, Los Angeles County's population reached 10,147,070 persons and San Bernardino County's population reached 2,116,461 persons, and they are ranked the 1st and 5th most populated counties of the state's 58 counties, respectively (California Department of Finance, 2016). Additional population growth and employment expansion within the project study area is expected to continue through natural increase and redevelopment of existing land uses or infill development of vacant parcels.

Table 4.11-1 presents a summary of SCAG growth forecast data for Los Angeles and San Bernardino counties and the cities of Pomona, Montclair, Ontario,

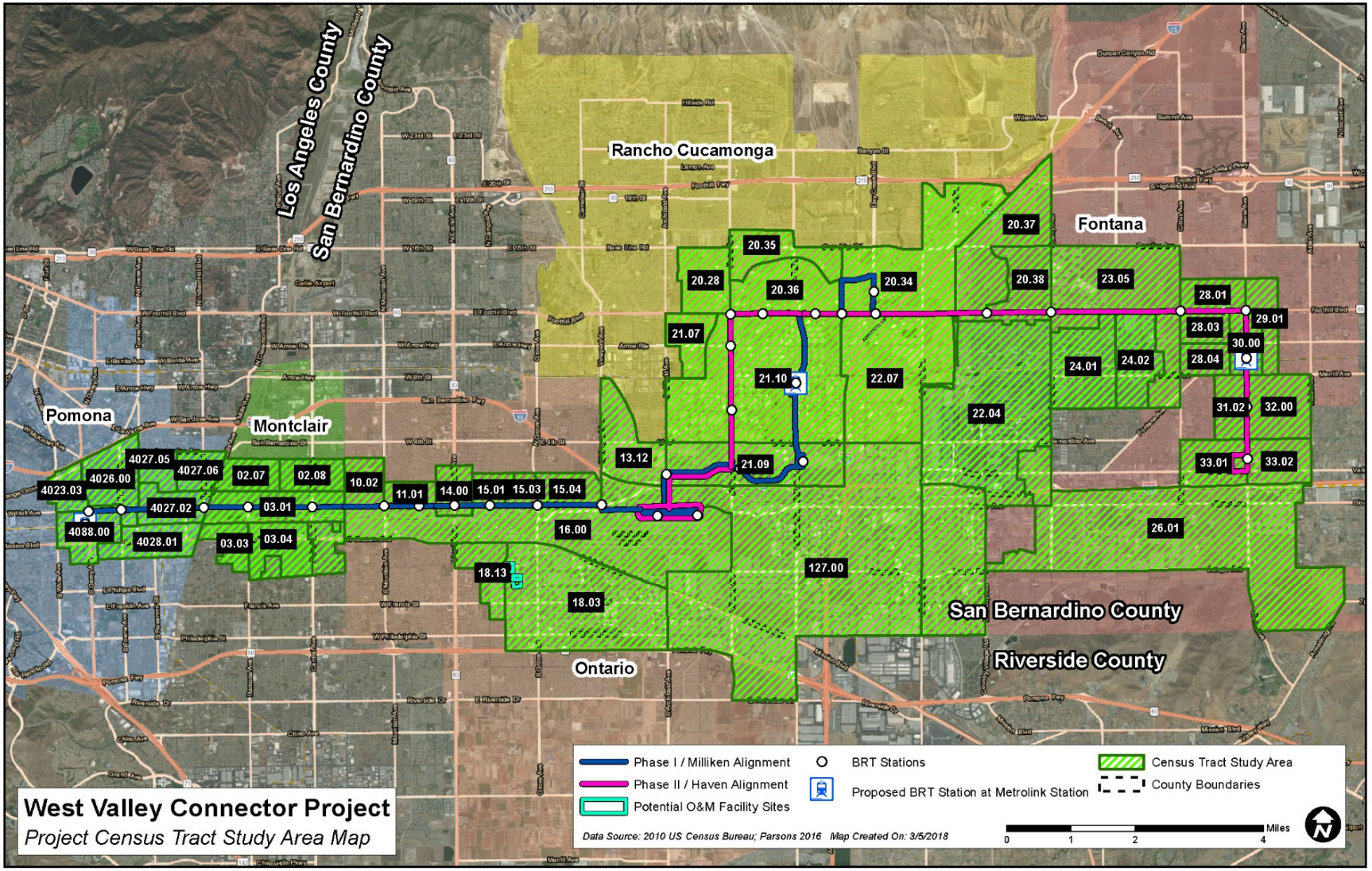


Figure 4.11-1 Study Area Census Tracts

Table 4.11-1 SCAG 2016 RTP/SCS Growth Forecasts

	County of Los Angeles	County of San Bernardino	City of Pomona (LA County)	City of Montclair (SB County)	City of Ontario (SB County)	City of Rancho Cucamonga (SB County)	City of Fontana (SB County)
Population 2016	10,212,962	2,135,800	155,650	37,550	181,950	172,000	202,550
Population 2020	10,326,200	2,197,400	160,800	37,900	197,600	173,900	204,900
Population 2040	11,514,800	2,731,300	190,400	42,700	258,600	204,300	280,900
% Change	12%	24%	18%	13%	31%	17%	37%
Households 2016	3,403,120	653,660	41,000	9,900	51,700	56,250	51,550
Households 2020	3,493,700	687,100	43,400	10,200	58,300	57,100	53,500
Households 2040	3,946,600	854,300	51,100	11,600	75,300	73,100	74,000
% Change	13%	24%	18%	14%	29%	28%	38%
Employment 2016	4,493,604	740,960	57,800	16,950	103,300	76,100	51,200
Employment 2020	4,662,500	789,500	60,500	17,400	129,300	82,300	55,400
Employment 2040	5,225,800	1,028,100	67,200	19,000	175,400	104,600	70,800
% Change	12%	30%	11%	9%	36%	27%	28%

Source: SCAG 2016 RTP/SCS.

Rancho Cucamonga, and Fontana, indicating how population, households, and employment are expected to increase from 2008 to 2035. Data in Table 4.11-1 indicate that Ontario and Fontana have the greatest forecasted growth in all three areas – population, housing, and employment. Data for 2016 are presented as the baseline condition.

U.S. Census Data

U.S. Census Bureau data on population composition was collected for the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana and the counties of Los Angeles and San Bernardino. Along with population characteristics, housing and socioeconomic characteristics are also presented and analyzed below.

Racial Composition

Table 4.11-2 provides a profile of the racial and ethnic composition of the study area and study area counties and cities.

Table 4.11-2 Ethnic Composition

	Total Population	White (%)	Black or African American (%)	American Indian or Alaskan (%)	Asian (%)	Native Hawaiian or Pacific Islander (%)	Some Other Race (%)	Two or More Races (%)	Hispanic or Latino (%)
County									
County of Los Angeles	9,974,203	2,712,983 (27.2)	802,132 (8.0)	18,207 (0.2)	1,377,333 (13.8)	23,921 (0.2)	24,807 (0.3)	215,647 (2.2)	4,797,592 (48.1)
County of San Bernardino	2,078,586	660,447 (31.8)	170,307 (8.2)	7,479 (0.4)	133,270 (6.4)	6,465 (0.3)	45,644 (2.2)	45,644 (2.2)	1,049,686 (50.5)
City									
Pomona	151,142	19,088 (12.6)	10,730 (7.1)	366 (0.2)	13,804 (9.1)	348 (0.2)	337 (0.2)	1,610 (1.1)	104,859 (69.4)
Montclair	37,685	5,847 (15.5)	1,530 (4.1)	40 (0.1)	3,638 (9.7)	331 (0.9)	99 (0.3)	393 (1.0)	25,807 (68.5)
Ontario	166,892	28,646 (17.2)	9,313 (5.6)	261 (0.2)	8,177 (4.9)	287 (0.2)	262 (0.2)	2,795 (1.7)	117,151 (70.2)
Rancho Cucamonga	170,170	67,697 (39.8)	14,384 (8.5)	227 (0.1)	20,382 (12.0)	248 (0.2)	227 (0.1)	5,510 (3.2)	61,495 (36.1)
Fontana	201,355	31,188 (15.5)	18,560 (9.2)	317 (0.2)	11,773 (5.9)	839 (0.4)	349 (0.2)	4,118 (2.1)	134,211 (66.7)
Study Area									
Study Area*	284,621	47,018 (16.5)	19,970 (7.0)	594 (0.2)	20,952 (7.4)	496 (0.2)	367 (0.1)	4678 (1.6)	190,546 (67.0)
Census Tract 4023.03	4,676	574 (12.3)	345 (7.4)	3 (0.1)	161 (3.4)	0 (0)	0 (0)	25 (0.5)	3,568 (76.3)
Census Tract 4026.00	7,624	1,694 (22.2)	488 (6.4)	109 (1.4)	374 (4.9)	0 (0)	0 (0)	50 (0.7)	4,909 (64.4)
Census Tract 4027.02	6,344	445 (7.0)	379 (6.0)	0 (0)	105 (1.7)	0 (0)	0 (0)	31 (0.5)	5,384 (84.9)

Table 4.11-2 Ethnic Composition

	Total Population	White (%)	Black or African American (%)	American Indian or Alaskan (%)	Asian (%)	Native Hawaiian or Pacific Islander (%)	Some Other Race (%)	Two or More Races (%)	Hispanic or Latino (%)
Census Tract 4027.05	3,536	697 (19.7)	245 (6.9)	0 (0)	114 (3.2)	0 (0)	0 (0)	50 (1.4)	2,430 (68.7)
Census Tract 4027.06	4,242	207 (4.9)	396 (9.3)	0 (0)	487 (11.5)	0 (0)	0 (0)	50 (1.2)	3,102 (73.1)
Census Tract 4028.01	5,240	104 (2.0)	25 (0.5)	0 (0)	100 (1.9)	0 (0)	6 (0.1)	18 (0.3)	4,987 (95.2)
Census Tract 4088.00	3,917	571 (14.6)	323 (8.2)	40 (1.0)	355 (9.1)	0 (0)	62 (1.6)	78 (2.0)	2,488 (63.5)
Census Tract 2.07	4,859	543 (11.2)	0 (0)	0 (0)	426 (8.8)	0 (0)	0 (0)	0 (0)	3,890 (80.1)
Census Tract 2.08	4,667	1,096 (23.5)	29 (0.6)	0 (0)	352 (7.5)	0 (0)	0 (0)	0 (0)	3,190 (68.4)
Census Tract 3.01	9,124	547 (6.0)	406 (4.4)	8 (0.1)	689 (7.6)	320 (3.5)	0 (0)	168 (1.8)	6,986 (76.6)
Census Tract 3.03	7,364	938 (12.7)	196 (2.7)	0 (0)	322 (4.4)	0 (0)	0 (0)	118 (1.6)	5,790 (78.6)
Census Tract 3.04	6,182	827 (13.4)	144 (2.3)	24 (0.4)	1,093 (17.7)	0 (0)	32 (0.5)	53 (0.9)	4,009 (64.8)
Census Tract 10.02	5,951	741 (12.5)	241 (4.0)	0 (0)	130 (2.2)	0 (0)	0 (0)	9 (0.2)	4,830 (81.2)
Census Tract 11.01	3,357	488 (14.5)	105 (3.1)	22 (0.7)	129 (3.8)	0 (0)	0 (0)	128 (3.8)	2,485 (74.0)
Census Tract 13.12	5,192	881 (17.0)	434 (8.4)	0 (0)	688 (13.3)	59 (1.1)	7 (0.1)	37 (0.7)	3,086 (59.4)
Census Tract 14.00	2,893	540 (18.7)	221 (7.6)	0 (0)	182 (6.3)	9 (0.3)	0 (0)	125 (4.3)	1,816 (62.8)

Table 4.11-2 Ethnic Composition

	Total Population	White (%)	Black or African American (%)	American Indian or Alaskan (%)	Asian (%)	Native Hawaiian or Pacific Islander (%)	Some Other Race (%)	Two or More Races (%)	Hispanic or Latino (%)
Census Tract 15.01	3,620	248 (6.9)	42 (1.2)	0 (0)	5 (0.1)	0 (0)	0 (0)	15 (0.4)	3,310 (91.4)
Census Tract 15.03	3,666	214 (5.8)	0 (0)	0 (0)	60 (1.6)	0 (0)	0 (0)	92 (2.5)	3,300 (90.0)
Census Tract 15.04	5,513	434 (7.9)	477 (8.7)	0 (0)	309 (5.6)	0 (0)	10 (0.2)	87 (1.6)	4,196 (76.1)
Census Tract 16.00	6,388	186 (2.9)	9 (0.1)	16 (0.3)	28 (0.4)	10 (0.2)	0 (0)	0 (0)	6,139 (96.1)
Census Tract (18.03)	2,853	694 (24.3)	151 (5.3)	99 (3.5)	85 (3.0)	0 (0)	0 (0)	0 (0)	1,824 (63.9)
Census Tract (18.13)	4,995	236 (4.7)	344 (6.9)	7 (0.1)	36 (0.7)	0 (0)	63 (1.3)	6 (0.1)	4,303 (86.1)
Census Tract 20.28	5,100	2,053 (40.3)	428 (8.4)	0 (0)	314 (6.2)	0 (0)	0 (0)	124 (2.4)	2,181 (42.8)
Census Tract 20.34	14,955	4,975 (33.3)	1,455 (9.7)	0 (0)	3,574 (23.9)	0 (0)	70 (0.5)	161 (1.1)	4,720 (31.6)
Census Tract 20.35	6,584	2,471 (37.5)	685 (10.4)	0 (0)	930 (14.1)	0 (0)	0 (0)	420 (6.4)	2,078 (31.6)
Census Tract 20.36	11,539	4,031 (34.9)	1,653 (14.3)	24 (0.2)	2,135 (18.5)	0 (0)	0 (0)	381 (3.3)	3,315 (28.7)
Census Tract 20.37	8,068	2,196 (27.2)	1,021 (12.7)	126 (1.6)	1,031 (12.8)	38 (0.5)	0 (0)	217 (2.7)	3,439 (42.6)
Census Tract 20.38	5,860	1,181 (20.2)	1,359 (23.2)	0 (0)	832 (14.2)	0 (0)	0 (0)	123 (2.1)	2,365 (40.4)
Census Tract 21.07	4,864	1,729 (35.5)	477 (9.8)	0 (0)	172 (3.5)	0 (0)	5 (0.1)	172 (3.5)	2,309 (47.5)

Table 4.11-2 Ethnic Composition

	Total Population	White (%)	Black or African American (%)	American Indian or Alaskan (%)	Asian (%)	Native Hawaiian or Pacific Islander (%)	Some Other Race (%)	Two or More Races (%)	Hispanic or Latino (%)
Census Tract 21.09	4,598	827 (18.0)	1,020 (22.2)	15 (0.3)	495 (10.8)	0 (0)	33 (0.7)	226 (4.9)	1,982 (43.1)
Census Tract 21.10	7,246	1,641 (22.6)	509 (7.0)	53 (0.7)	1,864 (25.7)	0 (0)	0 (0)	393 (5.4)	2,786 (38.4)
Census Tract 22.04	6,548	673 (10.3)	305 (4.7)	0 (0)	250 (3.8)	0 (0)	0 (0)	83 (1.3)	5,237 (80.0)
Census Tract 22.07	4,789	1,340 (28.0)	1,044 (21.8)	0 (0)	202 (4.2)	0 (0)	7 (0.2)	10 (0.2)	2,186 (45.6)
Census Tract 23.05	10,456	1,550 (14.8)	1,104 (10.6)	0 (0)	765 (7.3)	0 (0)	61 (0.6)	432 (4.1)	6,544 (62.6)
Census Tract 24.01	9,886	569 (5.8)	203 (2.1)	0 (0)	93 (0.9)	10 (0.1)	0 (0)	158 (1.6)	8,853 (89.6)
Census Tract 24.02	8,571	492 (5.7)	388 (4.5)	0 (0)	133 (1.6)	0 (0)	4 (0)	37 (0.4)	7,517 (87.7)
Census Tract 26.01	11,125	1,257 (11.3)	790 (7.1)	1 (0)	1,019 (9.2)	0 (0)	0 (0)	66 (0.6)	7,992 (71.8)
Census Tract 28.01	5,684	532 (9.4)	563 (9.9)	0 (0)	102 (1.8)	0 (0)	0 (0)	74 (1.3)	4,413 (77.6)
Census Tract 28.03	4,032	413 (10.2)	175 (4.3)	36 (0.9)	97 (2.4)	0 (0)	0 (0)	0 (0)	3,311 (82.1)
Census Tract 28.04	5,460	300 (5.5)	416 (7.6)	0 (0)	39 (0.7)	0 (0)	0 (0)	19 (0.3)	4,686 (85.8)
Census Tract 29.01	4,002	481 (12.0)	92 (2.3)	0 (0)	0 (0)	13 (0.3)	0 (0)	20 (0.5)	3,396 (84.9)
Census Tract 30.00	3,259	422 (12.9)	302 (9.3)	0 (0)	33 (1.0)	7 (0.2)	0 (0)	114 (3.5)	2,381 (73.1)

Table 4.11-2 Ethnic Composition

	Total Population	White (%)	Black or African American (%)	American Indian or Alaskan (%)	Asian (%)	Native Hawaiian or Pacific Islander (%)	Some Other Race (%)	Two or More Races (%)	Hispanic or Latino (%)
Census Tract 31.02	5,292	410 (7.7)	79 (1.5)	0 (0)	0 (0)	19 (0.4)	0 (0)	17 (0.3)	4,767 (90.1)
Census Tract 32.00	8,812	1,443 (16.4)	383 (4.3)	11 (0.1)	26 (0.3)	0 (0)	0 (0)	169 (1.9)	6,780 (76.9)
Census Tract 33.01	5,188	455 (8.8)	172 (3.3)	0 (0)	133 (2.6)	11 (0.2)	7 (0.1)	15 (0.3)	4,395 (84.7)
Census Tract 33.02	6,256	1,185 (18.9)	135 (2.2)	0 (0)	44 (0.7)	0 (0)	0 (0)	31 (0.5)	4,861 (77.7)
Census Tract 127.00	4,244	1,487 (35.0)	212 (5.0)	0 (0)	439 (10.3)	0 (0)	0 (0)	76 (1.8)	2,030 (47.8)
Note: Percentages may be greater than 100% due to rounding.									

Source: 2010-2014 American Community Survey 5-Year Estimates.

Based on the 2010-2014 American Community Survey 5-Year Estimates, the largest racial category in the study area is Hispanic or Latino, at 66.6 percent. This is much higher than Hispanic or Latino averages of 48.1 and 50.5 percent for Los Angeles County and San Bernardino County, respectively. Of the study area cities, Rancho Cucamonga serves as an outlier, with only 36.1 percent of the City's population identifying as either Hispanic or Latino. Rancho Cucamonga was once again an outlier when analyzing the White population, with 39.8 percent of the population identifying as White, while that population group comprised approximately 15 percent among the rest of the study area cities. Rancho Cucamonga also includes the largest percentage of populations that identifies as Asian (12.0 percent) or Two or More Races (3.2 percent). The Black or African American populations in all study area cities range from 4.1 to 9.2 percent. In the study area, nearly a quarter of residents identify to the Census as "some other race," which is higher than the averages for both counties. Other racial categories did not represent a large proportion of the population, ranging from zero to 1 percent.

Population Density

The total population located with the study area is 276,773. As shown in Table 4.11-2, Fontana has the largest population among study area cities, with more than 200,000 residents, but it is only third in terms of people per square mile, or population density. Montclair, while having the lowest total population size, has the highest population density with approximately 6,830 residents per square mile. Ontario has the lowest population density with 3,337 people per square mile.

Age

Elderly people and stay-at-home parents tend to be more active in their community, often participating more in neighborhood events. The transit-dependent population is largely comprised of the population under age 18 and age 65 and older. The distribution of age groups is relatively constant among project corridor cities and affected Census tracts, as reflected in data included in Table 4.11-3. The transit-dependent working-class population of the cities through which the proposed project would operate, defined as those falling between the age range of 18 and 64, constitutes between 59 and 64 percent of the population, similar to county averages. The percentage of Census tract study area residents who represent the working class is similar with approximately 61 percent.

Table 4.11-3 Age Distribution

	Total (Percentage)			Median Age
	Population < 18 (%)	Population 18-64 (%)	Population > 64 (%)	
County				
Los Angeles County	2,639,637 (26.5)	6,184,673 (62.0)	1,149,893 (11.5)	35.3
San Bernardino County	650,781 (31.3)	1,228,043 (59.1)	199,762 (9.6)	32.2
City				
Pomona	47,633 (31.5)	90,756 (60.0)	12,753 (8.4)	30.4
Montclair	10,936 (29.0)	22,817 (60.5)	3,932 (10.4)	33.2
Ontario	52,948 (31.7)	101,213 (60.6)	12,731 (7.6)	31.2
Rancho Cucamonga	46,596 (27.4)	108,331 (63.7)	15,243 (9.0)	35.2
Fontana	68,303 (33.9)	120,706 (59.9)	12,346 (6.1)	30.0
Study Area				
Study Census Tracts	83,519 (29.3)	181,902 (63.9)	19,200 (6.8)	30.4

Source: 2010-2014 American Community Survey 5-Year Estimates.

The proportion of elderly, defined as those age 65 or over, within the study area is lower compared to County and City averages, with 6.6 percent. Of the study area cities, Montclair has the highest percent of elderly with 10.4 percent, while Fontana has the lowest with 6.1 percent. Meanwhile, the proportion of study area youth (those 17 years old and under) at 33.1 percent is slightly higher than the surrounding cities except Fontana.

Income and Labor Force

The cities of Pomona, Montclair, Ontario, and Fontana share similar per capita income averages, ranging from $17,041 to $19,685, as shown in Table 4.11-4. Each of these four cities has per capita incomes that are lower than the countywide averages of $27,987 and $21,384 for Los Angeles and San Bernardino counties, respectively. Rancho Cucamonga, however, is an outlier, with an average per capita income significantly higher than the others at $31,528. Overall, the per capita income of the study area, $19,107, is much lower than the two county averages and lower than many of the study area cities.

Table 4.11-4 Socioeconomic Characteristics

	Total Population	In Labor Force over 16 (%)	Per Capita Income	Unemployed in Labor Force (%)	Total Households	Households with No Vehicle Availability (%)
Los Angeles County	9,974,203	5,113,315 (51.3)	$27,987	564,669 (11.0)	3,242,391	317,126 (9.8)
San Bernardino County	2,078,586	944,000 (45.4)	$21,384	131,293 (13.9)	607,604	34,969 (5.8)
Pomona	151,142	69,490 (46.0)	$17,041	8,975 (12.9)	38,894	1,950 (3.9)
Montclair	37,685	18,075 (48.0)	$17,881	2,168 (12.0)	10,336	872 (8.4)
Ontario	166,892	84,120 (50.4)	$18,601	10,948 (13.0)	45,680	2,064 (4.5)
Rancho Cucamonga	170,170	91,984 (54.1)	$31,528	9,749 (10.6)	55,140	2.812 (7.2)
Fontana	201,355	97,453 (48.4)	$19,685	14,222 (14.6)	55,140	2,213 (4.0)
Study Census Tracts	284,621	135,821 (47.7)	$17,782	18,310 (13.3)	77,465	4,668 (6.0)

Source: 2010-2014 American Community Survey 5-Year Estimates.

Approximately 13.7 percent of study area residents in the labor force are unemployed. This is comparable to the

San Bernardino County unemployment rate of 13.9 percent, but higher than the Los Angeles County rate of 11.0 percent. Fontana has the highest unemployment rate among the study corridor cities at 14.6 percent (see Table 4.11-4).

Of the total population, 48.3 percent of study area residents, those that are over the age of 16, are part of the civilian labor force. This is higher than the San Bernardino County average and lower than that of Los Angeles County. Among the study area cities, Rancho Cucamonga has the highest percentage of participation in the labor force (54.1 percent), while Fontana has the largest number of people working (97,453).

Households and Housing Characteristics

According to the 2010-2014 American Community Survey 5-Year Estimates (Table 4.11-5), there are 276,773 households present in the project corridor cities, with an average household size of 3.67 persons, which is higher than the averages of Los Angeles and San Bernardino counties. Of the study area cities, only Fontana has a higher average overall with 4.06 persons per household.

Table 4.11-5 Household Characteristics

	Total Population	Total Households	Average Household size	Median Household Income	Households with no vehicle availability (Percentage)
County					
County of Los Angeles	9,974,203	3,242,391	3.02	$55,870	317,126 (9.8%)
County of San Bernardino	2,078,586	607,604	3.34	$54,100	34,969 (5.8%)
City					
City of Pomona	151,142	38,894	3.77	$48,993	1,950 (3.9%)
City of Montclair	37,685	10,336	3.60	$48,767	872 (8.4%)
City of Ontario	166,892	45,680	3.64	$54,156	2,064 (4.5%)
City of Rancho Cucamonga	170,170	55,410	3.01	$77,061	2,812 (7.2%)
City of Fontana	201,355	49,438	4.06	$64,995	2,213 (4.0%)
Study Area					
Study Census Tracts	284,621	77,645	3.67	$52,016	4,668 (6.0%)

Source: 2010-2014 American Community Survey 5-Year Estimates

As reflected in Census data for the 45 Census tracts comprising the study area, a slight majority of the housing units are renter occupied at 50.9 percent, similar to the Los Angeles County average (53.6 percent), but significantly higher than the average for San Bernardino County (39.1 percent) and higher than among the five study area cities.

More study area residents, 55.9 percent, live in single-family homes compared to the Los Angeles County average of 50.4 percent, but it is significantly less than the 70.5 percent of San Bernardino County residents who reside in single-family homes. All study area cities have single-family home occupancy rates ranging between 58 and 64 percent, except Fontana, which has a single-family home occupancy rate of 78.6 percent.

Vehicle Availability

As shown in Table 4.11-4, within the study area, there are 4,545 households, or approximately 6.0 percent, without an automobile readily available. These households are more likely to be dependent on public transportation for travel. Broadening the analysis to corridor

cities, there are 9,911 households, or 5 percent, without an automobile, much like San Bernardino County averages. In Los Angeles County, on the other hand, almost 10 percent of residents do not have access to an automobile.

Neighborhoods and Businesses

There are several neighborhoods and businesses located in the project corridor cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. Throughout the project corridor, the neighborhoods comprise suburban residential enclaves, urban multi-family dwellings, golf course estates, commercial corridors, entertainment centers, and healthcare complexes. The following is a brief profile description of the various neighborhoods located along the project corridor.

City of Pomona

- ***Downtown Pomona:*** Located in the center of Pomona, this neighborhood is generally bound by Holt Boulevard to the north, White Avenue to the west, and Towne Avenue to the east. Downtown Pomona features the Pomona Metrolink Station/Transit Center, which is the western terminus of the project corridor. Directly south of the transit center is the downtown area, which is comprised of civic uses and commercial/retail properties.
- ***Indian Hill:*** The Indian Hill neighborhood in eastern Pomona is generally bound by South Mills Avenue to the east, 1st Street to the south, Kingsley Avenue to the north, and San Antonio Avenue to the west. The neighborhood is primarily made up of small- to medium-sized multi- and single-family residential residences. Holt Avenue, which runs through the center of the neighborhood, is surrounded by older retail and auto-related uses and the Indian Hill Mall.

City of Montclair

- ***Sunsweet:*** The Sunsweet neighborhood is bound by Kingsley Street to the north and State Street to the south in Montclair. Holt Boulevard runs through the center of the neighborhood and is primarily bordered by older retail, auto-related uses, and numerous vacant lots. To the south of Holt Boulevard are industrial uses and the San Bernardino Metrolink rail line. The northern area of the neighborhood consists primarily of multi- and single-family residences.

City of Ontario

- ***West Ontario:*** This neighborhood is generally bound by Benson Avenue to the west and San Antonio Avenue to the east. The project corridor passes through an area of commercial uses in the West Ontario neighborhood. North of the project corridor are primarily multi- and single-family residences, while to the south is a mix of different industrial uses.
- ***Downtown District:*** The Downtown District neighborhood is generally bound on the west and east by San

Antonio and Campus avenues. The historic downtown neighborhood runs along Euclid Avenue in the north-south direction and features a variety of commercial uses. Ontario City Hall, the Museum of History and Art, and the Ontario Amtrak Station are also located in this neighborhood. Located immediately east of Euclid Avenue are a few newer high-density residential developments.

- ***North Ontario:*** The North Ontario neighborhood is east of the Downtown District and extends to Grove Avenue. Along Holt Boulevard in this neighborhood, there are a multitude of vacant and underused parcels, particularly along the south side of the street. Overall, the makeup of the neighborhood is similar to the West Ontario neighborhood.
- ***Ontario International Airport:*** The airport neighborhood is dominated by the airport and related facilities. To the north of the neighborhood, there are a variety of hospitality uses, including the Ontario Convention Center, and several hotels in the immediate vicinity of the Holt Boulevard and Vineyard Avenue intersection. These uses are complemented by surrounding restaurants and auto uses.
- ***Ontario Center:*** North of I-10 and Ontario International Airport, the Ontario Center offers a multitude of commercial and retail services, entertainment facilities (Citizen's Bank Arena), light industrial uses, and multi-family residences. The neighborhood is generally bound by Milliken Avenue to the east, Vineyard Avenue to the west, and 4th Street to the north. Included in the neighborhood is the Cucamonga-Guasti Regional Park, which provides 160 acres for outdoor recreation in an urban setting. Founder's Park, a large formal park dedicated to the founding of Ontario, is also located in this neighborhood.
- ***Ontario Mills:*** Ontario Mills is located north of I-10 and is bound by Milliken Avenue, 4th Street, and I-15 to the east. The neighborhood contains the Ontario Mills regional shopping center, as well as other office and commercial uses.

City of Rancho Cucamonga

- ***Industrial Area:*** This neighborhood is bound by San Bernardino Avenue to the south and runs up to Foothill Boulevard to the north. The Industrial Area includes an 18-hole golf course and the Rancho Cucamonga Metrolink Station off Milliken Avenue. Along with the multitude of existing light industrial uses, the City is integrating a wide range of commercial, office, and high-density residential developments into the neighborhood. The northern area near Foothill Boulevard includes a commercial node, comprised primarily of restaurants, strip retail, and hospitality uses.
- ***Victoria Gardens:*** The Victoria Gardens neighborhood runs along Foothill Boulevard and is bound by East Avenue to the east and Base Line Road to the north. A variety of restaurants, commercial uses, and

small-scale and big-box retail are located along Foothill Boulevard within the neighborhood. The western portion of the neighborhood is comprised primarily of multi- and single-family residential. The east end features the Victoria Gardens mixed-use urban village, which includes a variety of commercial uses, a performing arts/ cultural center, and accompanying multi-family residential units.

City of Fontana

- ***West End:*** The West End neighborhood is a primarily residential area bordered by Foothill Boulevard, Cherry Avenue, Baseline Avenue, and East Avenue. The neighborhood serves as the west entrance into Fontana and includes more than 3,000 residential units, mostly single-family. In addition, there are 2 elementary schools, an intermediate school, a variety of open space, and neighborhood-serving commercial and office spaces located in the outer areas.
- ***Auto Club Speedway:*** This neighborhood is south of Foothill Boulevard between East Avenue and Citrus Avenue. The focal point of the neighborhood is the Auto Club Speedway. Common throughout the neighborhood is vacant and undeveloped land. In between the vacant parcels are various industrial uses, mobile home parks, and some single-family residential homes.
- ***Rancho Fontana:*** This neighborhood in the northwest portion of Fontana is bound by Walnut Street to the north, Redwood Avenue to the west, Citrus Avenue to the east, and Foothill Boulevard to the south. The southwest quadrant of the neighborhood contains some industrial uses, including a Target Distribution Center and other commercial stores. East of the industrial area is a neighborhood comprised primarily of single-family residential homes. In all, more than 2,300 dwelling units are in the Rancho Fontana neighborhood.
- ***Northgate:*** The Northgate neighborhood is north of Foothill Boulevard and is bound on the east by Citrus Avenue and on the west by Sierra Avenue. The neighborhood features some general commercial uses adjacent to Foothill Boulevard, but otherwise it consists mostly of single-family homes with some multi-family developments.
- ***Downtown:*** Downtown Fontana runs along Sierra Avenue and extends approximately from Foothill Boulevard to Ceres Avenue. Outside of the Downtown core is a mix of single- and multi-family residences, as well as some small-scale and big-box retail. At the center are the historic Downtown Fontana area, the Fontana Civic Center, the Fontana Lewis Library, the Pacific Electric Bike Trail, and a mix of different retail uses. The intersection of Sierra Avenue and Ceres Avenue acts as an entry gateway into the downtown neighborhood. The Fontana Metrolink Station, as well as some newer high-density senior housing is

located on both sides of Sierra Avenue.

- ***Central Fontana:*** The Central Fontana neighborhood generally extends from Ceres Avenue to I-10. The area features commercial uses that line major streets with single-family and higher-density housing located on streets behind the commercial areas. Fontana High School is in the western portion of the neighborhood. The intersection of San Bernardino Avenue and Sierra Avenue features a concentration of medium- to high-density residential and commercial developments. The Kaiser Permanente Medical Center is the focus of a node of commercial uses on Sierra Avenue near Valley Boulevard.

Station locations were selected to serve neighborhoods and businesses along the proposed corridor by considering the following criteria:

- Station Spacing: Approximately one station per mile, which allows most residents along the alignment to be within a reasonable access distance of 0.5 mile or less, equivalent to a 10-minute or less walk time;
- Connecting Transit Routes: Stations were located at all major intersections to facilitate transfers to local bus routes;
- Transit Centers: Stations were incorporated into all Transit Centers and Metrolink stations along the alignment;
- Major Attractions: Stations were located to provide ease of access to major attractions, including civic centers, shopping centers and Ontario International Airport.

Environmental Justice

Impacts and benefits of transportation projects result from the physical placement of transportation-related infrastructure and facilities, and from their ability to improve or impede access to neighborhoods. The inclusion of an environmental justice analysis ensures that under-served communities are identified and outreach is conducted to encourage such communities to participate in the planning and decision-making process for transportation investments, and that their concerns and needs are reflected into plans and policies so that the resulting system can better serve all of its users.

Applicable Regulations and Policies

EO 12898

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed on February 11, 1994, calls on federal agencies to identify and address any disproportionately high and adverse human health or environmental effects of federal programs, policies, and activities on minority and low-income populations to the greatest extent practicable and permitted by law. The Order directs federal actions, including transportation projects, to use existing law to avoid discrimination based on race, color, or national origin and to avoid disproportionately high and adverse

impacts on minority and low-income populations. These are often referred to as environmental justice populations.

FTA Circular 4703.1

FTA Circular 4703.1, *Environmental Justice Policy Guidance for Federal Transit Administration Recipients* (Circular), went into effect on August 15, 2012. The purpose of the Circular is to assist FTA funding recipients such as Omnitrans in fulfilling the intent of EO 12898. The general environmental justice principles embedded in EO 12898 and the Circular can be summarized as:

- Avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations;
- Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process; and
- Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

Methods for Identifying Minority and Low-Income Populations

Circular 4703.1 defines **minority populations** as:

- American Indian and Alaskan Native
- Asian
- Black or African-American
- Hispanic or Latino
- Native Hawaiian or Other Pacific Islander

FTA guidance indicates minority populations should be identified (a) where the minority population of the affected area exceeds 50 percent or (b) where the minority population percentage in the affected area is less than 50 percent but "meaningfully greater" than the percentage than that of the next larger geographical unit of analysis.

Low-income populations are defined as any individual or household with income at or below the federal poverty level established by the U.S. Department of Health and Human Services (DHHS) guidelines. The DHHS guidelines use family/household size and correlated income to determine poverty status. As suggested by Circular 4703.1, all households whose median income is at or below 150 percent of the poverty-level guidelines were considered low-income (see Table 4.11-6).

No numerical threshold has been established by FTA for defining a low-income community, but this study follows the convention applied in other planning contexts in which 10 percent or greater above a larger geographical baseline, such as a countywide service area, may be used to satisfy what is intended by the term a "meaningful greater" percentage.

Table 4.11-6 Federal Poverty Level Guidelines

Persons in Family/Household	Poverty Guideline (100%)	Poverty Guideline (150%)
1	$11,770	$17,655
2	$15,930	$23,895
3	$20,090	$30,135
4	$24,250	$36,375
5	$28,410	$42,615
6	$32,570	$48,855
7	$36,730	$55,095
8	$40,890	$61,335
Note: The 2015 HHS Poverty Guidelines only reflect price changes through calendar year 2014; accordingly, they are most closely equal to the Census Bureau American Community Survey 5-Year Estimate (2010-2014).		

Source: U.S. Department of Health and Human Services.

As Table 4-11.2 shows, the Hispanic/ Latino population is dispersed throughout the study area corridor, notably with two Census tracts exceeding 85 percent of the total population in each Pomona and Ontario, and five in Fontana. The largest percentage of Asians (more than 19 percent) within the study area is within three Census tracts located within Rancho Cucamonga, while the largest percentage of African Americans (more than 22 percent) are located within three Census tracts in Fontana.

Table 4-11.7 shows that of the study area Census tracts with low-income households, those within Rancho Cucamonga have the lowest concentrations. Of the 10 census tracts with 50 percent or greater low-income households, 1 is within Montclair, 2 are within Ontario, 3 are within Pomona, and 4 are in Fontana. An additional 13 Census tracts that meet the criteria definition for low-income households are included within the study area corridor.

Figure 4-11-2 graphically depicts the locations of environmental justice populations within the corridor study area. As shown in the figure, and as reflected in the Census data, minority populations are prevalent along both sides of the alternatives throughout the project area. This figure also illustrates how low-income populations within the corridor are not nearly as extensive as minority populations.

Table 4.11-7 Household Income Status of Study Area

	Total Households	Average Persons in Household	Median Household Income[2]	Percent Households below 150% Poverty Level
County				
County of Los Angeles	3,242,391	3.0	$55,870	28.2
County of San Bernardino	607,604	3.3	$54,100	28.0
City				
Pomona	38,894	3.8	$48,993	37.4
Montclair	8,108	3.6	$48,767	34.5
Ontario	45,680	3.6	$54,156	30.9
Rancho Cucamonga	55,410	3.0	$77,061	19.9
Fontana	49,438	4.1	$64,995	26.6
Study Area				
Census Tract 4023.03*	1,137	4.0	$35,362	51.0
Census Tract 4026.00*	2,479	3.0	$43,594	40.0
Census Tract 4027.02*	1,578	4.0	$34,516	53.0
Census Tract 4027.05	898	3.9	$63,500	28.4
Census Tract 4027.06	979	4.3	$62,872	31.7
Census Tract 4028.01*	1,115	4.7	$30,508	47.1
Census Tract 4088.00*	1,234	3.0	$29,274	51.6
Census Tract 2.07	1,149	4.2	$60,852	27.5
Census Tract 2.08	1,130	4.1	$60,147	23.8
Census Tract 3.01*	2,483	3.7	$34,088	52.2
Census Tract 3.03	1,755	4.2	$44,796	28.4
Census Tract 3.04	1,636	3.8	$61,731	22.4
Census Tract 10.02	1,387	4.3	$43,964	33.7
Census Tract 11.01*	1,042	3.2	$37,358	48.2
Census Tract 13.12	1,393	3.7	$53,144	14.2
Census Tract 14.00*	1,151	2.5	$26,898	49.1
Census Tract 15.01*	865	4.2	$43,661	47.2
Census Tract 15.03*	771	4.7	$35,767	56.2
Census Tract 15.04*	1,544	3.6	$35,543	47.5
Census Tract 16.00*	1,477	4.3	$34,353	57.4
Census Tract 18.03	1,068	2.6	$52,531	16.9
Census Tract 18.13	990	5.0	$39,531	44.3
Census Tract 20.28	1,616	3.2	$93,558	10.5
Census Tract 20.34	4,897	3.1	$79,815	12.5

Table 4.11-7 Household Income Status of Study Area

	Total Households	Average Persons in Household	Median Household Income[2]	Percent Households below 150% Poverty Level
Census Tract 20.35	2,392	2.8	$95,385	9.3
Census Tract 20.36	4,574	2.5	$64,492	13.7
Census Tract 20.37	2,152	3.8	$92,703	13.0
Census Tract 20.38	1,448	4.1	$91,705	6.2
Census Tract 21.07	1,914	2.5	$41,574	34.0
Census Tract 21.09	1,931	2.4	$56,418	8.1
Census Tract 21.10	3,077	2.4	$54,715	22.6
Census Tract 22.04	1,461	4.5	$52,569	30.0
Census Tract 22.07	543	3.6	$60,625	25.9
Census Tract 23.05	2,615	4.0	$90,587	13.7
Census Tract 24.01*	1,923	5.1	$50,828	39.8
Census Tract 24.02*	1,934	4.4	$41,114	47.7
Census Tract 26.01	2,367	4.7	$81,351	23.4
Census Tract 28.01*	1,273	4.5	$48,703	41.4
Census Tract 28.03*	940	4.3	$39,000	50.7
Census Tract 28.04*	1,255	4.4	$32,246	63.5
Census Tract 29.01*	1,018	3.9	$45,878	41.8
Census Tract 30.00*	1,036	3.1	$26,136	53.4
Census Tract 31.02*	1,365	3.9	$34,133	53.8
Census Tract 32.00*	2,021	4.4	$45,290	43.7
Census Tract 33.01*	1,444	3.6	$40,889	42.0
Census Tract 33.02*	1,698	3.6	$40,946	40.5
Census Tract 127.00	1,330	3.2	$80,083	17.1
Study Area	77,465	3.6	$53,104	31.0

Note:
*Census tracts that exceed Los Angeles County and San Bernardino County average of 28% by 10% or greater.
The low-income threshold is defined as 150% of the federal poverty line, as provided by the DHHS.

Source: U.S. Census Bureau Summary File 1; ACS 5-Year Estimate 2010-2014.

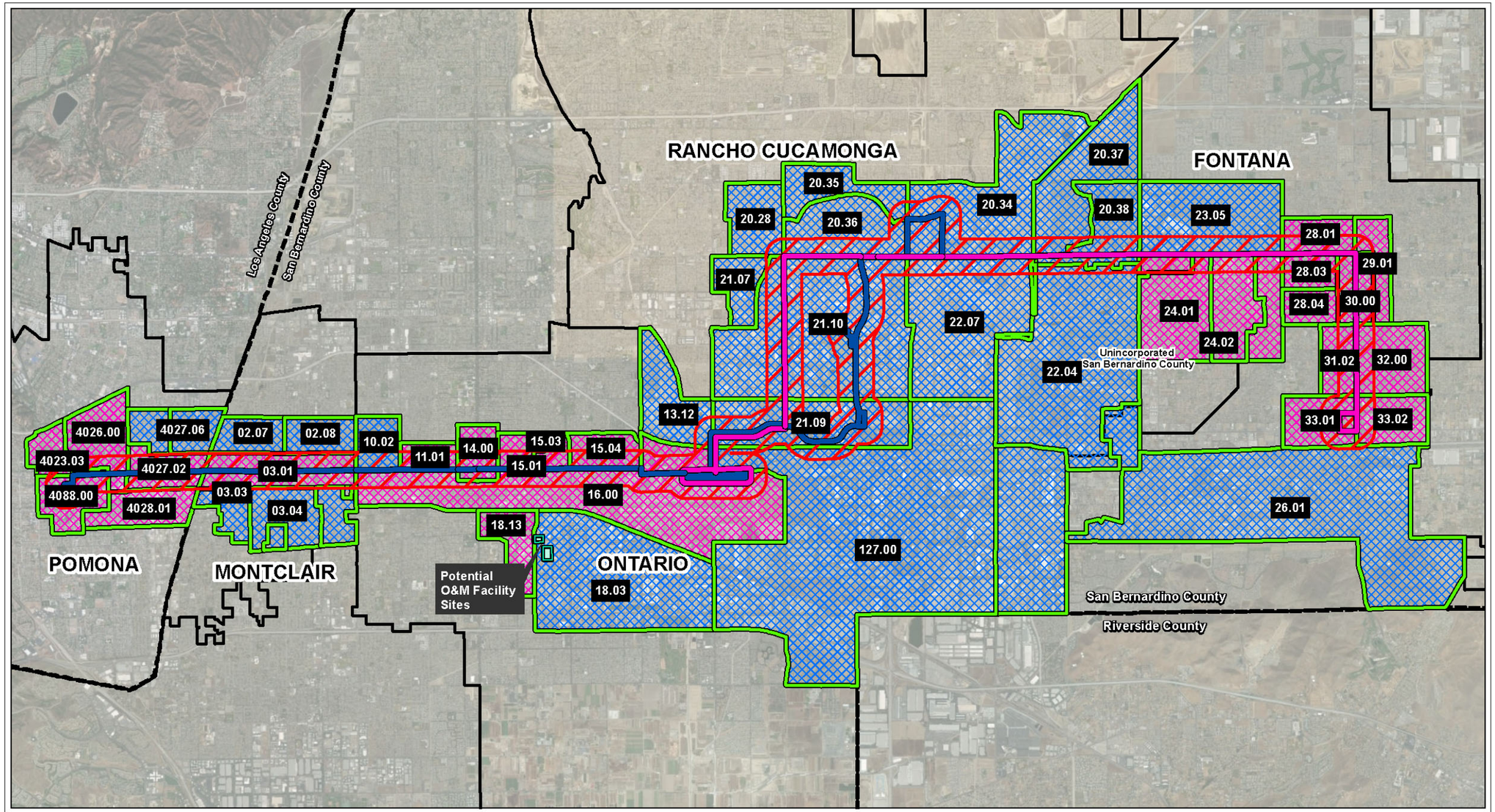


Figure 4.11-2 Environmental Justice Communities

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Public Outreach

Access to the decision-making process is a fundamental principal of environmental justice. Community outreach and participation have been integrated into the project development process from the outset, including alternatives development, extensive public and agency stakeholder involvement, and public scoping. A citizen's advisory committee, which consisted of local residents, business owners, and a local church representative, was formed to provide a broader perspective into the proposed project. This committee met on five occasions and helped shape some of the earliest efforts to engage with the broader community, beginning in 2012. Omnitrans' stakeholder outreach continued during the AA phase of the project in 2014.

Omnitrans conducted public outreach activities throughout the corridor in May and June 2014 to explain the purpose and objectives of the project and to provide a range of opportunities to answer questions and collect comments from the public.

To further the goals of environmental justice in accordance with federal directives, a Public Involvement Plan was developed and implemented as an integral part of the public involvement and outreach strategy for the proposed project, including a targeted effort to engage environmental and social equity organizations in the region. Among local community-based organizations, several whose mission is achieving environmental justice, including the Center for Community Action and Environmental Justice, and the United Voice for Pomona Environmental Justice, were sent bilingual notices for the public scoping meetings held in each of the five project corridor cities between April 12 and 20, 2016. In addition, a specially focused workshop meeting for the purposes of engaging potentially affected businesses on Holt Boulevard in Ontario, and other stakeholders, was also held in June 2017.

SBCTA will continue to engage in public outreach activities throughout development of the project, including consistent updates and announcements on the project website and Facebook page that will allow interested parties to stay up to date regarding the progress of the environmental documentation phase. Other outreach activities will include mailers to property owners and tenants within 0.25 mile of the project footprint and public meetings for affected property owners and tenants.

SBCTA recognizes the need to provide multicultural, multilingual, fully accessible, economically diverse participation from stakeholders along the project corridor. Many diverse attempts were made to ensure that both English- and Spanish-speaking community members had access to information about the WVC Project because English and Spanish are the most common spoken languages within the project area. Special outreach efforts for the public scoping meetings included a pre-postage paid postcard in

English and Spanish that was sent to approximately 1,035 stakeholders; advertisements in 2 English and 2 Spanish language newspaper publications; online ads on 2 English newspaper publication websites; a project webpage and Facebook page; electronic notices (e-blasts) to stakeholders; English and Spanish flyers sent to 45 public facilities (e.g., libraries, community centers, City halls, senior centers); announcements at the City Council meetings in each of the 5 cities; announcements in Omnitrans' online blog and bilingual newsletter; and poster ads on Omnitrans buses. Spanish translation services were available at each of the 5 public scoping meetings.

For additional details, please refer to Chapter 8, Public Outreach.

4.11.2 Impacts

Potential impacts on environmental justice populations were determined through review of analysis of the project alternatives, including land use; traffic; visual and aesthetic considerations; biological resources; water quality; hazardous waste; community and cultural resources; air quality; noise and vibration; safety and security; and acquisitions and displacements as addressed in respective sections of this chapter.

No Build Alternative

The No Build Alternative would maintain the current level of transit service in the study area. Under the No Build Alternative, the project would not be constructed, and there would be no impacts to transit improvements for environmental justice populations.

Build Alternatives

BRT Corridor

Alternative A

Alternative A would provide enhanced transit service in the study area with implementation of a 35-mile-long BRT corridor. Alternative A would not include expansion of facilities or require ROW acquisitions. No homes or businesses would be displaced.

Some utility relocations may be partially relocated in several areas throughout the corridor, as discussed in Section 4.13, Public Services and Utilities. No long-term disruptions in service are anticipated.

During construction of the side-running stations, delays to bicycles and pedestrians could result, but with implementation of a Traffic Management Plan (TMP), impacts should be minimal. See Section 5.2.9, Traffic and Transportation.

Implementation of Alternative A would provide a benefit to individuals who rely on public transportation services. Alternative A would improve accessibility, reliability, frequency, convenience, and connectivity of transit services to several key destinations, including employment, education, shopping, medical, recreation, and cultural opportunities, along the project corridor. These benefits would

tend to accrue to a greater degree to the area's transit user populations.

No high and disproportionate adverse impacts on environmental justice communities are anticipated under Alternative A because all substantive impacts would be would be fully mitigated.

Alternative B

Some temporary utility relocations will occur in several areas throughout the corridor, as discussed in Section 4.13, Public Services and Utilities. No long-term disruptions in service are anticipated.

Construction activities could result in lane closures and create short-term delays to vehicles, bicycles, and pedestrians, especially in Ontario along Holt Boulevard, but the preparation and implementation of a TMP should minimize impacts. Coordination with fire and police departments and other emergency services will be conducted in advance of construction. Public access to businesses will be maintained at all times. See Section 5.2.9, Traffic and Transportation.

Implementation of Alternative B would provide a benefit to individuals who rely on public transportation services. Alternative B would improve accessibility, reliability, frequency, convenience, and connectivity of transit services to several key destinations, including employment, education, shopping, medical, recreation, and cultural opportunities, along the project corridor. These benefits would tend to accrue to a greater degree to the area's transit user populations.

In addition, the planned BRT station design elements would help actualize the general planning goals of the affected cities and counties, as outlined in Section 4.8, Land Use. These include improving access and safety features for bicycles and pedestrians, which would entail infrastructure improvements in accordance with ADA requirements, namely providing concrete boarding areas at each station and connecting ADA-accessible pathways within a 0.5-mile radius of all stations, including repair or replacement of sidewalk or curb ramps and restriping of pedestrian crosswalks, where needed. Bicycle access improvements include providing bicycle parking racks at each station.

Taking all factors described above into account, the project alternatives would not have disproportionately high and adverse effects on environmental justice populations. The combination of station design and landscaping elements, together with proposed minimization measures, would help offset impacts associated with implementing either Alternative A or B, as discussed in Chapter 5; however, strategies to involve the environmental justice communities will continue during the preliminary engineering phase to effectively implement the project and proposed strategies.

O&M Facility

The operation of a O&M facility providing support for the proposed bus operations would have no effect on environmental

justice. The O&M facility would be located in an industrial used area in the City of Ontario where its operations would not affect residential areas or other sensitive receptors.

4.11.3 Avoidance, Minimization, and/or Mitigation Measures

Project design will be carried out to incorporate features that minimize impacts to the community in the long term such as those described in Measures TRA-1 and TRA-2 in Chapter 3.

Mitigation and minimization measures identified in Chapter 5, Construction Period Impacts, will help address project impacts on environmental justice populations.

Measures CI-TRA-3 and CI-TRA-4 presented in Chapter 5 (Construction Period Impacts) address creating a plan to coordinate detours with community groups and emergency service providers, including several measures to reduce community impacts; these include restricting construction times, rerouting traffic, minimizing lane and sidewalk closures, and alerting the affected community in advance and working with public agencies on detour routes, and maintaining access to local businesses.

Measures AV-2, AV-4, AV-5, AV-6, AV-7, and AV-8 presented in Section 4.1.8, Aesthetic and Visual Resources, are consistent with and promote general plan goals of the local communities (see Section, 4.8, Land Use). These include providing light glare shields at all stations; adhering to the streetscape designs of the affected localities; developing and implementing an Art-in-Transit program and incorporating artwork into the station designs; minimizing tree removal; and being sensitive to designated historic roadways in project design and landscaping. The Art-in-Transit program would be implemented during the early stages of the design phase so that an artist can assist with selection of some of the project elements to incorporate artwork into the station designs.

Measures SS-1 through SS-5 presented in Section 4.14 (Safety and Security) will incorporate security features in all BRT stations, include installing lighting, monitoring cameras, and other elements to enhance safety for all users. A greater level of security may be provided at specific locations if an assessment determines certain facilities warrant additional security measures.

Measure ACQ-2 presented in Section 4.12 (Acquisitions and Displacements) indicated that transportation for displaced persons to inspect potential relocation housing will be offered at no cost should they be unable to use their own means of transportation. This offer shall be extended to senior citizens, disabled people, and any transit-dependent individuals or households.

4.12 Acquisitions and Displacements

This section describes the potential need for property acquisition and any resulting displacements and relocations that would occur as a result of the proposed project implementation for each alternative. As indicated in Section 4.8 (Land Use and planning), approximately 10.21 acres of land would be temporarily impacted for construction easements under Alternative B; no land would be impacted under Alternative A. Approximately 5.39 acres of land along the dedicated lanes segment would be permanently converted to a transportation use.

The information contained in this section is summarized from the *West Valley Connector Project – Draft Relocation Impact Report* (OPC, 2018) prepared for the project.

4.12.1 Existing Conditions

The 35-mile-long project corridor traverses the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. Existing land uses along the project corridor are described in Section 4.8.1.

4.12.2 Impacts

No Build Alternative

There would be no acquisition of property or resulting displacements under the No Build Alternative.

Build Alternatives

BRT Corridor

Alternative A

Construction of the side-running BRT corridor under Alternative A would require a partial acquisition of land along the corridor to accommodate the reconfiguration, relocation, or extension of adjacent driveways, curbs, medians, sidewalks, parking lots, and local bus stops. These minor partial acquisitions (of less than 0.1 acre) are not anticipated to adversely affect public or privately owned properties along the alignment. The project design will be refined during the final engineering phase to avoid partial parcel acquisitions to the extent practicable.

Alternative B

Construction of the side-running BRT corridor segments under Alternative B would require a partial acquisition of land along the corridor similar to that described under Alternative A.

Construction of the 3.5-mile-long dedicated lanes would require partial and full acquisitions of numerous parcels. The property acquisitions described in this environmental document are based on conceptual-level design and engineering plans accompanying this document. In general, Alternative B would be built within the existing roadway ROWs. Specific property acquisitions would be identified during more advanced stages of final design and/or as a result of community comment.

A list of full and partial property acquisitions required to construct a 3.5-mile-long center-running BRT corridor under Alternative B is provided in Tables 4.12-1 and 4.12-2, respectively. Table 4.12-3 lists parcels requiring TCEs. The locations identified in Tables 4.12-1, 4.12-2, and 4.12-3 are shown in the Project Impact Boundary Exhibit in Appendix F of this report. Based on preliminary engineering, 37 parcels are being proposed for full acquisition under Alternative B. A single parcel may have multiple residential properties and/or commercial business properties. Within the 37 parcels, there are 14 residential properties and 61 nonresidential properties, including 53 commercial businesses and 8 industrial/manufacturing businesses

Displaced residential and commercial property owners and tenants are provided relocation assistance payments, including moving payments, and advisory assistance in accordance with the Uniform Relocation Assistance and Real Property Acquisitions Policies Act of 1987, as amended (Uniform Act).

Residents generally prefer to remain within close proximity to local schools and established familial and cultural settings, and businesses prefer to relocate as close as possible to existing customer bases or service areas.

The *Draft Relocation Impact Report* found the total amount of comparable adequate relocation sites available in the project area for residential and commercial properties potentially displaced by the project.

Because sufficient housing stock exists, the residents affected by the project could be relocated within proximity of their current locations and existing community services, if they so choose. The replacement area is comparable in terms of public facilities, services, and amenities, including community centers, senior centers, libraries, schools, parks, and police and fire stations.

Per the Uniform Relocation Act, in addition to receiving fair market compensation for any property acquired on behalf of the project, property owners and tenants would also receive relocation assistance. There are also provisions to ensure that comparable replacement housing is within the financial means of the displaced person. When such housing cannot be provided using the housing payments allowed within the statutory limits, the Uniform Act provides “housing of last resort” to respond to difficult or unique displacement conditions so displaced persons will be relocated to decent, safe, and sanitary replacement housing.

Tenants who are eligible may qualify for rental assistance if the cost to rent a comparable replacement dwelling is greater than their previous rent. Additionally, coordination with the local housing authority representatives by the real estate specialist will be undertaken to determine the availability of vouchers and other options for displaced persons who

may face immediate financial hardship. These minimization measures and others to recognize special needs households will be addressed in the Real Estate Acquisition Management Plan (RAMP), if Alternative B is ultimately selected.

Relocation assistance benefits and services are to be provided equitably to all property owners and tenants without regard to race, color, religion, age, national origins, and disability as specified under Title VI of the Civil Rights Act of 1964.

The acquisition of properties for construction of the 3.5-mile-long center-running corridor under Alternative B could potentially affect community cohesion; however, the effect of access changes, ROW acquisitions, a slight increase in noise, and a minor change in visual character are confined to limited areas and are not expected to negatively affect overall community character. Alternative B is not expected to sever or degrade access to neighborhoods or community facilities during construction or upon project operation. In fact, the proposed project overall may have the effect of enhancing community cohesion by placement of hardscape (i.e., street furniture, art work), lighting, landscaping, and other components of the new infrastructure associated with the transit investment. Such investments in the community can be a source of community pride.

Research indicates that ample replacement resources exist in the replacement areas of Ontario, Upland, Rancho Cucamonga, Claremont, San Dimas, La Verne, Pomona, Chino, Eastvale, Jurupa Valley, Fontana, Mira Loma, and Montclair for all potential relocation displacements, including residential owner/tenants and nonresidential owners/ tenants (OPC, 2017). Based on the analysis of the displacement and replacement data, adequate relocation resources exist within the replacement area. As such, no substantial relocation problems are anticipated as a result of the proposed project.

Partial acquisition of 168 parcels is also being considered, which consists of narrow slivers of additional ROW to accommodate bus stations and minor roadway widening. Partial acquisitions would include residential and commercial business properties. In addition, construction of the 3.5-mile-long center-running corridor under Alternative B would require TCEs on 58 parcels and would impact 65 parcels of parking facilities within the City of Ontario.

O&M facility

The O&M facility supporting bus operations for Alternatives A and B would be constructed at one of the three potential sites located within the industrial zoned land use in the City of Ontario. These sites are currently owned by the City of Ontario, and an agreement to allow the use of either of these sites would be done between the City of Ontario and SBCTA. No acquisition would be required.

4.12.3 Avoidance, Minimization, and/or Mitigation Measures

ACQ-1: A RAMP shall be developed adhering to the requirements pertaining to land acquisition for projects funded by FTA as prescribed in Volume 49 CFR Part 24, Uniform Relocation Assistance and Real Property Acquisition Policies Act for Federal and Federally Assisted Programs, and the California Relocation Assistance Act, 1970. Displacees who have met eligibility requirements will be provided relocation assistance payments and advisory assistance in accordance with the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.

The RAMP will address the need to have relocation specialists who have prior experience working with people who may have special needs, especially the elderly, disabled, and low-income population groups. It will also specify that one or more of the relocation specialists be fluent in Spanish. Additionally, the plan will address coordinating with the local Section 8 Housing Authority on the availability of vouchers and other options for displaced low-income households who may face immediate financial hardships.

The RAMP will address in advance of potential relocations of minority-owned businesses the need to coordinate with organizations such as the Inland Empire Region of the California Hispanic Chamber of Commerce, Asian Business Association – Inland Empire, and the Black Chamber of Commerce of the Inland Empire, to identify resources that may be of help to such businesses. The potential application of property lease-back options to allow small businesses to continue to function as long as feasible after acquisition will also be explored in the RAMP.

ACQ-2: Transportation for displaced persons to inspect potential relocation housing will be offered at no cost should they be unable to use their own means of transportation. This offer shall be extended to senior citizens, disabled people, and any transit-dependent individuals or households.

Table 4.12-1 Full Parcel Acquisitions along 3.5-mile-long Dedicated Lanes Segment (Alternative B)

Parcel ID	APN[1]	Address[2]	Business Name[2]	Use Type[2]	Impact Area (sqft)	ROW Impacts[3]
33	101114111	925 W. Holt Boulevard		Vacant	8,002	Full parcel acquisition
81	104852209	523 E. Holt Boulevard A	Little John's Appliances	Shopping centers	7,466	Full parcel acquisition
		523 E. Holt Boulevard B	Botanica El Salvador	Shopping centers		Full parcel acquisition
		523 E. Holt Boulevard C	Herbalife Club Ponte Saludable Hoy	Shopping centers		Full parcel acquisition
82	104852210	517 E. Holt Boulevard		Vacant	6,700	Full parcel acquisition
91	104852519	639 E. Holt Boulevard	Nissi Market Place	Retail sales	5,475	Full parcel acquisition
49	104901105	739 W. Holt Boulevard	Amigos Speedo Liquor	Shopping centers	6,987	Full parcel acquisition
		741 W. Holt Boulevard	Pupuseria Gladys Restaurant	Shopping centers		Full parcel acquisition
50	104901106	739 W. Holt Boulevard		Parking lot	3,223	Full parcel acquisition
77	104851220	727 E. Holt Boulevard	Donut Palace	Retail sales	7,688	Full parcel acquisition
79	104851222	717 E. Holt Boulevard	1 Stop Electronics Sales and Services	Retail sales	7,070	Full parcel acquisition
93	104906301	204 E. Holt Boulevard	Three Star Janitorial Warehouse	Automotive uses	9,121	Full parcel acquisition
94	104906302	214 E. Holt Boulevard		Vacant	13,691	Full parcel acquisition
95	104906303	220 E. Holt Boulevard	Rojas Enterprise	Retail sales	1,551	Full parcel acquisition
96	104906304	222 E. Holt Boulevard Unit A	Rojas Enterprise	Retail sales	3,036	Full parcel acquisition
		222 E. Holt Boulevard Unit B	4 Paws Boutique	Retail sales		Full parcel acquisition
97	104906305	226 E. Holt Boulevard	ABBA Insurance Services	Retail sales	4,569	Full parcel acquisition
		228 E. Holt Boulevard	Scissors Hair Salon	Retail sales		Full parcel acquisition
		230 E. Holt Boulevard	Enrique Income Tax	Retail sales		Full parcel acquisition
99	104906602	444 E. Holt Boulevard	Floor Covering Inc	Retail sales	30,989	Full parcel acquisition
100	104909101	500 E. Holt Boulevard	Los Amigos Mexican Food	Retail sales	15,777	Full parcel acquisition
		504 E. Holt Boulevard	Jasmines Beauty Salon	Retail sales		Full parcel acquisition
		504 E. Holt Boulevard	Computer & TV Repair	Retail sales		Full parcel acquisition
		506 E. Holt Boulevard	Rositas Income Tax	Retail sales		Full parcel acquisition
		510 E. Holt Boulevard	99 Cent Plus Menos Discount	Retail sales		Full parcel acquisition
103	104909104	526 E. Holt Boulevard Unit A	Huera's Party Supply & Rental	Retail sales	7,775	Full parcel acquisition
		527 E. Holt Boulevard Unit B	Unique Bouquets	Retail sales		Full parcel acquisition
		528 E. Holt Boulevard Unit C	Huera's Party Supply & Rental	Retail sales		Full parcel acquisition
107	104909301	616 E. Holt Boulevard		Residential single-family	5,131	Full parcel acquisition
108	104909302	624 E. Holt Boulevard	Christina's Bakery Panaderia	Shopping centers	5,123	Full parcel acquisition
			Exito Beauty Salon	Shopping centers		Full parcel acquisition
109	104909303	630 E. Holt Boulevard		Parking lot	3,960	Full parcel acquisition
110	104909304			Vacant	1,163	Full parcel acquisition
111	104909306	636 E. Holt Boulevard	AVR Van Rental	Retail sales	3,881	Full parcel acquisition
112	104909307			Vacant	1,241	Full parcel acquisition
113	104909309	640 E. Holt Boulevard	Xavier's Batteries	Retail sales	5,123	Full parcel acquisition
115	104909401	652 E. Holt Ave		Vacant	3,720	Full parcel acquisition

Table 4.12-1 Full Parcel Acquisitions along 3.5-mile-long Dedicated Lanes Segment (Alternative B)

Parcel ID	APN[1]	Address[2]	Business Name[2]	Use Type[2]	Impact Area (sqft)	ROW Impacts[3]
116	104909402	654 E. Holt Boulevard	E-Z Finance Auto Sales	Vacant	1,141	Full parcel acquisition
117	104909404	664 E. Holt Boulevard	Cagles Appliance Center	Retail sales	5,833	Full parcel acquisition
		666 E. Holt Boulevard	Cagles Appliance Center	Retail sales		Full parcel acquisition
118	104909414	660 E. Holt Boulevard		Vacant	4,069	Full parcel acquisition
120	104910105	728 E. Holt Boulevard		Residential single-family	7,410	Full parcel acquisition
		730 E. Holt Boulevard #1		Residential single-family		Full parcel acquisition
		730 E. Holt Boulevard #1		Residential single-family		Full parcel acquisition
		730 E. Holt Boulevard #3		Residential single-family		Full parcel acquisition
		730 E. Holt Boulevard #4		Residential single-family		Full parcel acquisition
		730 E. Holt Boulevard #5		Residential single-family		Full parcel acquisition
		732 1/2 E. Holt Boulevard		Residential single-family		Full parcel acquisition
121	104910106	736 E. Holt Boulevard	Las Rosales Smoke Grill	Retail sales	7,653	Full parcel acquisition
		740 E. Holt Boulevard		Residential single-family		Full parcel acquisition
122	104910107	744 E. Holt Boulevard	Regia Flowers	Retail sales	7,989	Full parcel acquisition
		745 E. Holt Boulevard	Cals Mini Mart	Retail sales		Full parcel acquisition
		742 E. Holt Boulevard		Residential single-family		Full parcel acquisition
124	104910109	754 E. Holt Boulevard		Vacant	8,041	Full parcel acquisition
126	104910111	766 E. Holt Boulevard	Griffith Radiator Services	Retail sales	16,688	Full parcel acquisition
127	104910112	802 E. Holt Boulevard	J & V Auto Parts & Accessories	Retail sales	8,037	Full parcel acquisition
128	104910113	810 E. Holt Boulevard	Basic Auto Repair	Automotive uses	7,697	Full parcel acquisition
129	104910114	814 E. Holt Boulevard	Dance Studio	Retail sales	8,189	Full parcel acquisition
132	104910118	828 E. Holt Boulevard	Raul's Auto Trim	Automotive uses	7,209	Full parcel acquisition
			Alonso's Barber	Retail sales		Full parcel acquisition
139	104913105	930 E. Holt Boulevard	Zapateria California	Retail sales	46,657	Full parcel acquisition
		932 E. Holt Boulevard Unit A	Navas Beauty Salon & Barber	Retail sales		Full parcel acquisition
		932 E. Holt Boulevard Unit B		Residential single-family		Full parcel acquisition
		932 E. Holt Boulevard Unit C		Residential single-family		Full parcel acquisition
		932 E. Holt Boulevard Unit D		Residential single-family		Full parcel acquisition
		932 E. Holt Boulevard Unit E		Residential single-family		Full parcel acquisition
		932 E. Holt Boulevard Unit F		Residential single-family		Full parcel acquisition

Notes
[1] Assessor Parcel Number (APN). Multiple addresses may be associated with a single APN.
[2] Addresses, business names, and land use type were field verified in June 2016.
[3] ROW impact description corresponds with labels on project impact exhibits.

Source: WVC Draft Relocation Impact Report, 2018.

Table 4.12-2 Partial Parcel Acquisitions along 3.5-mile-long Dedicated Lanes Segment (Alternative B)

Parcel ID	APN[1]	Address[2]	Use Type[2]	Impact Area (sq ft)	ROW Impacts[3]
182	011007208	1511 E. Holt Boulevard	Vacant	166	Partial parcel acquisition
183	011007209	1511 E. Holt Boulevard	Vacant	166	Partial parcel acquisition
166	011007210	1405 E. Holt Boulevard	Recreational	2,030	Partial parcel acquisition
167	011007211	1405 E. Holt Boulevard	Office	1,973	Partial parcel acquisition
184	011007216	1533 E. Holt Boulevard	Office	131	Partial parcel acquisition
185	011007225	1555 E. Holt Boulevard	Miscellaneous	3,947	Partial parcel acquisition
193	011009217	111 N. Vineyard Avenue, 1845 E Holt Boulevard	Shopping center, commercial	218	Partial parcel acquisition
176	011013113	1362 E. Holt Boulevard	Vacant	1,102	Partial parcel acquisition
178	011013122	E. Holt Boulevard	West Cucamonga Channel canal bridge	1,072	Partial parcel acquisition
206	011012103	1512 E. Holt Boulevard	Office, misc	144	Partial parcel acquisition
175	011013109	1328 E. Holt Boulevard	Vacant	636	Partial parcel acquisition
174	011013108	1322 E. Holt Boulevard	Retail sales	492	Partial parcel acquisition
173	011013107	1322 E. Holt Boulevard	Vacant	1,072	Partial parcel acquisition
170	011012110	1400 E. Holt Boulevard	Commercial	632	Partial parcel acquisition
169	011012109	1390 E. Holt Boulevard	Industrial	113	Partial parcel acquisition
168	011012108	1366 E. Holt Boulevard	Automotive uses	248	Partial parcel acquisition
186	011008102	Holt Boulevard	-	2,113	Partial parcel acquisition
187	011008103	1625 E. Holt Boulevard	Vacant	1,973	Partial parcel acquisition
189	011008107	-	Vacant	3,040	Partial parcel acquisition
194	011010101	1744 E. Holt Boulevard	Automotive uses	2,174	Partial parcel acquisition
203	011011110	1640 E. Holt Boulevard	Vacant	754	Partial parcel acquisition
202	011011109	1634 E. Holt Boulevard	Vacant	484	Partial parcel acquisition
201	011011108	1628 E. Holt Avenue	Vacant	274	Partial parcel acquisition
200	011011107	E. Holt Boulevard	Vacant	592	Partial parcel acquisition
199	011011106	1670 E. Holt Boulevard	Residential	1,019	Partial parcel acquisition
205	011011112	1660 E. Holt Boulevard	Vacant	867	Partial parcel acquisition
204	011011111	E. Holt Boulevard	Vacant	862	Partial parcel acquisition
198	011011103	-	Vacant	862	Partial parcel acquisition
197	011011102	1624 E. Holt Boulevard	Vacant	984	Partial parcel acquisition
196	011011101	1614 E. Holt Boulevard	Commercial	457	Partial parcel acquisition
208	011012105	1486 E. Holt Boulevard	Vacant	1,057	Partial parcel acquisition
207	011012104	120 S. Walker Street	Vacant	1,176	Partial parcel acquisition
188	011008106	1619 E. Holt Boulevard	Shopping center	105	Partial parcel acquisition
192	011009204	101 N. Vineyard Avenue	Mini mart	200	Partial parcel acquisition
151	011006101	1373 E. Holt Boulevard	Vacant	1,311	Partial parcel acquisition
152	011006104	1323 E. Holt Boulevard	Vacant	671	Partial parcel acquisition

Table 4.12-2 Partial Parcel Acquisitions along 3.5-mile-long Dedicated Lanes Segment (Alternative B)

Parcel ID	APN[1]	Address[2]	Use Type[2]	Impact Area (sq ft)	ROW Impacts[3]
153	011006110	1207 E. Holt Boulevard	Vacant	3,110	Partial parcel acquisition
154	011006115	1335 E. Holt Boulevard	Vacant	1,729	Partial parcel acquisition
155	011006117	E. Holt Boulevard	West Cucamonga Channel canal bridge	793	Partial parcel acquisition
156	011006118	1329 E. Holt Boulevard	Retail sales	566	Partial parcel acquisition
157	011006121	1217 E. Holt Boulevard	Residential hotel/motel/resorts	1,899	Partial parcel acquisition
181	011006122	1230 E. Nocta Street	Residential mobile/manufactured homes	209	Partial parcel acquisition
158	011006123	1348 E. Nocta Street	Residential apartments	35	Partial parcel acquisition
159	011006124	1315 E. Holt Boulevard	Residential apartments	2,378	Partial parcel acquisition
160	011006125	1241 E. Holt Boulevard	Residential hotel/motel/resorts, misc	2,165	Partial parcel acquisition
161	011006130	1253 E. Holt Boulevard	Vacant	388	Partial parcel acquisition
162	011006131	1253 E. Holt Boulevard	Miscellaneous	1,237	Partial parcel acquisition
163	011007102	E. Holt Boulevard	Vacant	2,052	Partial parcel acquisition
164	011007106	1381 E. Holt Boulevard	Vacant	945	Partial parcel acquisition
165	011007107	1387 E. Holt Boulevard	Vacant	1,028	Partial parcel acquisition
177	011013119	Holt Boulevard	Vacant	44	Partial parcel acquisition
171	011013101	E. Holt Boulevard	Vacant	348	Partial parcel acquisition
3	101052206	1134 W. Holt Boulevard	Retail sales, miscellaneous	244	Partial parcel acquisition
4	101052210	1102 W. Holt Boulevard	Automotive uses	2,052	Partial parcel acquisition
5	101050211	-	Vacant	993	Partial parcel acquisition
6	101052212	1124 W. Holt Boulevard	Shopping center	614	Partial parcel acquisition
7	101052213	1150 W. Holt Boulevard	Shopping center	492	Partial parcel acquisition
14	101054314	1360 W. Holt Boulevard	Retail sales	370	Partial parcel acquisition
15	101054332	1364 W. Holt Boulevard	Shopping center	666	Partial parcel acquisition
1	101050207	1020 W. Holt Boulevard	Automotive uses	113	Partial parcel acquisition
22	101113104	1125 W. Holt Boulevard	Office	87	Partial parcel acquisition
37	101114132	863 W. Holt Boulevard	Office	1,337	Partial parcel acquisition
35	101114116	849 W. Holt Boulevard	Automotive uses	440	Partial parcel acquisition
34	101114113	909 W. Holt Boulevard	Automotive uses	274	Partial parcel acquisition
36	101114130	909 W. Holt Boulevard	Vacant	131	Partial parcel acquisition
23	101113119	1113 W. Holt Boulevard	Automotive uses	3,010	Partial parcel acquisition
28	101113210	1021 W. Holt Boulevard	Retail sales	274	Partial parcel acquisition
27	101113209	W. Holt Boulevard	Vacant	166	Partial parcel acquisition
26	101113208	1033 W. Holt Boulevard	Automotive uses	270	Partial parcel acquisition
25	101113207	1051 W. Holt Boulevard	Shopping center, retail sales	1,032	Partial parcel acquisition
24	101113206	1065 W. Holt Boulevard	Mini mart	113	Partial parcel acquisition
21	101113103	1141 W. Holt Boulevard	Automotive uses	1,080	Partial parcel acquisition

Table 4.12-2 Partial Parcel Acquisitions along 3.5-mile-long Dedicated Lanes Segment (Alternative B)

Parcel ID	APN[1]	Address[2]	Use Type[2]	Impact Area (sq ft)	ROW Impacts[3]
8	101054305	1248 W. Holt Boulevard	Residential single-family	732	Partial parcel acquisition
9	101054307	1260 W. Holt Boulevard	Retail sales	775	Partial parcel acquisition
10	101054310	1328 W. Holt Boulevard	Retail sales	362	Partial parcel acquisition
11	101054311	1329 W. Holt Boulevard	Parking lot	340	Partial parcel acquisition
12	101054312	1340 W. Holt Boulevard	Commercial	340	Partial parcel acquisition
13	101054313	1350 W. Holt Boulevard	Retail sales	39	Partial parcel acquisition
48	104901104	745 W. Holt Boulevard	Residential	388	Partial parcel acquisition
47	104901103	755 W. Holt Avenue	Residential	527	Partial parcel acquisition
51	104901201	729 W. Holt Boulevard	Residential single-family	710	Partial parcel acquisition
56	104902129	661 W. Holt Boulevard	Residential hotel/motel/resorts	963	Partial parcel acquisition
42	104859130	624 E. Holt Boulevard	Shopping centers	523	Partial parcel acquisition
130	104910115	E. Holt Boulevard	Parking lot	1,568	Partial parcel acquisition
131	104910116	824 E. Holt Boulevard	Automotive uses	1,137	Partial parcel acquisition
137	104913103	914 E. Holt Boulevard	Vacant	1,246	Partial parcel acquisition
136	104913102	900 E. Holt Boulevard	Vacant	3,306	Partial parcel acquisition
125	104910110	756 E. Holt Boulevard	Residential single-family	1,285	Partial parcel acquisition
106	104909213	610 E. Holt Boulevard	Miscellaneous	2,666	Partial parcel acquisition
114	104909310	646 E. Holt Boulevard	Automotive uses	1,490	Partial parcel acquisition
141	104913108	958 E. Holt Boulevard		1,686	Partial parcel acquisition
142	104913109	1000 E. Holt Boulevard	Retail sales	684	Partial parcel acquisition
123	104910108	748 E. Holt Boulevard	Residential single-family	1,276	Partial parcel acquisition
105	104909202	571 E. Holt Boulevard	Vacant	5,062	Partial parcel acquisition
135	104910140	900 E. Holt Boulevard	Automotive uses	1,764	Partial parcel acquisition
134	104910139	844 E. Holt Boulevard	Retail sales	2,570	Partial parcel acquisition
104	104909201	570 E. Holt Boulevard	Vacant	697	Partial parcel acquisition
102	104909103	522 E. Holt Boulevard	Office	2,143	Partial parcel acquisition
133	104910138	700 E. Holt Boulevard	Restaurant	2,174	Partial parcel acquisition
101	14909102	512 E. Holt Boulevard	Vacant	1,224	Partial parcel acquisition
146	104913116	1050 E. Holt Boulevard	Vacant	1,708	Partial parcel acquisition
145	104913115	-	Vacant	431	Partial parcel acquisition
144	104913114	-	Vacant	1,011	Partial parcel acquisition
143	104913113	E. Holt Boulevard	Vacant	1,686	Partial parcel acquisition
147	104913120	1010 E. Holt Boulevard	Automotive uses	3,367	Partial parcel acquisition
140	104913106	936 E. Holt Boulevard	Vacant	1,686	Partial parcel acquisition
138	104913104	918 E. Holt Boulevard	Vacant	2,208	Partial parcel acquisition
119	104910104	720 E. Holt Boulevard	Grocery store	4,256	Partial parcel acquisition

Table 4.12-2 Partial Parcel Acquisitions along 3.5-mile-long Dedicated Lanes Segment (Alternative B)

Parcel ID	APN[1]	Address[2]	Use Type[2]	Impact Area (sq ft)	ROW Impacts[3]
62	104847218	1175 E. Holt Boulevard	Residential single-family	1,028	Partial parcel acquisition
60	104847211	1131 E. Holt Boulevard	Vacant	17	Partial parcel acquisition
57	104847114	1117 E. Holt Boulevard	Vacant	828	Partial parcel acquisition
58	104847115	1111 E. Holt Boulevard	Automotive uses, commercial	392	Partial parcel acquisition
59	104847201	1125 E. Holt Boulevard	Residential single-family	1,085	Partial parcel acquisition
179	104847215	1182 E. Nocta Street	Residential single-family	9,971	Partial parcel acquisition
64	104848103	1015 E. Holt Boulevard	Automotive uses	592	Partial parcel acquisition
65	104848106	Holt Boulevard	Vacant	479	Partial parcel acquisition
66	104848108	905 E. Holt Boulevard	Vacant	418	Partial parcel acquisition
68	104848128	957 E. Holt Boulevard	Vacant	762	Partial parcel acquisition
69	104848129	957 E. Holt Boulevard	Vacant	758	Partial parcel acquisition
88	104852516	661 E. Holt Boulevard	Vacant	1,311	Partial parcel acquisition
89	104852517	659 E. Holt Boulevard	Shopping center	444	Partial parcel acquisition
90	104852518	E. Holt Boulevard	Vacant	375	Partial parcel acquisition
40	104859128	646 E. Holt Boulevard	Vacant	1,803	Partial parcel acquisition
41	104859129	646 Holt Boulevard	Grocery store	3,367	Partial parcel acquisition
43	104859132	606 Holt Boulevard	Retail sales	57	Partial parcel acquisition
44	104860413	706 W. Holt Boulevard	Restaurant	2,300	Partial parcel acquisition
45	104860414	724 W. Holt Boulevard	Restaurant, miscellaneous	1,838	Partial parcel acquisition
46	104860415	740 W. Holt Avenue	Automotive uses	1,189	Partial parcel acquisition
87	104852417	601 E. Holt Boulevard	Automotive uses	409	Partial parcel acquisition
180	104847216	1191 E. Holt Boulevard	Vacant	7,205	Partial parcel acquisition
61	104847217	1179 E. Holt Boulevard	Residential single-family	1,124	Partial parcel acquisition
63	104847221	1133 E. Holt Boulevard	Residential single-family	889	Partial parcel acquisition
78	104851221	E. Holt Boulevard	Vacant	701	Partial parcel acquisition
84	104852315	111 N. Monterey Avenue	Residential single-family	392	Partial parcel acquisition
85	104852316	545 E. Holt Boulevard	Residential multiple-family	266	Partial parcel acquisition
83	104852211	505 E. Holt Boulevard	Retail sales	30	Partial parcel acquisition
86	104852414	111 N. Miramonte Avenue	Vacant	9	Partial parcel acquisition
70	104851210	757 E. Holt Boulevard	Automotive uses	157	Partial parcel acquisition
71	104851211	765 E. Holt Boulevard	Residential apartments	157	Partial parcel acquisition
72	104851215	831 E. Holt Boulevard	Parking lot	148	Partial parcel acquisition
73	104851216	755 E. Holt Boulevard	Retail sales	340	Partial parcel acquisition
74	104851217	745 E. Holt Boulevard	Residential single-family	518	Partial parcel acquisition
75	104851218	741 E. Holt Boulevard	Residential single-family	592	Partial parcel acquisition
172	011013106	1300 E. Holt Boulevard	Commercial	39	Partial parcel acquisition

Table 4.12-2 Partial Parcel Acquisitions along 3.5-mile-long Dedicated Lanes Segment (Alternative B)

Parcel ID	APN[1]	Address[2]	Use Type[2]	Impact Area (sq ft)	ROW Impacts[3]
2	101050208	1050 W. Holt Boulevard	Automotive uses	118	Partial parcel acquisition
29	101113211	1013 W. Holt Boulevard	Office	152	Partial parcel acquisition
92	104852520	635 E. Holt Boulevard	Automotive uses	457	Partial parcel acquisition
53	104902103	627 W. Holt Boulevard	Residential hotel/motel/resorts	357	Partial parcel acquisition
55	104902128	645 W. Holt Avenue	Retail sales	122	Partial parcel acquisition
39	101114136	931 W. Holt Boulevard	Retail sales	301	Partial parcel acquisition
52	104901224	701 W. Holt Boulevard	Restaurant	113	Partial parcel acquisition
150	104914124	1194 E. Holt Boulevard	Vacant	100	Partial parcel acquisition
149	104914123	1176 E. Holt Boulevard	Vacant	126	Partial parcel acquisition
148	104914120	1170 E. Holt Boulevard	Vacant	17	Partial parcel acquisition
190	011008108	1627 E. Holt Boulevard	Office	623	Partial parcel acquisition
191	011009145	1801 E. Holt Boulevard	Miscellaneous	4	Partial parcel acquisition
195	011010102	1776 E. Holt Boulevard	Commercial	152	Partial parcel acquisition
18	101055215	1542 W. Holt Boulevard	Parking lot	166	Partial parcel acquisition
32	101114107	961 W. Holt Boulevard	Retail sales	274	Partial parcel acquisition
31	101114106	967 W. Holt Boulevard	Automotive uses	344	Partial parcel acquisition
30	101113212	1005 W. Holt Boulevard	Automotive uses	183	Partial parcel acquisition
38	101114135	943 W. Holt Boulevard	Residential hotel/motel/resorts	322	Partial parcel acquisition
76	104851219	727 E. Holt Boulevard	Parking lot	100	Partial parcel acquisition
67	104848127	907 E. Holt Boulevard	Grocery store	802	Partial parcel acquisition
80	104852208	527 E. Holt Boulevard	Automotive uses	187	Partial parcel acquisition
209	104852317	541 E. Holt Boulevard	Residential single-family	35	Partial parcel acquisition
54	104902104	625 W. Holt Boulevard	Commercial	161	Partial parcel acquisition
98	104906511	326 E. Holt Boulevard	Shopping center	858	Partial parcel acquisition with building acquisition – Large parcel with multiple buildings: Partial acquisition of 1 building; relocation of 2 tenants, and cut and reface of impacted building

Notes
[1] Assessor Parcel Number (APN). Multiple addresses may be associated with a single APN.
[2] Data obtained from Parcel Quest (http://www.parcelquest.com/, site accessed June 2016). Field verification of building addresses and land use type is required.
[3] ROW impact description corresponds with labels on project impact exhibits. A partial parcel acquisition may include slivers of a sidewalk, as well as full building acquisition.

Source: WVC Draft Relocation Impact Report, 2018.

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Table 4.12-3 Parcels Requiring Temporary Construction Easements along 3.5-mile-long Dedicated Lanes Segment (Alternative B)

Parcel ID	APN[1]	Impact Area (sq ft)	ROW Impacts[3]
210	101055214	231	TCE
211	101055213	231	TCE
212	101055212	231	TCE
213	101055211	200	TCE
214	101055238	732	TCE
215	101055237	741	TCE
216	101055207	74	TCE
217	101055206	440	TCE
218	101054304	950	TCE
219	101054303	409	TCE
220	101054302	314	TCE
221	101054301	1,507	TCE
222	101052217	1,259	TCE
223	101050209	684	TCE
224	101050206	854	TCE
225	101111110	1255	TCE
226	101111120	584	TCE
227	101111121	719	TCE
228	101111104	379	TCE
229	101111105	353	TCE
230	101111118	915	TCE
231	101112124	1019	TCE
232	101112102	902	TCE
233	101112117	971	TCE
234	101112118	209	TCE
235	101112126	1263	TCE
236	101112113	1194	TCE
237	101112105	941	TCE
238	101112121	919	TCE
239	101112122	549	TCE
240	101113117	152	TCE
241	101113102	335	TCE
242	101049103	2304	TCE
243	101049102	1106	TCE
244	101049116	423	TCE
245	104901101	392	TCE

Table 4.12-3 Parcels Requiring Temporary Construction Easements along 3.5-mile-long Dedicated Lanes Segment (Alternative B)

Parcel ID	APN[1]	Impact Area (sq ft)	ROW Impacts[3]
246	104901202	322	TCE
247	104852416	867	TCE
248	104852415	87	TCE
249	104851228	466	TCE
250	104851212	335	TCE
251	104851213	1059	TCE
252	104851214	200	TCE
253	104848107	815	TCE
254	104848102	1220	TCE
255	104848101	989	TCE
256	104847124	462	TCE
257	104847122	579	TCE
258	104847123	218	TCE
259	104914128	523	TCE
260	104914125	314	TCE
261	104914118	353	TCE
262	104914119	614	TCE
263	011013120	592	TCE

Notes

[1] Assessor Parcel Number (APN). Multiple addresses may be associated with a single APN.

[2] Data obtained from Parcel Quest (http://www.parcelquest.com/, site accessed June 2016). Field verification of building addresses and land use type is required.

[3] ROW impact description corresponds with labels on project impact exhibits. A partial parcel acquisition may include slivers of a sidewalk, as well as full building acquisition.

Source: WVC Draft Relocation Impact Report, 2018.

4.13 Public Services and Utilities

This section discusses potential long-term impacts to public services and utilities along the WVC Project alignment and at the supporting O&M facility as a result of project operations.

Short-term impacts during project construction and proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with public services and utilities are discussed in Sections 5.2.14 and 5.3.14, respectively.

4.13.1 Existing Conditions

Community Facilities

Many community facilities and services are located near the project corridor (Figure 4.13-1), including fire protection and emergency medical services, law enforcement, schools, and other public facilities (e.g., libraries, City halls, and post offices), that may be affected by implementation of the proposed project. Table 4.13-1 lists the community facilities located within 0.5 mile of the proposed WVC Project.

The Pomona Civic Center, Ontario Civic Center, Ontario Convention Center, Ontario International Airport, and Fontana Civic Center are all key community-serving facilities that would be served by the proposed project.

Emergency Services

The cities of Pomona, Montclair, Ontario, and Fontana each have their own police departments to provide law enforcement services to their respective communities. Law enforcement services in Rancho Cucamonga are provided through a contract with the San Bernardino County Sheriff's Department.

Similar to police services, the cities of Pomona, Montclair, Ontario, and Rancho Cucamonga have their own fire protection services. The City of Fontana Fire Protection District, including emergency, prevention, and administrative services, is provided through contract by the San Bernardino County Fire Department.

Within 0.5 mile of the project alignment, there are eight fire stations, four police stations, and three medical centers, as shown in Figure 4.13-1. Table 4.13-1 lists these emergency service facilities.

Utilities

Communications

Communications services within the study area are provided by several companies: AT&T, Crown Castle, Level 3 Communications, Sunesys LLC, Verizon Business (formerly MCI), Verizon Wireless (formerly Airtouch), and Wilshire Connections. Cable TV service is provided by Time Warner Cable.

Electricity

Electrical service in the study area is provided by Southern California Edison Company (SCE). SCE owns, operates, and maintains aboveground and underground facilities in the project corridor. Most of SCE's facilities are located in the street ROW. Table 4.13-2 contains a summary of the facilities owned by SCE located within the project ROW.

Table 4.13-1 Community and Emergency Service Facilities within 0.5 Mile of the WVC Project

ID No.	Facility Name	Address	Map Sheet No.
Fire			
1	Ontario Fire Station Number 1	425 East "B" Street, Ontario, CA 91764	Sheet 3 of 10
2	Ontario Fire Station Number 8	3429 E. Shelby Street, Ontario, CA 91761	Sheet 5 of 10
3	Montclair Fire Station Number 2	10825 Monte Vista Avenue, Montclair, CA 91763	Sheet 2 of 10
4	Rancho Cucamonga Fire Station #4	11297 Jersey Boulevard, Rancho Cucamonga, CA 91730	Sheet 6 of 10
5	Fontana - Station 71	16980 Arrow Boulevard, Fontana, CA 92335	Sheet 9 of 10
6	Fontana - Station 73	14360 Arrow Boulevard, Fontana, CA 92335	Sheet 8 of 10
7	Los Angeles County Fire Station Number 181	590 South Park Avenue, Pomona, CA 91766	Sheet 1 of 10
8	Los Angeles County Fire Station Number 183	710 North San Antonio, Pomona, CA 91767	Sheet 1 of 10
Police			
9	City of Fontana Police Department	17005 Upland Avenue, Fontana, CA 92335	Sheet 9 of 10
10	Pomona Police Department	490 W Mission Boulevard, Pomona, CA 91766	Sheet 1 of 10
11	Rancho Cucamonga Police Department	10510 Civic Center Drive, Rancho Cucamonga, CA 91730	Sheet 7 of 10
12	(855) Rancho Cucamonga CHP Office	9530 Pittsburgh Avenue, Rancho Cucamonga, CA 91730	Sheet 6 of 10
Hospitals or Clinics			
13	Kindred Hospital - Ontario	550 N. Monterey Avenue, Ontario, CA 91764	Sheet 3 of 10
14	Kindred Hospital - Rancho	10841 White Oak Avenue, Rancho Cucamonga, CA 91730	Sheet 7 of 10
15	Kaiser Permanente - Fontana Medical Center	9961 Sierra Avenue, Fontana, CA 92335	Sheet 10 of 10
189	Rite Medical Clinic Urgent Care	502 W. Holt Avenue, Pomona, CA 91768	Sheet 1 of 10
191	California Medical Clinic	402 E. Holt Boulevard, Ontario, CA 91761	Sheet 3 of 10
192	Pomona Youth & Teens Clinic	502 W. Holt Avenue, Pomona, CA 91768	Sheet 1 of 10
193	Clinica Medica Familiar De	10563 S. Mills Avenue, Montclair, CA 91763	Sheet 1 of 10
194	DBH Walk-In Clinics	2940 Inland Empire Boulevard, Ontario, CA 91764	Sheet 5 of 10

Table 4.13-1 Community and Emergency Service Facilities within 0.5 Mile of the WVC Project

ID No.	Facility Name	Address	Map Sheet No.
195	California Health Clinic	5461 Holt Boulevard #H, Montclair, CA 91763	Sheet 2 of 10
196	Tuan Le Medical Clinic	1151 E. Holt Avenue #Q, Pomona, CA 91767	Sheet 1 of 10
197	Healthcare Medical Clinic	822 N. Garey Avenue, Pomona, CA 91767	Sheet 1 of 10
198	Merced Medical Clinic	240 S. Main Street, Pomona, CA 91766	Sheet 1 of 10
199	Urban Medical Clinic	586 E. Mission Boulevard, Pomona, CA 91766	Sheet 1 of 10
200	Molina Medical Clinic - Pomona	887 E. 2nd Street, Pomona, CA 91766	Sheet 1 of 10
201	Health Clinic Salud and Familia	1019 E. Holt Avenue, Pomona, CA 90767	Sheet 1 of 10
202	Pomona Valley Hospital Medical Center	9190 Haven Avenue, Rancho Cucamonga, CA 91730	Sheet 6 of 10
203	Concentra Urgent Care	9405 Fairway View Place, Rancho Cucamonga, CA 91730	Sheet 6 of 10
204	Rancho Cucamonga VA Clinic	8599 Haven Avenue #102, Rancho Cucamonga, CA 91730	Sheet 6 of 10
209	Hampton Medical Clinic	7777 Milliken Avenue #120, Rancho Cucamonga, CA 91730	Sheet 7 of 10
210	Mountain View Urgent Care	8250 White Oak Avenue, Rancho Cucamonga, CA 91730	Sheet 7 of 10
211	Foothill Family Medical Clinic	13677 E. Foothill Boulevard #Q, Fontana, CA 92335	Sheet 8 of 10
212	West Point Medical Center	7774 Cherry Avenue, Fontana, CA 92336	Sheet 8 of 10
217	Metropolitan Family Clinic	7965 Sierra Avenue, Fontana, CA 92336	Sheet 9 of 10
218	El Carmen Medical Clinic	16980 E. Foothill Boulevard, Fontana, CA 92335	Sheet 9 of 10
223	California Medical Clinic	16701 Valley Boulevard, Fontana, CA 92335	Sheet 10 of 10
224	Clinica Medica Familiar	9790 Sierra Avenue, Fontana, CA 92335	Sheet 10 of 10
Religious Facilities			
16	Bethel Assembly of God Church	9134 Mango Avenue, Fontana, CA 92335	Sheet 10 of 10
17	Calvary Baptist Church	9444 Mango Avenue, Fontana, CA 92335	Sheet 10 of 10
18	Ontario Spanish Seventh Day Adventist Church	316 W. B Street, Ontario, CA 91762	Sheet 3 of 10
19	Church of Christ	126 W. E Street, Ontario, CA 91762	Sheet 3 of 10

Table 4.13-1 Community and Emergency Service Facilities within 0.5 Mile of the WVC Project

ID No.	Facility Name	Address	Map Sheet No.
20	Church of God	686 S. Garey Avenue, Pomona, CA 91776	Sheet 1 of 10
21	Church of God of Montclair	10127 Ramona Avenue, Montclair, CA 91763	Sheet 2 of 10
22	Church of Secondo d'Asti Catholic Church	250 N. Turner Avenue, Ontario, CA 91761	Sheet 5 of 10
23	Community Church of God	628 William Street, Pomona, CA 91768	Sheet 1 of 10
24	Community Faith Center	8621 Juniper Avenue, Fontana, CA 92335	Sheet 9 of 10
25	Evangelical Assembly of God Church	705 S. Cypress Avenue, Ontario, CA 91762	Sheet 2 of 10
26	First American Baptist Church	8282 Upland Avenue, Fontana, CA 92335	Sheet 9 of 10
27	Purpose Church	601 N. Garey Avenue, Pomona, CA 91768	Sheet 1 of 10
28	Crosspoint Community Church	17244 Randall Avenue, Fontana, CA 92335	Sheet 10 of 10
29	First Christian Church	424 W. Holt Boulevard, Ontario, CA 91762	Sheet 3 of 10
30	First Church of Christ Scientist	599 N. Main Street, Pomona, CA 91768	Sheet 1 of 10
31	First Church of God	1233 E. Kingsley Avenue, Pomona, CA 91767	Sheet 1 of 10
32	First Presbyterian Church	401 N. Gibbs Street, Pomona, CA 91767	Sheet 1 of 10
33	First Presbyterian Church	9260 Mango Avenue, Fontana, CA 92335	Sheet 10 of 10
34	First United Methodist Church	9116 Sierra Avenue, Fontana, CA 92335	Sheet 10 of 10
35	Fontana Christian Center	14796 Arrow Route, Fontana, CA 92335	Sheet 8 of 10
36	Fontana Community Church	8316 Sierra Avenue, Fontana, CA 92335	Sheet 9 of 10
37	Fontana First Assembly of God Church	16580 San Bernardino Avenue, Fontana, CA 92335	Sheet 10 of 10
38	Living Way Christian Fellowship	16725 Valencia Avenue, Fontana, CA 92335	Sheet 9 of 10
39	Fontana Seventh Day Adventist Church	9236 Palmetto Avenue, Fontana, CA 92335	Sheet 10 of 10
40	Gloria Dei Lutheran Church	17220 Merrill Avenue, Fontana, CA 92335	Sheet 9 of 10
41	Heritage Church of the Nazarene	16866 Seville Avenue, Fontana, CA 92335	Sheet 9 of 10
42	Indonesian Seventh Day Adventist Church	422 N. Monterey Avenue, Ontario, CA 91764	Sheet 3 of 10

Table 4.13-1 Community and Emergency Service Facilities within 0.5 Mile of the WVC Project

ID No.	Facility Name	Address	Map Sheet No.
43	Korean Church of Pomona Valley	904 E. D Street, Ontario, CA 91764	Sheet 3 of 10
44	Lighthouse Ministry Community Church	8552 Rosena Avenue, Fontana, CA 92335	Sheet 9 of 10
45	Victory Outreach Pomona	177 W. Monterey Avenue, Pomona, CA 91767	Sheet 1 of 10
46	North Towne Christian Church	817 N. Towne Avenue, Pomona, CA 91767	Sheet 1 of 10
47	Our Lady of Guadalupe Roman Catholic Church	710 S Sultana Avenue, Ontario, CA 91761	Sheet 3 of 10
48	Our Lady of Lourdes Catholic Church	10191 Central Avenue, Montclair, CA 91763	Sheet 2 of 10
49	Pilgrim Congregational Church	600 N. Garey Avenue, Pomona, CA 91767	Sheet 1 of 10
50	Pilgrim Holiness Church	524 E. Pasadena Street, Pomona, CA 91767	Sheet 1 of 10
51	Pioneer Free Will Baptist Church	515 N. Allyn Avenue, Ontario, CA 91764	Sheet 3 of 10
52	Plum Avenue Baptist Church	312 E. Nevada Street, Ontario, CA 91761	Sheet 3 of 10
53	Primera Iglesia Church	709 S. Plum Avenue, Ontario, CA 91761	Sheet 3 of 10
54	Pomona Four Square Gospel Church	480 W. Monterey Avenue, Pomona, CA 91768	Sheet 1 of 10
55	Rock of Faith Foursquare	323 W. B Street, Ontario, CA 91762	Sheet 3 of 10
56	Community of Christ	315 W. Sunkist Street, Ontario, CA 91762	Sheet 3 of 10
57	Sacred Heart Church	12704 E. Foothill Boulevard, Rancho Cucamonga, CA 91739	Sheet 7 of 10
58	Saint George Catholic Church	505 N. Palm Avenue, Ontario, CA 91762	Sheet 3 of 10
59	Saint Joseph Catholic Church	17080 Arrow Boulevard, Fontana, CA 92335	Sheet 9 of 10
60	Saint Luke's Episcopal Church	16577 Upland Avenue, Fontana, CA 92335	Sheet 9 of 10
61	Saint Madeleine Catholic Church	931 E. Kingsley Avenue, Pomona, CA 91767	Sheet 1 of 10
62	Saint Paul's Lutheran Church	610 N. San Antonio Avenue, Pomona, CA 91767	Sheet 1 of 10
63	Seventh Day Adventist Church	360 W. 3rd Street, Pomona, CA 91766	Sheet 1 of 10
64	Seventh Day Church of God	143 N. Vine Avenue, Ontario, CA 91762	Sheet 3 of 10
65	Sovereign Grace Baptist Church	1168 E. G Street, Ontario, CA 91764	Sheet 3 of 10

Table 4.13-1 Community and Emergency Service Facilities within 0.5 Mile of the WVC Project

ID No.	Facility Name	Address	Map Sheet No.
66	Templo De La Fe	423 N. Main Street, Pomona, CA 91768	Sheet 1 of 10
67	Trinity Lutheran Church	5080 Kingsley Street, Montclair, CA 91763	Sheet 2 of 10
68	Trinity United Methodist Church	676 N. Gibbs Street, Pomona, CA 91767	Sheet 1 of 10
69	United Pentecostal Church	602 N. Virginia Avenue, Ontario, CA 91764	Sheet 3 of 10
70	Bible Baptist Church International	448 N. Virginia Avenue, Ontario, CA 91764	Sheet 3 of 10
169	St Paul's Episcopal Church	242 E. Alvarado Street, Pomona, CA 91767	Sheet 1 of 10
170	Imani Christian Cathedral	510 W. Monterey Avenue, Pomona, CA 91768	Sheet 1 of 10
171	Todd Memorial Chapel	570 N. Garey Avenue, Pomona, CA 91767	Sheet 1 of 10
172	Zainabia Islamic Center	575 N. Towne Avenue, Pomona, CA 91767	Sheet 1 of 10
173	New Direction Community Church	1100 E. Holt Avenue, Pomona, CA 91767	Sheet 1 of 10
174	From the Heart Church Ministries	655 N. Mills Avenue, Pomona, CA 91767	Sheet 1 of 10
175	Iglesia Ni Cristo	4159 Holt Boulevard, Montclair, CA 91763	Sheet 2 of 10
176	Ebenezer Christian Church	5138 W. Mission Boulevard, Montclair, CA 91762	Sheet 2 of 10
177	La Senda Antigua 2	685 N. Mills Avenue, Pomona, CA 91767	Sheet 1 of 10
178	Temple-Grace Christian Cathedral	4801 Holt Boulevard, Montclair, CA 91763	Sheet 2 of 10
225	Cucamonga Christian Fellowship	11376 5th Street, Rancho Cucamonga, CA 91730	Sheet 6 of 10
226	Apostolic Church	8719 Center Avenue, Rancho Cucamonga, CA 91730	Sheet 6 of 10
227	Mountain View Baptist Church	8440 Maple Place #105, Rancho Cucamonga, CA 91730	Sheet 6 of 10
228	Abundant Living Family Church	10900 Civic Center Drive, Rancho Cucamonga, CA 91730	Sheet 7 of 10
229	Calvary Faith Center Church	8301 Elm Avenue #600, Rancho Cucamonga, CA 91730	Sheet 7 of 10
230	Mountainview Faith Community Church	7986 Haven Avenue, Rancho Cucamonga, CA 91730	Sheet 7 of 10
231	The Church of Jesus Christ of Latter-Day Saints	8280 Utica Avenue #150, Rancho Cucamonga, CA 91730	Sheet 7 of 10

Table 4.13-1 Community and Emergency Service Facilities within 0.5 Mile of the WVC Project

ID No.	Facility Name	Address	Map Sheet No.
232	Calvary Chapel of Rancho Cucamonga	10700 Town Center Drive, Rancho Cucamonga, CA	Sheet 7 of 10
233	Vine Church	8351 Elm Avenue #108, Rancho Cucamonga, CA 91730	Sheet 7 of 10
234	Summit Ridge Church	11830 Sebastian Way, Rancho Cucamonga, CA 91730	Sheet 7 of 10
235	Purpose Church Rancho Cucamonga	12005 Jack Benny Drive, Rancho Cucamonga, CA 91739	Sheet 7 of 10
236	The Neighborhood Vineyard Church	11966 Jack Benny Drive Suite 104, Rancho Cucamonga, CA 91739	Sheet 7 of 10
237	Shield of Faith Family Church Fontana	13815 E. Foothill Boulevard, Fontana, CA 92335	Sheet 8 of 10
238	Rock Christian Church	14622 E. Foothill Boulevard, Fontana, CA 92335	Sheet 8 of 10
239	Great I Am	14189 E. Foothill Boulevard #102, Fontana, CA 92335	Sheet 8 of 10
240	Ministerios Tesoros Escondidos	8430 Cherry Avenue, Fontana, CA 92335	Sheet 8 of 10
241	Under His Wings Christian Fellowship	7950 Cherry Avenue #111, Fontana, CA 92336	Sheet 8 of 10
242	The Universal Church	8020 Citrus Avenue, Fontana, CA 92336	Sheet 9 of 10
243	Iglesia Cristiana El Sembrador CRC	8380 Cypress Avenue, Fontana, CA 92335	Sheet 9 of 10
244	Holy Spirit Power Ministries	7863 Sierra Avenue, Fontana, CA 92336	Sheet 9 of 10
245	Cornerstone Baptist Church	7716 Sierra Avenue, Fontana, CA 92336	Sheet 9 of 10
246	Kingdom Hall of Jehovah's Witnesses	10005 Cypress Avenue, Fontana, CA 92335	Sheet 10 of 10
Libraries			
71	Fontana Lewis Library	8437 Sierra Avenue, Fontana, CA 92335	Sheet 9 of 10
72	Ovitt Family Community Library	215 E. C Street, Ontario, CA 91764	Sheet 3 of 10
73	Pomona Public Library	625 S. Garey Avenue, Pomona, CA 91766	Sheet 1 of 10
74	Law Library for San Bernardino County	8409 Utica Avenue, Rancho Cucamonga, CA 91730	Sheet 6 of 10
75	Rancho Cucamonga Public Library	12505 Cultural Center Drive, Rancho Cucamonga, CA 91739	Sheet 7 of 10
Post Offices			
76	Downtown Station Ontario Post Office	123 W. Holt Boulevard, Ontario, CA 91762	Sheet 3 of 10
77	Fontana Post Office	8282 Sierra Avenue, Fontana, CA 92335	Sheet 9 of 10

Table 4.13-1 Community and Emergency Service Facilities within 0.5 Mile of the WVC Project

ID No.	Facility Name	Address	Map Sheet No.
78	Ontario Post Office	1555 E. Holt Boulevard, Ontario, CA 91761	Sheet 3 of 10
79	Pomona Post Office	580 W. Monterey Avenue, Pomona, CA 91769	Sheet 1 of 10
Train Stations			
80	Fontana Train Station	16777 Orange Way, Fontana, CA 92335	Sheet 9 of 10
81	Ontario Train Station	198 E. Emporia Street, Ontario, CA 91764	Sheet 3 of 10
82	Pomona Train Station	100 W. Commercial Street, Pomona, CA 91768	Sheet 1 of 10
83	Rancho Cucamonga Train Station	11208 Azusa Court, Rancho Cucamonga, CA 91730	Sheet 6 of 10
Schools			
84	Pomona Catholic High School	533 W. Holt Avenue, Pomona, CA, 91768	Sheet 1 of 10
85	Western University of Health Sciences	309 E. 2nd Street, Pomona, CA 91766	Sheet 1 of 10
86	Saint Pauls School	242 E. Alvarado Street, Pomona, CA 91767	Sheet 1 of 10
87	San Antonio Elementary School	855 E. Kingsley Avenue, Pomona, CA 91767	Sheet 1 of 10
88	Kingsley Elementary School	1170 Washington Avenue, Pomona, CA 91767	Sheet 1 of 10
89	Village Academy High School	1444 E. Holt Avenue, Pomona, CA 91767	Sheet 1 of 10
90	Park West High School	1460 E. Holt Avenue, Suite #100, Pomona, CA 91767	Sheet 1 of 10
91	Lehigh Elementary School	10200 Lehigh Avenue, Montclair, CA 91763	Sheet 2 of 10
92	Montera Elementary School	4825 Bandera Street, Montclair, CA 91763	Sheet 2 of 10
93	Kingsley Elementary School	5625 Kingsley Street, Montclair, CA 91763	Sheet 2 of 10
94	University of La Verne College of Law	440 N. Allyn Avenue, Ontario, CA 91764	Sheet 3 of 10
95	Ray Wiltsey Middle School	1450 E. G Street, Ontario, CA 91764	Sheet 3 of 10
96	Mariposa Elementary School	1605 E. D Street, Ontario, CA 91764	Sheet 3 of 10
97	Ontario Center School	835 N. Center Avenue, Ontario, CA 91764	Sheet 5 of 10
98	Argosy University Inland Empire	3401 N. Centre Lake Drive, #200, Ontario, CA 91761	Sheet 5 of 10

Table 4.13-1 Community and Emergency Service Facilities within 0.5 Mile of the WVC Project

ID No.	Facility Name	Address	Map Sheet No.
99	Platt College Ontario	3700 Inland Empire Boulevard, #400, Ontario, CA 91764	Sheet 5 of 10
100	Coyote Canyon Elementary School	7889 Elm Avenue, Rancho Cucamonga, CA 91730	Sheet 7 of 10
101	Terra Vista Elementary School	7497 Mountain View Drive, Rancho Cucamonga, CA 91730	Sheet 7 of 10
102	Sacred Heart Parish School	12676 E. Foothill Boulevard, Rancho Cucamonga, CA 91739	Sheet 7 of 10
103	Perdew Elementary School	13051 Miller Avenue, Etiwanda, CA 91739	Sheet 8 of 10
104	West Heritage Elementary School	13690 W. Constitution Way, Fontana, CA 92336	Sheet 8 of 10
105	East Heritage Elementary School	14250 E. Constitution Way, Fontana, CA 92336	Sheet 8 of 10
106	Almond Elementary School	8172 Almond Avenue, Fontana, CA 92335	Sheet 8 of 10
107	Almeria Middle School	7723 Almeria Avenue, Fontana, CA 92336	Sheet 9 of 10
108	Tokay Elementary School	7846 Tokay Avenue, Fontana, CA 92336	Sheet 9 of 10
109	Fontana Middle School	8425 Mango Avenue, Fontana, CA 92335	Sheet 9 of 10
110	Chaffey College	16855 Merrill Avenue, Fontana, CA 92335	Sheet 9 of 10
111	Desert Sands Charter High School	17244 Randall Avenue, Fontana, CA 92335	Sheet 10 of 10
112	Randall Pepper Elementary School	16613 Randall Avenue, Fontana, CA 92335	Sheet 10 of 10
113	Westech College	9460 Sierra Avenue, Fontana, CA 92335	Sheet 10 of 10
114	Cypress Elementary School	9751 Cypress Avenue, Fontana, CA 92335	Sheet 10 of 10
115	Upland Christian Academy	10900 Civic Center Drive, Rancho Cucamonga, CA 91730	Sheet 7 of 10
116	Lincoln Elementary School	440 N. Allyn Avenue, Ontario, CA 91764	Sheet 3 of 10
185	Our Lady of Lourdes School	5303 Orchard Street, Montclair, CA 91763	Sheet 2 of 10
Daycares			
117	Kids First Christian Day Care	250 S. Parcels Street, Pomona, CA 91766	Sheet 1 of 10
118	Peace of Mind Preschool	240-250 S. Parcels Street, Pomona CA 91766	Sheet 1 of 10
119	YMCA Child Care Connection	676 N. Gibbs Street, Pomona, CA 91767	Sheet 1 of 10

Table 4.13-1 Community and Emergency Service Facilities within 0.5 Mile of the WVC Project

ID No.	Facility Name	Address	Map Sheet No.
120	Head Start-State Preschool	1460 E. Holt Avenue, #128, Pomona, CA 91767	Sheet 1 of 10
121	Inland Early Steps Services	1824 E. Elma Court, Ontario, CA 91764	Sheet 3 of 10
122	Tutor Time	3333 Concourse Street, #1201, Ontario, CA 91764	Sheet 5 of 10
123	Good Steward Day Care	9229 Utica Avenue, #160, Rancho Cucamonga, CA 91730	Sheet 6 of 10
124	Montessori Child Development	8196 Mulberry Avenue, Fontana, CA 92335	Sheet 8 of 10
125	Fontana KinderCare	16149 E. Foothill Boulevard, Fontana, CA 92335	Sheet 9 of 10
126	Weekday Nursery School	8316 Sierra Avenue, Fontana, CA 92335	Sheet 9 of 10
127	All Start Academy Inc.	10022 Palmetto Avenue, Fontana, CA 9235	Sheet 10 of 10
Regional Shopping Centers			
128	Ontario Mills Mall	1 Mills Circle, Ontario, CA 91764	Sheet 5 of 10
129	Victoria Gardens	12505 N. Main Street, #200, Rancho Cucamonga, CA 91739	Sheet 7 of 10
179	Stater Bros. Markets	1045 N. Garey Avenue, Pomona, CA 91767	Sheet 1 of 10
180	Walgreens	495 E. Holt Avenue, Pomona, CA 91767	Sheet 1 of 10
181	Cardenas Market and other retail shops	690 E. Holt Avenue, Pomona, CA 91767	Sheet 1 of 10
182	Rite Aid	611 E. Holt Avenue, Pomona, CA 91767	Sheet 1 of 10
183	El Super and other retail shops	1575 E. Holt Avenue, Pomona, CA 91767	Sheet 1 of 10
184	Orchard Plaza	4480 Holt Boulevard, Montclair, CA 91763	Sheet 2 of 10
186	Stater Bros. Markets and other retail shops	646 W. Holt Boulevard, Ontario, CA 91762	Sheet 3 of 10
187	Ontario Gateway Center	4400 Ontario Mills Parkway, Ontario, CA 91764	Sheet 5 of 10
188	Marketplace at Ontario Center	951 N. Milliken Avenue, Ontario, CA 91764	Sheet 5 of 10
190	Valley Indoor Swap Meet	1600 Holt Boulevard, Pomona, CA 91767	Sheet 1 of 10
207	Foothill Marketplace	E. Foothill Boulevard and I-15, Rancho Cucamonga, CA 91739	Sheet 7 of 10
208	Terra Vista Town Center	10808 E. Foothill Boulevard #160, Rancho Cucamonga, CA 91730	Sheet 7 of 10

Table 4.13-1 Community and Emergency Service Facilities within 0.5 Mile of the WVC Project

ID No.	Facility Name	Address	Map Sheet No.
213	Foothill Plaza	16920 E. Foothill Boulevard, Fontana, CA 92336	Sheet 9 of 10
214	Fontana Village Shopping Center	16981 E. Foothill Boulevard, Fontana, CA 92335	Sheet 9 of 10
215	Stater Bros. Markets	8228 Sierra Avenue, Fontana, CA 92335	Sheet 9 of 10
216	Citrus Shopping Center	16108 E. Foothill Boulevard, Fontana, CA 92335	Sheet 9 of 10
219	Vineyard Valley Shopping Center	Valley Boulevard and Sierra Avenue, Fontana, CA 92335	Sheet 10 of 10
220	Palm Court Shopping Center	16920 Slover Avenue, Fontana, CA 92337	Sheet 10 of 10
221	Sierra Plaza South Shopping Center	9954 Sierra Avenue, Fontana, CA 92335	Sheet 10 of 10
222	Inland Empire Center	16721 Valley Boulevard, Fontana, CA 92335	Sheet 10 of 10
Civic Centers			
130	Pomona Civic Center	400 Civic Center Plaza, Pomona, CA 91766	Sheet 1 of 10
131	Ontario Civic Center	303 E. B Street, Ontario, CA 91764	Sheet 3 of 10
132	Fontana Civic Center	8353 Sierra Avenue, Fontana, CA 92335	Sheet 9 of 10
206	Rancho Cucamonga Civic Center	10500 Civic Center Drive, Rancho Cucamonga, CA 91730	Sheet 7 of 10
Hospitality			
133	Ontario Convention Center	2000 E. Convention Center Way, Ontario, CA 91764	Sheet 3 of 10
134	Citizens Bank Arena	4000 Ontario Center, Ontario, CA 91764	Sheet 5 of 10
Airport			
135	Ontario International Airport	2500 E Airport Drive, Ontario, CA 91761	Sheet 5 of 10
Golf Courses			
136	Empire Lakes Golf Course (To be redeveloped as mixed-use)	11015 6th Street, Rancho Cucamonga, CA 91730	Sheet 6 of 10
Parks			
137	Memorial Park	502 E. Franklin Avenue, Pomona, CA 91766	Sheet 1 of 10
138	Centennial Park	246 S. Gibbs Street, Pomona, CA 91776	Sheet 1 of 10
139	Garfield Park	501-599 Arboleda Way, Pomona, CA 91766	Sheet 1 of 10
140	Sunset Park	4351 Orchard Street, Montclair, CA 91763	Sheet 2 of 10

Table 4.13-1 Community and Emergency Service Facilities within 0.5 Mile of the WVC Project

ID No.	Facility Name	Address	Map Sheet No.
141	Saratoga Park	5363 Kingsley Street, Montclair, CA 91763	Sheet 2 of 10
142	Kingsley Park	5575 Kingsley Street, Montclair, CA 91763	Sheet 2 of 10
143	James R. Bryant Park	632 W. D Street, Montclair, CA 91763	Sheet 2 of 10
144	Euclid Avenue Parkway	331 N. Euclid Avenue, Ontario, CA 91762	Sheet 3 of 10
145	Ontario Dog Park	415 W. Transit Street, Ontario, CA 91762	Sheet 3 of 10
146	Nugent's Park	225 S. Euclid Avenue, Ontario, CA 91762	Sheet 3 of 10
147	Sam Alba Park	550-598 S. Cherry Avenue, Ontario, CA 91761	Sheet 3 of 10
148	Veterans Memorial Park	1235 E. D Street, Ontario, CA 91764	Sheet 3 of 10
149	James Galanis Park	1263-1271 E. Nocta Street, CA 91764	Sheet 3 of 10
150	Carpenter's Union Park	3250 E. Shelby Street, Ontario, CA 91764	Sheet 5 of 10
151	Cucamonga-Guasti Regional Park	800 N. Archibald Avenue, Ontario, CA 91764	Sheet 5 of 10
152	Ontario Motor Speedway Park	915 N. Center Avenue, Ontario, CA 91764	Sheet 5 of 10
153	Ralph M. Lewis Park	7898 Elm Street, Rancho Cucamonga, CA 91730	Sheet 7 of 10
154	West Greenway Park	7889 Elm Avenue, Rancho Cucamonga, CA 91730	Sheet 7 of 10
155	Milliken Park	7699 Milliken Avenue, Rancho Cucamonga, CA 91730	Sheet 7 of 10
156	Mountain View Park	11701 Terra Vista Parkway, Rancho Cucamonga, CA 91730	Sheet 7 of 10
157	Victoria Arbors Park	7429 Arbor Lane, Rancho Cucamonga, CA 91739	Sheet 7 of 10
158	Garcia Park	13150 Garcia Drive, Rancho Cucamonga, CA 91730	Sheet 8 of 10
159	Patricia Murray Park	8040 Jamestown Circle, Fontana, CA 92336	Sheet 8 of 10
160	McDermontt Sports Complex& McDermontt Park West	7846 S. Heritage Circle, Fontana, CA 92336	Sheet 8 of 10
161	Northgate Park	7800 Celeste Avenue, Fontana, CA 92336	Sheet 9 of 10
162	Bill Martin Park	7881 Juniper Avenue, Fontana, CA 92336	Sheet 9 of 10

Table 4.13-1 Community and Emergency Service Facilities within 0.5 Mile of the WVC Project

ID No.	Facility Name	Address	Map Sheet No.
163	Cypress Park	8380 Cypress Avenue, Fontana, CA 92336	Sheet 9 of 10
164	Seville Park	16501-16549 Seville Avenue, Fontana, CA 92336	Sheet 9 of 10
165	Miller Park	17004 Arrow Boulevard, Fontana, CA 92336	Sheet 9 of 10
166	Santa Fe Park	16823-16849 Orange Way, Fontana, CA 92335	Sheet 9 of 10
167	Veteran's Park	17255 Merrill Avenue, Fontana, CA 92335	Sheet 9 of 10
168	Jack Bulik Park	16851 Filbert Street, Fontana, CA 92335	Sheet 10 of 10
205	Epicenter/Adult Sports Complex	8408 Rochester Avenue, Rancho Cucamonga, CA 91730	Sheet 7 of 10
247	Bon View Park	1010 S Bon View Avenue, Ontario, CA 91761	Sheet 4 of 10

Source: WVC Community Impact Report, 2018

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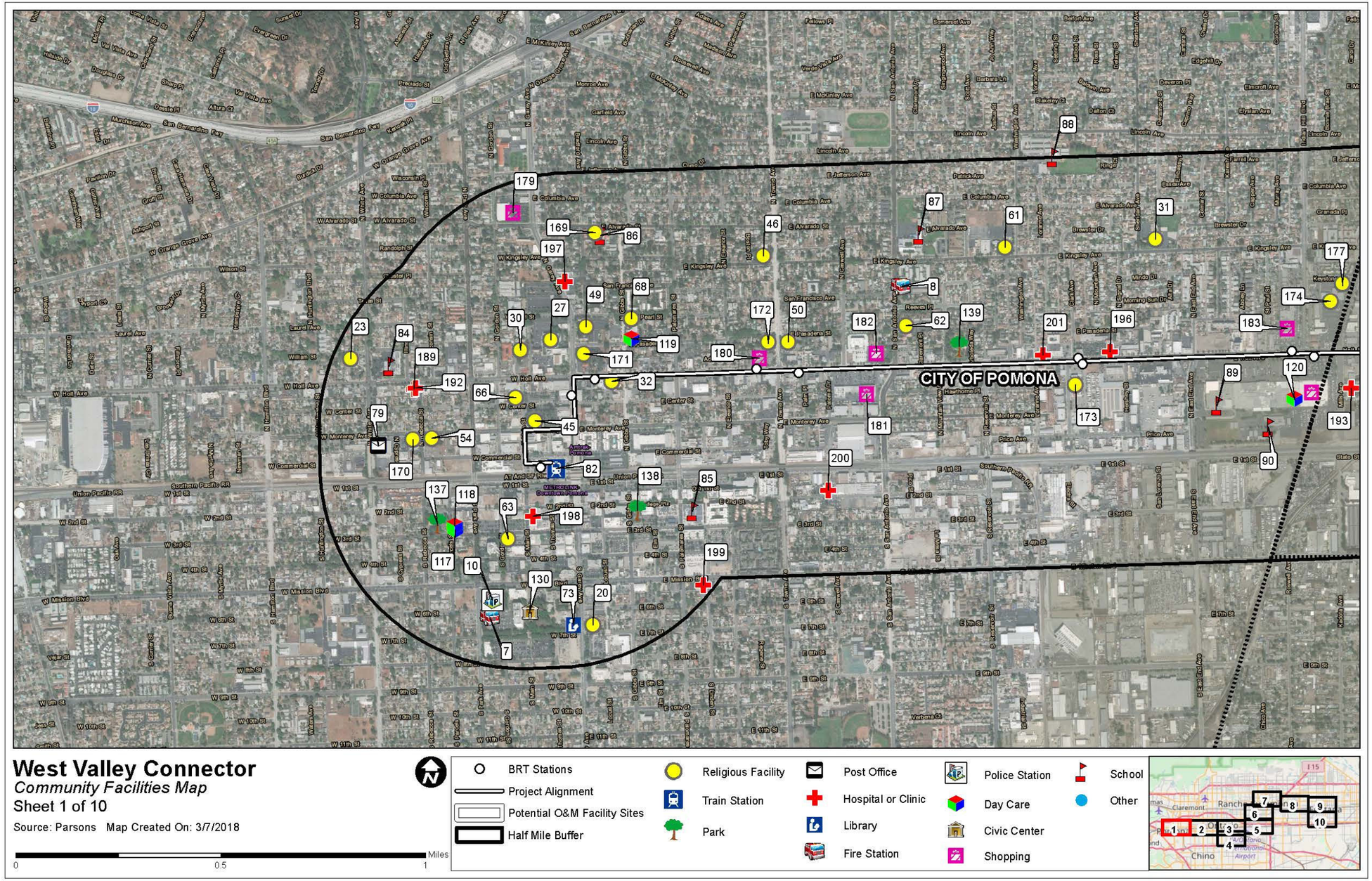

Figure 4.13-1 Community and Emergency Service Facilities (Sheet 1 of 10)

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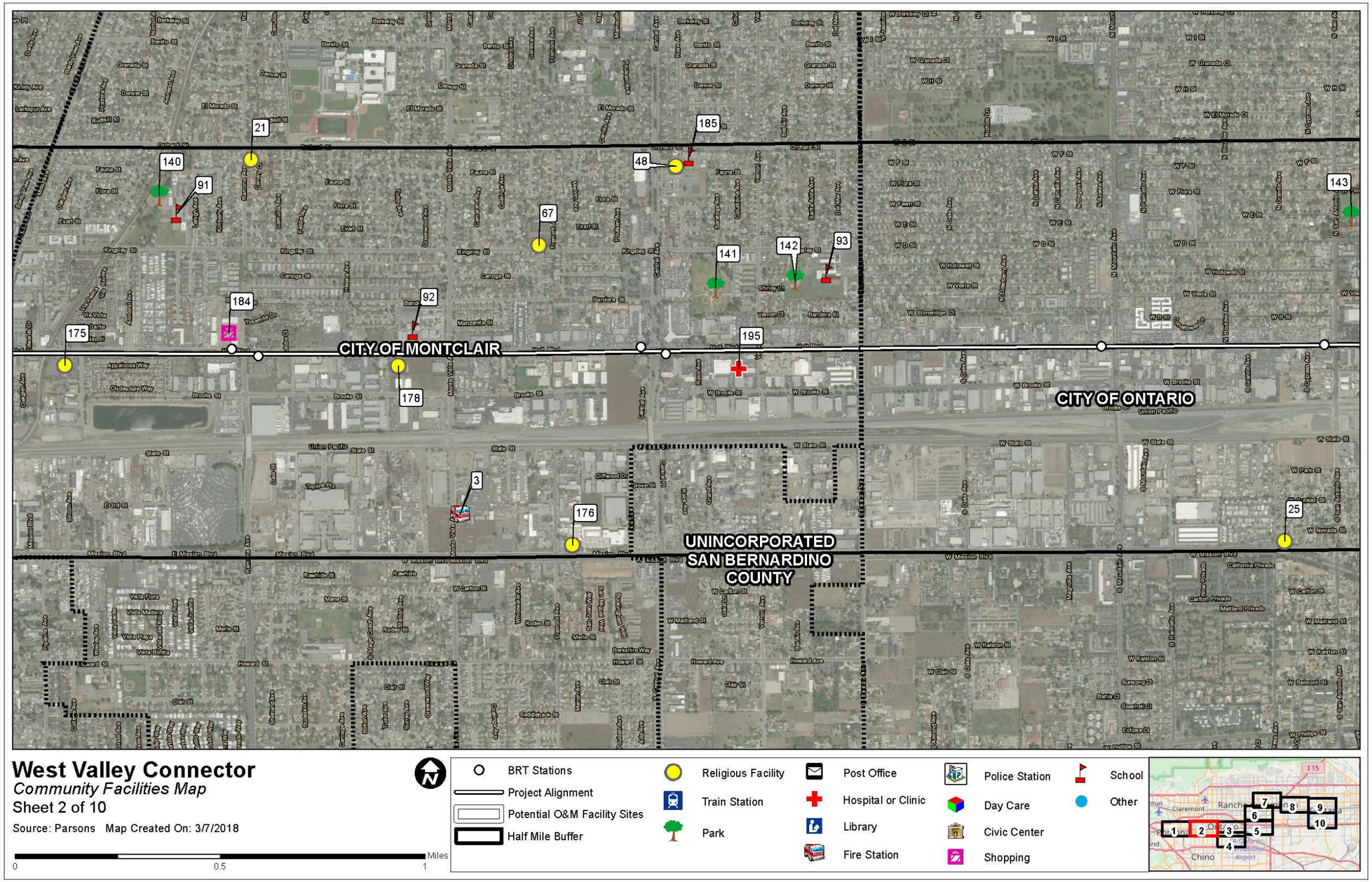

Figure 4.13-1 Community and Emergency Service Facilities (Sheet 2 of 10)

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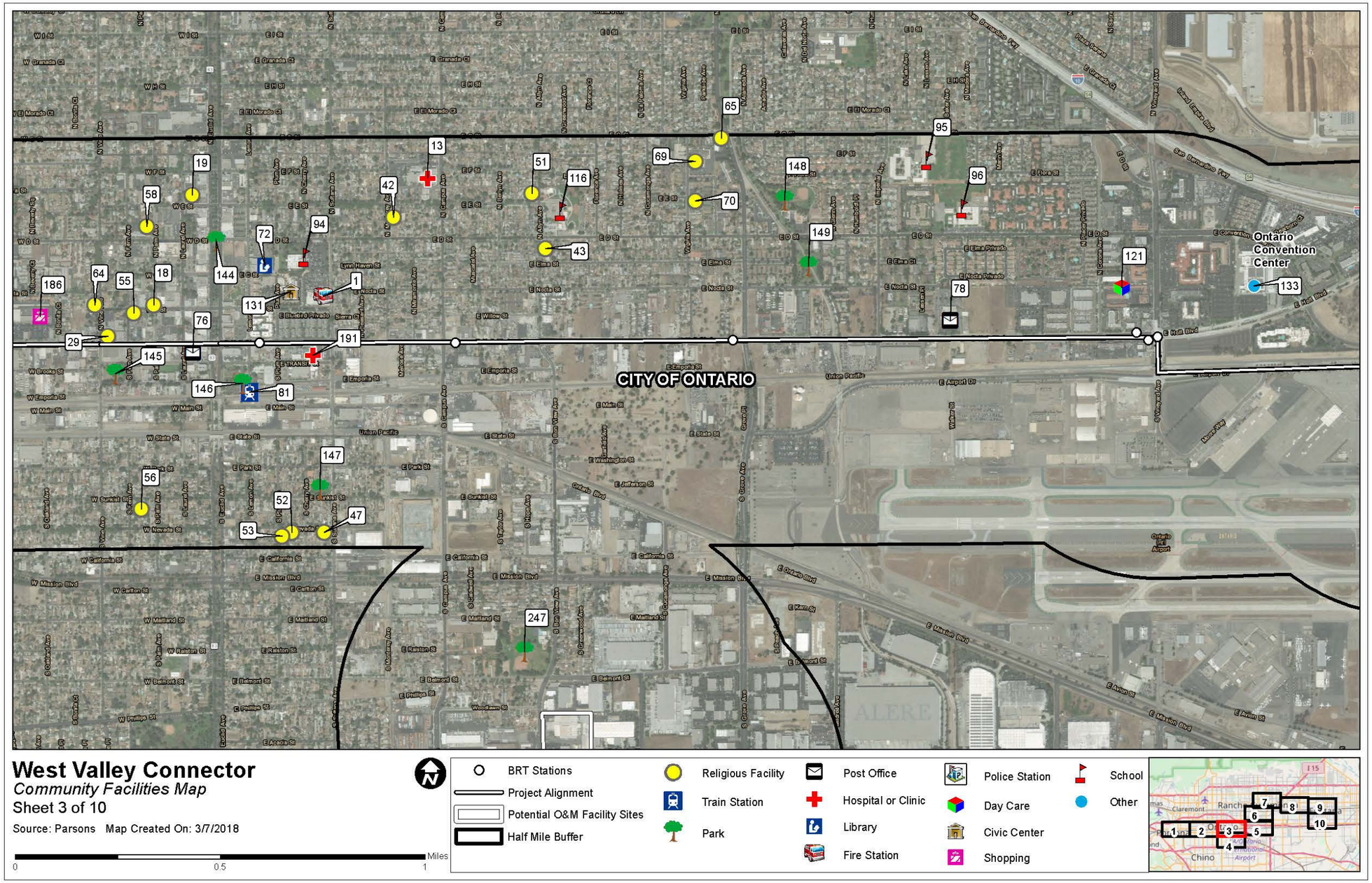

Figure 4.13-1 Community and Emergency Service Facilities (Sheet 3 of 10)

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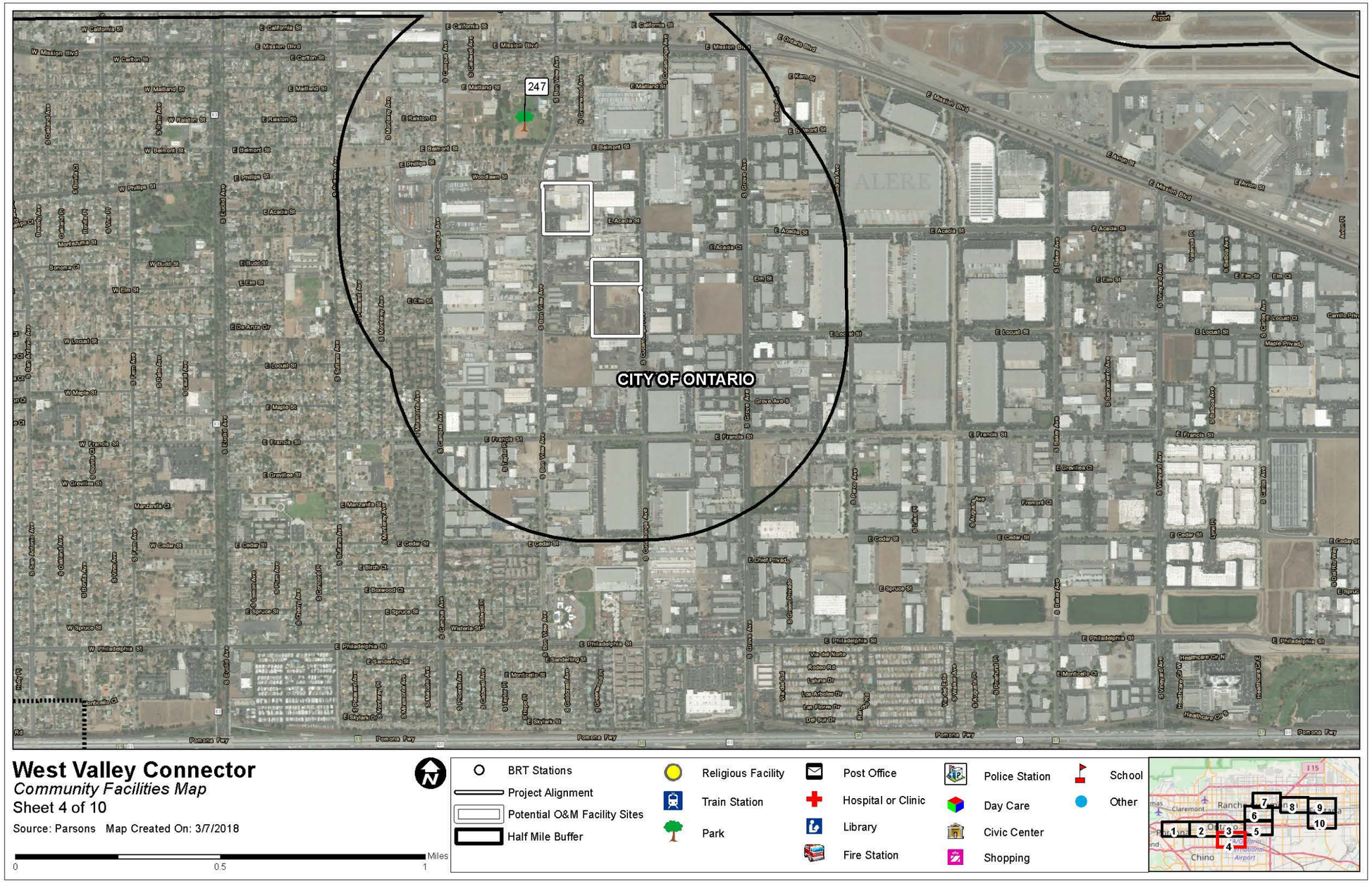

Figure 4.13-1 Community and Emergency Service Facilities (Sheet 4 of 10)

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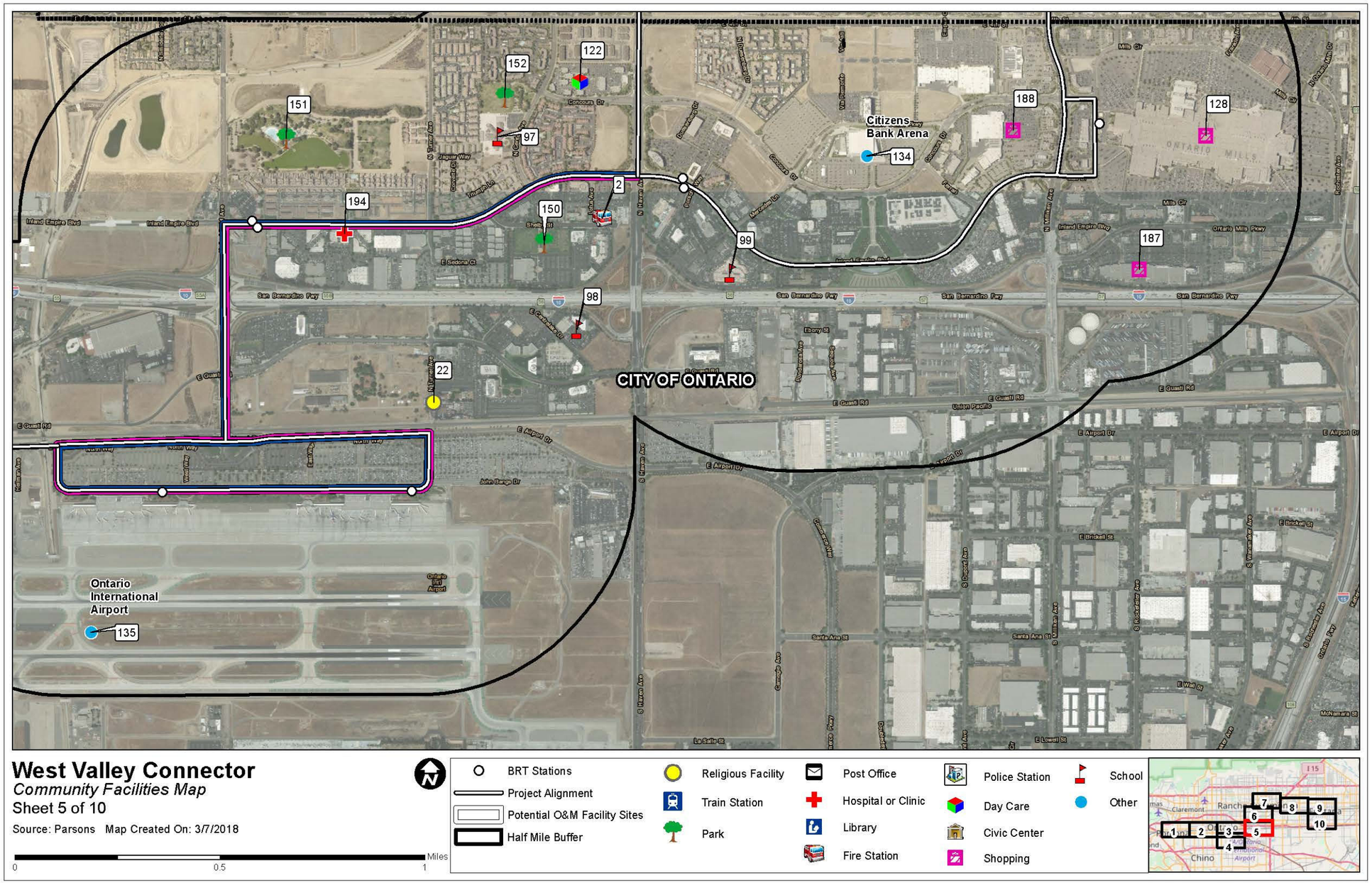

Figure 4.13-1 Community and Emergency Service Facilities (Sheet 5 of 10)

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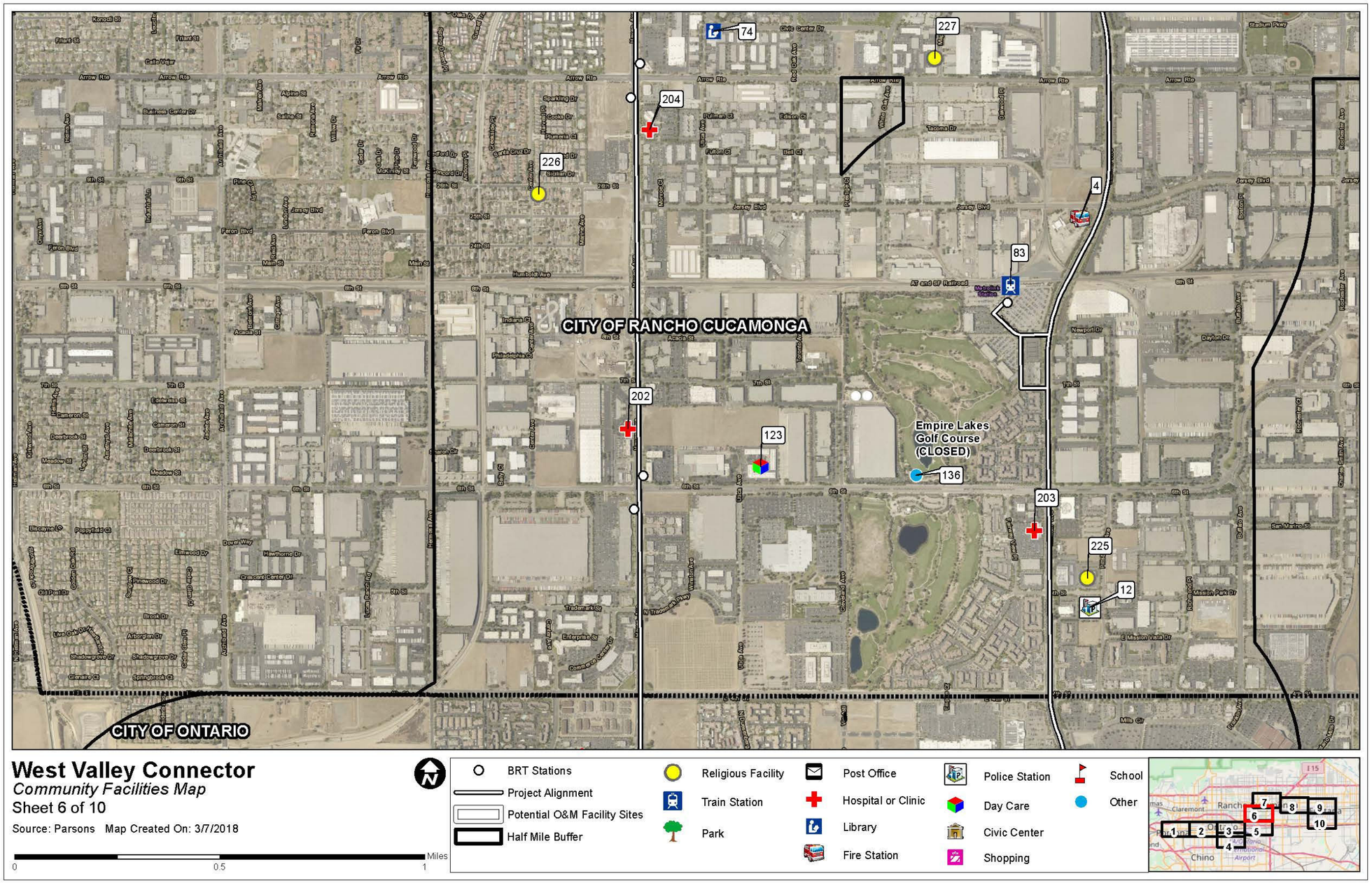

Figure 4.13-1 Community and Emergency Service Facilities (Sheet 6 of 10)

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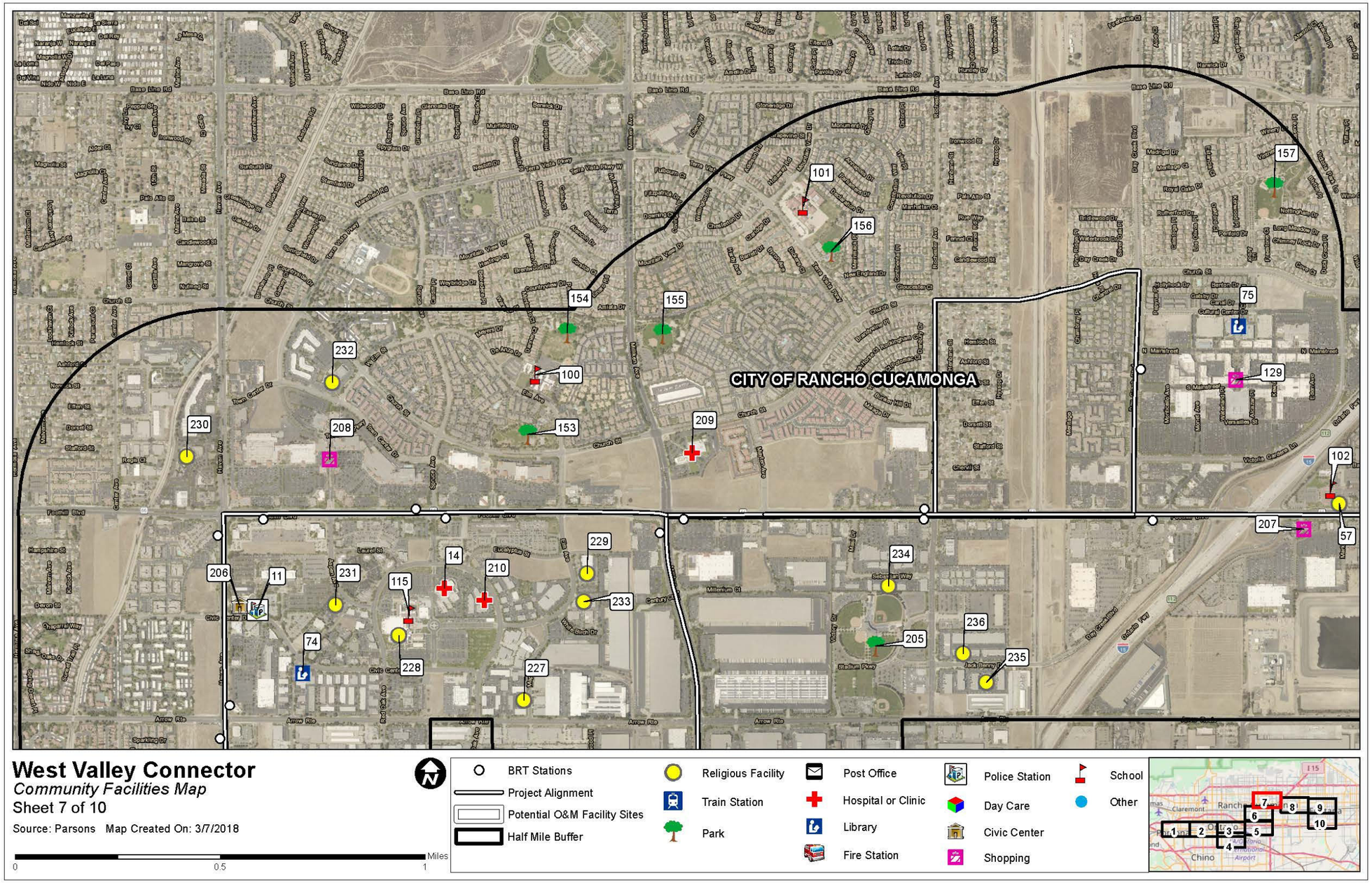

Figure 4.13-1 Community and Emergency Service Facilities (Sheet 7 of 10)

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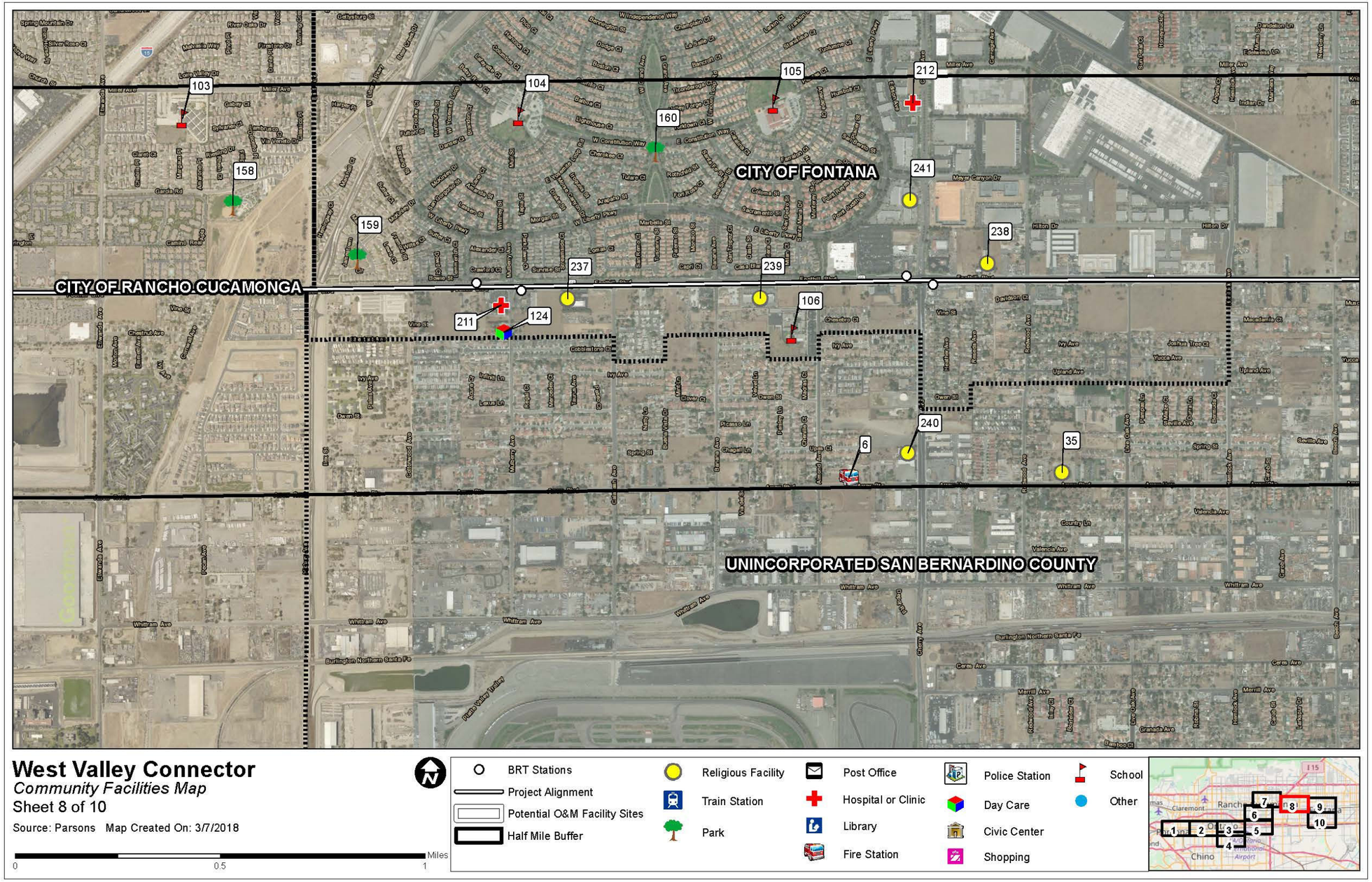

Figure 4.13-1 Community and Emergency Service Facilities (Sheet 8 of 10)

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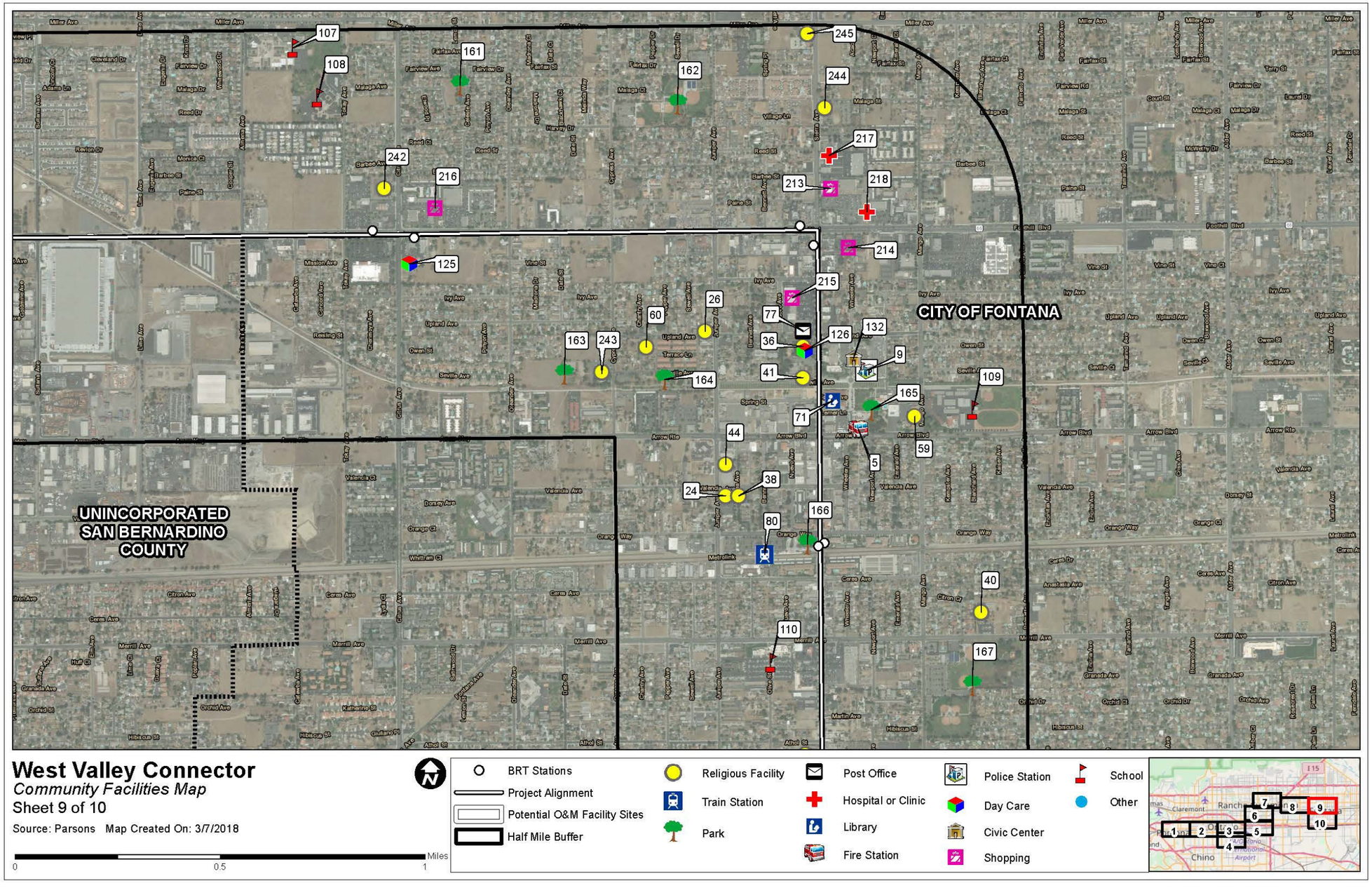

Figure 4.13-1 Community and Emergency Service Facilities (Sheet 9 of 10)

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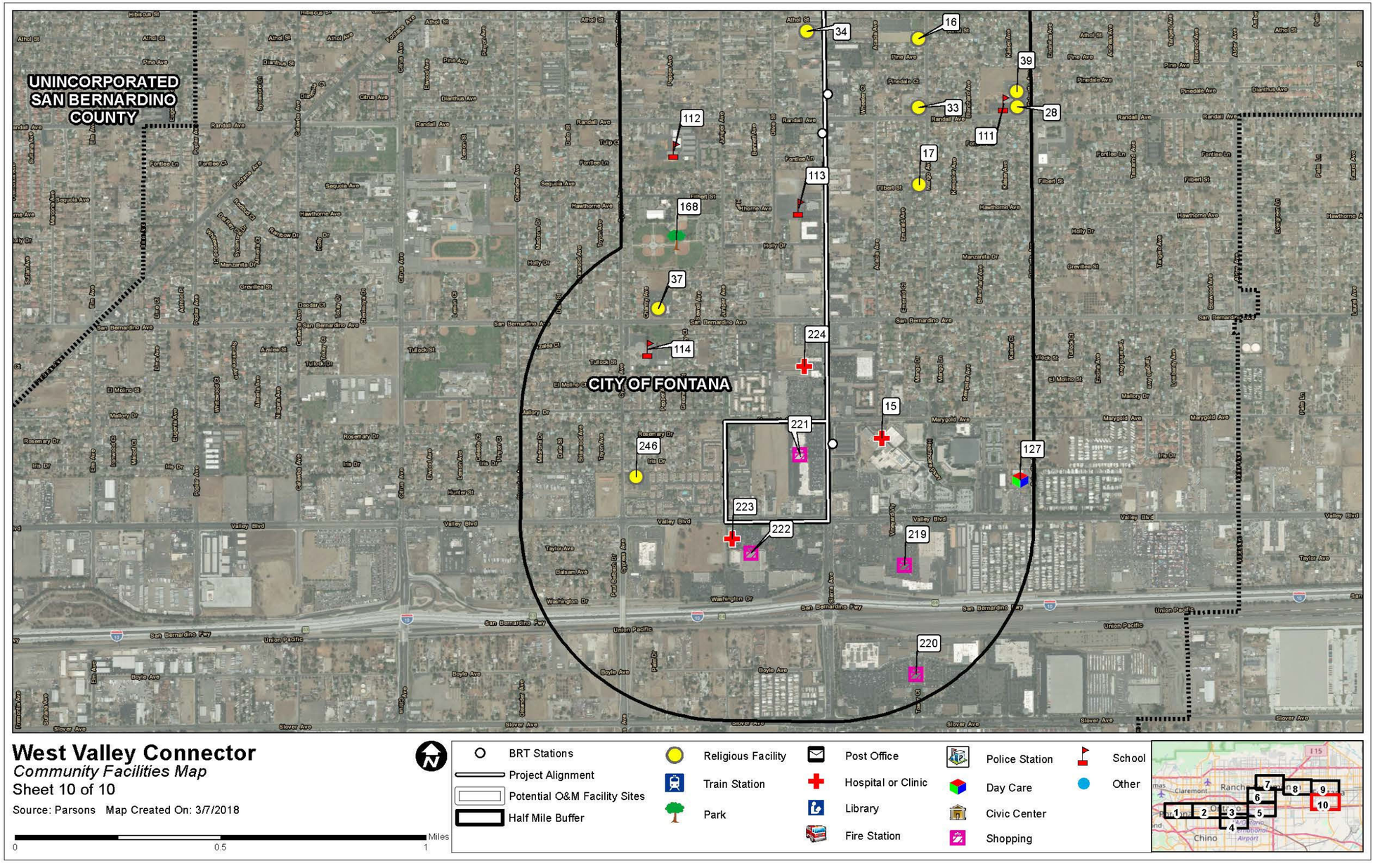

Figure 4.13-1 Community and Emergency Service Facilities (Sheet 10 of 10)

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Table 4.13-2 Location of Utilities Contained within the WVC Right-of-Way

Utility Owner	Facility	Size
AT&T	Telecommunication	Overhead and underground
City of Fontana	Sewer	Varies 6" to 33" pipe
	Water	Varies 2" to 20" pipe
	Gas	Varies 2" to 6" pipe
City of Montclair	Water	Varies 1" to 30" pipe
	Sewer	Varies 4" to 18" pipe
City of Ontario	Sewer	Varies 8" to 30" pipe
	Water	Varies 1" to 30" pipe
City of Pomona	Sewer	8" pipe
	Water	Varies 6" to 10" pipe
City of Rancho Cucamonga	Sewer	6", 8", 24", 27" pipe
	Water	Varies 6" to 16" pipe
	Storm drain	Varies 18" to 120" pipe
Crown Castle	Telecommunication	Fiber optics (overhead and underground)
Cucamonga Valley Water District	Water	Varies 4" to 12" and 144" pipe
Fontana Water Company	Water	Unknown
Chino Basin Municipal Water District	Water	Unknown
Kinder Morgan	Oil	Unknown
Level 3 Communications	Telecommunication	Unknown
Marygold Mutual Water Company	Water	Varies 6" to 10" pipe
Metropolitan Water District	Water	144" pipe
Monte Vista Water District	Water	Varies 2" to 30" pipe
Plains All American Pipeline	Oil	12" pipe
SCE	Electric	Overhead and underground
Southern California Gas	Gas	1" to 8", 24" and 36" pipe
Sunesys, LLC	Telecommunication	Overhead and underground
Time Warner Cable	Cable TV	Underground
Verizon Business (formerly MCI)	Telecommunication	Underground
Verizon Wireless (formerly Airtouch)	Telecommunication	Unknown
Water Facilities Authority	Water	20" pipe
Wilshire Connections	Telecommunication	Fiber optics

Natural Gas

Natural gas service within the study area is provided by the Southern California Gas Company (The Gas Company). The Gas Company owns, operates, and maintains underground gas lines in most of the public streets within the study area cities. Table 4.13-2 contains a summary of the facilities owned by The Gas Company located within the project ROW.

Water

Municipal water is provided by a variety of entities throughout the study area.

In Pomona, water is provided and distributed by the City Public Works Water Division. Most of the water is from City-owned wells, with the remaining water purchased from the Metropolitan Water District of Southern California (MWD) and Three Valleys Municipal Water District (TVMWD).

In Montclair, water is provided by the Monte Vista Water District.

The City Municipal Utilities Department provides water throughout Ontario.

In Rancho Cucamonga, water is provided by the Cucamonga Valley Water District.

There are several water suppliers within Fontana, but within the portion of Fontana included in the project corridor, water is supplied by the Fontana Water Company.

Sewer

City of Pomona Water/Wastewater Operations Division is responsible for the O&M of an extensive wastewater collection system and is tasked with ensuring proper and efficient operation of the system. The City provides sewer service throughout Pomona and to a limited area outside the City limits.

The City of Montclair provides sewer service throughout Montclair.

Within Ontario, sewer service is provided by the City of Ontario.

The City of Rancho Cucamonga provides sewer service within Rancho Cucamonga.

In Fontana, sewer service is provided by the City of Fontana.

Wastewater is treated at the Inland Empire Utilities Agency (IEUA). IEUA operates two independent sewer collection systems – The Regional Sewer System (RSS), which serves to convey primarily domestic wastewater to one of IEUA's four regional water recycling facilities, and the Non-Reclaimable Wastewater System (NRWS), which collects and conveys wastewater containing high levels of dissolved salts outside the Agency's service area.

Storm Drains

Rancho Cucamonga has storm drains that vary from 12-inch to 120-inch pipes within the project area.

Solid Waste

Solid waste collection is provided by various entities throughout the study area.

In Pomona and Ontario, the collection and removal of solid waste is handled by City departments.

The cities of Montclair, Rancho Cucamonga, and Fontana all contract with Burrtec Waste Industries for all residential and commercial trash collection.

4.13.2 Impacts

No Build Alternative

The No Build Alternative would maintain the current level of transit service along the project corridor. The project would not be constructed; therefore, the existing multimodal transportation system would not be improved. Emergency response times in the area may deteriorate as congestion increases.

Build Alternatives

The following discussion is common to Alternatives A and B.

BRT Corridor

Community Facilities

All build alternatives would operate the BRT within the existing transportation ROW. No community facilities would be relocated, nor would there be long-term operational effects on identified community facilities resulting from implementation of a build alternative. With implementation of a build alternative, transit service would be improved, which in turn would provide improved access to community facilities located in the study area.

Alternative A would not result in any property acquisitions. Permanent impacts to community facilities are not anticipated.

Alternative B would permanently impact 0.09 acre of the U.S. Post Office at 1555 E. Holt Boulevard in Ontario. Although the acquisition area would affect the sidewalk and reduce a landscaped area of the property, it would not inhibit existing operation of postal services at the property.

Emergency Services

Under both alternatives, emergency vehicles would be unrestricted in their ability to access any property along the project corridor.

Alternative B would retain full turning movements at key intersections for fire and emergency vehicles access. Coordination between SBCTA and City of Ontario Fire Department would be required as engineering design progresses to ensure emergency vehicle response times would not be impacted.

Utilities

Communications

Emergency telephones may be installed at the stations and would be provided by the local provider.

Electricity

The proposed stations would require basic utility services. Electricity would be needed for station security lighting and operation of the communication system. The proposed project would not preclude the provision of these services; therefore, no adverse effects would result.

Natural Gas

The proposed project's fleet would be comprised of 60-foot-long articulated CNG

propulsion buses. The project would not introduce a demand such that it would adversely burden the current natural gas supply.

Water

Water would be required for landscaping, maintenance, and cleaning of station areas. The proposed action would not inhibit the provision of water recourses in the area and would not result in adverse effects related to water.

Sewer

A total of 25 sewer lines are anticipated to be affected by project construction. Manhole rims and covers would require an elevation adjustment to align with the proposed grade of roadway modifications. Where manhole covers are located directly at proposed center-running stations, sewer lines would be relocated or abandoned and replaced with new lines at a new location. Sewer dipping would be conducted during project design to identify the exact locations of these potential conflicts. However, the project would not preclude the provision of these sewer services; therefore, no adverse effects would result.

Storm Drains

The proposed project would entail minor grading activities that would impact the onsite drainage pattern of some roadways and station locations, but the impacts would be mitigated by treatment BMPs. The proposed project would result in minor modifications to the existing storm drain systems so that drainage of new stations is connected to existing storm drain systems. Current street drainage is adequate for accommodating these changes.

Solid Waste

Trash receptacles would be provided to collect incidental solid waste generated by patrons using the stations. The proposed action would not result in the generation of solid waste in excess of projected capacity of local landfills; therefore, no adverse effects would result.

O&M Facility

The O&M facility would not have significant or adverse impacts on public services or utilities because it would be located on an industrial site where basic urban services and utilities, such as phone, electricity, water, natural gas, solid waste disposal, storm drains, and sewer, are already available and sized to accommodate industrial operations.

4.13.3 Avoidance, Minimization, and/or Mitigation Measures

No long-term impacts to public services and utilities would occur; therefore, no avoidance, minimization, and mitigation measures are required.

Avoidance, minimization, and mitigation measures to minimize construction impacts associated with public services and utilities are discussed in Section 5.3.14.

4.14 Safety and Security

This section presents information about the existing safety and security within the study area as it pertains to transit patrons, pedestrians, and motorists that may be affected by the proposed project.

Potential safety issues include station boarding and disembarking accidents, and ROW accidents and security issues related to stations, location and layout, and parking design.

Short-term impacts during project construction and proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with safety and security are discussed in Sections 5.2.15 and 5.3.15, respectively.

4.14.1 Regulatory Setting

It is SBCTA policy to ensure that the proposed project be designed and constructed in full compliance with FTA requirements for safety and security. Safety and security are priorities in conducting all work within the Omnitrans stations. Omnitrans has a System Safety Management Plan (SSMP) to achieve this policy. The overall objective of this SSMP is to define activities, management controls, and monitoring processes that ensure that its patrons are adequately protected and local fire and police jurisdictions have appropriate and unimpeded access to the system in the event of an incident.

4.14.2 Existing Conditions

The study area encompasses jurisdictions and agencies that have safety and security responsibilities, including SBCTA, County of San Bernardino, County of Los Angeles, and the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. The following paragraphs provide a general description of the safety programs in the study area.

Safety

As part of the SSMP, Omnitrans operates a System Safety Program Plan (SSPP) to promote safety throughout its system. The SSPP is a series of dynamic documents designed to merge safety with Omnitrans' current operations. Safety is also dictated throughout the agency by a formal Injury and Illness Prevention Program, Personnel Policy 802. There are 38 safety procedures that accompany Safety Policy 802. Specific programs include:

- Video and audio equipment on Omnitrans buses for the protection of its employees and the public.
- Direct communication services to connect all Omnitrans buses with Omnitrans Dispatch, who will contact local law enforcement, if necessary.
- Safety, security, and emergency preparedness information communicated through posters, bus book information, bus cards, bus stop information signs, and the Internet.
- Safety and security considerations, compatible with other system requirements, are incorporated into the design, construction, and

operation of project elements, including facilities, equipment, and systems to minimize the potential for accidents and criminal activity.
- Hazards associated with all phases of system design, construction, and preparation for operations are identified and then reduced through elimination or minimizing the risk to obtain an acceptable level of safety and security.
- Patrons, employees, contractor employees, the public, and Omnitrans property are protected from hazards or unsafe conditions.

Security

Omnitrans' internal security staff and contract security guard services handle security. Issues that arise with passengers on buses are called into the Omnitrans Dispatch Office, and a Field Supervisor is dispatched to the scene. Omnitrans follows the Workplace & Transit System Security Program, Personnel Policy 803. There are 17 security procedures that accompany Security Policy 803. These programs establish security procedures to protect every employee and the public. If incidents escalate beyond the control of Omnitrans drivers and staff, then Omnitrans Dispatch contacts local law enforcement in the city where the incident is taking place. For the study area, local law enforcement includes the Pomona Police Department (PD), Montclair PD, Ontario PD, Rancho Cucamonga PD, Fontana PD, County of San Bernardino Sheriff's Department, and County of Los Angeles Sheriff's Department.

4.14.3 Impacts

Pedestrian and motorist safety is evaluated below on a qualitative basis using the experience of BRT systems throughout North America with similar types of service. The assessment of security also presented below addresses the potential for crime against persons, property theft, and vandalism.

No Build Alternative

Continued transit operations under the No Build Alternative would continue to use existing Omnitrans safety and security guidelines. SBCTA would implement additional safety measures and procedures in response to increasing demand over time, as required. Omnitrans would maintain current levels of employee and patron safety. Safety and security concerns associated with the No Build Alternative would not result in an adverse impact.

Build Alternatives

BRT Corridor

Alternative A

Pedestrian Safety

Alternative A would operate in mixed-flow lanes. Stations along mixed-flow lanes would include side-running stations, far-side platforms, and near-side platforms. Pedestrian crossings would be located at existing signalized intersections, and pedestrians would cross to the stations via clearly marked crosswalks. Pedestrian safety concerns associated with mixed-flow operations would be the same as

existing conditions or the No Build Alternative.

Motorist Safety

Under Alternative A, motorist safety would be the same as existing conditions. Following standard operational practices in mixed-flow traffic, and providing signal warnings, pavement separations, and signals would minimize the potential for adverse effects. Experience with similar BRT systems in other locations suggest that there would be an initial time period of adjustment, followed by a steady-state long-term period of time in which drivers of private vehicles understand and obey the restrictions, separations, and warning systems provided.

Security

The design of BRT facilities, including vehicles, stations, and parking lots, would provide a safe, secure, and comfortable transit system consistent with current Omnitrans operating rules and FTA regulatory requirements. Mixed-flow sbX stations would be at-grade and would be comprised of two separate platforms along the alignment, one for each direction of travel located along the curbs and sidewalk.

Omnitrans would apply safety and security procedures to all sbX stations, which would result in no adverse effect.

Alternative B

Alternative B consists of side-running stations where the BRT buses would be operated in a mixed-flow lane and center-running stations where the BRT buses would be operated in the dedicated lane. Impacts on safety and security for the mixed-flow lane and side-running station operations would be the same as that described under Alternative A. The following discussion is centered around the safety and security resulting from the dedicated lane and center-running station operations.

Pedestrian Safety

Under Alternative B, buses would operate in center exclusive lanes along Holt Boulevard, between Benson Avenue and Vine Avenue and between Euclid Avenue and Vineyard Avenue in Ontario. Pedestrians would access the center stations from existing signalized intersections. Each crosswalk accessing the center lane would be clearly marked and equipped with safety features, including visual and audible warning signals for the hearing and sight impaired in compliance with ADA regulations. Safety devices (e.g., colored textured concrete, pavers, or embedded lights) would help prevent pedestrians from accidentally entering the center exclusive lane. A short fence would be provided along the center exclusive lane, which would visually deter pedestrians from crossing exclusive lanes at locations other than designated pedestrian crossings.

Motorist Safety

Under Alternative B, sbX buses would travel in center exclusive lanes where bus drivers would have full control of their vehicle. Conflicts could occur if private vehicles turn left across the center exclusive bus lane. SBCTA would provide

clearly distinguished surfaces for the exclusive lanes (e.g., striping delineations and pavement markings that say “Bus Only”) and warning and information signs to alert private vehicles to the presence of the exclusive lanes, thereby preventing vehicles from making left turns in front of sbX buses. SBCTA would also engage the public with an educational campaign to make the driving public aware of the change in roadway conditions.

Intersections along the project route would operate as at-grade street crossings and would not require the installation of bells, gates, or whistles. Before reaching the intersection, private automobile drivers would be warned by presignals that they are approaching an intersection that crosses the center exclusive lane. The center exclusive lane would be painted or striped to separate it visually from the general purpose roadway. In addition, safety devices (e.g., colored textured concrete, pavers, or embedded lights) would help alert motorists to the presence of the center exclusive lane.

Security

The design of facilities, including vehicles, stations, and parking lots, would provide a safe, secure, and comfortable transit system consistent with current Omnitrans operating rules and FTA regulatory requirements. Center-running stations would consist of raised platforms of sufficient length and width to accommodate passenger loading. Platforms would be well-lit and include amenities such as canopies, seating, and trash receptacles. They would also include some or all of the following safety and security equipment: security cameras, light fixtures, PA system, and emergency telephones.

Omnitrans would apply safety and security procedures to all sbX stations, resulting in no adverse effect.

O&M Facility

Pedestrian Safety

The O&M facility would be located in the industrial zoned land use within the City of Ontario separated from the dense residential and commercial areas; thus, operation of the facility would have no significant or adverse effects on pedestrian safety. The low volumes of buses and cars entering and exiting the facility throughout the day would not pose a substantial risk, and the facility itself would not generate a substantial volume of pedestrians.

Motorist Safety

Buses, employees, vendors, and visitors would generate a low but steady volume of vehicle traffic in and out of the O&M facility. This low volume of additional vehicle traffic would not have a significant or adverse effect on motorist safety near the O&M facility.

Security

The O&M facility would be fenced and would be equipped with night lighting sufficient to illuminate all parking and other exterior areas. The facility would have a full-time security guard. No adverse security impacts are anticipated.

4.14.4 Avoidance, Minimization, and/or Mitigation Measures

No Build Alternative

The No Build Alternative does not result in potential impacts to safety and security; therefore, mitigation measures are not required.

Build Alternatives

Although not required to alleviate impacts, SBCTA proposes the following design features to ensure patron safety and security on the sbX system:

SS-1: All stations and parking facilities shall be equipped with monitoring equipment and/or be monitored by SBCTA security personnel on a regular basis.

SS-2: SBCTA shall implement a security plan that includes in-vehicle and station surveillance by SBCTA security or other local jurisdiction security personnel.

SS-3: All stations shall be lit to standards that avoid shadows, and all pedestrian pathways leading to/from sidewalks and parking facilities shall be well illuminated.

SS-4: SBCTA shall coordinate and consult with Pomona PD, Montclair PD, Ontario PD, Rancho Cucamonga PD, Fontana PD, County of San Bernardino Sheriff's Department, and County of Los Angeles Sheriff's Department to develop safety and security plans for the alignment, parking facilities, and station areas.

SS-5: The station design shall not include design elements that obstruct visibility or observation, nor provide discrete locations favorable to crime; pedestrian access at stations shall be ground level with clear sight lines.

SS-6: For motorist safety, SBCTA shall engage the public with educational campaigns to make the public aware of changes in roadway conditions.

SS-7: Before reaching the intersection, private automobile drivers shall be warned by presignals of approaching intersections that cross exclusive lanes. The exclusive lane shall be painted or striped to separate it visually from the general purpose roadway or other additional safety devices (e.g., colored textured concrete, pavers, or embedded lights) may be placed to help alert motorists to the presence of the center exclusive lane.

SS-8: Platforms shall be well-lit and include amenities such as canopies, seating, and trash receptacles. The platforms will also include some or all of the following safety and security equipment: security cameras, light fixtures, PA system, and emergency telephones.

Avoidance, minimization, and mitigation measures to minimize construction impacts associated with safety and security are discussed in Section 5.3.15.

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4.15 Parks and Recreation

This section analyzes potential long-term impacts to parks and recreation along the WVC Project, including the proposed O&M Facility, as a result of project operations.

Short-term impacts during project construction and proposed avoidance, minimization, and mitigation measures to minimize construction impacts associated with parks and recreation are discussed in Sections 5.2.16 and 5.3.16, respectively.

The information contained in this section is summarized from the *West Valley Connector Project – Community Impact Report* (Parsons, 2018c) prepared for the project.

4.15.1 Existing Conditions

The study area for parks and recreational facilities includes those resources within a 0.5-mile radius of the project corridor. Approximately 33 parks were identified within 0.5 mile of the project corridor, as shown in Table 4.15-1. The location of these resources within the project area is shown in Figure 4.13-1 in Section 4.13, Public Services and Utilities, of this report.

4.15.2 Impacts

No Build Alternative

Because there would be no construction or operation of the proposed BRT service with this alternative, no impacts to parklands would occur.

Build Alternatives

Based on the preliminary design, park and recreational facilities within the study area would not be affected by either Alternative A or Alternative B.

O&M Facility

Based on the preliminary design, park and recreational facilities within the study area would not be affected by construction of the proposed O&M facility.

4.15.3 Avoidance, Minimization, and/or Mitigation Measures

There are no impacts to any parks or recreational facilities within the study area; therefore, no avoidance, minimization, and mitigation measures are proposed.

Table 4.15-1 Parks within 0.5 Mile of the Project Corridor

Pomona	
Memorial Park Centennial Park	Garfield Park
Montclair	
Sunset Park Saratoga Park	Kingsley Park
Ontario	
James R. Bryant Park Euclid Avenue Parkway Ontario Dog Park Nugent's Park Sam Alba Park	Veterans Memorial Park James Galanis Park Carpenter's Union Park Cucamonga-Guasti Regional Park Ontario Motor Speedway Park Bon View Park
Rancho Cucamonga	
Ralph M. Lewis Park West Greenway Park Victoria Arbors Park	Milliken Park Garcia Park Mountain View Park
Fontana	
Patricia Murray Park McDermott Sports Complex & McDermott Park West Northgate Park Bill Marin Park Cypress Park	Seville Park Miller Park Santa Fe Park Veteran's Park Jack Bulik Park

Source: WVC Project Community Impact Report, 2018.

4.16 Other CEQA and NEPA Considerations

This section analyzes other CEQA and NEPA considerations, including cumulative impacts, irreversible and irretrievable commitments of resources, and the relationship between local short-term uses of the environment and maintenance and enhancement of long-term productivity.

The proposed project is not considered to have adverse cumulative effects for land use, acquisitions, environmental justice, biological resources, air quality, energy, or noise. The proposed project would require the commitment of irreversible and irretrievable resources, including property acquisition, consumption of fossil fuels, labor, and construction materials, and the expenditure of public funds.

4.16.1 Cumulative Impacts

A cumulative impact analysis is required under both CEQA and NEPA. A "cumulative impact" is the impact on the environment that results from the incremental impact of the proposed project (proposed action) when considered in the context of other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such actions (40 CFR §1508.7). Cumulative impacts must be addressed if the incremental effect of a project, combined with the effects of other projects, is "cumulatively considerable" (14 CCR §15130(a)).

Cumulative impacts can result from individually minor but collectively significant actions occurring over time. NEPA provides the context and carries the mandate to analyze the cumulative effects of a federal action. The purpose of cumulative effect analysis is to ensure that federal decisions consider the full range of an action's consequences.

CEQA recognizes two methods of establishing the cumulative impact setting or scenario: the "list approach" and the "projections approach." The first approach uses a list of past, present, and reasonably foreseeable future projects producing related or cumulative impacts (14 CCR §15130(b)(1)(A)). Together, these projects can comprise the cumulative scenario that forms the basis of the cumulative impact analysis. The second approach uses land use, population, and employment projections contained in adopted general plans or related planning documents that have been adopted or certified, and that describe regional or area-wide future conditions contributing to the cumulative impact (14 CCR §15130(b)(1)(B)). This approach is particularly appropriate for transportation projects as it accounts for future travel demand that would be generated by anticipated land use and employment changes.

A hybrid approach that relies on a list for evaluating local cumulative impacts and that relies on projections for evaluating regional cumulative impacts is also acceptable. This cumulative impact analysis relies on information provided by

regional plans – such as the RTP (traffic) and SIP (air quality), as well as the local development projects listed in Table 2-3 and the local transportation projects listed in Table 2-4. CEQA also states that the discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion of cumulative impacts shall be guided by standards of practicality and reasonableness and shall focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact" (14 CCR §15130(b)).

Cumulative impacts identified for the WVC Project are those impacts that result from past, present, and reasonably foreseeable future actions within the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, Fontana and surrounding areas. The study area for each of the resources potentially affected by the cumulative projects is defined below. The affected environment for each of these resources has been previously discussed in their respective portions of Chapters 3 and 4.

Tables 2-3 and 2-4 summarize the reasonably foreseeable projects considered in the cumulative impact analysis of this project. The approximate locations of the cumulative projects are shown in Figure 2-16. Land development projects included in Table 2-3 are all part of the overall urban development already planned for the project study area. Their contribution to cumulative impacts is expected to not be adverse. However, of all related development plans/projects listed in Table 2-3, there is a potential that project 19 (Empire Lake Specific Plan) adopted by the City of Cucamonga in 2016 could have the construction schedule that is overlapped with the construction of the proposed BRT station at Metrolink Stattion in Rancho Cucamonga, which is the closest station to the proposed (Empire Lake Specific Plan development area.

Several of the transportation projects listed in Table 2-4 are studies of potential projects that may or may not occur in the foreseeable future, and no specific construction periods or anticipated opening years for operations are available. These include the following projects listed in Table 2-4:

- #4 – Los Angeles-San Bernardino Intercounty Transit and Rail Study. The study is currently underway, and no specific construction date is available.
- #10 – Ontario Airport Rail Access Study. Construction of this project has not been planned.
- #11 – The ARRIVE Corridor Study. Construction of this project has not been planned.
- #13 – Customer-Based Ridesharing and Transit Interconnectivity Study. The study is currently underway, and no specific construction date is available.

- #14 – Foothill Boulevard BRT Study. Construction of this project has not been planned.

Therefore, these projects are not included in the cumulative effects analysis.

Several of the projects listed in Table 2-4 are small scope projects that involve fixing existing or constructing new sidewalks; installing Americans with Disabilities Act (ADA) access ramps; removing and replacing trees, and occasionally small amounts of ROW acquisition. These projects are typical street improvement projects that have no adverse effects on the environment. As a result, their contribution to cumulative impacts would be negligible. These projects from Table 2-4 are therefore not included in the cumulative effects analysis:

- #1 – Pomona ADA Improvements – Major Street Rehabilitation
- #2 – Pomona ADA Curb Ramps and Sidewalk Compliance Program
- #3 – Pomona ADA Transition Plan
- #5 – Improvement to Transit Access for Cyclists and Pedestrians
- #15 – WVC Corridor – Safe Routes to Transit Project
- #16 – Safe Routes to School Project – Fontana Avenue and Arrow Boulevard
- #17 – Fontana Grade Crossings Pedestrian Improvement Project

The following projects from Table 2-4 are considered in the cumulative impact analysis, as appropriate, depending on the location of the project to the individual resource study areas:

- #6 – I-10 Corridor Project - The I-10 Corridor Project is proposed to improve safety and relieve traffic congestion on I-10, 0.4 mile west of White Avenue in Pomona at Post Mile (PM) 44.9 to just east/west of Live Oak Canyon Road in Yucaipa at PM 37.0.
- #7 – I-10/Grove Avenue Interchange Project - The I-10/Grove Avenue Interchange Project proposes to improve on the operational deficiencies of the existing interchange and relieve traffic congestion to accommodate anticipated increases in automobile and truck traffic in the study area. The project would construct a new interchange at Grove Avenue, close the existing I-10/4th street interchange, and include improvements along Grove Avenue and 4th Street near the interchange.
- #8 – Grove Avenue Corridor Project - The Grove Avenue Corridor Project proposes to widen Grove Avenue between 4th Street and Holt Boulevard in Ontario. The project would accommodate recent and projected growth in passenger and goods/trucks movement associated with Ontario International Airport and changes in land use since Grove Avenue was originally constructed.
- #9 – Metro Gold Line Foothill Extension Construction Activity: Ontario Airport Extension – This project would extend the Gold Line for approximately 8 miles – from the TransCenter in Montclair, located just east of Monte Vista Avenue and north of Arrow Highway, to Ontario – and

terminate the line at Ontario International Airport. Although not formally part of the Foothill Extension Project, the Construction Authority completed a study to understand the feasibility of extending the line from Montclair to the airport in 2008. The Initial Study concluded that extending the line was feasible and provided many potential route options.

- #12 – I-15 Corridor Improvement Project - The project proposes to improve a 14.6-mile-long segment of the I-15 corridor. The proposed project would include the addition of one to two tolled Express Lanes in each direction from Cajalco Road where it crosses I-15 in Corona to just south of the I-15 and SR-60 interchange at Riverside Drive.

Impacts

This section discusses potential impacts to various resources that could occur as a result of implementation of the proposed WVC Project, together with the other related projects listed in Tables 2-3 and 2-4, as applicable.

Though it is not currently anticipated, if multiple projects are built during the same general time frame, localized construction-related traffic congestion and construction air emissions and noise impacts would likely increase. SBCTA and Omnitrans would work together with other lead agencies to ensure overlapping construction from multiple projects in the same vicinity would be managed to avoid or lessen cumulative impacts.

Considering the nature of the proposed project and the resulting impacts, there could be the potential for cumulative impacts for several resources, including:

- Aesthetics/Visual Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Hazardous Materials/Waste
- Hydrology/Water Quality
- Land Use (including land acquisition)
- Traffic and Transportation
- Noise and Vibration
- Energy
- Demographics and Neighborhood
- Public Services/Utilities

The following resources are not considered in the cumulative impact analysis because either the effect is localized or the effects would be fully mitigated with the proposed mitigation measures.

- Geology, Soils, and Seismicity: The impact is localized and will be mitigated with the proposed mitigation measures.
- Parks and Recreation: The proposed project would not result any impacts to park and recreation services.
- Global Climate Change: The GHG Emissions Study quantified construction and operational emissions and assessed consistency with GHG reduction plans. The proposed project is a mass transit system that is consistent with State and regional policies to reduce long-term GHG emissions. No significant

impacts have been identified under CEQA, and no adverse effects have been identified under NEPA. No mitigation or control measures are necessary to reduce GHG emissions.

Analysis of cumulative impacts for these other resources is presented below. The affected environment for each of these resources has been previously discussed in their respective portions of Chapters 3 and 4. This analysis focuses on the cumulative impacts from the build alternatives.

Aesthetics/Visual Resources

Resource Study Area

The project is located in an area with two identifying elements: the flat appearance of the foreground landscape and the steep San Bernardino and San Gabriel mountains, which form a dramatic backdrop to the development that occurs in most of the resource study area. One additional element to be considered in the resource study area is the haze that frequently develops in the area, obscuring views to the mountains and influencing the overall appearance of the resource study area.

Current Condition and Historical Context

The landscape is generally medium-density urban development. The project's location has a general mixed-use character. The most prominent scenic resources in the area are the San Bernardino and San Gabriel mountains.

Project Impacts

Project operation and construction impacts associated with aesthetics/visual resources are discussed in Sections 4.1 and 5.2.1, respectively.

The proposed WVC project would introduce new stations, lighting, and other permanent sbX visual elements. In addition, the proposed project would require removal/replacement of approximately 62 trees to construct side-running stations. Operation of the proposed project would be consistent with existing urban visual character of the corridor. For Alternative B at the 3.5 mile dedicated lane segment, the project would alter the current visual setting in some areas (e.g., Holt Boulevard, between Benson Avenue and Vineyard Avenue), including removal/replacement of landscaping and approximately 406 trees (364 trees within the roadway widening segment to construct the center-running stations and bus-only dedicated lanes and 42 trees to construct the side-running stations), pavement widening, and reduced building setbacks; not considered adverse effect to viewer groups.

Construction activity (equipment and lighting) would be noticeable to area residents and others in the vicinity. Impacts would be short term and are a common feature of the urban environment. No adverse impacts are anticipated.

No adverse impact to visual and aesthetic would occur as a result of the O&M facility construction and operation.

Reasonably Foreseeable Actions

Project 19 (Empire Lakes Specific Plan) listed in Table 2-3 would develop the privately-owned Empire Lakes Golf Course (160 acres) into a mixed-use, TOD site. The project would include a combination of residential, commercial, recreational, and office uses in an urban setting near transit services, including the Rancho Cucamonga Metrolink Station, and local regional activity centers. The project site is located north of 4th Street, west of Milliken Avenue, east of Cleveland Avenue, and south of 8th Street and the railroad. Construction of the specific plan project is scheduled to commence in 2019 and complete by 2024.

Projects 6, 7, 8, 9, and 12 listed in Table 2-4 consist of roadway projects that may increase intensity and density of urban development in the project area through construction of new infrastructure systems.

Project 6, the I-10 Corridor Project, goes through of the cities of Pomona, Montclair, Ontario and Fontana. Construction is planned to start in 2019 with an opening year of 2024. Both build alternatives analyzed in the project environmental document have similar impacts to visual/aesthetics. The project would result in changes to the visual quality and/or character associated with pavement width, bridge replacements, vegetation removal, construction activities, and new and modified structures. Removal of vegetation near interchange areas would likely have the greatest impact on visual quality. Other elements such as replacement structures, new retaining walls, and soundwalls would create permanent change to elements within the viewshed. Multiple mitigation measures have been proposed to reduce visual impacts.

Project 7, the I-10/Grove Avenue Interchange Project, is located within the City of Ontario. An environmental document has not been released as of June 2018; therefore, visual impacts from this project have not been determined and the construction schedule has not been finalized. However, this project does not intersect with the WVC project. As discussed in the Preliminary Environmental Analysis Report for the project, there is a potential for visual impacts on sensitive viewers. A Visual Impact Assessment was recommended to address aesthetic treatments to address impacts on sensitive viewer groups. Incorporation of aesthetic treatments to address impacts to sensitive viewers would assist in reducing visual impacts of the project.

Project 8, the Grove Avenue Corridor Project, is located within the City of Ontario and intersects the WVC Project at Grove Avenue and Holt Boulevard. An environmental document has not been released as of June 2018; therefore, visual impacts from the proposed project have not been determined and the construction schedule has not been finalized. However, the intersection of Grove Avenue and Holt Boulevard is planned to be constructed in late 2020

and completed by early 2021. However, based on the nature of the proposed improvements at the intersection, no visuals impacts are anticipated.

Project 9, the Metro Gold Line Foothill Extension to Ontario Airport, will be located in Montclair, Upland, and Ontario. Construction is anticipated to start in 2020 and finish in 2026. While most visual impacts would be less than significant, adverse and unavoidable visual impacts would result from the new flyover at Towne Avenue in Pomona and from removing some of the deodar cedar trees adjacent to the right-of-way in the City of La Verne. While these impacts would be adverse and unavoidable, they would only occur at singular locations and would be highly localized and would not make a substantial contribution to a cumulative adverse effect.

Project 12, the I-15 Corridor Improvement Project, goes through the cities of Fontana, Rancho Cucamonga and Ontario. Construction is planned to start in 2021 with an opening year of 2024. Visual impacts include removal of vegetation, widening the roadway, adding low retaining walls, and new signage and sign poles. Measures would be designed and implemented to reduce visual impacts.

Cumulative Impacts

Alternatives A and B

Based on the available information on other foreseeable projects listed above, construction of the land development project 19 and transportation projects 6, 9, and 12 could potentially occur in a similar timeframe as the proposed WVC project. Local residents, commuters, and businesses in the surrounding communities may observe the construction activity more frequently during the construction period of the proposed projects. However, the impacts are temporary and would cease after the construction activities of each project are completed.

The primary purposes of the related transportation projects are to alleviate traffic congestion and to accommodate the planned growth in the respective project areas, the visual effects would be limited to the viewshed in the related projects' sites. With the incorporation of mitigation measures undertaken by each individual project, no cumulative impacts to aesthetic and visual resources are anticipated.

Air Quality

Resource Study Area

The project site is located in the South Coast Air Basin (Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Basin subregion of the SCAQMD covers an area of 6,745 square miles. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The Basin is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east; and the San Diego County line to the south.

Current Condition and Historical Context

The Basin is in an area of high air pollution potential due to its climate and topography. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The region experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatologic pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds.

Project Impacts

Project operation and construction impacts associated with air quality are discussed in Sections 4.2 and 5.2.2, respectively.

The proposed WVC project would not result in adverse effects to mobile source air toxic (MSAT) emissions; nor would it cause a particulate matter (PM) or carbon monoxide (CO) hot-spot within the project corridor.

Regional reactive organic gas (ROG), CO, and nitrogen oxide (NOX) emissions would decrease, while particulate matter less than 10 microns in diameter (PM_{10}) and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) would slightly increase.

Total vehicle miles traveled (VMT) in the project area would decrease slightly compared to the No Build Alternative.

During construction, short-term degradation of air quality may occur due to the release of particulate emissions generated by construction-related activities.

Reasonably Foreseeable Actions

All the projects listed in Tables 2-3 and 2-4 are within the Basin. However, only land development project 19 listed under Table 2-3 and transportation projects 6, 7, 8, 9, and 12 listed in Table 2-4 would potentially result in construction and operation of buildings and infrastructure that would potentially contribute to the cumulative condition.

Project 6, the I-10 Corridor Project goes through of the cities of Pomona, Montclair, Ontario and Fontana. Construction is planned to start in 2019 with an opening year of 2024. Both build alternatives analyzed in the environmental document would increase regional emissions for VOCs, NOx, and CO. While one of the build alternative would increase PM_{10} and $PM_{2.5}$ regional emissions, the other build alternative would result in the decrease of PM_{10} and $PM_{2.5}$ regional emissions. Both would result in diesel particulate matter changes. Several mitigation measures have been recommended to reduce air quality impacts.

Project 7, the I-10/Grove Avenue Interchange Project, is located within the City of Ontario. An environmental document has not been released as of June 2018; therefore, the result of air quality analysis and the construction schedule are not currently available.

However, as discussed in the Preliminary Environmental Analysis Report for the project, it is expected that the proposed project would improve area traffic congestion and therefore have a beneficial effect on air quality.

Project 8, the Grove Avenue Corridor Project, is located within the City of Ontario and intersects the WVC at the intersection of Grove Avenue and Holt Boulevard. An environmental document has not been released as of June 2018; therefore, the result of air quality analysis and the construction schedule are not currently available. However, the intersection of Grove Avenue and Holt Boulevard is planned to be constructed in late 2020 and completed by early 2021. While construction emissions associated with the widening of this intersection may occur at the same time as the WVC project, the emissions would be short-term and would ceased once construction is complete. Like the I-10/Grove Avenue Interchange Project, it is expected that operation of the proposed project would improve area traffic congestion and therefore have a beneficial effect on air quality.

Project 9, the Metro Gold Line Foothill Extension to Ontario Airport, will be located in Montclair, Upland and Ontario. Construction is anticipated to start in 2020 and finish in 2026. The trains utilized will be electrically powered. VMT is expected to be reduced. As a result, air quality is expected to improve with the Build Alternative. During construction, the project may contribute to regional air quality impacts; however, the emissions would be localized and short-term in duration.

Project 12, the I-15 Corridor Improvement Project, goes through the cities of Fontana, Rancho Cucamonga and Ontario. Construction is planned to start in 2021 with an opening year of 2024. Construction emissions are anticipated to be lower than significance threshold limits; and operation emissions are anticipated to reduce over time with implementation of EPA's vehicle and fuel regulations.

Cumulative Impacts

Alternatives A and B

Cumulative impacts on air quality may result from the combination of incremental changes in emissions resulting from past, present, and reasonably foreseeable future development within the proposed project location, as outlined in Tables 2-3 and 2-4.

Because the Basin is designated as a State and/or federal nonattainment area for O_3, PM_{10}, $PM_{2.5}$, and Pb, there is an ongoing regional cumulative impact associated with these pollutants. An individual project can emit these pollutants on a regional level without significantly contributing to this cumulative impact depending on the magnitude of emissions. SCAQMD has indicated that the project-level thresholds may be used as an indicator to determine if project emissions contribute to a cumulative impact.

Based on the results of air quality analysis for the proposed WVC project, air

pollutant emissions associated with regional construction and operation of the proposed project would not exceed any applicable project-level SCAQMD thresholds of significance. However, construction activities associated with Alternative B would exeed the localized signifiance thresholds for PM_{10} and $PM_{2.5}$. However, construction emissions are short-term in duration and are localized and would cease once construction is complete. Based on the available information on other foreseeable projects listed above, construction of land development project 19 and transportation projects 6, 9, and 12 could potentially occur in a similar timeframe as the proposed WVC project. Construction emissions of these projects would also be short-term, localized and cease once cnostruction is complete; therefore, construction emissions would not be cumulative considerable.

These land development and transportation projects, along with the proposed project, have been included in the latest regional transportation plan. The 2016 RTP was prepared, published and approved. Therefore, these projects all meet the regional conformity. As such, cumulative air quality impacts have been addressed.

The proposed project is a transit project and would not result in adverse effects to MSAT emissions; nor would it cause PM or CO hot-spot within the project corridor. Therefore, the proposed project would not result in a substantial contribution to cumulative emissons for air quality when considered in combination with the other reasonably foreseeable projects.

Biological Resources

Resource Study Area

The resource study area for biological resources (Biological Study Area – BSA) is 500 feet in width over the length of the project and up to 1,000 feet for mapping of Delhi soils. The BSA is larger than the area directly or indirectly impacted by project construction activities.

Current Condition and Historical Context

The project is located within a relatively flat portion of Los Angeles and San Bernardino counties that is a developed area. Most of the study corridor has been developed by urban land uses, resulting in additional leveling of topography. Vegetation communities in the BSA include developed/ornamental, disturbed/ ruderal (including non-native grassland), agricultural/ vineyard, waterways (channels), and disturbed CSS (see Section 4.3.2). The proposed project is an urban corridor in a developed area that is highly disturbed. Areas of compacted soils containing non-native grassland, typical of roadway shoulders, are found in the BSA.

Project Impacts

Project operation and construction impacts associated with biological resources are discussed in Sections 4.3 and 5.2.3, respectively.

The proposed WVC project would result in no permanent impacts to vegetation under

Alternative A and approximately 1.1 acres of permanent impacts to Disturbed/ Ruderal habitat under Alternative B. This vegetation is highly disturbed and is not suitable habitat for any sensitive species including burrowing owl. At the West Cucamonga Channel, Alternative B would potentially have a temporary impact to 0.2 acre under the jurisdiction of USACE and the RWQCB and 0.2 acre under the jurisdiction of CDFW. There would be no biological impacts from the O&M Facility.

Reasonably Foreseeable Actions

Transportation projects 6, 7, 8, 9, and 12, from Table 2-4 would likely result in permanent and/or temporary loss of habitat for plant and wildlife species in the area.

Project 6, the I-10 Corridor Project goes through of the cities of Pomona, Montclair, Ontario and Fontana. Construction is planned to start in 2019 with an opening year of 2024. Both Build Alternatives have similar impacts to biological resources. Both would affect vegetation communities, would result in impacts to CDFW and RWCQB jurisdictional waters, would result in impacts to special-status animal species; and would impact suitable habitat for some threatened and endangered species.

Project 7, the I-10/Grove Avenue Interchange Project, is located within the City of Ontario. An environmental document has not been released as of June 2018; therefore, no biological impacts of this project are currently available. However, as discussed in the Preliminary Environmental Analysis Report for the project, there may be impacts to jurisdictional waters; however, impacts to habitat for special-status species are not anticipated to occur. No threatened or endangered species are anticipated to occur within the project study area.

Project 8, the Grove Avenue Corridor Project, is located within the City of Ontario. An environmental document has not been released as of June 2018; therefore, no biological impacts for Project 8 are currently available. However, the intersection of Grove Avenue and Holt Boulevard is planned to be constructed in late 2020 and completed by early 2021. However, like the I-10/Grove Avenue Interchange Project, the Grove Avenue Corridor Project is not anticipated to have adverse impacts to biological species.

Project 9, the Metro Gold Line Foothill Extension to Ontario Airport, will be located in Montclair, Upland, and Ontario. Construction is anticipated to start in 2020 and finish in 2026. Modifications to jurisdictional areas would not have adverse impacts with mitigation. Mitigation for trees would result in no adverse impacts. Impacts to nesting birds and raptors would not be adverse with mitigation. Impacts to indirect biological effects would also not be adverse with mitigation.

Project 12, the I-15 Corridor Improvement Project, goes through the cities of Fontana, Rancho Cucamonga and Ontario. Construction is planned to start in

2021 with an opening year of 2024. The project would result in permanent direct impacts to existing vegetation; temporary and permanent direct impacts on potentially jurisdictional wetlands and other waters; and would affect suitable habitat for non-listed special-status reptile, bird, and mammal species. Mitigation measures are recommended to be incorporated to reduce impacts.

Cumulative Impacts

Alternatives A and B

The disturbance of plant and animal species and loss of habitat that would accompany future infrastructure and roadway projects in the project area would adversely affect sensitive species and their habitats in the study area. The proposed project and other transportation projects could also indirectly affect adjacent habitat during construction or operation. During construction, noise or vibration could affect burrowing animals or nesting raptors. Night lighting during construction or operation of the projects could interfere with typical foraging or predation of nocturnal species in adjacent areas, increasing the potential for some wildlife to avoid these areas.

Based on the available information on other foreseeable projects listed above, construction of Projects 6, 8, 9, and 12 could potentially occur in a similar timeframe as the proposed WVC project. The proposed project, in combination with the related projects, would result in the conversion of biological resources in the cumulative analysis time frame. There would be a cumulative loss of plant and animal species, as well as habitat. However, recommended mitigation would reduce impacts to biological resources, and when taken collectively, the proposed project would not have a moderate contribution to the cumulative effects to biological resources.

Cultural Resources

Resource Study Area

The resource study area includes all cultural resources located within the designated APE. From west to east, the alignment of both the Architectural and Archaeological APE begins on the north side of the Pomona Transit Center, and travels north on Main Street, east on Monterey Avenue, north on Garey Avenue, and east along Holt Boulevard through the cities of Pomona, Montclair, and Ontario. Upon reaching Ontario International Airport, the Architectural APE travels north on Archibald Avenue, east on G Street, continues along Inland Empire Boulevard, and north on Haven Avenue through the City of Rancho Cucamonga. The APE incorporates parallel alignment of Milliken Avenue as part of the proposed Milliken Alignment. Upon reaching Foothill Boulevard in Rancho Cucamonga, the APE extends east through Victoria Gardens (Church Street and Day Creek Boulevard) and continues eastbound until reaching Sierra Avenue, where the alignment travels south through the City of Fontana before reaching a circular loop that then traverses west on Valley Boulevard, north on Juniper Avenue, and east on Marygold Avenue, until reaching Sierra Avenue. The

vertical limits of the APE vary depending on proposed project activities within the project study area.

Current Condition and Historical Context

There are no documented paleontological localities within the boundaries of the proposed project site (refer to Section 4.4.2).

Record and literature searches and pedestrian surveys were conducted for the project to assist in identifying cultural resources. Several archaeological resources were recorded within the 0.25-mile radius around the APE boundary. Several architectural resources were identified in the APE as a result of the record searches and field surveys conducted (refer to Section 4.4.3).

Project Impacts

Project operation and construction impacts associated with cultural resources are discussed in Sections 4.4 and 5.2.4, respectively.

The proposed WVC project is not anticipated to impact archaeological within the established APE. However, the proposed project has a potential to impact paleontological resources if deep ground excavation activities are required during construction.

Construction of Alternative A would affect two built-environment NRHP eligible or listed historic properties in the APE: the Southern Pacific Railroad Depot and the National Old Trails Road/Route 66. It does not appear that the proposed activities would diminish the integrity of setting, design, materials, or workmanship in such a manner that the properties would no longer qualify for the NRHP. Therefore, Alternative A would not result in cumulative impacts on the built-environment NRHP eligible or listed historic properties.

Construction of Alternative B would affect six built-environment NRHP eligible or listed historic properties in the APE: Southern Pacific Railroad Depot; Vince's Spaghetti; A.C Moorhead House; The Grinder Haven; Jacob Lerch House; and the National Old Trails Road/Route 66. It does not appear that the proposed activities would diminish the integrity of setting, location, design, materials, feeling, association, or workmanship in such a manner that the properties would no longer qualify for the NRHP. Therefore, Alternative B would not result in cumulative impacts on the built-environment NRHP eligible or listed historic properties.

Alternative B would also require partial acquisition of 11 properties and full acquisition of 7 properties that have been locally designated by the City of Ontario as historically significant.

Reasonably Foreseeable Actions

Project 8 from Table 2-4 is located within the cultural and paleontological resource study areas.

Project 8, the Grove Avenue Corridor Project, is located within the City of

Ontario, and the intersection of Grove Avenue and Holt Boulevard is planned to be constructed in late 2020 and completed by early 2021. An environmental document has not been released as of June 2018; therefore, no cultural or paleontological impacts for Project 8 are currently available. However, like the I-10/Grove Avenue Interchange Project, the Grove Avenue Corridor Project is not anticipated to have adverse impacts to cultural or paleontological resources.

Cumulative Impacts

Alternatives A and B

The project has the potential to result in adverse impacts on unanticipated paleontological resources during construction; however, a standard mitigation measure has been incorporated into the project (refer to CI-CR-3), so such impacts would be localized. Intersection improvement at Holt Boulevard of Project 8, Grove Avenue Corridor Project, is located within the same APE boundary of the proposed WVC project. With standard mitigation measures incorporated and implemented, no cumulative impacts are anticipated.

Likewise, with standard cultural resources mitigation measures incorporated, the proposed project would not result in any impacts to archaeological resources during construction or operations (refer to CI-CR-1); therefore, the project would not contribute to cumulative impacts on archaeological resources.

Hazardous Materials/Waste

Resource Study Area

The study area for hazardous materials/ waste is approximately 1 mile in radius from the project footprint.

Current Condition and Historical Context

The project study area is a medium-density urban area. Existing land uses throughout the project area consist of a mix of uses from residential to industrial to commercial.

Project Impacts

Project operation and construction impacts associated with hazardous materials and waste are discussed in Sections 4.6 and 5.2.6, respectively.

The ISA prepared for the proposed WVC projects identified some Environmental Areas of Concern (AOC) within the study area for Alternative B and the O&M facility study sites; however, no impacts from project implementation to these AOCs are anticipated with mitigation measures implemented.

Reasonably Foreseeable Actions

Projects 7 and 8 from Table 2-4 would involve construction activities that would create additional hazardous materials/waste impacts.

Both Project 7, the I-10/Grove Avenue Interchange Project and Project 8, the Grove Avenue Corridor Project, are located within the City of Ontario. An environmental document of each project

has not been released as of June 2018; therefore, no information on hazardous materials impacts from these two projects are currently available. It is anticipated that during construction and operations, any use, transport or disposal of hazardous or potentially hazardous materials would be conducted in accordance with applicable federal, state and local requirements, thus reducing potential impacts.

Cumulative Impacts

Alternatives A and B

For hazardous materials and waste, the concern would not be from contamination caused by the proposed project, but rather from materials that are currently present in the environment, and hazardous materials transported on the areawide roadway system on a daily basis. Federal, State, and local management and disposal requirements address the handling of these materials.

Each of the individual projects within the resource study area would be required to investigate and report any findings of contaminated soil or groundwater; therefore, no adverse cumulative effects to hazardous waste or materials are anticipated.

Hydrology/Water Quality

Resource Study Area

The resource study area for hydrology and water quality includes the area located within the Chino Split hydrological subarea (HSA).

Current Condition and Historical Context

The Chino Split HSA covers approximately 190,515 acres. The proposed project overlies the Raymond Groundwater Basin in Los Angeles County and the Chino Basin in San Bernardino County. The Raymond Basin is located in the northwestern part of the San Gabriel Valley, in eastern Los Angeles County. The Chino Basin is one of the largest groundwater basins in southern California, covering approximately 235 square miles of the Upper Santa Ana River Valley. Groundwater elevation contours evaluated in spring 2014 indicate that groundwater flows in a south-southwest direction from the primary areas of recharge in the northern parts of the Chino Basin toward the Prado Basin in the south. According to the Chino Basin Watermaster, groundwater is encountered at depths in excess of 250 feet below ground surface (bgs) near the proposed project site. Recently reported groundwater depths to the west and south of the proposed project site are approximately 260 to 320 feet bgs on average. In accordance with the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM), West Cucamonga Channel is the only water body designated as a flood hazard area geometrically encroached by the proposed project study limits.

Project Impacts

Project operation and construction impacts associated with hydrology and

water quality are discussed in Sections 4.7 and 5.2.7, respectively.

Construction of the proposed project would not result in adverse impacts to water quality under both alternatives. Increased storm water runoff from the new impervious area (under Alternative B) would be directed to project design features that would include water quality control measures.

Increased storm water runoff from the selected O&M facility site would be contained on-site by conveying surface flows to engineered infiltration zones. No substantial changes to hydraulic conveyance capacity are anticipated.

Reasonably Foreseeable Actions

Reasonably foreseeable projects that could cumulatively contribute to hydrology and water quality impacts include various land development projects listed in Table 2-3 and transportation projects 6, 7, 8, 9, and 12 listed in Table 2-4.

Land development project 19 (Empire Lakes Specific Plan) listed in Table 2-3 would develop the privately-owned Empire Lakes Golf Course (160 acres) into a mixed-use, TOD site. The project would include a combination of residential, commercial, recreational, and office uses in an urban setting near transit services, including the Rancho Cucamonga Metrolink Station, and local regional activity centers. Construction of the proposed project is scheduled to commence in 2019 and complete by 2024. The project could have the potential to affect water quality during construction and operation phases. The project has incorporated the BMPs to reduce any potential impacts to hydrology and water quality.

Project 6, the I-10 Corridor Project goes through of the cities of Pomona, Montclair, Ontario and Fontana. Construction is planned to start in 2019 with an opening year of 2024. Both Build Alternatives have similar impacts to hydrology/water quality. Several channels and drains and their floodplain at varying degrees would be affected. Several transverse and longitudinal floodplain encroachments are anticipated. An increase in impervious surface area is anticipated for both build alternatives. Mitigation measures are recommended to reduce impacts.

Both projects 7, the I-10/Grove Avenue Interchange Project and project 8, the Grove Avenue Corridor Project, are located within the City of Ontario. An environmental document of each project has not been released as of June 2018; therefore, no information on hydrology and water quality impacts from these two projects are currently available. It is anticipated that the respective projects would incorporate BMPs to reduce any potential impacts related to hydrology and water quality.

Project 9, the Metro Gold Line Foothill Extension to Ontario Airport, will be located in Montclair, Upland, and Ontario. Construction is anticipated to start in 2020 and finish in 2026. The project is not located within a FEMA 100-year floodplain. Impacts to surface and ground

waters would not be adversr with BMPs incorporated.

Project 12, the I-15 Corridor Improvement Project, goes through the cities of Fontana, Rancho Cucamonga and Ontario. Construction is planned to start in 2021 with an opening year of 2024. The implementation of the project is not expected to affect special flood hazard zones; and while there is expected to be an increase in impervious surface area, BMPs would be incorporated to reduce the water quality impacts.

Cumulative Impacts

Alternatives A and B

Implementation of the proposed project and the increase in runoff resulting from the increase in impervious area could cause or contribute to an alteration in water quality and could affect the beneficial uses of the water bodies. However, the proposed project is not anticipated to have adverse impacts on water quality. Impacts on groundwater and groundwater quality within the project corridor are not anticipated. The proposed project is not anticipated to have a adverse impact on surface hydrology. Therefore, operation of the proposed project would not result in a cumulatively considerable contribution to hydrology/ water quality impacts and, in combination with projects 6, 7, 8, 9, and 12 listed in Table 2-4.

Based on the available information on other foreseeable projects listed above, construction of land development project 19 and transportation projects 6, 8, 9, and 12 could potentially occur in a similar timeframe as the proposed WVC project. Hydrology/water quality impacts related to construction of the proposed project in combination with probable future projects would not be adverse with mitigation measures incorporated. Erosion and siltation from construction could affect drainages downstream of the proposed project area, which would pose a potentially adverse impact to water quality. However, project design features pertaining to drainage, stormwater runoff management, and water quality would be incorporated and compliance with State and federal water quality regulations and implementation of BMPs to control and treat runoff would ensure that impacts to water quality during the construction period would not be adverse. Therefore, construction of the proposed project would not result in a cumulatively considerable contribution to hydrology/ water quality impacts and, in combination with nearby land development and transportation projects listed in Tables 2-3 and 2-4.

Land Use and Planning (including Acquisition)

Resource Study Area

The resource study area for the project is defined as the area within 300 feet of the centerline of the proposed alignment and within 0.5 mile from proposed BRT stations in each city. Jurisdictions covered in the analysis include the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, Fontana, and unincorporated areas of San Bernardino County.

Current Condition and Historical Context

The project study area is mostly medium-density urban. Existing land uses throughout the project study area consist of a mix of uses from industrial to residential to commercial.

Project Impacts

Project operation and construction impacts associated with land use are discussed in Sections 4.8, 4.12, 5.2.8, and 5.2.13, respectively.

The project would not physically divide an established community, result in street closures, or substantially restrict vehicular or pedestrian access to existing streets. The project would be consistent with existing land use and zoning plans. The project would result in approximately 10 acres of temporary impacts and requires acquisition of approximately 5 acres of land to be permanently converted to a transportation use.

The O&M facility would be located in an industrial zoned area. No impact on land use is anticipated.

Alternative B would require full acquisition of 37 parcels, which include 14 residential, 53 commercial, and 8 industrial/manufacturing business properties. Partial acquisition of 168 parcels would be required. No acquisitions or displacements would be required for the O&M facility.

TCEs would be required throughout the project corridor. Temporary construction impacts may include limited access to buildings, driveways, and sidewalks, and impacts to landscaping, which would be restored after project construction is completed. Approximately 10.39 acres of land would be temporarily impacted for construction easements.

Reasonably Foreseeable Actions

Land development project 19 (Empire Lakes Specific Plan) listed in Table 2-3 is located in the vicinity of the Rancho Cucamonga Metrolink Station, one of the proposed BRT station locations. Construction of the proposed project is scheduled to commence in 2019 and complete by 2024.

Transportation projects 6, 7, 8, 9, and 12 listed in Table 2-4 have been planned to provide support to the existing and planned developments in the study area that may contribute to the cumulative condition.

Project 6, the I-10 Corridor Project goes through of the cities of Pomona, Montclair, Ontario and Fontana. Construction is planned to start in 2019 with an opening year of 2024. Both build alternatives have similar impacts to land use, planning and acquisitions. Both build alternatives will result in property acquisitions. Both Build Alternatives will result in impacts to park and recreational facilities. However, mitigation measures are recommended to reduce impacts.

Project 7, the I-10/Grove Avenue Interchange Project, is located within the City of Ontario. An environmental

document has not been released as of June 2018; therefore, no information on impacts to land use and acquisition in currently available. However, as discussed in the Preliminary Environmental Analysis Report for the project, several parks may require small acquisitions.

Project 8, the Grove Avenue Corridor Project, is located within the City of Ontario. An environmental document has not been released as of June 2018; therefore, no information on impacts to land use and acquisition are currently available.

Project 9, the Metro Gold Line Foothill Extension to Ontario Airport, will be located in Montclair, Upland and Ontario. Construction is anticipated to start in 2020 and finish in 2026. To construct the project, there would be 15 partial and 8 full acquisitions. No residences would be acquired. No adverse impacts to land use would occur during construction or operations.

Project 12, the I-15 Corridor Improvement Project, goes through the cities of Fontana, Rancho Cucamonga and Ontario. Construction is planned to start in 2021 with an opening year of 2024. No acquisitions are anticipated.

Cumulative Impacts

The proposed project is consistent with goals and policies outlined in various General Plans and Specific Plans applicable for the project alignment, as discussed in Section 4.8.3. The proposed project would provide support to the existing and planned developments in the study area.

Based on the available information on other foreseeable projects listed above, construction of land development project 19 and transportation projects 6, 8, 9, and 12 could potentially occur in a similar timeframe as the proposed WVC project. SBCTA and Omnitrans would work together with other lead agencies to ensure overlapping construction from multiple projects in the same vicinity would be managed to avoid or lessen cumulative disruption of the exiting uses within the project area.

Alternative A

Implementation of Alternative A would not result in conversion of any land use or change any zoning designation along the proposed alignment. No cumulative impacts would occur.

Alternative B

Implementation of Alternative B would result in conversion of existing land use along the 3.5-mile-long dedicated lane within the City of Ontario as discussed in Section 4.8.3. No cumulative effects are anticipated since there are no other foreseeable transportation projects that would require land acquisition located within the proposed corridor alignment.

Traffic and Transportation

Resource Study Area

The traffic analysis study area runs west to east along the proposed corridor from the City of Pomona to the City of Fontana.

A total of 129 intersections were analyzed for the proposed corridor traffic analysis and an additional 7 intersections were analyzed for the O&M facility traffic impact analysis. See detailed study area in Chapter 3.

Current Condition and Historical Context

The existing street network can be characterized as a standard, grid system of local streets traversed by a network of freeways, the most relevant of which is I-10, which crosses the proposed project alignment at Archibald Avenue. The primary arterial streets along which the proposed project would run are Holt Avenue/Boulevard, Inland Empire Boulevard, Milliken Avenue, Haven Avenue, Foothill Boulevard, and Sierra Avenue. Holt Avenue/Boulevard and Sierra Avenue are four-lane roadways. Haven Avenue, Milliken Avenue, and Foothill Boulevard are six-lane divided roadways.

Project Impacts

The project would have a beneficial impact on long-term traffic and transportation operations in the corridor by improving corridor mobility and transit efficiency in the western San Bernardino Valley from the City of Pomona in Los Angeles County to the City of Fontana in San Bernardino County, with an enhanced, state-of-the-art BRT system.

Traffic analysis was performed for the study intersections both for the No Build and Build Alternatives for the opening year (2023) and horizon year (2040). The results are discussed in Sections 3.3 and 5.2.9, respectively. In addition, impacts to parking and pedestrian and bicycle facilities are discussed in Sections 3.4 and 3.5, respectively.

Construction of side-running stations would result in delays to bicycle and pedestrian traffic near station construction. Construction activities would require the closure of lanes and result in delays to motor vehicle, bicycle, and pedestrian traffic. Some bus routes would be relocated to nearby locations. At the O&M Facility, construction would be confined to the existing site. Minimal disruption to traffic may occur during transport of construction equipment.

The proposed project is a transit project; it aims to alleviate traffic congestion. Based on the traffic analysis, traffic condition would be worsened from LOS D or better to LOS E at up to 11 and 12 intersections under Alternative A and B, compared to 17 intersections under No Build Alternative by 2040.

Reasonably Foreseeable Actions

Land development project 19 (Empire Lakes Specific Plan) listed in Table 2-3 is located in the vicinity of the Rancho Cucamonga Metrolink Station, one of the proposed BRT station locations. Construction of the proposed project is scheduled to commence in 2019 and complete by 2024.

Transportation projects 6, 7, 8, 9, and 12 listed in Table 2-4 have been planned to

provide support to the existing and planned developments in the study area that may contribute to the cumulative condition.

Project 6, the I-10 Corridor Project goes through of the cities of Pomona, Montclair, Ontario and Fontana. Construction is planned to start in 2019 with an opening year of 2024. Both build alternatives would result in the worsening the traffic level of services at some local street intersections along the corridor at the opening year (2025) and the horizon year (2045).

Project 7, the I-10/Grove Avenue Interchange Project, is located within the City of Ontario. An environmental document has not been released as of June 2018; therefore, no information related to traffic impacts from this project is currently available. Based on the Preliminary Environmental Analysis Report for the project, the proposed project would result in improved traffic flow through the project corridor; however, changes in traffic patterns and flows could result in potential impacts on local arterials that could require mitigation.

Project 8, the Grove Avenue Corridor Project, is located within the City of Ontario. An environmental document has not been released as of June 2018; therefore, no information related to traffic impacts from this project is currently available.

Project 9, the Metro Gold Line Foothill Extension to Ontario Airport, will be located in Montclair, Upland, and Ontario. Construction is anticipated to start in 2020 and finish in 2026. Approximately 5,150 parking spaces would be required. Parking structures would be built, or on-street parking would be used. The project is expected to result in a decrease in VMT compared to the No Build Alternative.

Project 12, the I-15 Corridor Improvement Project, goes through the cities of Fontana, Rancho Cucamonga and Ontario. Construction is planned to start in 2021 with an opening year of 2024.

Construction of the project would result in the partial mainline lane and full freeway facility closures for various construction activities. A TMP will be implemented that includes strategies and measures to avoid and minimize disruption to the public and community during construction.

Cumulative Impacts

Alternatives A and B

The existing corridor conditions provide an ideal opportunity for successful implementation of a BRT project. Improved transit service would provide travelers with an alternative to driving in increasingly congested conditions. Investing in public transit facilities and equipment would help transit capture a larger share of the travel market, thereby reducing reliance on single-occupancy vehicles, improving the efficiency of the local roadway network, reducing the need for roadway expansion, and improving air quality.

Traffic forecast under both build and no-build scenarios of the proposed project

was performed for the years 2023 (opening year) and 2040 (horizon year). The analysis has taken into account the projected growth in population and employment in the area as a result of various land and transportation development projects in the area. Based on the available information on other foreseeable projects listed above, construction of land development project 19 and transportation projects 6, 8, 9, and 12 could potentially occur in a similar timeframe as the proposed WVC project, which may result in incremental traffic delay from multiple construction activities in the same locality. Close coordination of each project to avoid overlapping construction schedule and the implementation of the TMP developed for each project would reduce traffic impacts during construction. With the implementation of avoidance, minimization, and mitigation measures proposed by each individual project, it is not anticipated that the project would have negative impacts on access, circulation, parking, and public transit, and it would not contribute to cumulative project impacts.

Noise and Vibration

Resource Study Area

When determining whether the overall noise and vibration impacts of a related project would be cumulatively considerable and whether the proposed project's contribution to any impacts would be cumulatively considerable, it must be noted that noise and vibration are localized occurrences. The effects decrease rapidly as the distance from the source to the receptor increases. Therefore, only projects from Tables 2-3 and 2-4 that are near the proposed project would be considered in a cumulative context.

Current Condition and Historical Context

The project is located within an urban setting with primarily residential and commercial development. Land uses in the project vicinity include residential, commercial, airport, educational institutions, recreation, utility, civic, public service facilities (e.g., fire stations and hospitals), industrial, and vacant land.

The existing noise along the proposed BRT corridor is largely dominated by local traffic on surface roads. Other sources of noise include local business-related activities, such as public announcements near automobile dealerships, and some light industrial facilities.

Noise measurements were taken at 49 locations within the project limits.

Project Impacts

Project operation and construction impacts associated with noise and vibration are discussed in Sections 4.9 and 5.2.10, respectively.

During construction, temporary increases in noise and vibration would be experienced at some sensitive receptors.

During operations, the project would result in a less than 1-decibel (dB) increase in

the overall noise level at screened portions of the proposed BRT alignment. This would not modify the existing noise environment in any appreciable manner. The O&M facility would be located in an industrial zoned area. Only light maintenance would be performed at the new facility. No noise impact from O&M facility during project operation is anticipated.

Reasonably Foreseeable Actions

Project 8 from Table 2-4 is located within the noise study areas.

Project 8, the Grove Avenue Corridor Project, is located within the City of Ontario, and the intersection of Grove Avenue and Holt Boulevard is planned to be constructed in late 2020 and completed by early 2021. An environmental document has not been released as of June 2018; therefore, no noise impacts for Project 8 are currently available. Since the construction of Project 8 (Grove and Holt Boulevard intersection) is likely to be completed before the commencement of the proposed WVC project, the two projects combined are not anticipated to have adverse impacts to noise.

Cumulative Impacts

Alternatives A and B

Operational noise would be confined to the vicinity of the proposed project. An additive effect is not anticipated to elevate noise levels to such an extent that a combined cumulatively considerable impact would occur, especially when compared to baseline ambient noise levels in the vicinity of the proposed project. The overall noise contribution from the proposed project would be less than 1-dB increases in overall noise levels. This increase in noise is not considered an impact under FTA criteria. Therefore, the proposed project would not result in a cumulatively considerable contribution to cumulative noise impact.

Construction of some development associated with the approval of known development projects could occur at the same time as the corridor construction. However, a cumulative noise effect is not anticipated because of the attenuation effects provided by the substantial distance among the projects. While some of the projects are near the proposed project location, adverse cumulative noise impacts are not expected to occur even if construction occurred simultaneously due to construction noise generally being confined to the vicinity of the construction equipment being used. The proposed project would not make a cumulatively considerable contribution to noise and vibration impacts.

Energy

Resource Study Area

The geographic context for the cumulative analysis for electricity is the SCE service area. The geographic context for the cumulative analysis of natural gas is the Southern California Gas Company service area. The geographic context for the cumulative analysis for transportation energy is southern California. Growth

within these regions is anticipated to increase the demand for electricity, natural gas, and transportation energy.

Current Condition and Historical Context

On-road transportation energy consumption in the project area includes the fuel required for passenger vehicles (i.e., automobiles, vans, and light trucks), heavy trucks (i.e., three or more axles), and transit buses. A mix of natural gas, electricity, gasoline, and diesel fuel provide the energy source for transportation within the WVC corridor. Passenger vehicles primarily use gasoline as fuel, where heavy trucks primarily use diesel fuel. Omnitrans Express and local buses, which traveled 9,207,000 miles in Fiscal Year 2015-2016, are powered by CNG.

Project Impacts

Project operation and construction impacts associated with energy resources are discussed in Sections 4.10 and 5.2.11, respectively.

Estimated fossil fuel use during construction is not considered a wasteful or inefficient use of nonrenewable resources because the fuel is being used to construct a mass transit system, which is identified as an efficient method of reducing energy use.

During operations, the project would result in less gasoline consumption compared to the No Build Alternative. The O&M Facility would consume electricity and natural gas; however, the amounts would have no effect on regional or local supplies.

Reasonably Foreseeable Actions

Reasonably foreseeable projects that could cumulatively contribute to energy impacts during construction include land development project 19 listed in Table 2-3 and transportation projects 6, 7, 8, 9, and 12 listed in Table 2-4.

Land development project 19 (Empire Lakes Specific Plan) listed in Table 2-3 is located in the vicinity of the Rancho Cucamonga Metrolink Station, one of the proposed BRT station locations. Construction of the proposed project is scheduled to commence in 2019 and complete by 2024.

Project 6, the I-10 Corridor Project goes through of the cities of Pomona, Montclair, Ontario and Fontana. Construction is planned to start in 2019 with an opening year of 2024. Energy impacts would be minimized with incorporation of energy conservation measures, which include, but are not limited to selecting energy-efficient project features (e.g., lighting, pavement surface), using energy-efficient design (i.e., reduced grades, decrease in out-of-direction travel, traffic flow improvements), ramp metering, auxiliary lanes, and other Transportation System Management (TSM)/Transportation Demand Management (TDM) measures, as well as bicycle and pedestrian facilities, to further offset increased fuel consumption associated with the projected increase in vehicle miles traveled.

Project 7, the I-10/Grove Avenue Interchange Project, is located within the City of Ontario. An environmental document has not been released as of June 2018; however, the Preliminary Environmental Analysis Report did not anticipate adverse energy impacts would be arisen from the proposed project.

Project 8, the Grove Avenue Corridor Project, is located within the City of Ontario. An environmental document has not been released as of June 2018; however, impact to energy usage is not anticipated.

Project 9, the Metro Gold Line Foothill Extension to Ontario Airport, will be located in Montclair, Upland, and Ontario. Construction is anticipated to start in 2020 and finish in 2026. The Build Alternative would require energy consumption. However, the Build Alternative is predicted to slightly decrease energy usage when compared with the No Build Alternative.

Project 12, the I-15 Corridor Improvement Project, goes through the cities of Fontana, Rancho Cucamonga and Ontario. Construction is planned to start in 2021 with an opening year of 2024. Energy impacts were not analyzed in the project environmental document; thus, impact to energy usage is not anticipated

Cumulative Impacts

Alternatives A and B

Based on the available information on other foreseeable projects listed above, construction of land development project 19 and transportation projects 6, 8, 9, and 12 could potentially occur in a similar timeframe as the proposed WVC project. It is not anticipated that a shortage of energy supplies would occur on a cumulative basis as a result of the concurrent construction schedule because there are enough energy supplies locally.

Most of the electricity and natural gas energy resources would be consumed at the O&M facility. Transportation energy would be consumed by the buses used to operate the proposed project. The electrical consumption at the proposed O&M facility would amount to less than 0.001 percent of the regional electricity generation. The amount of natural gas usage at the proposed O&M facility would amount to less than 0.005 percent of the Southern California Gas Company throughput. Neither of these values would have an effect on regional or local supplies. As such, the proposed project would not result in a cumulatively considerable contribution to electrical and natural gas energy usage in combination with other foreseeable development and transportation projects identified.

Transportation energy used by the proposed project would be less than the energy consumption by the No Project Alternative and would result in a positive energy usage impact. Therefore, the proposed project, in combination with other nearby transportation development projects, would not result in a cumulatively considerable contribution to transportation energy consumption.

Demographics & Neighborhoods

Resource Study Area

The resource study area for the project is defined as the area located within 0.5 mile on either side of the alignments evaluated.

Current Condition and Historical Context

The proposed project study area intersects with 45 Census tracts. The socioeconomic profile includes the demographic characteristics of the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana, in addition to the counties of Los Angeles and San Bernardino.

As described in Section 4.11.1, the Hispanic/Latino population is dispersed throughout the study area corridor, notably with two Census tracts exceeding 85 percent of the total population in Pomona and Ontario, and five Census tracts in Fontana. The largest percentage of Asians (more than 19 percent) within the study area is within three Census tracts located within Rancho Cucamonga, while the largest percentage of African Americans (more than 22 percent) are located within three Census tracts in Fontana.

Demographic data indicated that of the 10 census tracts with 50 percent or greater low-income households, 1 is within Montclair, 2 are within Ontario, 3 are within Pomona, and 4 are in Fontana. An additional 13 Census tracts that meet the criteria definition for low-income households are included within the study area corridor.

As reflected in the Census data, minority populations are prevalent along both sides of the alternatives throughout the project area, as graphically depicted in Figure 4-11-2 in Section 4.11.1.

Project Impacts

Project operation and construction impacts on environmental justice are discussed in Sections 4.11 and 5.2.12, respectively.

Construction-related impacts would generally be minor for a limited duration between 2018 and 2020, and localized as construction moves along the corridor, resulting in inconveniences to motorists, pedestrians, businesses, and residences in the immediate vicinity of the construction activities.

The road widening segment under Alternative B would impact Census Tracts 15.01, 15.03, and 16, which includes low income and minority populations. Impacts to these three census tracts would primarily entail acquisition of commercial properties; however, these impacts would not have disproportionately high or adverse impacts to minority or low-income populations.

The O&M facility would be located in an industrial zoned area where its operations would not affect residential areas or other sensitive receptors.

Reasonably Foreseeable Actions

Land development project 19 (Empire Lakes Specific Plan) listed in Table 2-3 is located in the vicinity of the Rancho Cucamonga Metrolink Station, one of the proposed BRT station locations. Construction of the proposed project is scheduled to commence in 2019 and complete by 2024.

Most of the transportation development projects listed in Table 2-4 have been planned to support the projected growth in population and employment in the area. Reasonably foreseeable projects that could potentially contribute to environmental justice impacts on a cumulative basis during construction include Projects 6, 7, 8, 9, and 12 listed in Table 2-4.

Project 6, the I-10 Corridor Project goes through of the cities of Pomona, Montclair, Ontario and Fontana. Construction is planned to start in 2019 with an opening year of 2024. Neither the build alternatives nor the No Build Alternative would result in an impact to any environmental justice population.

Project 7, the I-10/Grove Avenue Interchange Project, is located within the City of Ontario. An environmental document has not been released as of June 2018; therefore, the result of environmental justice impact analysis is not currently available. However, the Preliminary Environmental Analysis Report for the project did not indicate a concern over the environmental justice issue.

Project 8, the Grove Avenue Corridor Project, is located within the City of Ontario. An environmental document has not been released as of June 2018; therefore, the result of environmental justice impact analysis is not currently available.

Project 9, the Metro Gold Line Foothill Extension to Ontario Airport, will be located in Montclair, Upland, and Ontario. Construction is anticipated to start in 2020 and finish in 2026. Environmental justice was not addressed for this project. However, the socioeconomic composition of the study area would remain unchanged.

Project 12, the I-15 Corridor Improvement Project, goes through the cities of Fontana, Rancho Cucamonga and Ontario. Construction is planned to start in 2021 with an opening year of 2024. It is expected that the project would be constructed mostly within the existing right of way limits. The project does not require property acquisition that would result in displacement of any residence or businesses, nor would it cause relocation impacts. The project would not support a large development project at the expense of minority and low-income communities. No environmental justice impacts were anticipated.

Cumulative Impacts

Alternatives A and B

Any development projects within the vicinity of the proposed project alignments would affect land use; traffic; visual and aesthetic considerations; biological

resources; water quality; hazardous waste; community and cultural resources; air quality; noise and vibration; safety and security; and acquisitions and displacements.

The proposed WVC project would benefit various land development projects, including the nearby project 19 listed in Table 2-3. Projects 6, 7, 8, 9, and 12 listed in Table 2-4 are transportation-related projects aimed at improving accessibility and connectivity of transit services. Based on the available information on other foreseeable projects listed above, construction of Projects 6, 8, 9, and 12 could potentially occur in a similar timeframe as the proposed WVC project. While there would be impacts associated with construction activities, these activities would be short term in duration, and mitigation measures would be implemented to reduce impacts. These related transportation projects are not anticipated to make a cumulatively considerable contribution to environmental justice impacts.

The proposed project could require some utility relocations that may be partially relocated in several areas throughout the corridor. However, no long-term disruptions in service are anticipated. Construction activities could also result in lane closures and create short-term delays to vehicles, bicycles, and pedestrians, especially in Ontario along Holt Boulevard under Alternative B, but the preparation and implementation of a TMP should minimize impacts. Coordination with fire and police departments and other emergency services would be conducted in advance of construction. Public access to businesses would be maintained at all times. Implementation of either build alternative would provide a benefit to individuals who rely on public transportation services. Either build alternative would improve accessibility, reliability, frequency, convenience, and connectivity of transit services to several key destinations, including employment, education, shopping, medical, recreation, and cultural opportunities, along the project corridor. These benefits would tend to accrue to a greater degree to the area's transit user populations.

In addition, the planned BRT station design elements would help actualize the general planning goals of the affected cities and counties. These include improving access and safety features for bicycles and pedestrians, which would entail infrastructure improvements in accordance with ADA requirements, namely providing concrete boarding areas at each station and connecting ADA-accessible pathways within a 0.5-mile radius of all stations, including repair or replacement of sidewalk or curb ramps and restriping of pedestrian crosswalks, where needed. Bicycle access improvements include providing bicycle parking racks at each station.

Taking all factors described above into account, the project alternatives would not have disproportionately high and adverse effects on environmental justice populations. The combination of station

design and landscaping elements, together with proposed minimization measures, would help offset impacts associated with implementing either Alternative A or B. However, strategies to involve the environmental justice communities will continue during the preliminary engineering phase to effectively implement the project and proposed strategies. The proposed project would not make a cumulatively considerable contribution to environmental justice impacts.

Public Services/Utilities

Resource Study Area

The resource study area for the cumulative analysis for community facilities (i.e., schools, libraries, City halls, post offices) is a 0.5-mile radius from the proposed project. The resource study area for emergency services (i.e., fire, police, medical centers) is 0.5 mile from the proposed project. The resource study area for utilities (i.e., communications, electricity, natural gas, water, sewer, storm drains, solid waste) is each utility's respective service area.

Current Condition and Historical Context

A list of all the public services and utilities within 0.5-mile radius of the proposed project is shown in Tables 4.13-1 and 4.13-2.

Project Impacts

Project operation and construction impacts associated with public services and utilities are discussed in Sections 4.13 and 5.2.12, respectively.

Construction activities could affect access to community facilities and services during construction. Disruptions would be related primarily to operation of construction equipment in the area, partial and/or complete lane closures, noise and vibration, light and glare, and fugitive dust emissions. Additionally, a TCE would be required from the U.S. Post Office at 1555 E. Holt Boulevard in Ontario that would affect driveway access.

Relocation of some utilities in some areas of the corridor is required; following standard procedural controls, impacts to utilities during construction would not be adverse.

Reasonably Foreseeable Actions

Reasonably foreseeable projects that could cumulatively contribute to public services/utilities impacts include land development project 19, listed in Table 2-3 and transportation projects 6, 7, 8, 9, and 12 listed in Table 2-4.

Land development project 19 (Empire Lakes Specific Plan) listed in Table 2-3 is located in the vicinity of the Rancho Cucamonga Metrolink Station, one of the proposed BRT station locations. Construction of the proposed project is scheduled to commence in 2019 and complete by 2024.

Project 6, the I-10 Corridor Project goes through of the cities of Pomona, Montclair, Ontario and Fontana. Construction is planned to start in 2019 with an opening

year of 2024. Approximately 159 utilities have the potential to be affected by the proposed improvements.

Project 7, the I-10/Grove Avenue Interchange Project, is located within the City of Ontario. An environmental document has not been released as of June 2018; therefore, the result of utility impact analysis is not currently available. However, the Preliminary Environmental Analysis Report for the project did not indicate a concern over the public services and utilities.

Project 8, the Grove Avenue Corridor Project, is located within the City of Ontario. An environmental document has not been released as of June 2018; however, like other similar types of project, impacts to public services and utilities on a long-term basis are not anticipated.

Project 9, the Metro Gold Line Foothill Extension to Ontario Airport, will be located in Montclair, Upland, and Ontario. Construction is anticipated to start in 2020 and finish in 2026. Impacts to police, fire protection and schools would not be significant or adverse.

Project 12, the I-15 Corridor Improvement Project, goes through the cities of Fontana, Rancho Cucamonga and Ontario. Construction is planned to start in 2021 with an opening year of 2024. Several utilities would require relocation due to conflict with the project improvements or due to proximity and requirements for clearance distance. Temporary and short-term traffic closures and detours during construction could result in impacts on circulation and access for emergency services. The project would implement a TMP to avoid and minimize such impacts. Overall, the proposed project would not result in any permanent, direct or indirect, impacts on utilities or emergency services.

Cumulative Impacts

Alternatives A and B

Cumulative public services and utilities impacts would result from the combined demand from the proposed project and projects and other known development projects within the resource study area.

Operation of the proposed project would not result in a need to build or hire additional public service facilities or staff. No additional utility facilities would be required to be built to support operation of the proposed project. As such, the proposed project would not result in a cumulatively considerable contribution to public services or utilities impacts in the existing service area.

During construction of the proposed project, a TMP and public outreach program would minimize impacts to public services. No additional utility facilities would be required during construction of the proposed project.

Based on the available information on other foreseeable projects listed above, construction of land development project 19 and transportation projects 6, 8, 9, and 12 could potentially occur in a similar timeframe as the proposed WVC project.

Implementation of these related transportation projects aim to alleviate traffic congestion and to accommodate the planned growth in the respective project areas. As such, construction and operation of the proposed project would not result in a cumulatively considerable contribution to public services or utilities impacts.

4.16.2 Irreversible and Irretrievable Commitments of Resources

The No Build Alternative would not directly involve the use of resources except insofar as it would include planned and programmed capital improvements, requiring materials, labor, and money to construct.

The proposed project would require the use of nonrenewable resources to construct the physical components of the proposed project. Implementation of a build alternative would involve the commitment of a range of physical, human, and fiscal resources. The proposed project, however, would not use an extraordinary amount of raw materials compared to other urban, industrial, or commercial development projects of similar scope and magnitude.

Construction and operation of the proposed project would involve the use of energy in the forms of diesel, oil, gasoline, electricity, and natural gas. These energy resources would be irretrievable and irreversible. Nonrecoverable materials and energy would be used during construction and operation, but the amounts needed would be accommodated by existing supplies. Although the amounts of materials and energy used would be insignificant, they would no longer be available for other uses.

Land required for Alternative B is an irretrievable commitment, as would be property acquisition. Property requirements would include 15.23 acres, consisting of 37 full parcel acquisitions and 263 partial parcel acquisitions to accommodate the dedicated bus-only lanes and center-running stations along Holt Boulevard. Portions of these properties would be converted to transportation uses necessary to support the project. This would be considered irreversible commitment for the duration of the time period that the land use is committed to a transportation use; however, if a greater need arises for the use of the land, the land could be converted to another use.

Construction of the project would also require expenditure of local, State, and federal funds, which, once spent, would not be retrievable.

The proposed justification for the consumption of resources is the following objectives of the proposed project, which are to:

- Improve transit service by better accommodating existing high bus ridership
- Provide branded rapid transit service
- Improve transit in high ridership areas
- Improve mobility of transit-dependent populations

- Improve ridership by providing a viable and competitive transit alternative to the automobile
- Reduce auto use and congestion
- Improve the speed and reliability of bus transit
- Improve efficiency of transit service delivery while lowering Omnitrans' operating costs per rider
- Better serve major travel markets
- Support local and regional planning goals to organize development along transit corridors and around transit stations

Commitment of these resources is based on the concept that residents and businesses in the immediate area would benefit from the improved transportation system and, specifically, transit service quality. These improvements include improved travel time and efficiency along the project corridor, which are expected to outweigh the commitment of these resources.

Furthermore, the fossil fuels consumed by operation of the proposed BRT would be less than the fossil fuels consumed by private vehicles.

4.16.3 Relationships between Local Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity

The No Build Alternative would not involve a short-term use of the environment, but it would allow long-term conditions, such as increased congestion on roadways, to worsen, affecting buses as well as automobiles.

Many residents in San Bernardino County depend on an adequate transportation system along the project corridor. A dependable transit system provides long-term benefits at the expense of short-term costs, such as ROW acquisition, construction energy use, and State and federal investments.

The proposed project would involve the use of fuel and construction materials and result in temporary increases in noise and air emissions during the construction period. While there would be temporary adverse effects associated with construction activities, affecting visual resources and aesthetics, noise, air quality, and utilities, traffic delays, detours and inconveniences, and temporarily hindered access for bicyclists and pedestrians. Long-term productivity would be enhanced with implementation of either build alternative by improved circulation and accessibility to the transportation network in the area, especially through the more-congested areas, particularly for transit-dependent populations. Transit-dependent populations, workers, and residents would realize improved access to employment, retail, and entertainment opportunities.

4.17 Greenhouse Gas Emissions

GHGs are those that absorb infrared radiation in the atmosphere and include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorocarbons. Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "CO_2 equivalent," (CO_2e) and is the amount of GHG emitted multiplied by the global warming potential. The global warming potential of CO_2 is therefore defined as "one." GHGs lead to the trapping and buildup of heat in the atmosphere near the earth's surface, commonly known as the "greenhouse effect." The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without natural GHGs, the earth's surface would be cooler (ARB, 2006).

Emissions from human activities, such as electricity production and vehicles, have elevated the concentration of these gases in the atmosphere. Emissions of GHGs in excess of natural ambient concentrations are thought to be responsible for enhancement of the greenhouse effect and to contribute to what is termed "global warming," a trend of unnatural warming of the earth's natural climate. Unlike criteria air pollutants and TACs, which are pollutants of regional and local concern, GHGs are global pollutants, and climate change is a global issue.

Global climate change caused by GHGs is currently one of the most important and widely debated scientific, economic, and political issues in the United States. Global climate change is a change in the average weather of the earth, which can be measured by wind patterns, storms, precipitation, and temperature. Historical records have shown that temperature changes have occurred in the past, such as during previous ice ages. Some data indicate that the current temperature record differs from previous climate changes in rate and magnitude. These climate changes could lead to various changes in weather and rainfall patterns over time. According to ARB, some of the potential impacts of global warming in California may include loss in snow pack, sea level rise, more extreme heat days per year, more high O_3 days, more large forest fires, and more drought years (ARB, 2006 and 2007).

This section presents long-term impacts of the project on global climate change. The information contained in this section is summarized from the *West Valley Connector Project – Greenhouse Gas Emissions Study* (Terry A. Hayes and Associates, 2018a) prepared for the project.

4.17.1 Regulatory Framework

Federal Regulations

NEPA requires federal agencies to evaluate and disclose the environmental effects of their proposed actions. NEPA analyses of GHG emissions and climate change pose difficult challenges in

assuring that meaningful analysis is provided. Virtually any human activity, including those that federal agencies fund or permit, can cause emissions of GHGs, yet it is unlikely that any individual project would generate enough GHG emissions to significantly influence global climate change. Instead, a project contributes to the global climate impact incrementally and cumulatively, combining with the emissions from all other sources of GHGs. In August 2016, the Council on Environmental Quality (CEQ) released final guidance for federal agencies on how to consider the impacts of their actions on global climate change in their NEPA reviews (CEQ 2016). The guidance provides a framework for agencies to consider the effects of a proposed action on climate change, as indicated by its estimated GHG emissions. The guidance emphasizes that agency analyses should be commensurate with projected GHG emissions and climate impacts and that they should employ appropriate quantitative or qualitative analytical methods to ensure that useful information is available to inform the public and the decision-making process in distinguishing between alternatives and mitigations.

State Regulations and Programs

California has adopted a variety of Statewide legislation to address various aspects of climate change and GHG emissions. Much of this legislation is not directed at citizens or jurisdictions specifically; rather, it establishes a broad framework for the State's long-term GHG reduction and climate change adaptation program. The governor has also issued several executive orders related to the State's evolving climate change policy. Below is a summary of GHG legislation applicable to the project.

Assembly Bill 32

AB 32 requires ARB to develop and enforce regulations for the reporting and verification of Statewide GHG emissions and directs ARB to set a GHG emission limit—based on 1990 levels—to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner. On December 11, 2008, ARB adopted the AB 32 Scoping Plan, which sets forth the framework for facilitating the State's goal of reducing GHG emissions to 1990 levels by 2020.

The First Update of the AB 32 Scoping Plan was adopted on May 22, 2014. The 2017 Climate Change Scoping Plan was adopted on December 14, 2017 and includes strategies to meet a 2030 GHG reduction goal of 40 percent below 1990 levels (the goal set out in EO B-30-15, described below). Neither AB 32 nor the updated AB 32 Scoping Plan establishes regulations implementing the Legislature's Statewide goals for reducing GHGs at the project level.

The AB 32 Scoping Plan outlines a series of technologically feasible and cost-effective measures to reduce Statewide GHG emissions, including expanding energy efficiency programs, increasing electricity production from renewable

resources (at least 33 percent of the Statewide electricity mix), increasing automobile efficiency, implementing the Low-Carbon Fuel Standard, and developing a cap-and-trade program. Multiple AB 32 Scoping Plan measures address GHG emissions from transportation fuels and energy. Together, the elements of the AB 32 Scoping Plan will ensure that overall Statewide emissions will be decreased to the extent necessary to achieve AB 32's emissions reduction goals.

Assembly Bill 1493

AB 1493 makes amendments to the Clean Car Standards (Chapter 200, Statutes of 2002), also known as the "Pavley" regulations, which require reductions in GHG emissions in new passenger vehicles from 2009 through 2016. These amendments are part of California's commitment toward a nationwide program to reduce new passenger vehicle GHGs from 2012 through 2016. The Clean Car Standards required ARB to develop and adopt standards for vehicle manufacturers to reduce GHG emissions coming from passenger vehicles and light-duty trucks at a "maximum feasible and cost effective reduction" by January 1, 2005. Pavley I took effect for model years starting in 2009 to 2016; and Pavley II, which is now referred to as "Low Emission Vehicle (LEV) III GHG," will cover 2017 to 2025. Fleet average emission standards would reach 22 percent reduction by 2012 and 30 percent by 2016.

In January 2012, ARB adopted the Advanced Clean Cars program to extend AB 1493 through model years 2017 to 2025. This program will promote all types of clean fuel technologies such as plug-in hybrids, battery electric vehicles, CNG vehicles, and hydrogen-powered vehicles while reducing smog and saving consumers money in fuel costs. Fuel savings may be up to 25 percent by 2025.

Senate Bill 375

SB 375 was enacted to reduce GHG emissions from automobiles and light trucks through integrated transportation, land use, housing, and environmental planning. Under the law, Metropolitan Planning Organizations are tasked with incorporating SCSs as an element in RTPs. The SCS documents are intended to:

- Identify the general location of uses, residential densities, and building intensities within the region;
- Identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the RTP considering net migration into the region, population growth, household formation, and employment growth;
- Identify areas within the region sufficient to house an 8-year projection of the regional housing need for the region;
- Identify a transportation network to service the transportation needs of the region;
- Gather and consider the best practically available scientific

information regarding resource areas and farmland in the region;
- Consider the State housing goals;
- Set forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the GHG emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the GHG emission reduction targets approved by the State Board; and
- Allow the RTP to comply with the CAA.

State Cap-and-Trade Program

The State Cap-and-Trade Program creates a market-based system with an overall emissions limit for affected sectors, including electric utilities, large industrial facilities, and distributors of transportation, natural gas, and other fuels.

Senate Bills 1078/107/X 1-2

SBs 1078 and 107, California's Renewables Portfolio Standard, obligated investor-owned energy service providers and Community Choice Aggregations to procure an additional 1 percent of retail sales per year from eligible renewable sources until 20 percent was reached (by 2010). The California Public Utilities Commission (CPUC) and CEC are jointly responsible for implementing the program. SB X 1-2, called the California Renewable Energy Resources Act, obligates all California electricity providers to obtain at least 33 percent of their energy from renewable resources by 2020.

Executive Order S-01-07

EO S-01-07 established a Low-Carbon Fuel Standard and directed the Secretary of the California Environmental Protection Agency (Cal/EPA) to develop and propose protocols for measuring the life-cycle carbon intensity of transportation fuels.

Executive Order S-3-05

EO S-3-05 established State GHG emission targets of 1990 levels by 2020 (the same as AB 32, enacted later and discussed below) and 80 percent below 1990 levels by 2050. It calls for the Secretary of Cal/EPA to be responsible for coordination of State agencies and progress reporting. In response to the EO, the Secretary of Cal/EPA created the Climate Action Team (CAT). California's CAT originated as a coordinating council organized by the Secretary of Cal/EPA.

Executive Order B-30-15

EO B-30-15 established a mid-term goal for 2030 of reducing GHG emissions by 40 percent below 1990 levels and required ARB to update its current AB 32 Scoping Plan to identify the measures to meet the 2030 target. The EO supports EO S-3-05, described above, but is currently binding only on State agencies.

California Green Building Standards Code

In January 2010, the California Building Standards Commission adopted the Statewide mandatory Green Building Standards Code (CALGreen) Part 11 of Title 24, CCR. The Code was most recently updated in 2017 (CalGreen 2016) to require additional energy savings. CALGreen applies to the planning, design, operation, construction, use, and

occupancy of every newly constructed building or structure.

California Environmental Quality Act and Senate Bill 97

By enacting SB 97 in 2007, California's lawmakers expressly recognized the need to analyze GHG emissions as a part of the CEQA process. SB 97 required the Office of Planning and Research (OPR) to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines addressing the analysis and mitigation of GHG emissions. Those CEQA Guidelines amendments clarified several points, including the following:

- Lead agencies must analyze the GHG emissions of proposed projects, and must reach a conclusion regarding the significance of those emissions (CEQA Guidelines Section 15064.4).
- When a project's GHG emissions may be significant, lead agencies must consider a range of potential mitigation measures to reduce those emissions (CEQA Guidelines Section 15126.4(c)).
- Lead agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change (CEQA Guidelines Section 15126.2(a)).
- Lead agencies may significantly streamline the analysis of GHG on a project level by using a programmatic GHG emissions reduction plan meeting certain criteria (CEQA Guidelines Section 15183.5(b)).
- CEQA mandates analysis of a proposed project's potential energy use (including transportation-related energy), sources of energy supply, and ways to reduce energy demand, including through the use of efficient transportation alternatives (CEQA Guidelines, Appendix F).

Senate Bill 743

SB 743 encourages land use and transportation planning decisions and investments that reduce VMT that contribute to GHG emissions, as required by AB 32. SB 743 requires the OPR to develop revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts of projects within transit priority areas that promote the reduction of GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. It also allows OPR to develop alternative metrics outside of transit priority areas.

California Air Pollution Control Officers Association

The California Air Pollution Control Officers Association (CAPCOA) is a nonprofit association of the air pollution control officers from all 35 local air quality agencies throughout California. CAPCOA promotes unity and efficiency in State air quality issues and strives to encourage consistency in methods and practices of air pollution control. In 2008, CAPCOA published the CEQA and Climate Change White Paper. This paper is intended to serve as a resource for reviewing GHG emissions from projects under CEQA. It

considers the application of thresholds and offers approaches toward determining whether GHG emissions are significant. The paper also evaluates tools and methodologies for estimating impacts and summarizes mitigation measures.

Regional

South Coast Air Quality Management District

SCAQMD adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" on April 6, 1990. The policy commits SCAQMD to consider global impacts in rulemaking and in drafting revisions to the AQMP. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy.

SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds. In its October 2008 document, SCAQMD proposed the use of a percent emission reduction target (e.g., 30 percent) to determine significance for commercial/residential projects that emit greater than 3,000 metric tons per year. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for stationary source/industrial projects where SCAQMD is the lead agency; however, SCAQMD has yet to adopt a GHG significance threshold for land use development or transportation projects and has formed a GHG CEQA Significance Threshold Working Group to further evaluate potential GHG significance thresholds.

The GHG CEQA Significance Threshold Working Group is tasked with providing guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. Members of the working group included government agencies implementing CEQA and representatives from various stakeholder groups that will provide input to SCAQMD staff on developing CEQA GHG significance thresholds. The working group discussed multiple methodologies for determining project significance. These methodologies included categorical exemptions, consistency with regional GHG budgets in approved plans, a numerical threshold, performance standards, and emissions offsets. The GHG CEQA Significance Threshold Working Group has not convened since 2008.

San Bernardino County Transportation Authority (SBCTA)

SBCTA is the transportation planning agency for the County of San Bernardino. SBCTA actively participates in the regional planning activities of SCAG. SCAG's planning area covers the counties of San Bernardino, Imperial, Los Angeles, Orange, Riverside, and Ventura. Members of the SBCTA Board of Directors serve on various SCAG committees and on the Regional Council, the governing board of SCAG.

SCAG adopted the 2016-2040 RTP/SCS on April 7, 2016, and it includes a strong commitment to reduce emissions from transportation sources to comply with SB 375. SB 375 requires ARB to develop

regional CO_2 emission reduction targets (exclusive of Pavley emissions that are counted separately), compared to 2005 emissions, for cars and light trucks for 2020 and 2035 for each Metropolitan Planning Organization. The 2016-2040 RTP/SCS charts a course for closely integrating land use and transportation planning, including in areas labeled as High Quality Transit Areas. High Quality Transit Areas are located within 0.5 mile of a fixed guideways transit stop or a bus transit corridor where passengers are picked up at a frequency of every 15 minutes or less during peak commuting hours. It outlines $556.5 billion in transportation system investments through 2040.

The 2016-2040 RTP/SCS was prepared through a collaborative, continuous, and comprehensive process by SCAG, and it serves as an update to the 2012-2035 RTP/SCS. Major themes in the 2016-2040 RTP/SCS that are relevant to the project include integrating strategies for land use and transportation; striving for sustainability; protecting and preserving the existing transportation infrastructure; increasing capacity through improved system management; and giving people more transportation choice. Importantly, the 2016-2040 RTP/SCS states that the region will meet or exceed the SB 375 per capita targets, lowering regional per capita GHG emissions (below 2005 levels) by 8 percent by 2020 and 18 percent by 2035. The 2016-2040 RTP/SCS also states that regional 2040 per capita emissions would be reduced by 22 percent, although ARB has not established a 2040 per capita emissions target.

A Regional Greenhouse Gas Reduction Plan was published in 2014 by the San Bernardino Associated Governments (SANBAG). The Plan provides SANBAG/SBCTA and the 21 participating cities with an inventory of GHG emissions, targets, and provided reduction strategies for each City. In addition, the Climate Action Plan (CAP) Implementation Tools Project, sponsored by SCAG, provided vital tools for the participating cities to use in the development, adoption, implementation, and monitoring of city-specific CAPs. Total GHG emissions, excluding stationary sources, for the combination of all partnership cities in 2008 were 13,543,455 metric tons of CO_2e. On-road transportation emissions represented 45 percent of emissions. The Plan states that on-road transportation measures can achieve significant benefits for individual residents and the region as a whole. Reductions in VMT and traffic congestion would reduce smog-forming emissions, TACs, and diesel particulate matter. Alternative modes of transportation, such as bicycling, walking, and transit, may also help reduce many serious health risks associated with vehicle exhaust. Community well-being and quality of life may also be improved as individuals spend less time commuting, waiting for the bus, and/or sitting in heavy congestion. For on-road emissions, the Plan includes a measure to improve transit travel time and connectivity (On-Road-1.1). This measure is described as

reducing transit passenger travel time through reduced headways and increased speed, along with improving intermodal connectivity. In addition, measure On-Road-1.2 references other transit improvements, including additional BRT routes.

Local

Omnitrans

Omnitrans has committed to a core set of actions on sustainability promoted by the APTA. APTA's Sustainability Commitment Program is a voluntary program in which member agencies pledge their commitment to sustainability. Signatory agencies must commit to the following:

- Make sustainability part of the agency's strategic objectives;
- Identify a sustainability champion within the agency who tracks key sustainability indicators and targets, reports annually to APTA, engages with the agency and community, and recommends and implements short- and long-term goals and programs;
- Establish an outreach program on sustainability for staff; and
- Establish a baseline measurement for key indicators.

Targets are set to reduce or increase certain key indicators, measured by APTA's standard methodology. The indicators include the following:

- Water usage and pollutant discharge;
- Criteria air pollutant emissions;
- GHG emissions/savings;
- Energy use;
- Recycling levels/waste;
- Operating expense;
- Unlinked passenger trips; and
- VMT.

4.17.2 Existing Conditions

GHGs are the result of natural and human-influenced activities. Volcanic activity, forest fires, decomposition, industrial processes, landfills, consumption of fossil fuels for power generation, transportation, heating, and cooling are the primary sources of GHG emissions. Without human activity, the Earth would maintain an approximate, but varied, balance between the emission of GHGs into the atmosphere and the storage of GHG in oceans and terrestrial ecosystems. Increased combustion of fossil fuels (e.g., gasoline, diesel, coal) has contributed to a rapid increase in atmospheric levels of GHGs over the last 150 years.

The primary effect of rising global concentrations of atmospheric GHG levels is a rise in the average global temperature of approximately 0.2 degrees Celsius per decade, determined from meteorological measurements worldwide between 1990 and 2005. Climate change modeling using 2000 emission rates shows that further warming is likely to occur given the expected rise in global atmospheric GHG concentrations from innumerable sources of GHG emissions worldwide (including from economically developed and developing countries and deforestation), which would induce further changes in the

global climate system during the current century.

Adverse impacts from global climate change worldwide and in California include:

- Declining sea ice and mountain snowpack levels, thereby increasing sea levels and sea surface evaporation rates with a corresponding increase in atmospheric water vapor due to the atmosphere's ability to hold more water vapor at higher temperatures;
- Rising average global sea levels primarily due to thermal expansion and the melting of glaciers, ice caps, and the Greenland and Antarctic ice sheets;
- Changing weather patterns, including changes to precipitation, ocean salinity, and wind patterns, and more energetic aspects of extreme weather including droughts, heavy precipitation, heat waves, extreme cold, and the intensity of tropical cyclones;
- Declining Sierra Nevada Mountain snowpack levels, which account for approximately half of the surface water storage in California, by 70 percent to as much as 90 percent over the next 100 years;
- Increasing the number of days conducive to O_3 formation (e.g., clear days with intense sun light) by 25 to 85 percent (depending on the future temperature scenario) in high O_3 areas located in the southern California area and the San Joaquin Valley by the end of the 21st century; and
- Increasing the potential for erosion of California's coastlines and seawater intrusion into the Sacramento Delta and associated levee systems due to the rise in sea level.

Scientific understanding of the fundamental processes responsible for global climate change has improved over the past decade; however, significant scientific uncertainties remain, for example, in predictions of local effects of climate change, occurrence of extreme weather events, and effects of aerosols, changes in clouds, shifts in the intensity and distribution of precipitation, volcanic activity, and changes in oceanic circulation. Due to the complexity of the climate system, the uncertainty surrounding the implications of climate change may never be completely eliminated. Because of these uncertainties, significant debate continues as to the extent to which increased concentrations of GHGs have caused or will cause climate change, and with respect to the appropriate actions to limit and/or respond to climate change. Given the scale over which climate change occurs, as well as the uncertainties described above, it is not possible to link specific development projects to future specific climate change impacts, though estimating project-specific emissions is possible.

ARB has prepared a Statewide emissions inventory covering 2000 to 2014, which demonstrates that GHG emissions have decreased by 7.9 percent over that period.

California's largest single source of GHGs is emissions from the transportation sector, contributing approximately 37 percent of total emissions. Emissions from this sector declined marginally compared to 2011, even while the economy and population continued to grow. The long-term direction of transportation-related GHG emissions is another clear trend, with a 13 percent drop over the past 10 years. Table 4.17-1 shows GHG emissions from 2005 to 2014.

Table 4.17-1 California Greenhouse Gas Emissions Inventory

Sector	CO_2e Emissions (Million Metric Tons)									
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Transportation	184	184	184	173	166	163	159	159	158	160
Industrial	95	93	90	90	88	91	91	91	93	93
Electric Power	108	105	114	120	101	90	88	95	90	88
Commercial and Residential	42	43	43	43	44	45	45	43	43	38
Agriculture	34	36	36	36	34	35	36	37	35	36
High Global Warming Potential	8	8	9	10	11	12	14	15	16	17
Recycling and Waste	8	8	8	8	8	9	9	9	9	9
Emissions Total	**479**	**477**	**484**	**480**	**452**	**445**	**442**	**449**	**444**	**441**

Source: CARB, California Greenhouse Gas Inventory 2000-2014, March 30, 2016.

4.18.2 Impact Analysis

Impact discussion under this topic applies to both Alternatives A and B.

NEPA Analysis

FTA currently considers it practicable to assess the effects of GHG emissions for transit projects at a programmatic level. This programmatic assessment serves to report on whether certain types of proposed transit projects merit detailed analysis of their GHG emissions at the project-level, and provide a source of data and analysis for FTA and its grantees to reference in future environmental documents for projects in which detailed, project level GHG analysis would provide only limited information beyond what is collected and considered in this programmatic analysis.

The results of the GHG emissions study for the sample BRT projects published in the Greenhouse Gas Emissions from Transit Projects: Programmatic

Assessment (FTA Report No. 0097, January 2017), suggested that BRT project generates relatively low levels of GHG emissions primarily due to their low infrastructure needs and low annual transit vehicle miles traveled (VMT) which is consistent with the results of analysis performed by this project.

The GHG emissions analysis for the project addresses emissions and the potential effects on regional and local air quality under existing conditions, the No Build Alternative, and the build alternatives. The primary source of direct emissions under operational conditions is vehicular traffic. Emissions from vehicular traffic within the project corridor are based on the VMT, speed distributions, and vehicle types. Table 4.17-2 displays the VMT for existing conditions (2016), the No Build Alternative and build alternatives in the opening year (2023), and the No Build Alternative and build alternatives in the design year (2040). The total VMT in the project area is the same between Alternatives A and B, because the number of mixed-flow lanes remains unchanged.

The VMT data were utilized to estimate air pollutant emissions from all vehicular traffic throughout the project corridor. Table 4.17-3 presents the results of operational emissions modeling for vehicular traffic based on speed distribution and fleet mix data provided in the traffic study. Table 4.17-3 also shows the difference in emissions between the build alternatives and the No Build Alternative. There is little difference between the build alternatives, with Alternative B without the Haven branch generating the most emissions in 2023 and 2040. Implementation of the project would result in a marginal decrease in GHG emissions in 2023, and result in an increase of no more than 0.02 percent in 2040 under Alternative B. The slight increase in emissions would be related to increased regional truck VMT. The truck VMT increase offsets the regional reduction in passenger vehicle VMT. Regardless, the percent change in emissions is not considered significant for any of the build alternatives; therefore, the project would not result in an adverse effect related to GHG emissions.

The entire road surface would be above the 100-year floodplain. The proposed project would not alter water surface elevations of the 100-year flood.

The build alternatives would be consistent with development plans for the area and would not significantly change the land use in the area because it is currently developed or zoned for development. The build alternatives would not expose people or structures to the risk of flooding, create floodplains, or result in an increase in the base flood elevation. Natural and beneficial floodplain values would not be affected by the build alternatives. A range of other potential climate change impacts may affect the proposed project, including increased temperatures, heat stress days, and water supplies. The proposed project has no component that would not exacerbate these issues. Therefore, the proposed project would not result in an adverse effect related to climate change.

Table 4.17-2 Project Corridor Vehicle Miles Traveled

Scenario	No Build Alternative	Alternative A	Alternative B
Existing VMT (2016)	12,926,868	-	-
Opening Year VMT (2023)	13,393,271	13,389,567	13,389,287
Percent Change from Existing (%)	3.6%	3.6%	3.6%
Percent Change from No Build (%)	-	-0.03%	-0.03%
Design Year VMT (2040)	15,725,284	15,721,813	15,722,280
Percent Change from Existing (%)	21.6%	21.6%	21.6%
Percent Change from No Build (%)	-	-0.04%	-0.04%
Note: The VMT analysis was prepared when 2020 was the estimated opening year. The current opening year estimate is 2023. Nevertheless, the traffic modeling forecast considered VMT through 2040 and indicates that VMT would decrease in the opening and horizon years. A 3-year delay in the opening date does not substantially alter this analysis. In addition, within the EMFAC2014 model, pollutant emissions decrease in future years due to fleet turnover and improvements in engine exhaust technology.			

Source: WVC Project Greenhouse Gas Emissions Study, 2018.

Table 4.17-3 Greenhouse Gas Emissions Analysis Relative to No Build Alternative

Scenario	Annual Emissions (Metric Tons CO_2e)	Build Alternatives Relative to No Build Alternative	Percent Difference
Existing (2016)	2,021,030	--	--
Opening Year (2023)			
No Build Alternative	1,898,124	--	--
Alternative A	1,898,918	794	0.04
Alternative B	1,899,229	1,105	0.06
Design Year (2040)			
No Build Alternative	1,475,058	--	--
Alternative A	1,475,324	265	0.02
Alternative B	1,476,277	1,218	0.08
Note: The VMT analysis was prepared when 2020 was the estimated opening year. The current opening year estimate is 2023. Nevertheless, the traffic modeling forecast considered VMT through 2040 and indicates that VMT would decrease in the opening and horizon years. A 3-year delay in the opening date does not substantially alter this analysis. In addition, within the EMFAC2014 model, pollutant emissions decrease in future years due to fleet turnover and improvements in engine exhaust technology.			

Source: WVC Project Greenhouse Gas Emissions Study, 2018.

CEQA Analysis

This section analyzes GHG emissions that would be generated by construction activities and future operating conditions of the proposed project in accordance with the criteria set forth in Appendix G of the CEQA Guidelines.

Greenhouse Gas Emissions

Operational emissions associated with implementation of the proposed project

would result from vehicular traffic along the BRT corridor that could potentially be affected by installation of the additional lane(s). Regional emissions estimated using EMFAC2014 are shown in Table 4.17-3, above, for the existing condition (2016), opening year (2023), and design year (2040). Table 4.17-4 shows that compared to the CEQA baseline of 2016, the build alternatives would generate substantially less GHG emissions in 2023 and 2040. This is because exhaust emissions decrease in future years as the vehicle fleet continues to turn over to newer, more-efficient vehicles and emission standards become more stringent. When comparing Build to No Build Alternative emissions, GHG emissions would increase by a maximum of 0.06 percent in 2023 and 0.08 percent in 2040. The slight increase in emissions would be related to increased regional truck VMT and emissions from the O&M facility. The truck VMT increase offsets the regional reduction in passenger vehicle VMT.

Operational GHG emissions have been quantified for public disclosure. Evaluating the significance of GHG emissions by their effect on the State's efforts to meet its long-term goals is a reasonable threshold.

Table 4.17-4 Greenhouse Gas Emissions Analysis Relative to the CEQA Baseline

Scenario	Annual Emissions (Metric Tons CO_2e)	Change from Existing Conditions	Percent Difference
Existing (2016)	2,021,030	--	--
Opening Year (2023)			
No Build Alternative	1,898,124	-122,906	-6.1
Alternative A	1,898,918	-122,112	-6.0
Alternative B	1,898,229	-121,801	-6.0
Design Year (2040)			
No Build Alternative	1,475,058	-545,972	-27
Alternative A	1,475,324	-545,707	-27
Alternative B	1,475,277	-544,754	-27
Note: The VMT analysis was prepared when 2020 was the estimated opening year. The current opening year estimate is 2023. Nevertheless, the traffic modeling forecast considered VMT through 2040 and indicates that VMT would decrease in the opening and horizon years. A 3-year delay in the opening date does not substantially alter this analysis. In addition, within the EMFAC2014 model, pollutant emissions decrease in future years due to fleet turnover and improvements in engine exhaust technology.			

Source: WVC Project Greenhouse Gas Emissions Study, 2018.

Consistency with Greenhouse Gas Reduction Plans

Relevant plans adopted for the purposes of reducing GHG emissions include the AB 32 Scoping Plan, the 2016-2040 RTP/SCS, and the SANBAG Regional Greenhouse Reduction Plan. In addition, consistency with EO S-03-05 and EO B-30-15 is also considered, although no State or local regulations have been adopted to enforce the EO goals with respect to land use approvals.

Consistency with AB 32 Scoping Plan

The AB 32 Scoping Plan outlines a series of technologically feasible and cost-effective measures to reduce statewide GHG emissions, including expanding energy efficiency programs, increasing electricity production from renewable resources (at least 33 percent of the statewide electricity mix), and increasing automobile efficiency, implementing the Low-Carbon Fuel Standard, and developing a cap-and-trade program.

When the California Natural Resources Agency promulgated Guidelines Section 15064.4, the agency explained that the AB 32 Scoping Plan "may not be appropriate for use in determining the significance of individual projects because it is conceptual at this state and relies on the future development of regulations to implement and the strategies identified in the Scoping Plan" (California Natural Resources Agency, 2009:26–27).

The technologically feasible and cost-effective measures listed in the AB 32 Scoping Plan are designed to be implemented by State agencies. Nevertheless, local governments and private developments can support AB 32 goals through consistent implementation of AB 32 Scoping Plan policies, where applicable. Extension of transit is a core AB 32 strategy. Accordingly, the proposed project would support State goals for alternative transportation. Moreover, as shown in Table 4.17-3, the proposed project would result in a long-term GHG reduction compared to the CEQA baseline. The proposed project would have a less-than-significant impact related to consistency with the policies in the AB 32 Scoping Plan.

Consistency with SCAG and SBCOG Policies

The SCAG 2016-2040 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375. The plan charts a course for closely integrating land use and transportation planning, including in areas labeled as High Quality Transit Areas. High Quality Transit Areas are located within 0.5 mile of a fixed guideway transit stop or a bus transit corridor where passengers are picked up at a frequency of every 15 minutes or less during peak commuting hours. Major themes in the 2016-2040 RTP/SCS that are relevant to the proposed project include integrating strategies for land use and transportation, striving for sustainability, protecting and preserving the existing transportation infrastructure, increasing capacity through improved system management, and giving people more transportation choices. The proposed project would provide increased

regional transit opportunities, would create new High Quality Transit Areas, and would not interfere with SCAG's ability to implement the regional strategies outlined in the 2016-2040 RTP/SCS. In addition, the proposed project is included in the list of projects for the 2016-2040 RTP/SCS.

The SBCOG Regional Greenhouse Reduction Plan provides SBCOG and the 21 participating cities with an inventory of GHG emissions, targets, and provided reduction strategies for each City. For on-road emissions, the plan includes a measure to improve transit travel time and connectivity (On-Road-1.1). This measure is described as reducing transit passenger travel time through reduced headways and increased speed, along with improving intermodal connectivity. In addition, measure On-Road-1.2 references other transit improvements, including additional BRT routes. The proposed project would be consistent with both of these measures.

Omnitrans sustainability commitments also ensure consistency with regional GHG reduction plans. Omnitrans is a member of the APTA Sustainability Commitment Program, which requires the following commitments:

- Make sustainability part of the agency's strategic objectives;
- Identify a sustainability champion within the agency who tracks key sustainability indicators and targets, reports annually to APTA, engages with the agency and community, and recommends and implements short- and long-term goals and programs;
- Establish an outreach program on sustainability for staff; and
- Establish a baseline measurement for key indicators.

Consistency with Executive Orders S-3-05 and B-30-15 (Post-2020 Goals)

EO B-30-15 established an interim GHG reduction target of 40 percent below 1990 levels by 2030, and EO S-3-05 established a long-term goal of reducing Statewide GHG emissions to 80 percent below 1990 levels by 2050. Achieving these long-term GHG reduction policies will require systemic changes in how energy is produced and used. In evaluating emissions for consistency with EO S-3-05 and EO B-30-15, it is important to note that many of these broad-scale shifts in how energy is produced and used are outside of the control of the transit project. It is anticipated that State programs adopted to reduce post-2020 emissions will extend strategies outlined in the AB 32 Scoping Plan. Increased transit will be a critical component of any post-2020 policy. Accordingly, the proposed project will facilitate anticipated GHG strategies adopted and recommended at the State level to reduce post-2020 emissions, consistent with goals outlined under EO B-30-15 and EO S-3-05. Moreover, as shown in Table 4.17-3, the BRT line would result in a long-term GHG reduction compared to the CEQA baseline due to increased public transit ridership and less reliance on passenger vehicles. The proposed project would therefore have a less-than-

significant impact related to consistency with EO B-30-15 and EO S-3-05.

4.17.3 Avoidance, Minimization, and/or Mitigation Measures

The GHG Emissions Study quantified construction and operational emissions and assessed consistency with GHG reduction plans. The proposed project is a mass transit system that is consistent with State and regional policies to reduce long-term GHG emissions. No significant impacts have been identified under CEQA, and no adverse effects have been identified under NEPA. No mitigation or control measures are necessary to reduce GHG emissions.

CHAPTER 5 –
CONSTRUCTION PERIOD IMPACTS

5.0 CONSTRUCTION PERIOD IMPACTS

This chapter discusses temporary construction impacts associated with the proposed 35-mile-long WVC Project. Section 5.1 presents a typical construction scenario for the proposed project as it is presently understood. Section 5.2 contains an impact evaluation by issue area. Mitigation measures and minimization measures, if required, are provided by issue area in Section 5.3.

5.1 Construction Scenarios

5.1.1 Phase I/Milliken Alignment

Construction of the Phase I/Milliken Alignment is estimated to take approximately 20 to 24 months to complete. Conceptual construction steps and schedules for Alternatives A and B are similar, as presented in Figures 5-1 and 5-2. As shown in both figures, site clearing, utility relocation, roadway construction, and station construction could occur segment by segment as determined appropriate by the construction Contractor.

Alternative A

Construction of the side-running stations and a “kit-of-part” or amenities as described in Section 2.4.2 would occur along the corridor alignment within the existing street ROW.

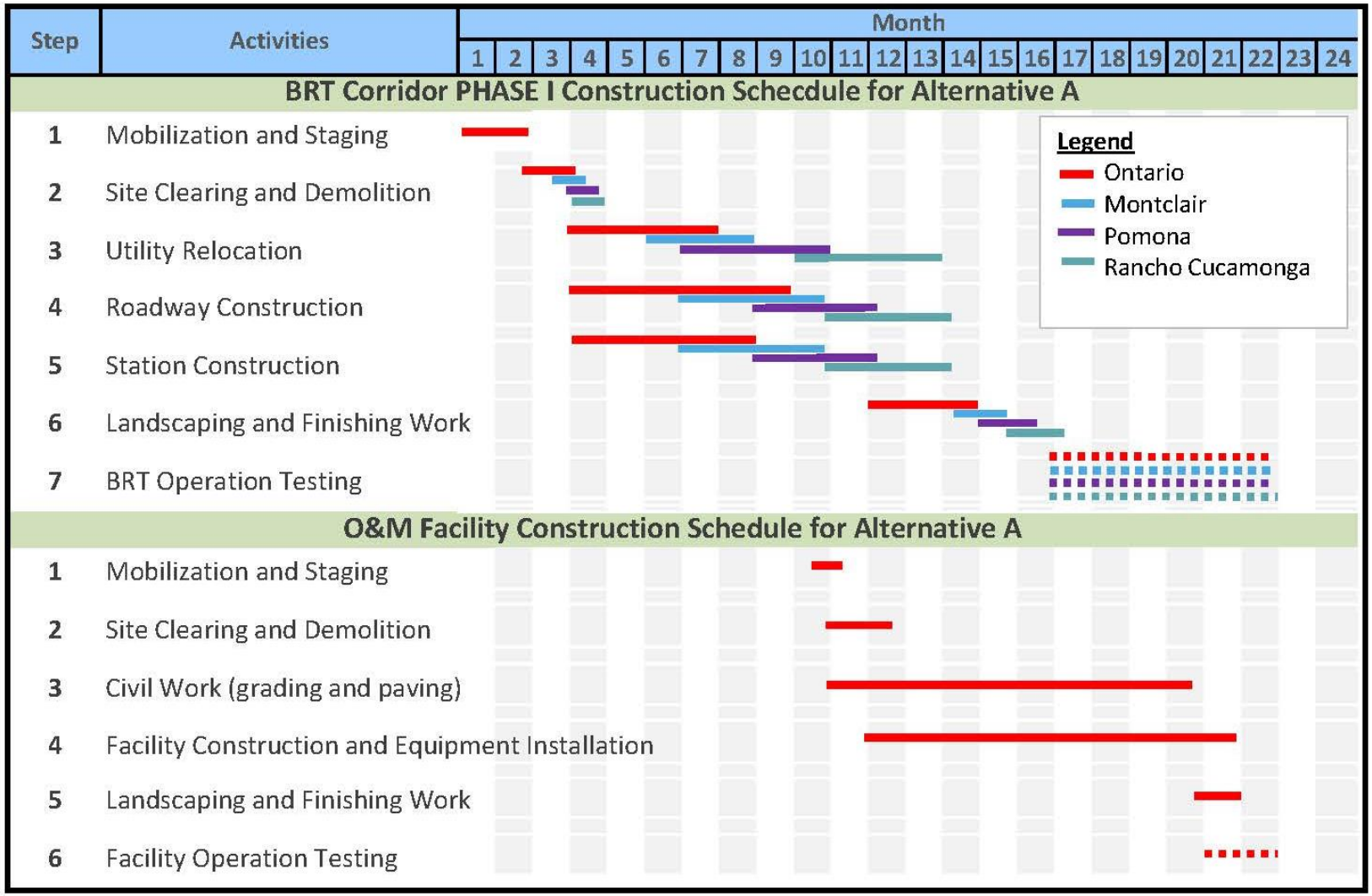
Station construction would involve installing components such as canopies, ticket vending equipment, drinking fountains, railings, lighting, signage, and station furniture. Construction of each side-running station would disturb the area of approximately 0.45 acre along the outside land and sidewalk. Reconstruction of curbs and gutters would be done after the station is constructed to return the street to the preconstruction condition.

Traffic flow along the roadway alignment would be maintained during construction, although, occasionally, lane reduction could occur to accommodate construction activities. The Contractor would be responsible for developing construction staging and identifying temporary lay-down and staging area(s) for field trailers, storage of equipment, and construction-related activities near the proposed project site. The Contractor may propose to set up temporary rock-crushing equipment near the proposed action to recycle concrete and asphalt rubble for use as crushed miscellaneous base to be placed under the street pavement.

Alternative B

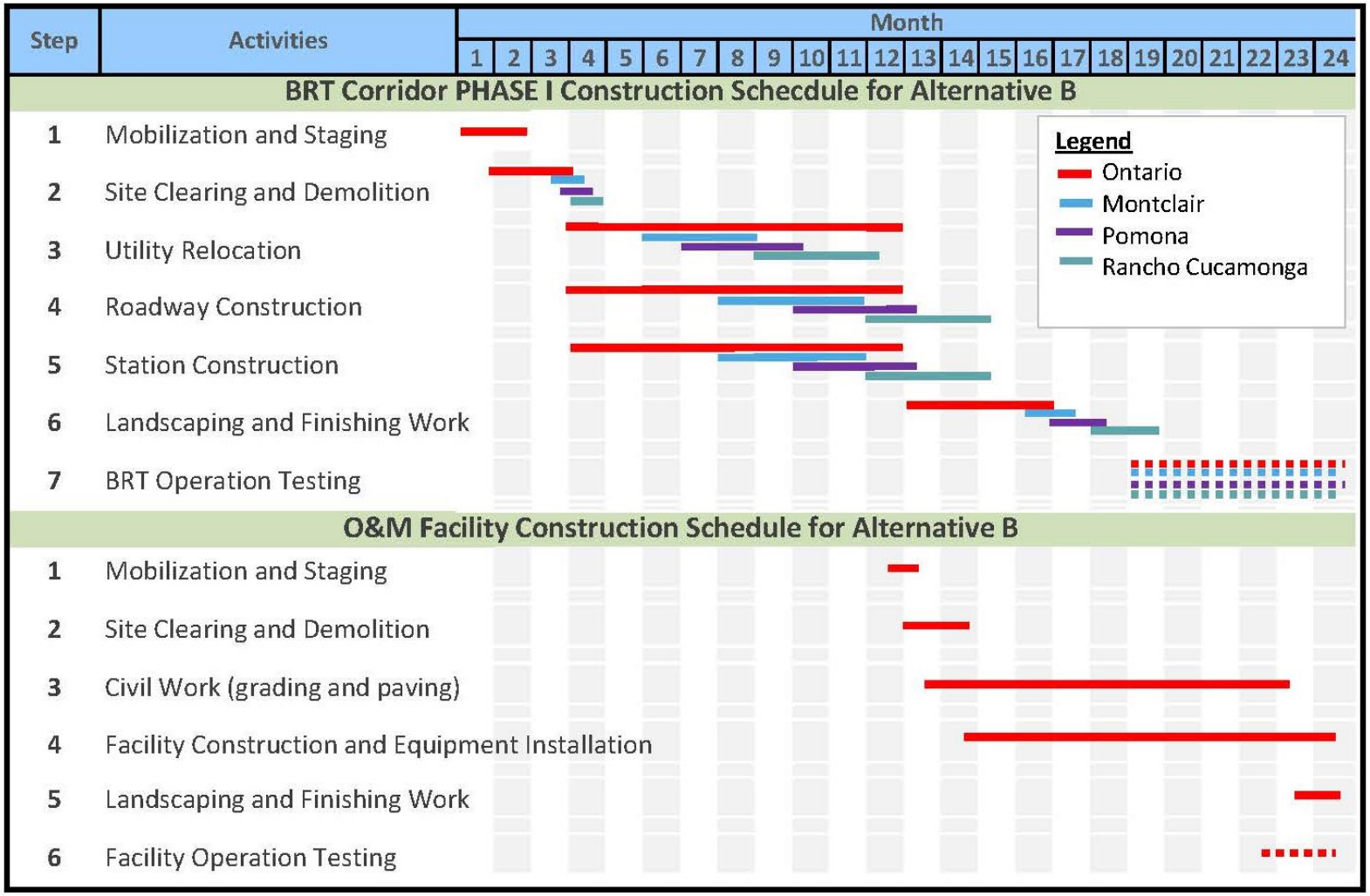
Construction of the side-running stations and a “kit-of-part” or amenities under Alternative B would occur within the existing street ROW similar to that described under Alternative A. In addition, Alternative B would require reconstruction of 3.5 miles of Holt Boulevard in Ontario to accommodate exclusive bus lanes and construction of bus shelters and pylons for center-running stations.

Figure 5-1 Conceptual Construction Schedule for Phase I/Milliken Alignment – Alternative A



Source: Parsons, 2018.

Figure 5-2 Conceptual Construction Schedule for Phase I/Milliken Alignment – Alternative B



Source: Parsons, 2018.

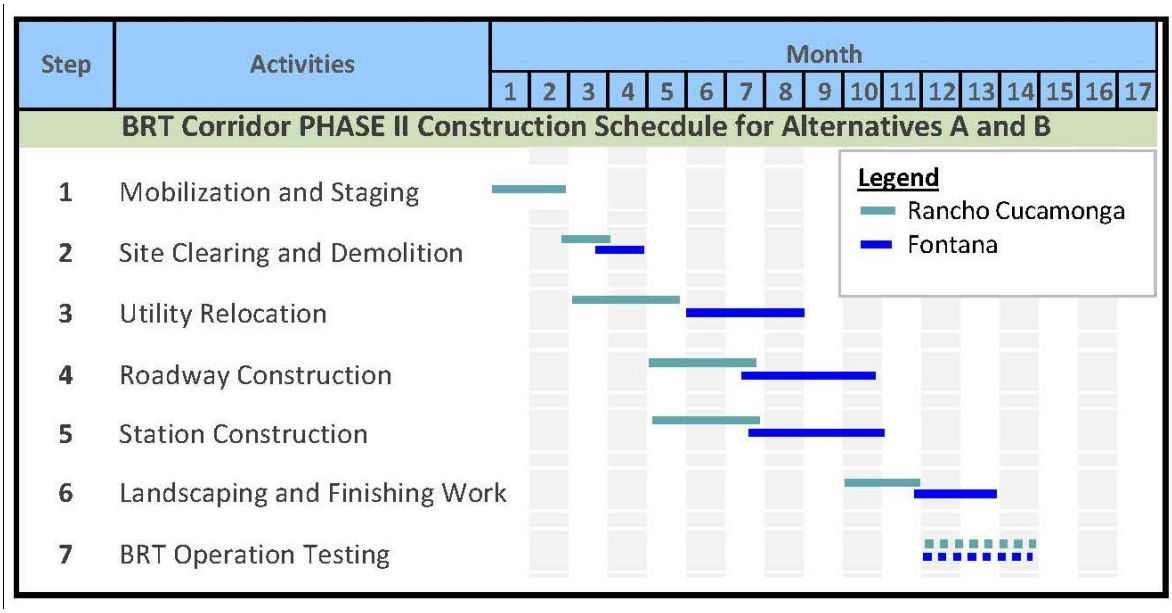
Traffic flow, including bicycle lanes and pedestrian walkways along the roadway alignment, would be maintained during construction, although occasionally, lane reduction could occur to accommodate construction activities. For the dedicated lane segment, reconstruction of the roadway would be done segment by segment and one side at a time to avoid roadway closure.

5.1.2 Phase II/Haven Alignment

Alternatives A and B of the Phase II/ Haven Alignment are the same.

Construction of the Phase II/Haven Alignment would take place after completion of the Phase I Alignment and when funding is available. Construction steps would be similar to that of Phase I, Alternative A (side-running station). Construction is estimated to be completed within 12 to 14 months, as shown in Figure 5-3. Site clearing, utility relocation, roadway construction, and station construction could occur segment by segment as determined appropriate by the construction Contractor.

Figure 5-3 Conceptual Construction Schedule for Phase II/Haven Alignment



Source: Parsons 2018

5.1.3 Typical Construction Sequence for BRT Corridor

Construction of the BRT corridor (Alternatives A and B) would follow typical steps described below.

Step 1: Mobilization and Staging

This first step in the construction process would require an estimated 1 to 2 months and involves Contractor preparation for construction activities. As mentioned earlier, the construction Contractor is responsible for selecting the staging area for each phase of construction.

Mobilization includes, but is not limited to, the following principal items:

1. Move all plant and equipment required for operations on to the site.
2. Install temporary construction power, lighting, and other temporary facilities.
3. Develop construction water supply.
4. Provide and maintain a field office for the Contractor and Engineer.
5. Provide onsite sanitary facilities and potable water facilities.
6. Arrange for and erect Contractor's work and storage yard.
7. Obtain and maintain all required permits, insurances, and bonds.
8. Post all OSHA-required notices and establishment of safety programs.
9. Photographically document the site and access conditions before start of and at the completion of construction.
10. Install and maintain protective fence around the limits of work, where appropriate, and/or environmentally sensitive areas (ESAs).

Step 2: Site Clearing and Demolition

This step involves clearing the corridor and preparing it for construction of the BRT stations and associated amenities. Site clearing and demolition would take approximately 1 to 2 months to complete after ROW acquisition, if applicable to alternative. The corridor would be cleared of any conflicting aboveground structures and improvements.

For the side-running station construction under Alternatives A and B, site clearing would commence prior to station construction. Site clearing would involve the area around the station of approximately 0.05 acre per location.

For the 3.5-mile dedicated lane segment under Alternative B, site clearing, which would include building and/or structure demolition, would take place once the ROW acquisition process is complete. In the case of former lease property, the tenants would be required in most instances to remove their improvements, with some remainder to be removed by the construction Contractor.

Hazardous materials within any structures would be removed prior to demolition. Where necessary, construction sites would be fenced for public safety.

Construction of the center-running stations within the 3.5-mile dedicated lane segment would occur in phases such as one side of the roadway and up to a half or one block at a time to minimize impacts to the roadway users and the area residents/businesses.

Step 3: Utility Relocation

This process is expected to occur over approximately 8 to 10 months. Existing utilities that would interfere with construction of the stations and associated amenities would be removed and relocated for continuing service. In addition, utilities crossing the alignment may need to be removed and relocated to either temporary (requiring final relocation at an appropriate point later in the construction process) or permanent locations at the outset.

Relocation or reconstruction of existing utilities will need to take into account service required at the station locations

and parking lots (i.e., electricity for platform and parking lot lighting, telephone for communications, water for landscape maintenance) and also any additional feeds to reconstructed traffic signals. Some aboveground utility poles along the Refined LPA alignment would have to be relocated to make room for the roadway widening.

This work would be conducted in accordance with contract specifications, including the following requirements:

- Obtain authorization from owner before initiating work;
- Contact Underground Service Alert in advance of excavation work to mark-out underground utilities;
- Conduct investigations, including exploratory borings, to confirm the location and type of underground utilities and service connections;
- Prepare a support plan for each utility crossing detailing the intended support method;
- Take appropriate precautions for the protection of unforeseen utility lines; and
- Restore or replace each utility as close as possible to its former location and as good or better condition than found prior to removal.

Step 4: Roadway Construction

This step is estimated to be completed in 8 to 10 months and would occur concurrently with the utility relocation and station construction based on the schedule prepared by the construction Contractor. Construction activities involved with this step are described below.

Excavation

Shallow excavation (estimated to a depth of approximately 1.75 feet) is anticipated because roadway widening would be an essentially at-grade facility. In some cases, deeper excavation may be required to place and compact subgrade materials under the roadbed. Excavated material would be collected in haul trucks and carried away from the construction area to either become fill material for this proposed project or for some other project or, if either is not desired or the soil contains high levels of contaminants, it would be hauled for disposal at an approved disposal site. Haul routes have not been specified at the present time; these would be determined in consultation with the appropriate departments of the involved cities. A minimum of contamination is expected; however, the actual amount would not be determined until pre-testing is conducted prior to the initiation of excavation activities. If contaminated materials are found, then characterization, treatment, and disposal will be conducted in accordance with applicable regulations.

Drainage Facilities

Subsurface drainage facilities, including catch basins, drainage pipe, and connections, would be installed to connect to the local storm drain system. There may be sections of the corridor requiring substantial lengths of longitudinal drainage pipe, depending on the amount of runoff to be expected, the capacity of the local storm drain system, and the location of appropriate connection points. The extent of this necessity and

specifications, such as size, length, and connection points, would be determined in preliminary and final design. It would also be necessary to manage drainage during the construction period such that proposed project-related drainage does not overflow onto adjacent properties or public streets. To comply with Los Angeles RWQCB and EPA for the CWA, the use of BMPs to control and treat runoff, as necessary, will be followed.

Compaction of Subgrade

Once the excavation process is completed, the roadway would be compacted to appropriate geotechnical standards, thereby providing the subgrade needed for installation of the structural roadway section. It may be necessary to over excavate and recompact the subgrade to ensure a sufficient base for the proposed project or widened roadway facility.

Install Base Material

Following the installation of utilities, including conduits, for communications and lighting, the subgrade would be compacted to a sufficient density and graded appropriately for drainage. Base material, consisting of aggregate, would then be brought to the site in trucks and placed on top of the subgrade. The material would be graded and compacted to a prescribed density.

Construct Curbs and Gutters

The next step in roadway construction is to form and pour curbs and gutters where needed. Runoff from the curbs and gutters would be channeled into drainage facilities leading to the existing storm drain system.

Place Portland Cement Concrete or Asphalt

Following the curb and gutters construction, the roadway would be paved with Portland cement concrete or asphalt. It would likely occur in intermittent paving for several days in a row in various sections of the corridor and several times in each segment as multiple layers of pavement are applied.

Install/Upgrade Traffic Signals

It may be necessary to upgrade the local arterial traffic control system throughout the corridor to permit the interaction between local traffic and Omnitrans bus movements. New signal controllers would need to be installed at a variety of locations along the corridor. Reconstruction of street intersections would be accomplished, where necessary, along with the traffic signalization work. It may be necessary, depending on traffic conditions, to stage the reconstruction of some intersections and also preclude the simultaneous reconstruction of adjacent intersections in some areas.

Step 5: Station Construction

It is estimated that station construction would take approximately 8 to 10 months. Each station would be constructed using the following steps:

Clearing and Grubbing

Each station location would be cleared of obstructions and rough-graded to permit subsequent activities to occur.

Platform Construction

Once the station areas are cleared, footings would be excavated to a depth necessary for the canopies, lighting, and other aboveground elements. It would be necessary at this point to install utility feeds for power, water, ticket vending machines, and telephones as part of the footing and platform construction. The footings would receive reinforcing steel, and concrete would be poured. With the footings in place, at-grade platforms would be formed and the concrete platforms poured and finished. For Alternative B, center-running station platforms along Holt Boulevard in Ontario would be raised.

Install Canopy and Other Platform Amenities

With the platforms in place, the above-platform features can be installed. Included among these features would be canopies and railings.

Step 6: Landscaping and Finish Work

This construction step would require approximately 4 to 6 months. The following activities would occur:

Install Irrigation System and Landscaping

Prior to installing planting material, irrigation systems would be installed where required. Planting materials, including groundcover, shrubs, and trees, would be brought to each planting location by truck and planted.

Complete Finish Work

A variety of finish work tasks would need to be completed. At each station, final platform features would be installed, including benches, ticket vending machines, stand-alone validators, map cases, pylons, trash receptacles, artwork, lighting, and signage. Also, to be completed would be parking lot paving, striping, and landscaping. Along the corridor, installation of electrical equipment, signage, and final cleanup would occur.

Striping

For most of the corridor, Omnitrans buses would operate in mixed-flow traffic. For Alternative B, the portion along Holt Boulevard within Ontario would require restriping of travel lanes and intersection approaches to allow additional turning lanes, alterations in street lane geometry, and pedestrian crosswalks.

Signs

New signage would be installed along the corridor for Omnitrans bus users, motorists, pedestrians, and bicyclists.

Step 7: BRT Operations Testing

Once the entire corridor is completed, operations testing would occur that would include the interactive traffic signal system, communications equipment, and station equipment. Completion of this testing would then permit the corridor to be opened for service.

5.1.4 Typical Construction Sequence for the O&M Facility

Construction of the O&M facility is estimated to be completed within 10 to 12 months and would occur only in the City of Ontario during the latter part of the BRT corridor construction, as shown in Figures 5-1 and 5-2 above. Construction sequences for the O&M facility are of typical building construction, which include the following:

Step 1: Mobilization and Staging

This step would take approximately 1 month and involves Contractor preparation for construction activities. It is anticipated that the construction Contractor would stage the equipment onsite.

Step 2: Site Clearing and Demolition

Demolition of the existing building onsite would take approximately 1 to 2 months. Hazardous materials within any structures would be handled per the construction specifications. Where necessary, the construction site would be fenced for public safety.

Step 3: Civil Work

The step would be done in stages concurrently with the facility construction. Work would involve excavation, grading, and paving. It is anticipated that 8 to 10 months would be required for this step.

Step 4: Facility Construction and Equipment Installation

This step would take approximately 8 to 10 months and would be done in stages concurrent with the grading and paving activities. Once the site area is graded, construction of the O&M building and parking lot would begin. Construction and installation includes, but is not limited to, the following principal items:

- Subsurface drainage facilities
- Building framing
- Utilities, such as electrical, water, sewer, and gas
- Concrete features and improvements
- HVAC and lighting/electrical components
- Insulation and drywall
- Flooring and tiling
- Cabinets and shelving
- O&M equipment

Step 5: Landscaping and Finishing Work

This step would take approximately 1 month once the facility construction is almost complete. Work under this step would include:

- Landscaping: Prior to installing planting material, irrigation systems would be installed where required. Planting materials, including groundcover, shrubs, and trees, would be brought by truck and planted.
- Finish Work: At this stage, final facility features would be installed, including trash receptacles, lighting, and signage. Parking lot paving, striping, and landscaping would also be completed, and final cleanup would occur.
- Striping: Sitework striping would include parking and designated striping for site operations, as appropriate.

- Sign Installation: New signage would be needed along the facility premises for Omnitrans bus users, motorists, pedestrians, and facility employees.

Step 6: Facility Operation Testing

This step would occur at the final 2 months of facility construction. Testing would include electrical systems, communications equipment, and maintenance facilities. Completion of this testing would then permit the facility to be opened for service.

5.2 Construction Period Impacts

Impacts related to construction would be temporary and short term. Construction period impacts by issue area are assessed below.

5.2.1 Aesthetics and Visual Resources

BRT Corridor

Construction activities for the BRT stations would result in temporary disruption to the visual character of the area where the construction site is located along the corridor. The disruption would not block key views, but it could result in visual intrusions, shade and shadow, increase in ambient light levels, and glare. Alternative B would be slightly more disruptive of the visual environment because the center-running station sites would be more prominent in the visual landscape than would the side-running stations. Construction activities would include the use of grading equipment such as dozers, trucks for hauling, forklifts, and other equipment to build these elements. Views of equipment, fencing, and disturbed landscaping would be visible to adjacent uses, motorists, and pedestrians within the proposed project corridor. These views would be intermittent and short term. Because views of construction would be temporary and intermittent, and no other visual impacts such as changes to lighting or blockage of key views would occur, the visual impacts of construction would not be adverse.

O&M Facility

Construction of the O&M facility would be confined within the existing site, which is located within the industrial land use zone. No adverse visual impacts from the construction site are anticipated because the site would be fenced to provide safety to the public.

5.2.2 Air Quality

BRT Corridor

Implementation of the proposed project would generate emissions of air pollutants temporarily during construction activities and continually during operation following completion of the BRT line.

Construction-related effects on air quality would be greatest when multiple pieces of equipment are operating simultaneously and generating exhaust emissions. Construction activities would temporarily generate enough PM_{10}, $PM_{2.5}$, and small amounts of CO, NO_X, and VOCs to be of concern. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads

of soils. Unless properly controlled, vehicles leaving the site could deposit mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary day-to-day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Large dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Tables 5-1 and 5-2 show the estimated regional emissions associated with each construction phase for Alternatives A and B, respectively. Note that the emissions were estimated for both Phase I/Milliken alignment and Phase II/Haven alignment construction. Based on the results, Alternatives A and B would generate approximately the same amounts of air pollutant emissions. Regional construction emissions would not exceed the thresholds set forth by SCAQMD. In addition, construction emissions are short term in duration; therefore, they would not result in long-term adverse conditions.

Localized construction emissions include those emissions only generated within the construction zone (i.e., fugitive dust and equipment exhaust). Tables 5-3 and 5-4 show the estimated localized emissions phase for Alternatives A and B, respectively. Localized particulate matter emissions would exceed the applicable significance thresholds under Alternative B. More than 80 percent of localized particulate matter emissions would be related to fugitive dust. The proposed project would be required to comply with SCAQMD Rule 403 (Fugitive Dust), which would reduce emissions by the greatest extent feasible. This was assumed to be a 50 percent reduction based on the default assumptions in the construction model. Compliance with Rule 403 is a regulatory requirement, and the emissions reduction was included in the unmitigated emission estimates.

Construction activity associated with Alternative B would exceed the localized significance thresholds for PM. Mitigation measures (CI-AQ-1 through CI-AQ-13) will be taken to reduce fugitive dust emissions, but even with these measures in place, fugitive dust will be above the significance thresholds for a short period of time. Therefore, the proposed project would result in a temporary but significant and unavoidable impact related to localized construction emissions.

Table 5-1 Regional Construction Emissions Analysis – Alternative A

Project Component	Maximum Daily Regional Emissions (pounds per day)				
	CO	NOx	VOC	PM_{10}	$PM_{2.5}$
Phase I					
Milliken Alignment Construction	31.9	28.6	3.3	4.5	2.0
O&M Facility Construction	36.0	32.6	35.1	4.7	2.3
Milliken Alignment + O&M Facility Construction Overlap	67.9	61.2	38.4	9.2	4.3
Phase II					
Haven Alignment Construction	31.5	23.7	2.8	4.2	1.7
Maximum Daily Regional Emissions	**67.9**	**61.2**	**38.4**	**9.2**	**4.3**
SCAQMD Threshold	550	100	75	150	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**

Source: WVC Air Quality Study, 2018

Table 5-2 Regional Construction Emissions Analysis – Alternative B

Project Component	Maximum Daily Regional Emissions (pounds per day)				
	CO	NOx	VOC	PM_{10}	$PM_{2.5}$
Phase I					
Dedicated Lanes Construction and Road Widening – Ontario	65.3	64.5	6.7	29.5	8.4
Milliken Alignment Construction	31.9	28.6	3.3	4.5	2.0
O&M Facility Construction	36.0	32.6	35.1	4.7	2.3
Dedicated Lanes + Milliken Alignment Construction Overlap	97.2	93.1	10.0	34.0	10.4
Milliken Alignment + O&M Facility Construction Overlap	67.9	61.2	38.4	9.2	4.3
Phase II					
Construction of Haven Alignment	31.5	23.7	2.8	4.2	1.7
Maximum Daily Regional Emissions	**97.2**	**93.1**	**38.4**	**34.0**	**10.4**
SCAQMD Threshold	550	100	75	150	55
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**

Source: WVC Air Quality Study, 2018

Table 5-3 Localized Construction Emissions Analysis – Alternative A

Project Component	Maximum Daily Localized Emissions (pounds per day)			
	CO	NOx	PM_{10}	$PM_{2.5}$
Phase I				
Milliken Alignment Construction	10.6	9.6	1.5	0.7
SCAQMD Threshold (≤1 Acre Site Disturbance, Receptor ≤ 25 m)	612	103	4	3
Exceed Threshold?	**No**	**No**	**No**	**No**
O&M Facility Construction	32.8	28.1	3.9	2.2
SCAQMD Threshold (≤1 Acre Site Disturbance, Receptor ≤ 25 m)	612	103	4	3
Exceed Threshold?	**No**	**No**	**No**	**No**
Phase II				
Haven Alignment Construction	10.5	7.9	1.4	0.6
SCAQMD Threshold (≤1 Acre Site Disturbance, Receptor ≤ 25 m)	612	103	4	3
Exceed Threshold?	**No**	**No**	**No**	**No**

Source: WVC Air Quality Study, 2018

Table 5-4 Localized Construction Emissions Analysis – Alternative B

Project Component	Maximum Daily Localized Emissions (pounds per day)			
	CO	NOx	PM_{10}	$PM_{2.5}$
Phase I				
Dedicated Lanes Construction and Road Widening – Ontario	65.3	64.5	29.0	8.2
SCAQMD Threshold (2-Acre Site Disturbance, Receptor @ 25 m)	885	149	6	5
Exceed Threshold?	**No**	**No**	**Yes**	**Yes**
Milliken Alignment Construction	10.6	9.6	1.5	0.7
SCAQMD Threshold (≤1 Acre Site Disturbance, Receptor ≤ 25 m)	612	103	4	3
Exceed Threshold?	**No**	**No**	**No**	**No**
O&M Facility Construction	32.8	28.1	3.9	2.2
SCAQMD Threshold (≤1 Acre Site Disturbance, Receptor ≤ 25 m)	612	103	4	3
Exceed Threshold?	**No**	**No**	**No**	**No**
Phase II				
Haven Alignment Construction	10.5	7.9	1.4	0.6
SCAQMD Threshold (≤1 Acre Site Disturbance, Receptor ≤ 25 m)	612	103	4	3
Exceed Threshold?	**No**	**No**	**No**	**No**

Source: WVC Air Quality Study, 2018

During construction, sensitive receptors near construction zones may experience short-term degradation of air quality due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Anticipated emissions from construction equipment may include CO, NO_X, VOCs, PM_{10}, $PM_{2.5}$, and TACs, such as diesel PM. Construction activities associated with the build alternatives would be temporary in nature and would not require more than 5 years to complete; therefore, construction emissions are not considered for conformity purposes or included in regional- and project-level conformity analysis [40 CFR 93.123(c)(5)]. Impacts to air quality during construction with mitigation incorporated are not considered adverse pursuant to NEPA because it is short-term, localized, and limited to fugitive dust emissions.

O&M Facility

Construction emissions associated with the O&M facility are shown in Tables 5-3 through 5-4. Construction activity would not result in regional or localized significant impacts or adverse effects.

5.2.3 Biological Resources

BRT Corridor

Alternatives A and B

Nesting Birds

No nests, nesting birds, swallows, or bats were observed during the general biological survey. Raptors and migratory birds potentially using shrubs and trees within the BSA could be affected by their removal and/or proximity to construction activities. Project impacts to nesting birds would be limited to the removal of trees and shrubs within the BSA and exclusion of swallows from any nests associated with either of the build alternatives. Project impacts for either Alternative A or B would be about the same.

Non-Sensitive Vegetation Communities

A total of 0.8 acre of disturbed/ruderal habitat is anticipated to be temporarily impacted by Alternative B. These areas are located along E. Holt Avenue, primarily east of Euclid Avenue.

Jurisdictional Wetlands and Waters of the U.S.

Impacted USACE jurisdictional features consist entirely of previously constructed concrete drainage channels. All impacts to concrete-lined features are considered temporary as long as connectivity to upstream and downstream waters remains the same. As such, 0.2 acre of temporary impacts has been identified at West Cucamonga Channel under Alternative B. The channel is concrete lined on all surfaces, and vegetation was not observed during field surveys. This 0.2 acre of temporary impacts at West Cucamonga Channel is also under the jurisdiction of CDFW.

O&M Facility

Construction of the O&M facility would be confined within the existing site, which is located within the industrial land use zone. Some ornamental trees may be removed, but landscaping work will be done once construction is complete. No adverse

impacts to biological resources are anticipated.

5.2.4 Cultural and Paleontological Resources

BRT Corridor

Archaeological Resources

Alternatives A and B

According to the ASR prepared for this proposed project, of the 91 previously recorded resources identified during the literature and records search and subsequent research, 70 are located outside of but within 0.25 mile of the APE. Of the 21 previously recorded resources located within the APE, only 2 are identified as archaeological in nature. One of the previously recorded resources (P-36-007144) is no longer extant and has been evaluated as not eligible for inclusion in the NRHP or CRHR. Therefore, there would be no effect to this resource from the proposed project, and no mitigation measures are needed for it.

One previously recorded resource, National Old Trails Highway/Route 66 (P-36-002910), is listed on the NRHP and is eligible for the CRHR. No original materials associated with the historic road remain within the proposed project APE. Although the proposed project would involve construction along the original alignment of Route 66, there would be no direct effect to any historic built component of this resource. Because the proposed transit-improvement project is consistent with the current setting and use of the historic roadway, there would be no indirect effect to this historic property from the proposed project. No mitigation measures are required for this resource.

There are an additional four historic-age archaeological resources that have been recorded within 0.25 mile of the APE but are outside of the APE. These four resources will not be subject to impacts from the proposed project.

As part of the pedestrian surveys completed for the ASR, 11 new historic archaeological sites were identified and recorded during the survey. These were primarily vacant lots with remnants of asphalt or concrete from former use as parking lots or the sites of businesses that are no longer extant. Detailed information regarding these 11 new cultural resources is provided in Appendix A of the ASR. All 11 newly identified sites have been evaluated as not eligible for inclusion in the NRHP or CRHR. Because these 11 resources are not historic properties under Section 106 of the NHPA and are not historical resources under CEQA, there would be no effect to them from the proposed project, and no mitigation measures are needed for these 11 resources. Impacts on known archaeological resources under either Alternative A or B would be about the same.

Historic Architectural Resources

Alternative A

Alternative A would require minor construction to install bus pads on historic Route 66 (NRHP listed) in Fontana and at the Southern Pacific Railroad Depot

(NRHP listed) parcel in Pomona. Construction would include repaving of the curbside road surface on Route 66 and a portion of a parking lot, sidewalk, and lawn area at the Southern Pacific Railroad Depot parcel, with durable concrete for bus stations. Construction impacts are expected to be temporary and would not alter the use, character, integrity, or feeling of either historic property. No adverse or significant impacts to Route 66, the Southern Pacific Railroad Depot, or other historic architectural resources under Alternative A are anticipated.

Since the construction of the side-running stations under Alternative A would occur only within the isolated area around the station location (with the disturbed area of about 0.45 acre per station), no impacts to any historic property from noise and vibration are anticipated. However, minimization measures are in place to minimize impacts from noise and vibration.

Alternative B

Under Alternative B, there would be an effect on historic architectural resources in the proposed project area during construction, the extent of which will be determined in consultation with the SHPO, and potentially other interested parties. Current design would result in partial acquisition and temporary impacts to six NRHP-eligible or listed properties. Partial acquisition is required from the Southern Pacific Railroad Depot (100 W. Commercial Street, Pomona), the Jacob Lerch House (541 E. Holt Boulevard, Ontario), A.C. Moorhead House (961 W. Holt Boulevard, Ontario), and The Grinder Haven (724 W. Holt Boulevard, Ontario). Impacts may include driveway improvements, sidewalk construction, and hardscape changes. Temporary impacts would occur to these same historic properties above, in addition to two others: Vince's Spaghetti (1206 W. Holt Boulevard, Ontario) and to a portion of historic Route 66 (Fontana), to install bus pads and/or a bus stop. Temporary construction activities may include secured or fenced staging areas for materials and equipment. Residences and community resources may also experience short-term disruptions of utility services during construction activities as utilities need to be moved. Access would be maintained and use of the historic properties, or roadway and sidewalks in the case of Route 66, would continue during construction. Effects of short-term construction impacts on or near historic properties will be mitigated by using the standard BMPs identified in the topical areas in this chapter.

Under Alternative B, there would be 10 locally designated historical resources subject to partial acquisition and 7 locally designated historical resources subject to full acquisition in the City of Ontario. In addition, TCEs would be required for two locally designated historical resources located in Ontario (813-817 E. Holt Boulevard and 1101 E. Holt Boulevard). The required full acquisition of these 7 locally designated historical resources is considered a significant impact pursuant to CEQA.

Impacts from the construction of the side-running stations under Alternative B would be the same as that described under Alternative A above. However, roadway reconstruction in the 3.5-mile dedicated lane segment could cause some vibration impacts to the nearby historic buildings. Minimization measures are in place to minimize impacts from noise and vibration to historic buildings. No adverse effects are anticipated under Section 106 with mitigation measures incorporated.

Paleontological Resources

The proposed project site is entirely underlain by young Quaternary deposits with low paleontological sensitivity at the surface; however, deeper excavations have the potential to impact older Quaternary deposits, which have produced numerous significant fossils within the proposed project vicinity. Excavations for roadway widening, bus shelters, bus pads, and pylon installation are expected to be shallow (2.5 to 4 feet) and are anticipated to be entirely within low-sensitivity younger Quaternary deposits. Deeper excavation for storm drains (15-foot depth) and utility relocations (6-foot depth) have the potential to be located within older Quaternary deposits.

Alternative A

Under Alternative A, only shallow excavations would be required.

Alternative B

Under Alternative B, shallow and deep excavations are required and could have some impacts to paleontological resources.

O&M Facility

Construction of the new O&M facility would be confined within one of the potential sites located within the industrial land use zone within the City of Ontario. Each of the sites has been highly disturbed with industrial development. No paleontological resources of concern were identified during the record search and field review study. No adverse effects on paleontological resources are anticipated.

5.2.5 Geology, Soils, and Seismicity

BRT Corridor

Alternatives A and B

Construction of the BRT corridor and associated amenities would not affect regional geologic or seismic conditions. Construction would occur primarily within existing roadway ROWs for both alternatives, except for the dedicated lane segment under Alternative B where additional ROW is required and would not include activities that might influence existing geologic and seismic character of the regional or local area. Soil disturbance during construction would consist of roadway grading in areas where outside widening is required. These areas would be cleared and grubbed, and unsuitable materials would be removed and replaced with engineered fill. Implementation of the construction grading BMPs would minimize soil erosion during construction. The minor grading, cut, and fill activities

required to construct the proposed project would not change the overall soil characteristics of the region or local area. Impacts under either Alternative A or B would be about the same.

O&M Facility

Similar to the BRT corridor, construction of the O&M facility would not affect regional geologic or seismic conditions. Construction would be confined within the existing site. Implementation of the construction grading BMPs would minimize soil erosion during construction. No change to geology and soils characteristics of the site would occur as a result of the O&M facility construction.

5.2.6 Hazardous Waste

BRT Corridor

Alternatives A and B

Except as noted, impacts would be about the same under either Alternative A or B.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous materials is vital if they are disturbed during project construction.

The ISA prepared for this proposed project identified some utility poles and overhead transformers within the City ROW under both Alternatives A and B.

Utility poles, which consist of creosote-treated wood, may require removal. If removed during the proposed project, the poles should be managed as treated wood waste in accordance with the DTSC.

Overhead transformers are mounted on multiple utility poles along Holt Boulevard. Historically, pole-mounted transformers have contained PCBs, which would need to be profiled and managed appropriately, if present.

Based on site reconnaissance and historical research, there are structures that may contain ACM and LBP. Impacts from demolition of the buildings could present a health hazard if the ACMs were removed in a way that generates airborne fibers.

Construction along the existing ROW would involve minor excavation at station areas and likely would not encounter hazardous materials.

Hazardous materials, including fuels and motor oils, paints, cleaners, degreasers, and insulating materials, would be used during construction. While many of these materials are commonly used, they are considered hazardous materials (e.g., fuels are flammable) based on their physical properties, and improper handling could endanger workers and the public or result in contamination of soil and/or water. Handling and storage of fuels and other flammable materials during construction would follow California OSHA standards for fire protection and prevention. These measures include appropriate storage of flammable liquids and prohibition of open flames within 50 feet of flammable storage areas.

Contact with contaminants from pre-existing hazardous wastes in the proposed project area could have adverse effects on workers, the public, and environmental health and safety. The contaminants of concern potentially present along the proposed alignment are asbestos, lead, and total petroleum hydrocarbons. Workers could be exposed to soil and/or groundwater containing hazardous substances via direct contact (i.e., ingestion or through the skin) or via airborne pathways (i.e., inhalation of vapors or minute particles). The public and environment could be exposed to contaminants transported offsite during construction. The degree of hazard associated with these impacts on human or environmental receptors would depend on the chemical properties, concentrations, or volumes of contaminants; the nature and duration of construction activities; and contaminant migration pathways. The largest potential exposure risk is to the construction worker.

Construction of facilities for the proposed project would not require deep excavations or large earth movements. Foundations for the station structures would not be deep and would not cover a large area. Street light pole foundations would be sunk up to 5 feet, with a 2-foot-diameter hole to be excavated. Given the construction techniques used and the mitigation and minimization measures in place, the potential for large-scale releases of contaminants is limited.

Groundwater is approximately 250 feet bgs near the proposed project site and flows to the southwest. Recently reported groundwater depths to the west and south of the proposed project site are approximately 260 to 320 feet bgs, on average. Minor excavation required to construct the proposed project is not anticipated to encounter groundwater. Disposal of contaminated soil or water would require transport of contaminants outside the proposed project area.

O&M Facility

As discussed in Section 4.6.3, the ISA Addendum has determined Site 1 as an AOC and Site 3 as an REC. Appropriate clean up and coordination with DTSC would be undertaken for the selected site prior to commencement of the construction activities.

Hazardous materials-related impacts during O&M facility construction are similar to those described for the BRT corridor; however, the impacts are mostly confined within the construction site.

Contact with contaminants from pre-existing hazardous wastes in the proposed project area could have adverse effects on workers, the public, and environmental health and safety. The contaminants of concern potentially present at the selected O&M facility site are asbestos, lead, and, depending on the selected site, may include total petroleum hydrocarbons, volatile organic compounds, metals, or pesticides in soil. Workers could be exposed to soil and/or groundwater containing hazardous

substances via direct contact (i.e., ingestion or through the skin) or via airborne pathways (i.e., inhalation of vapors or minute particles). The public and environment could be exposed to contaminants transported offsite during construction. The degree of hazard associated with these impacts on human or environmental receptors would depend on the chemical properties, concentrations, or volumes of contaminants; the nature and duration of construction activities; and contaminant migration pathways. The largest potential exposure risk is to the construction workers.

Construction of facilities for the O&M facility would not require deep excavations or large earth movements. Given the construction techniques used and the mitigation and minimization measures in place, the potential for large-scale releases of contaminants is limited.

Groundwater is approximately 250 feet bgs near the proposed project site. Construction of the O&M facility is not anticipated to encounter groundwater. Disposal of contaminated soil or water would require transport of contaminants outside the proposed project area.

5.2.7 Hydrology, Water Quality, and Floodplains

Hydrology and Water Quality

The estimated maximum disturbed soil area (DSA) during construction would include the DSA for the project alignment, for the stations, and for the O&M facility. The DSA for the O&M facility would range from 4.77 to 9.60 acres, depending on the option selected (the analysis assumes that the entire O&M facility site would be disturbed). Thus, the overall DSA for the alignment, stations, and O&M facility would range from 7.87 to 12.70 acres for Alternative A and from 65.41 to 70.24 acres for Alternative B.

BRT Corridor

Alternative A

Soil-disturbance activities would include earth-moving activities such as excavation necessary to install bus shelters; soil compaction and earth-moving; and grading. The estimated maximum DSA during construction would include the DSA for the project alignment and the stations. The DSA for the Alternative A alignment and stations would be approximately 3.10 acres.

Disturbed soils are susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the proposed project area. Chemical contaminants, such as oils, fuels, paints, solvents, nutrients, trace metals, and hydrocarbons, can attach to sediment and be transported to downstream drainages and ultimately into collecting waterways, contributing to the chemical degradation of water quality. Anticipated changes associated with sediment transport to receiving water bodies would be a decrease in water clarity, which would cause a decrease in aquatic plant production and obscure sources of food, habitat, refuges, and nesting sites of fish. The deposition of

sediment or silt in a water body can fill gravel spaces in stream bottoms, smothering fish eggs and juvenile fish.

Sediment can also carry nutrients, such as nitrogen and phosphorus, which may cause algal blooms. Pesticides that attach to soil particles and enter waterways could bioaccumulate within the food chain, which ultimately could affect the aquatic ecosystems. The transport of other toxic pollutants into receiving water bodies could introduce subtle, sublethal changes in plant and wildlife gene structure, nervous system function, immune response, and reproductive rates, which ultimately affects species survival, population, and ecosystem structure.

Construction materials, waste handling, and the use of construction equipment could also result in stormwater contamination and affect water quality. Spills or leaks from heavy equipment and machinery can result in oil and grease contamination. Operation of vehicles during construction could also result in tracking of dust and debris. Staging areas can also be sources of pollutants because of the use of paints, solvents, cleaning agents, and metals during construction. Pesticide use, including herbicides, fungicides, and rodenticides, associated with site preparation is another potential source of stormwater contamination. Larger pollutants, such as trash, debris, and organic matter, could also be associated with construction activities. As such, the discharge of stormwater may cause or threaten to cause violations of WQOs. These pollutants would occur in the stormwater discharges and non-stormwater discharges and could cause chemical degradation and aquatic toxicity in the receiving waters.

Excavation could affect groundwater quality during dewatering activities if groundwater is encountered. Bus shelters in areas of shallow groundwater would require excavation and dewatering. If an excavation needs to be dewatered, groundwater would be disposed of according to NPDES dewatering permit requirements. The amount of dewatering, however, is likely to be relatively small and to occur across widely spaced locations; therefore, no substantial changes to regional groundwater levels are anticipated.

Construction activities could result in accidental releases of construction-related hazardous materials that might affect groundwater. Excavations could provide a direct path for construction-related contaminants to reach groundwater. Excavation could disturb known and undocumented soil or groundwater contamination, resulting in the migration of contaminated groundwater farther into the groundwater table. The two build alternatives would have similar potentials for inadvertent contamination of groundwater. Per NPDES requirements, a dewatering plan would be prepared to guide the response to undocumented soil or groundwater contamination; therefore, no substantial changes to groundwater quality are anticipated.

During construction, all regulatory requirements would be implemented prior

to soil disturbance. Additionally, an SWPPP would be prepared that would address stormwater management, spill prevention and response, and non-stormwater discharges. Construction Site BMPs would be deployed to the MEP. Because construction is occurring in an already built environment, construction impacts of the build alternatives would only slightly increase sediment loads during the removal of paved areas and disturbance of underlying soils. Temporary increases in sediment loads from the construction area are unlikely to alter the hydrologic response (i.e., erosion and deposition) downstream in the Chino Split Hydrologic Sub-Area (HSA) and, subsequently, the sediment processes in this HSA because the potential for sediment is negligible. Use of temporary Construction Site BMPs would minimize construction impacts on water quality. The impacts would not be significant or adverse.

Alternative B

The nature of water quality-related impacts under Alternative B would be similar to Alternative A with the exception that the DSA under Alternative B covers a larger area of approximately 60.64 acres compared to Alternative A.

Alternative B would result in 0.67 acre of temporary impacts on the West Cucamonga Channel to construct new sidewalk and landscaping associated with the road widening segment. Connectivity to upstream and downstream waters would remain the same. No channel widening would be required. However, access to the West Cucamonga Channel during construction would require a permit from the San Bernardino County Flood Control District.

O&M Facility

The DSA for the O&M facility varies by the potential sites under consideration. Site 1 encompasses an area of 9.6 acres, while Sites 2 and 3 encompass areas of 4.77 and 8.93 acres, respectively. Potential impacts from stormwater runoff during construction would be minimized by using temporary Construction Site BMPs to be implemented by the construction Contractor.

Floodplains

Alternatives A and B

Both of the build alternatives would require some improvements at West Cucamonga Channel, including roadway widening, grading, and culvert installation. Floodplain encroachment at West Cucamonga Channel would occur where the existing culvert crosses under Holt Boulevard. This culvert would be extended to accommodate the proposed roadway widening. The proposed work would not substantially alter the floodplain because the culvert crossing would only be extended by approximately 30 feet total (15 feet on each side). Furthermore, the 100-year flood event would still be contained in the channel under the proposed conditions.

The proposed project would be designed to minimize impacts, where possible, by limiting the grading and structural

encroachments at designated floodplain and floodway areas. The following measures would be incorporated into the design and construction phases to minimize potential floodplain impacts:

- Provide positive drainage during construction and refrain from filling designated floodplains.
- Implement recommended BMPs as identified in the Storm Water Data Report prepared for the project.
- Include erosion control and water quality protection during in-river construction and post-construction as identified in the Storm Water Data Report.
- Develop a contingency plan for unforeseen discovery of underground contaminants in the SWPPP.
- Limit construction activities between October and May to those actions that can adequately withstand high flows and entrainment of construction materials. The Contractor shall prepare a Rain Event Action Plan (REAP) and discuss high flows mitigation.
- Provide adequate conveyance capacity at bridge crossings to ensure no net increase in velocity. A more detailed hydraulic analysis shall be completed to assess existing and post-hydraulic conditions.

5.2.8 Land Use and Planning

BRT Corridor

Alternative A

Construction of the BRT corridor under both alternatives would require some TCEs of approximately 0.1 acre in total to support the construction activities along the corridor, especially around the proposed bus stations. Temporary impacts may include limited access to buildings, driveways, and sidewalks, and impacts to landscaping, which would be restored after the proposed project construction is completed.

Alternative B

In addition to the TCEs required along the corridor as described under Alternative A, construction of the 3.5-mile-long dedicated lanes would require additional construction easements of approximately 4.22 acres. This land would be restored after the proposed project construction is completed.

Mitigation measures outlined in Section 4.12 (Acquisitions and Displacement) and Section 5.3.9 (Traffic and Transportation) would be implemented to minimize adverse ROW impacts.

O&M Facility

Construction of the O&M facility would be confined within the existing site, which is located within the industrial land use zone. No TCE would be required. No impact to land uses are anticipated.

5.2.9 Traffic and Transportation

BRT Corridor

The proposed action would temporarily affect motor vehicles, bicycles, and pedestrian traffic during construction under either build alternative.

Alternative A

Alternative A would involve construction of the side-running stations along the corridor alignment. Minimal construction-related impacts are anticipated under this alternative. In addition to the new side-running stations, many signalized intersections would be affected due to traffic signal modification or installation of additional traffic signal equipment. In some instances, closures on the curb side of the road, including sidewalks, curbs, and gutters, would be affected during construction of the stations. Construction of the stations along the existing bicycle lanes, such as those along Inland Empire Boulevard, Haven Avenue, Milliken Avenue, Foothill Boulevard, Day Creek Boulevard, and Rochester Avenue, could result in temporary blockage of respective bicycle lanes for approximately 2 to 3 months per each station.

SBCTA, in cooperation with local municipalities, would prepare a Traffic Management Plan (TMP) for all work performed within public ROW. The TMP would provide safe and efficient movement of motorists, pedestrians, bicyclists, construction equipment, workers, and emergency and law enforcement personnel and equipment. If temporary blockage of bicycle lanes is necessary, a bicycle detour lane with barriers or the latest bicycle detour standard per the California Manual on Uniform Traffic Control Devices (MUTCD) or other City-approved standard will be included in the TMP at each station location during construction to ensure no interruption to the bicyclists. Similarly, for pedestrians, a sidewalk detour, rerouting pedestrians to an alternative sidewalk path or a sidewalk diversion, which provides a protected pathway near, but safely away from the station construction, would be included in the TMP, used in accordance with the California MUTCD or other City-approved standard. The TMP would be consistent with local agency guidelines and include construction staging, proposed detours, hours of operation, and estimated time required for construction completion. Access to all businesses would be maintained at all times throughout project construction.

Although it is not possible to completely eliminate traffic impacts and delays associated with the construction process, prudent application of TMP measures and advance noticing to businesses, residents, and emergency service providers would prevent any impacts from being adverse. To the greatest extent feasible, lane or road closures would be scheduled to occur during off-peak hours. In addition, during the design phase of project development, a detailed examination of the proposed project corridor would be conducted to determine the best sequencing of project construction activities to simultaneously achieve the dual objectives of least construction duration and minimization of impacts.

Alternative B

Construction of the side-running station under Alternative B would be similar to that described under Alternative A.

The major construction work would occur along the alignment between Benson Avenue and Vineyard Avenue where exclusive lanes and center-running stations are proposed. In most cases, the work would be accomplished with single lane closure operations; however, there are some streets with geometric constraints where construction would require street closure with detours of motoring and bicycle traffic, and possibly pedestrian traffic. On-street parking would be restricted within work areas and, in some cases, might extend beyond to accommodate construction equipment and materials. Some bus routes would also be affected and would be coordinated for relocation to nearby locations.

O&M Facility

Construction of the O&M facility would be confined within the existing site, which is located within the industrial land use zone of the City of Ontario. Impacts to traffic and circulation could occur as a result of equipment and construction material transportation; however, it is not anticipated to be adverse. Based on the construction schedule shown in Figure 5-1, the O&M facility would be constructed during the second half of the corridor construction and is likely to be at a different construction period than the dedicated lane construction under Alternative B. Therefore, traffic disruption would be minimized.

5.2.10 Noise and Vibration

This section describes impacts during construction pertaining to noise and vibration for the BRT Corridor and the O&M facility.

Noise

Construction noise varies greatly depending on the construction process, type and condition of the equipment used, and layout of the construction site. Many of these factors are subject to the Contractor's discretion. Projections of potential construction noise levels may vary from actual noise experienced during construction due to these factors.

Overall, construction noise levels are governed primarily by the noisiest pieces of equipment. The engine, which is usually diesel, is the dominant noise source for most construction equipment.

The proposed project spans the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. Compliance with each separate set of construction noise guidelines would require adherence with varying limits under different jurisdictions that would prove difficult and impractical.

As a result, FTA daytime and nighttime construction noise level thresholds should be applied for the entire project. Table 5-5 presents the recommended noise limits for the proposed project. These limits are for 8-hour average noise levels (L_{eq}) as applies at the property line of the nearest location to the construction site.

Table 5-5 FTA Construction Noise Impact Criteria

Land Use	8-hour L_{eq}, dBA		L_{dn}, dBA
	Day	Night	30-day Average
Residential	80	70	75[1]
Commercial	85	85	80[2]
Industrial	90	90	85[2]

Notes:
[1] In urban areas with very high ambient noise levels (L_{dn}>65), L_{dn} from construction operations should not exceed existing ambient +10 dB.
[2] 24-hour L_{eq}, not L_{dn}.
[3] Daytime hours are 7:00 a.m. to 10:00 p.m.; nighttime hours are 10:00 p.m. to 7:00 a.m.

Source: FTA, 2006.

BRT Corridor

Alternative A

Construction noise under Alternative A would generally occur at the side-running station construction areas within the existing ROW of the corridor alignment.

Table 5-6 summarizes the available data on noise emission levels of construction equipment from FTA's *Transit Noise and Vibration Impact Assessment* and Parsons' recent experience with major construction projects. Actual noise levels experienced could vary significantly from the values provided due to variation in manufacturer, manner of operation, or condition of equipment. Using typical sound emission levels in Table 5-6, and the estimated time duration of operation, an estimate of L_{eq} can be calculated at various relevant distances for each stage of construction.

Construction noise impacts would occur along the proposed project corridor at residential noise-sensitive locations if construction activities take place within the distances shown in Table 5-6 and remain within that distance for at least an 8-hour period.

When these conditions occur, construction noise impacts could result. Construction noise is typically temporary, intermittent, and limited to weekday daytime hours when many residents would normally not be home. Implementation of minimization measures described in Section 5.3.10 would minimize noise impacts during construction. The impacts would not be significant or adverse with mitigation.

Table 5-6 Predicted Construction Equipment Noise Emission Levels

Construction Activity Equipment	Number of Equipment Used	Sound Level at 50 ft (dBA)	Usage Factor[1]	Effective Usage Factor[2]	Leq, dBA[3, 4] @ 50 ft	Leq, dBA[3, 4] @ 100 ft
Site Cleaning & Demolition						
Grading/Demolition						
Loader	1	85	0.5	0.15	77	71
Dump Truck	2	88	0.5	0.30	83	77
Roller	1	74	0.3	0.30	69	63
Backhoe	1	80	0.3	0.09	70	64
Utility Truck	1	84	0.5	0.15	76	70
Compressor	1	81	0.5	0.50	78	72
			Overall Leq =		**85**	**79**
			Noise Impact Distance[5] = 95 ft			
Utility Relocation						
Utility Removal/Installation						
Backhoe	1	80	0.5	0.15	72	66
Utility Truck	1	84	0.5	0.15	76	70
Dump Truck	1	88	0.2	0.06	76	70
Compressor	1	81	0.5	0.50	78	72
Compactor	1	82	0.3	0.09	72	66
			Overall Leq =		**82**	**76**
			Noise Impact Distance[5] = 65 ft			
Roadway Construction						
Concrete Paving						
Concrete Mixer	2	85	0.5	0.30	80	74
Utility Truck	2	84	0.5	0.30	79	73
			Overall Leq =		**82**	**76**
			Noise Impact Distance[5] = 65 ft			
Asphalt Concrete Paving						
Dump Truck	3	88	0.5	0.45	85	79
Grader	1	85	0.5	0.15	77	71
Roller	2	74	0.5	1.00	74	68
Utility Truck	1	84	0.5	0.15	76	70
			Overall Leq =		**86**	**80**
			Noise Impact Distance[5] = 105 ft			
Concrete Roadway						
Utility Truck	2	84	0.5	0.30	79	73
Concrete Mixer	1	85	0.5	0.15	77	71
			Overall Leq[5] =		**81**	**75**
			Noise Impact Distance[5] = 55 ft			
Station Construction						
Foundation						
Utility Truck	2	84	0.5	0.30	79	73
Compressor	1	81	0.3	0.25	75	69
Concrete Mixer	2	85	0.5	0.30	80	74
			Overall Leq =		**83**	**77**
			Noise Impact Distance[5] = 75 ft			
Station Finishes						
Crane, Derrick	1	88	0.5	0.15	80	74
Compressor	1	81	0.2	0.20	74	68
Flatbed Truck	1	85	0.1	0.03	70	64
Utility Truck	2	84	0.5	0.30	79	73
Welding Machine	1	82	0.5	0.15	74	68
			Overall Leq =		**84**	**78**
			Noise Impact Distance[5] = 80 ft			

Construction Activity Equipment	Number of Equipment Used	Sound Level at 50 ft (dBA)	Usage Factor[1]	Effective Usage Factor[2]	Leq, dBA[3, 4] @ 50 ft	Leq, dBA[3, 4] @ 100 ft
O&M Facilty Construction						
Demolition of Existing Facility						
Pavement Breaker	2	82	0.3	0.15	74	68
Front-end loader	2	79	0.5	0.30	74	68
Dozer	1	80	0.5	0.15	72	66
Dump Truck	2	88	0.3	0.15	80	74
			Overall Leq =		**82**	**76**
			Noise Impact Distance[5] = 60 ft			
Removal of Pavement						
Pavement Breaker	2	82	0.5	0.30	77	71
Dozer	1	80	0.3	0.08	69	63
Dump Truck	2	88	0.3	0.15	80	74
			Overall Leq =		**82**	**76**
			Noise Impact Distance[5] = 60 ft			
Excavation and Site Grading						
Backhoe	2	80	0.5	0.30	75	69
Compactor	2	82	0.3	0.15	74	68
Grader	1	85	0.5	0.15	77	71
Front-end loader	2	79	0.3	0.15	71	65
			Overall Leq =		**81**	**75**
			Noise Impact Distance[5] = 55 ft			
Foundation						
Utility Truck	2	84	0.3	0.15	76	70
Concrete Mixer	1	85	0.5	0.15	77	71
Saw	2	78	0.3	0.15	70	64
			Overall Leq =		**80**	**74**
			Noise Impact Distance[5] = 50 ft			
Structure Construction						
Crane, Derrick	1	88	0.5	0.15	80	74
Saw	2	78	0.3	0.15	70	64
Utility Truck	2	84	0.5	0.30	79	73
			Overall Leq =		**83**	**77**
			Noise Impact Distance[5] = 65 ft			

Notes:
1 - Usage factor is a percentage of time of the 8-hour construction period through which a hypothetical receptor would be noise impacted by the piece of equipment concerned. This value cannot exceed 0.5 in practical terms.
2 - Assuming that the equipment are operating at, or near, their maximum sound levels 30 percent of the time during operation except for the compressor, roller, and generator. These 3 pieces of equipment were assumed to be operational 100 percent of the time
3 - Calculated noise levels do not assume any mitigation measures.
4 - Distance is measured from the geometric center of construction activities.
5 - Based on the construction noise limit criteria of 80 dBA for daytime hours at residential land uses. Distances are measured from the center of the noise producing activities associated with the construction phase.
Source: Parsons

Construction activities occurring during nighttime hours would notably increase the number of potentially impacted residences because the nighttime criterion is 10 dB lower, at 70 dBA. Nighttime construction operations are not recommended near residences; however, it may be beneficial to conduct nighttime construction in industrial and commercial areas with no sensitive nighttime use because some businesses may prefer to avoid construction-related disruptions during normal business hours.

Another area where construction noise impacts may occur would be at sensitive land uses that are adjacent to construction lay-down or staging areas. These are areas where construction equipment and materials are stored and accessed during

the construction period. The Contractor would be responsible to select the construction staging areas. Special provisions would be included in the specifications that selection of the construction staging area should be made with care. The chosen site should be as far away as possible from any sensitive residential areas to minimize the potential for construction noise impacts to a less than significant level. The impact would not be adverse with mitigation.

Alternative B

Construction noise impacts under Alternative B would be the same as Alternative A for the side-running station construction. However, at the 3.5-mile roadway segment along Holt Boulevard where the center-running station would be constructed as part of the dedicated lanes, higher noise levels could be expected during the clearing and demolition phase and roadway construction phase. Implementation of minimization measure CI-NC-1, described in Section 5.3.10, would minimize noise impacts during construction. The impact would not be adverse with mitigation.

O&M Facility

Construction of the O&M facility would be confined within the existing site, which is located within the industrial use area. Noise impacts to sensitive receptors are not anticipated.

Vibration

BRT Corridor

Construction activities can result in varying degrees of ground vibration, depending on the equipment and method employed. The vibration associated with typical bus transit construction is not likely to damage building structures, but it could cause cosmetic building damage.

Vibrations generated by construction activities are mainly in the form of surface or Raleigh waves. Studies have shown that the vertical component of construction-generated vibrations is the strongest, and that PPV correlates best with building damage and complaints. Table 5-7 summarizes the construction vibration limits shown in FTA guidelines for structures located near the ROW of a transit project.

Building Damage

Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods employed. Operation of construction equipment causes vibration that spreads through the ground and diminishes in strength with distance. Buildings founded on the soil near the construction site respond to these vibrations, with varying results ranging from no perceptible effects at the lowest levels, low rumbling sounds, perceptible vibration at moderate levels, and potential damage at the highest levels.

Table 5-7 Construction Vibration Damage Criteria

Building Category	Peak Particle Velocity, in/sec	Approximate Lv*, VdB
I. Reinforced-concrete, steel, or timber (no plaster)	0.50	102
II. Engineered concrete and masonry (no plaster)	0.30	98
III. Non-engineered timber and masonry buildings	0.20	94
IV. Buildings extremely susceptible to vibration damage	0.12	90
Note: * Root-mean-square velocity in decibels (VdB) re: 1 micro-inch per second.		

Source: FTA, 2006.

The heaviest pieces of equipment, such as a pile driver or a vibratory roller, would be the dominant source of overall construction vibration. The vibration levels created by the normal movement of vehicles, including graders, front loaders, and backhoes, are the same order-of-magnitude as the ground-borne vibration created by heavy vehicles traveling on streets and highways.

Table 5-8 presents the average vibration levels for various types of construction equipment under a wide variety of construction activities. PPV levels at 25 feet provided by FTA are shown for construction equipment likely to be used for the construction efforts for the WVC Project. Most of the single- or multi-family residential buildings along the proposed corridor are assumed to be traditional wood-frame structures on a concrete slab or a raised foundation. These residential structures fall under Building Category III, as shown in Table 5-8. Commercial buildings are assumed to fall under Building Category II and Section 4(f) buildings fall under Building Category IV.

As summarized in Table 5-8, operation of the vibratory roller is the dominant source of construction vibration. The anticipated vibration would exceed the FTA building damage thresholds for Building Categories II, III, and IV (engineered concrete and masonry Buildings, non-engineered timber and masonry buildings, and buildings extremely susceptible to vibration damage) buildings situated within 20, 26, and 36 feet, respectively, of the construction areas.

Table 5-8 Construction Vibration Impact Distances for Building Damage

Equipment	Peak Particle Velocity at 25 feet (inches/second)	Approximate L_v[1] at 25 feet	Building Damage Impact Distance for Building Category (feet		
			II	III	IV
Vibratory Roller	0.210	94	20	26	36
Loaded Trucks	0.076	86	10	13	18
Small Bulldozer	0.003	58	<10	<10	<10

Note:
[1] RMS velocity in decibels (VdB), re: 1 micro-inch per second
[2] This is the distance at which PPV is 0.3 inch per second for Building Category II and 0.2 inch per second for Building Category III-type buildings.

Source: FTA, 2006.

Human Annoyance

Construction vibration impacts during some construction activities would be sufficient to cause some annoyance at residential locations (FTA Land Use Category III) that are within 107 feet from the construction activity based on the impact assessment presented in Table 5-9. Construction vibration impacts causing human annoyance are typically temporary, intermittent, and limited to weekday daytime hours when many residents would normally not be home. For these reasons, mitigation measures for human annoyance are often not justified or necessary.

Alternative A

Construction activities under Alternative A would generally center around the side-running station locations within the existing ROW of the corridor alignment. Heavy equipment would be used during the site clearing and grading phase, which is of short duration per station. No adverse impacts on vibration and human annoyance are anticipated.

Alternative B

Under Alternative B, several residential and commercial buildings within the area on Holt Boulevard between Benson Avenue and Vineyard Avenue are located less than 20 feet from anticipated construction areas along the WVC alignment; therefore, structural damage from vibration associated with anticipated construction-related activities could be expected at residential buildings located within 20 feet and commercial buildings located within 26 feet from construction activities along the proposed project corridor. With the implementation of minimization measures described in Section 5.3.10, vibration impacts during construction would not be adverse.

Table 5-9 Construction Vibration Impact Distances for Human Annoyance

Equipment	Peak Particle Velocity at 25 feet (inches/second)	Approximate L_v[1] at 25 feet	Human Annoyance Impact Distance[2] for Land Use Category (feet)	
			II	III
Vibratory Roller	0.210	94	135	107
Loaded Trucks	0.076	86	73	58
Small Bulldozer	0.003	58	9	7

Note:
[1] RMS velocity in decibels (VdB), re: 1 micro-inch per second.
[2] This is the distance at which the RMS amplitude velocity level is 72 VdB for Land Use Category II and 75 VdB for Category III inside the building structure. When propagating from the ground surface to the building structure foundation, there is a vibratory coupling loss of 5 dB; however, this loss is offset by the building amplification in light-frame construction. Thus, no additional adjustments are applied.

Source: FTA, 2006.

O&M Facility

Construction of the O&M facility would be confined within either of the potential sites located within the industrial use area of the City of Ontario. Vibration impacts to nearby buildings are not anticipated.

5.2.11 Energy

BRT Corridor

Alternatives A and B

During project construction, diesel fuel would be used for equipment and trucks, while gasoline fuel would be used for worker vehicles. Construction of Alternative A would require less fuel than Alternative B, as shown in Table 5-10, because Alternative B would involve the dedicated lanes construction. The increased fuel use for both alternatives is not considered a wasteful or inefficient use of nonrenewable resources because the fuel is being used to construct a mass transit system, which has been identified by State and regional agencies as an efficient method of reducing energy use; therefore, there would be no adverse effect related to the efficient use of nonrenewable energy resources during construction.

Construction activity would not require natural gas, and most of the power would be provided by generators or diesel-fueled equipment. Construction activity would not require infrastructure or capacity-enhancing alterations to existing power or natural gas facilities. Therefore, no adverse impacts to existing power or natural gas facilities are anticipated.

O&M Facility

Table 5-10 also shows fuel use associated with construction of the O&M facility. Similar to the BRT Corridor, the O&M facility is not anticipated to result in any adverse impacts.

Table 5-10 Fossil Fuel Consumption during Construction Activities

Scenario	Equipment Diesel (gallons)	Worker Gasoline (gallons)	Haul Diesel (gallons)
Alternative A			
Phase I	50,921	51,700	9,518
Phase II	44,838	3,600	3,600
Total	95,759	55,300	10,551
Alternative B			
Phase I	164,222	103,378	32,893
Phase II	44,838	3,600	1,033
Total	209,060	106,978	33,926
O&M Facility	27,693	6,084	3,611

Source: WVC Project Energy Study, 2018

5.2.12 Demographics and Neighborhoods

BRT Corridor

Alternatives A and B

The build alternatives would be constructed almost entirely within existing transportation ROW or on adjacent sidewalks. While some TCEs may be required for curb removal and utility connection work, access to local neighborhoods, facilities, and businesses along the corridor would be maintained throughout the construction period.

Temporary impacts associated with the build alternatives involve construction-related disruptions related to the operation of construction equipment, including noise and vibration, light and glare, and fugitive dust emissions. In addition, partial and/or complete lane and sidewalk closures would be required. Construction-related impacts within the public ROW would be localized as construction moves along the corridor, resulting in inconveniences to motorists, pedestrians, businesses, and residences in the immediate vicinity of the construction activities.

Construction of the 3.5-mile-long stretch of dedicated lanes along Holt Boulevard associated with Alternative B would require widening of the existing roadway to accommodate two mixed-flow traffic lanes and one transit lane in each direction. In addition, five center-running stations would be constructed in the median along this stretch of Holt Boulevard. Construction of this segment has the potential to result in short-term effects to the surrounding neighborhood and adjacent businesses due to temporary road closures and associated detours. Although access to all residences and businesses would be maintained during the construction period, there may be delays or longer indirect routes needed to reach various destinations due to road closures and detours.

Because through traffic and bicycle and pedestrian circulation would be maintained

in each direction during construction, there would not be any new barriers or impedances to community interaction. The amount and type of construction work required to construct the proposed project is not anticipated to result in effects severe enough to appreciably affect the local businesses' ability to operate. Public outreach will be continuously conducted through the entire project area to notify local residents, facilities, and businesses along the corridor of any construction work in their vicinity prior to construction activities.

O&M Facility

The proposed O&M facility would be constructed in the industrial zoned area within the City of Ontario. No adverse impacts to area residents or businesses are anticipated.

5.2.13 Acquisitions and Displacements

Impacts resulting from the required acquisition of properties to accommodate the proposed project construction and operations were discussed in Section 4.12 (Acquisitions and Displacements) of this report.

5.2.14 Public Services and Utilities

Public Services

BRT Corridor

Alternatives A and B

Construction of the side-running stations and their amenities under Alternatives A and B would be mostly confined within the disturbed area at each station, which is approximately 0.05 acre per location. Occasional disruptions from construction activities would be primarily related to operation of construction equipment in the area, partial and/or complete lane closures, noise and vibration, light and glare, and fugitive dust emissions. Because project construction activities would be temporary, no long-term or permanent adverse effects on nearby community facilities are expected to result. With the implementation of minimization measures, such as development and implementation of the TMP and public outreach program, impacts to public services would not be significant or adverse.

Construction of Alternative B would also require a 0.07-acre TCE at the U.S. Post Office at 1555 E. Holt Boulevard in Ontario, which could affect landscaping and driveway access. The impact is limited in scope, and the driveway would be reconfigured and new landscaping would be incorporated after conclusion of the temporary use.

O&M Facility

The proposed O&M facility would be constructed in the industrial zoned area within the City of Ontario. No adverse impacts to public services are anticipated.

Utilities

BRT Corridor

Alternatives A and B

To accommodate project construction, some utility relocation adjacent to the construction sites would be needed.

Advance coordination with utility providers would be carried out to minimize impacts to the consumers. The effects of utility relocation would be about the same under either Alternative A or B.

O&M Facility

The proposed O&M facility would be constructed in the industrial zoned area within the City of Ontario. Utility relocation, if needed, would occur onsite. No adverse impacts to local utilities are anticipated.

5.2.15 Safety and Security

It is SBCTA' policy to design and construct all projects in full compliance with FTA requirements for safety and security as described in Section 4.14. The following paragraphs address safety and security impacts as they pertain to construction activities. Except as noted, impacts would be about the same under either Alternative A or B.

BRT Corridor

Alternatives A and B

Safety

Omnitrans has made it a priority to facilitate a safe and secure work environment for all of its employees, contractors, and emergency responders during construction work. In this regard, they have prepared an SSMP, which defines activities, management controls, and monitoring processes.

The proposed project would be constructed mostly during daytime hours within an active-use transportation corridor; hence, construction worker, motorist, bicyclist, and pedestrian safety is a primary consideration. As mentioned earlier, the TMP would be prepared to address traffic management procedures. Traffic controls would be established and implemented during construction to minimize traffic conflicts and help ensure a safe working and driving environment.

Construction activities at the jobsite would be governed by OSHA regulations defined in the federal CFR, Part 29, Chapter XVII. The Contractor is required to comply with all standards under Part 1926 of this regulation titled "Safety and Health Regulations for Construction," commonly referred to as the "Construction Standards." To establish a safe working environment, the contract documents for this proposed project would require that it is the Contractor's responsibility to provide and maintain all measures required by Construction Safety Orders issued by the Division of Industrial Safety of the California OSHA. The Contractor would also be required to comply with all laws and regulations regarding public health and safety. This would include, but not be limited to, temporary controls such as fences, barriers, plates, overcrossings, trench bridges, traffic control devices, lights, warning signals, guards, street sweeping, and trash removal.

With adherence to the laws and regulations noted above, safety impacts associated with the proposed action are not expected to be adverse.

Security

Security at staging area lots could also be a concern during project construction. Construction site security precautions would be taken during construction to minimize the potential for adverse impacts to persons or property associated with the proposed project. The Contractor would be responsible for establishing and maintaining the security of each staging area. Each staging area would be secured with installation of a temporary 6-foot-high chain-link fence along the site perimeter to prevent unauthorized access. The use of a security service during construction may be warranted and would be evaluated on a case-by-case basis.

O&M Facility

Construction of the proposed O&M facility would be confined within the existing site located within the industrial zoned area of the City of Ontario. The site would be fenced off during construction for public safety and workers' security. No adverse impacts are anticipated.

5.2.16 Parks and Recreation

BRT Corridor

Alternatives A and B

There would be no construction-related temporary impacts, including those associated with noise and dust, to the park and recreation features located in the study area under either of the build alternatives because none of the facilities are located close enough to the proposed project construction to be affected. The closest park, Ontario Dog Park, is located approximately 250 feet southeast of the intersection of Holt Boulevard and Vine Avenue. Construction activities of either build alternative would not obstruct access to this park; therefore, no impacts to park usage are anticipated.

O&M Facility

The closest park to the potential O&M facility sites is Bon View Park located between approximately 2,300, 2,000, and 1,000 feet northwest of Sites 1, 2, and 3, respectively. Construction activities associated with the O&M facility would not obstruct access to this park; therefore, no impacts to park usage are anticipated.

5.2.17 Section 4(f)

BRT Corridor

As discussed in Section 4.17, the project would result in direct and temporary occupancy of NRHP-eligible or listed properties that are Section 4(f) resources.

Alternative A

Alternative A would result in the direct use of one NRHP-eligible or listed properties (the Southern Pacific Railroad Depot) and the temporary occupancy of two NRHP-eligible or listed properties (the Southern Pacific Railroad Depot and Route 66). No adverse effects from the use of these properties are anticipated, and a *de minimis* finding is recommended.

Alternative B

Alternative B would result in the direct use of four NRHP-eligible or listed properties (Southern Pacific Railroad Depot, A.C. Moorhead House, The Grinder Haven,

and the Jacob Lerch House) and the temporary occupancy of six NRHP-eligible or listed properties (Southern Pacific Railroad Depot, A.C. Moorhead House, The Grinder Haven, Jacob Lerch House, Vince's Spaghetti, and Route 66). No adverse effects from the use of these properties are anticipated, and a *de minimis* finding is recommended.

Minimization and mitigation measures to offset construction impacts from the proposed project are discussed in Chapter 8, Section 4(f) Evaluation.

O&M Facility

There would be no impacts to Section 4(f) resources as a result of the new O&M facility construction at any potential site identified.

5.2.18 Global Climate Change

BRT Corridor

Alternative A

Construction activities would generate GHG emissions of CO_2, CH_4, and N_2O from mobile and stationary construction equipment exhaust as well as employee and haul truck vehicle exhaust. It is estimated that total GHG emissions associated with construction of Alternative A would be 1,402 $MTCO_2e$. SCAQMD recommends that the significance of temporary construction emissions be assessed together with permanent operational emissions. Refer to Section 4.17, Global Climate Change, for the impact determination of project-related GHG emissions.

Alternative B

Construction of Alternative B would cover a larger construction area. It is estimated that GHG emissions associated with Alternative B would be 4,113 $MTCO_2e$. Refer to Section 4.17, Global Climate Change, for the climate change impact determination.

O&M Facility

Construction of the O&M facility would account for approximately 515 MTCO2e for both build alternatives. Refer to Section 4.17, Global Climate Change, for the climate change impact determination.

5.3 Mitigation and/or Minimization Measures

5.3.1 Aesthetics and Visual Resources

Adverse impacts to aesthetics and visual resources are not expected to occur during construction; therefore, no avoidance, minimization, or mitigation measures are required.

5.3.2 Air Quality

CI-AQ-1: Apply water or dust palliative to the site and equipment as frequently as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a "no visible dust" criterion either at the point of emission or at the ROW line as required by SCAQMD.

CI-AQ-2: Spread soil binder on any unpaved roads used for construction purposes and all project construction parking areas.

CI-AQ-3: Properly tune and maintain construction equipment and vehicles. Use low-sulfur fuel in all construction equipment as provided in CCR Title 17, Section 93114.

CI-AQ-4: Develop a dust control plan documenting sprinkling, temporary paving, speed limits, and expedited revegetation as needed to minimize construction impacts to existing communities.

CI-AQ-5: Locate equipment and material storage sites at least 500 feet from the sensitive receptors. Keep construction areas clean and orderly.

CI-AQ-6: Extended idling, material storage, and equipment maintenance should be prohibited within 500 feet of sensitive air receptors, to the extent feasible.

CI-AQ-7: The project shall not allow track-out to extend 25 feet or more from the point of origin from an active operation. Use track-out reduction measures such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic. Notwithstanding the preceding, all track-out from an active operation shall be removed after each workday or evening shift.

CI-AQ-8: Cover all transported loads of soils and wet materials prior to transport, or provide adequate freeboard (space from the top of the material to the top of the truck) to minimize emission of dust (PM) during transportation.

CI-AQ-9: Promptly and regularly remove dust and mud that are deposited on paved, public roads due to construction activity and traffic to decrease PM.

CI-AQ-10: Route and schedule construction traffic to avoid peak travel times as much as possible to reduce congestion and related air quality impacts caused by idling vehicles along local roads.

CI-AQ-11: SCAQMD Rule 401 – Visible Emissions: Contractors shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminants for a period or periods aggregating more than 3 minutes in any 1 hour that are as dark or darker in shade as that designated as No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer's view to a degree equal to or greater than smoke.

CI-AQ-12: Contractors shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endangers the comfort, repose, health, or safety of any such persons or the public; or that cause or have a natural tendency to cause injury or damage to business or property.

CI-AQ-13: Contractors shall control fugitive dust in accordance with SCAQMD Rule 403 using the best available control measures to reduce dust so it does not remain visible in the atmosphere beyond the property line of the project. The dust control plan shall describe all applicable

dust control measures to be implemented at the project; and shall describe types of dust suppressant, surface treatments, and other measures to be utilized at the construction sites to comply with the Rule. The relevant specifics of Rule 403 are as follows:

- No person shall cause or allow the emissions of fugitive dust from any active operation, open storage pile, or disturbed surface area such that the dust remains visible in the atmosphere beyond the property line of the emission source; or the dust emission exceeds 20 percent opacity, if the dust emission is the result of movement of a motorized vehicle.
- No person shall conduct active operations without utilizing the applicable best available control measures included in Table 1 of Rule 403 to minimize fugitive dust emissions from each fugitive dust source type within the active operation.
- No person shall cause or allow PM_{10} levels to exceed 50 micrograms per cubic meter when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume particulate matter samplers or other EPA-approved equivalent methods for PM_{10} monitoring.
- No person shall conduct an active operation with a disturbed surface area of 5 or more acres or with a daily import or export of 100 cubic yards or more of bulk material without utilizing approved control measure/measures at each vehicle egress from the site to a paved public road.

CI-AQ-14: Contractors shall not cause or allow PM_{10} levels to exceed 50 µg/m^3 when determined, by simultaneous sampling, as the difference between upwind and downwind samples collected on high-volume samplers reasonably placed upwind and downwind of key activity areas and as close to the property line as feasible, such that other sources of fugitive dust between the sampler and the property line are minimized.

5.3.3 Biological Resources

CI-BR-1: During final design, the Project Engineer will coordinate with a qualified biologist to delineate all ESAs within the project footprint and immediately surrounding areas.

CI-BR-2: Prior to clearing vegetation or construction within or adjacent to ESAs, the Contractor will install highly visible barriers (e.g., orange construction fencing) adjacent to the project footprint to designate ESAs to be preserved in place. No grading or fill activity of any type will be permitted within these ESAs. In addition, no construction activities, materials, or equipment will be allowed within the ESAs. All construction equipment will be operated in a manner to prevent accidental damage to nearby ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within the ESAs. Silt fence barriers will be installed at the ESA boundaries to prevent accidental deposition of fill material in areas where

vegetation is adjacent to planned grading activities. A qualified biologist will supervise the placement of ESA fencing.

CI-BR-3: Prior to completion of construction, the Contractor will hydroseed temporarily impacted vegetation communities with appropriate native plant species. Plant species used in the seeding shall be determined in coordination with a qualified biologist.

CI-BR-4: Avoid disturbance of any nests protected by the MBTA. Alternatively, tree and shrub removal activities can be scheduled to occur during the nonbreeding season (September 1 through January 31).

CI-BR-5: Avoid disturbance of any nests protected by the MBTA. If tree and shrub removal acitivities are scheduled to occur during the breeding season (February 1 through August 31), then SBCTA will implement the following measures to avoid potential adverse effects on birds covered by the MBTA:

- No more than 1 week prior to construction, a qualified wildlife biologist will conduct a preconstruction survey of all potential nesting habitat within 500 feet of construction activities where access is available.
- If active nests are found during preconstruction surveys, then the project proponent will create a no-distrubance buffer [acceptable in size to CDFW] around active raptor nests and nests of other special-status birds during the breeding season, or until it is determinated that all young have fledged. Typical buffers include 500 feet for raptors and 250 feet for other nesting birds. The size of these buffer zones and types of construction activities restricted in these areas may be further modified during coordination and in consultation with CDFW, and it will be based on existing noise and human disturbance levels at the project site. Nests initiated during construction are presumed to be unaffected, and no buffer would be necessary; however, the “take” (e.g., mortality, severe disturbance to) of any individual birds will be prohibited.

If preconstruction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, then no further mitigation is required. Trees and shrubs within the construction footprint that have been determined to be unoccupied by birds covered by the MBTA or that are located outside the no-disturbance buffer for active nests may be removed.

5.3.4 Cultural and Paleontological Resources

Archaeological Resources

Because the proposed project is expected to result in no operational effects on archaeological resources, no avoidance, minimization, or mitigation measures are required; however, impacts may occur in the construction phase. Two Native American Tribes, the Gabrieleno Band of Mission Indians – Kizh Nation and the Soboba Band of Luiseño Indians, have requested Native American monitoring

during ground-disturbing construction activities. As a result, the following measure will be implemented:

CI-CR-1: Archaeological and Native American monitoring shall be limited to any project-related, ground-disturbing construction activities (e.g., grading, excavation, drilling) that may affect previously undisturbed sediments, anticipated within the Holt Avenue Corridor to be between 3 feet and 5 feet below the existing ground surface where electrical and communication utilities have been placed, and up to 20 feet below ground surface in areas in which the sewer main is located. Project activities involving utility relocation and establishment of storm drain laterals along Holt Avenue may involve previously undisturbed sentiments as would construction activities associated with the proposed O&M facility in Ontario. Archaeological monitoring, when applicable, shall be conducted by a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology. Tribal monitor(s) shall be retained and compensated and are required to be approved by the consulting Tribal Government(s) and are listed under the NAHC's Tribal Contact list for the area of the project location. That list of individuals, however, would need to be provided to SBCTA for review and final selection. A Cultural Resources Monitoring and Mitigation Plan (CRMMP) shall be finalized prior to the start of ground-disturbing activities outlining the roles and responsibilities of the monitors, describing the protocols and procedures for monitoring, identifying locations or construction activities requiring monitoring, and defining the procedures for the recordation and treatment of new finds. No information regarding the discovery of human remains shall be publicized.

CI-CR-2: If previously unidentified cultural materials are unearthed during construction, work shall be halted within 100 feet of the find and the area clearly delineated as a restricted area by flagging and/or fencing, until the resource can be fully documented and evaluated by a qualified archaeologist meeting the Secretary of Interior's Professional Qualification Standards. All discoveries shall be treated as significant until a formal evaluation can be made.

If the cultural materials are determined to be Native American in origin, additional consultation with the appropriate Tribe(s) will be conducted, and whose representative(s) will be permitted to perform a site visit when the archaeologist makes their assessment on the resource, so as to provide Tribal input.

If it is determined by SBCTA's qualified archaeologist that an inadvertently discovered archaeological resource constitutes a historical resource or a unique archaeological resource as defined by CEQA, an appropriate time allotment and sufficient funding to allow for implementation of avoidance measures or other appropriate mitigation shall be available. Avoidance and preservation in place is the preferred manner of

mitigation. As identified in CEQA Section 21083.2(b), preservation in place may be accomplished by, but is not limited to, avoidance, incorporating the resource into open space, capping, or deeding the site into a permanent conservation easement. SBCTA, the lead agency under CEQA, shall determine if avoidance and preservation in place is feasible. If it is determined that data recovery through excavation is the only feasible mitigation available, then a Cultural Resources Treatment Plan that provides for the adequate recovery of the scientifically consequential information contained in the archaeological resource will be prepared by a qualified archaeologist in consultation with the appropriate Tribal representatives. The qualified archaeologist(s) will consult with appropriate Native American Tribal representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond that which is scientifically important, are considered.

CI-CR-3: If human remains are encountered during ground-disturbing activities, work shall be halted within 100 feet of the find, and the area clearly delineated as a restricted area by flagging and/or fencing, or other suitable approaches, and protected by posting a monitor or construction worker to ensure no additional disturbance occurs. If the human remains cannot be fully accessed, documented, and housed on the same day, the area will be secured by posting a guard onsite outside of working hours or by covering the discovery area with muslin cloth and heavy metal plates (if the human remains are found below grade) or with other impervious material, or by making other provisions commonly accepted by professional archaeologists to prevent damage or vandalism to the remains.

The San Bernardino or Los Angeles County Coroner shall be contacted within 24 hours of discovery of human remains in compliance with CEQA Guidelines Section 15064.5(e), California Health and Safety Code Section 7050.5(b), and PRC 5097.98. Work will continue to be diverted while the County Coroner determines whether the remains are Native American. If the remains are determined to be Native American, the County Coroner will contact the NAHC, which will designate a Most Likely Descendant (MLD) to offer guidance on the appropriate and respectful treatment and disposition of the remains per California PRC 5097.98. Human remains and any associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation with the MLD has taken place and a plan of action has been developed.

If an MLD cannot be identified, or the MLD fails to make a recommendation regarding the treatment of the remains within 48 hours after being granted access to the project area to examine the remains, SBCTA, in coordination with FTA, shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a

location not subject to further subsurface disturbance. After the appropriate actions are taken, as outlined above, the excavation work associated with project construction, may resume.

Historic Architectural Resources

CI-CR-4: SBCTA will include an environmentally sensitive buffer in the plans and specifications to alert contractors to avoid character-defining features of each built environment historic property. Should any proposed project activities change in a manner that would be expected to cause an impact to character-defining features of the resource, SBCTA will be responsible for consulting with FTA and SHPO to develop and apply appropriate treatment measures under the Secretary of the Interior's Standards for the Treatment of Historic Properties, as determined by a qualified Architectural Historian (as defined at 36 CFR 61). No project construction work will occur within 50 feet of any of the character-defining features of the specific historic property in question until agreement has been reached among consulting parties under Section 106.

CI-CR-5: Alterations to each of the following historic properties will adhere to the Secretary of the Interior's Standards (SOIS) for the Treatment of Historic Properties (36 CFR 68). The Standards provide guidance for making alterations to historic resources, including related landscape features and the building's site and environment. The historic character of each property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a historic property will be avoided. The new work will protect the historic integrity of each historic property and its environment.

BMPs would be incorporated to minimize short-term, temporary noise and vibration impacts to each of the following historic properties, with the exception of the National Old Trails Road/Route 66. These include provisions for vibration monitoring by the Contractor and having a plan in place before construction begins for the use of alternative equipment and techniques when established thresholds may be exceeded. In addition to the common measures stated above that will apply to the historic properties, additional property-specific measures to minimize harm to these properties are specified below.

Southern Pacific Railroad Depot (100 W. Commercial Street, Pomona)

The existing sidewalks at the railroad station property will be connected to the new sidewalk area so as to match pre-project conditions. Any disturbed turf grass and landscaping not used by the project will be replaced to match pre-project conditions in consultation with the property owner and the City of Pomona, during and at the completion of construction.

National Old Trails Road/ Historic Route 66 (Rancho Cucamonga; Fontana)

The affected area of the historic linear property consists of small pavement areas needed to construct bus pads. The removal of historic materials or alteration of features and spaces that characterize a property will be avoided. The new work will protect the historic integrity of the property and its environment.

Vince's Spaghetti (1206 W. Holt Boulevard, Ontario)

A historic neon sign near the edge of the easternmost driveway will be retained. The driveways will be reconstructed to pre-project conditions in consultation with the property owner during and at the completion of construction. The new work will protect the historic integrity of the property and its environment. Temporarily disturbed surface areas will be returned to pre-project conditions once construction is completed; therefore, the visual changes associated with the project are considered minor, and the project will not substantially alter or destroy any primary views of the historic property.

A.C. Moorhead House (961 W. Holt Boulevard, Ontario)

The affected area of the historic property consists of the two driveway areas, the front lawn, and landscaping. The two driveways will be reconstructed, and turf grass and landscaping will be replaced. Original landscaping on the property will be retained. The new work will protect the historic integrity of the property and its environment.

The Grinder Haven (724 W. Holt Boulevard, Ontario)

A historic neon sign near the edge of the property, between the two driveways, will be retained. The new work will protect the historic integrity of the property and its environment. Project features will not damage or destroy character-defining materials or features associated with the historic property, or substantially alter or destroy any primary views of the historic property.

Access to The Grinder Haven will be maintained at all times during project construction. No impacts to parking spaces within the lot are anticipated. The historic neon sign may be relocated as a result of the driveway improvements but would be re-established in close proximity and with the same street orientation as present.

Jacob Lerch House (541 E. Holt Boulevard, Ontario)

The affected area of the historic property consists of a sliver portion, which is currently lawn. Turf grass will be replaced in areas to match pre-project conditions in consultation with the property owner during and at the completion of construction. Original landscaping on the property will be retained. The new work will protect the historic integrity of the property and its environment. Project features will not be close to the historic residential building, and they will not damage or destroy character-defining

materials or any features associated with the historic property, or substantially alter or destroy any primary views of the historic property.

Paleontological Resources

CI-CR-6: Prepare and implement a Paleontological Monitoring Plan (PMP), which will include the following:

- Workers Environmental Awareness Program (WEAP). The WEAP shall be presented to all construction personnel prior to the start of ground-disturbing activities.
- Periodic paleontological spot checks shall be conducted by a qualified paleontologist in any location along the alignment where excavation exceeds depths of 5 feet into the younger Quaternary deposits to check for the presence of older, more paleontologically sensitive geologic units (including older Quaternary alluvium). The specific locations where excavation will exceed the 5-foot threshold will be determined once final construction plans are available, and will be included in the PMP. If paleontologically sensitive geologic units are observed during spot checking, full-time monitoring shall be implemented during excavations into the sensitive sediments. The 5-foot depth at which spot checking shall be triggered will initially be implemented, but it shall be modified as needed by the qualified paleontologists, in consultation with SBCTA and FTA, based on the sediment types, depths, and distributions observed during monitoring during the life of the project.
- If unanticipated paleontological resources are discovered during project-related activities, work must be halted within 100 feet of the discovery until it can be evaluated by a qualified paleontologist.
- Upon completion of ground-disturbing activities, a Paleontological Monitoring Report (PMR) shall be prepared and submitted to SBCTA, FTA, and the fossil repository.

CI-CR-7: One or more of the following activities would be implemented to mitigate impacts on the City of Ontario's locally designated historical resources if Alternative B is selected and the historical resources cannot be avoided or relocated: preparing a contextual history of Holt Boulevard, with a focus on its historic resources; preparing photographic documentation of the CRHR-eligible buildings to be demolished; installing plaques in cases where historic buildings are removed; developing short videos consisting of oral interviews of persons associated with the area's history for the City of Ontario to post on their website; and installing historical information kiosks located at sbX bus stops.

5.3.5 Geology, Soils, and Seismicity

CI-GSS-1: During construction, the appropriate level of inspections and tests shall be performed by a third-party contractor to confirm soil and subsurface conditions within the corridor.

CI-GSS-2: Final grading and construction plans shall be reviewed by a qualified geotechnical contractor to confirm that geotechnical recommendations outlined in the *Preliminary Geotechnical Report* were applied to the design and that no additional recommendations are required.

5.3.6 Hazardous Waste

CI-HAZ-1: If unexpected groundwater is encountered during construction, groundwater sampling shall be conducted to determine contaminants and contamination levels. If contamination is found, a work plan shall be developed by the project geotechnical engineer to protect the health of construction workers.

CI-HAZ-3: A survey shall be conducted to screen for ACM and LBP prior to demolition of aboveground building structures. If ACMs are found, then the Contractor shall comply with SCAQMD Rule 1403 notification and removal process activities at the project site during construction. In addition, disposal of ACMs will comply with local, State, and federal requirements.

CI-HAZ-4: Any hazardous materials or wastes encountered before or during the demolition stage of the project shall be disposed of according to current regulatory guidelines.

CI-HAZ-5: A worker health and safety plan (HASP) that meets the provisions of CCR Title 8, Section 5192, shall be developed by the project Contractor. HASP procedures will address the identification, excavation, handling, and disposal of hazardous wastes and materials that may be found in construction areas.

CI-HAZ-6: A Soil Management Plan (SMP) shall be developed by the project Contractor that includes soil management requirements if contaminated media is encountered.

CI-HAZ-7: If the utility poles that contain creosote-treated wood are removed during the project, the poles shall be managed as TWW in accordance with DTSC Alternative Management Standards for TWW.

CI-HAZ-8: Overhead transformers along Holt Boulevard may contain PCBs. If alteration is required, it shall be managed in accordance with the current regulatory requirement.

5.3.7 Hydrology, Water Quality, and Floodplains

CI-WQ-C1: The Contractor shall implement erosion control BMPs during construction, including:

- Limitation of construction access routes and stabilization of cleared access points;
- Stabilization of cleared excavated areas by providing vegetative buffer strips and plastic coverings, and applying ground base on areas to be paved;
- Protection of adjacent properties by installing sediment barriers or filters, or vegetative buffer strips;
- Stabilization and prevention of sediments from surface runoff from

discharging into storm drain outlets; and
- Use of sediment control and filtration to remove sediment from water generated by dewatering, if required.

CI-WQ-C2: The Contractor shall follow the guidelines and regulations established by the CGP for Discharges Associated with Construction Activities, Order No. 2009-0009-DWQ, amended by Order 2010-0014-DWQ and Order 2012-0006-DWQ (CGP).

In addition, an SWPPP will be prepared and implemented, which will identify BMPs to minimize erosion and ensure the proper handling and storage of materials that may have the potential to affect water quality. During construction, materials will be stored properly in upland locations to avoid affecting the receiving waters. The SWPPP will also include a Construction Site Monitoring Program, which will be based on the project's risk level to ensure that the implemented BMPs are effective and prevent any discharge that will result in exceeding any water quality standard.

Implementation of BMPs will include the following measures to reduce potential construction-related events that could impact water quality:

- Implementation of proper vehicle and equipment cleaning, fueling, and maintenance practices;
- Control and prevention of the discharge of all potential pollutants (e.g., petroleum products, solid wastes, construction chemicals); and
- Implementation of federal, State, and local policies regarding hazardous materials use, storage, and transport and hazardous materials mitigation measures.

A contingency plan shall be prepared before construction to address construction-related spills and pollutant discharges.

CI-WQ-C3: If dewatering is required, the Contractor shall follow the requirements specified in the NPDES permit for discharges to surface water that pose an insignificant *(de minimis)* threat to water quality, from either the Santa Ana RWQCB per Order No. R8-2005-0041 (NPDES No. CAG998001) or the Los Angeles RWQCB under Order No. R4-2013-0095 (NPDES No. CAG994004).

With the incorporation of the standard measures into the final design as described in Section 5.2.7, no additional avoidance or mitigation measures are required.

CI-FP-1: Provide positive drainage during construction and refrain from filling designated floodplains.

CI-FP-2: Include erosion control and water quality protection during in-river construction and post-construction as identified in the Storm Water Data Report prepared for this project.

CI-FP-3: Limit construction activities between October and May to those actions that can adequately withstand high flows and entrainment of construction materials. The Contractor shall prepare an REAP and discuss high flows mitigation.

5.3.8 Land Use and Planning

Minimization measures to minimize impacts to land use during project construction are presented in Section 5.3.9 (Traffic and Transportation).

5.3.9 Traffic and Transportation

CI-TRA-1: SBCTA or its contractor shall prepare a TMP in cooperation with local municipalities prior to construction. The TMP will be submitted with the construction plan to the police and fire departments of affected cities prior to commencement of construction activities. The TMP will outline necessary street closures and detours.

If temporary blockage of bicycle lanes is necessary, a bicycle detour lane with barriers or the latest bicycle detour standard per the California MUTCD or other City-approved standard will be included in the TMP at each station location during construction to ensure no interruption to the bicyclists. Similarly, for pedestrians, a sidewalk detour, rerouting pedestrians to an alternative sidewalk path or a sidewalk diversion, which provides a protected pathway near, but safely away from the station construction, would be included in the TMP, used in accordance with the California MUTCD or other City-approved standard. Signs will be posted to direct bicyclists and pedestrians to intersections where they may cross.

CI-TRA-2: Business access shall be maintained at all times during construction, and work will be scheduled to avoid unnecessary inconvenience to the public and abutting property owners. Undue delays in construction activities will be avoided to reduce the public's exposure to construction.

5.3.10 Noise and Vibration

The project would not result in an appreciable increase in noise levels. As such, no mitigation measures are necessary to reduce noise impacts for operation of the proposed project.

To minimize noise and vibration impacts at nearby sensitive receptor sites, the following measures will be implemented during project construction.

CI-NC-1: The Contractor shall implement the following control measures, as applicable, to minimize noise disturbances at sensitive areas during construction:

- All equipment shall have sound-control devices no less effective than those provided on the original equipment. Each internal combustion engine used for any purpose on the job or related to the job shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the jobsite without an appropriate muffler.
- Construction methods or equipment that will provide the lowest level of noise impact (e.g., avoid impact pile driving near residences and consider alternative methods that are also suitable for the soil condition) shall be used.
- Idling equipment shall be turned off.

- Truck loading, unloading, and hauling operations shall be restricted through residential neighborhoods to the greatest possible extent.
- Temporary noise barriers shall be used, as necessary and practicable, to protect sensitive receptors against excessive noise from construction activities.
- Newer equipment with improved noise muffling shall be used, and all equipment items shall have the manufacturers' recommended noise abatement measures (e.g., mufflers, engine covers, and engine vibration isolators) intact and operational. All construction equipment shall be inspected at periodic intervals to ensure proper maintenance and presence of noise-control devices (e.g., mufflers and shrouding).
- Construction activities shall be minimized in residential areas during evening, nighttime, weekend, and holiday periods. Coordination with each city shall occur before construction can be performed in noise-sensitive areas.
- Construction lay-down or staging areas shall be selected in industrially zoned districts. If industrially zoned areas are not available, commercially zoned areas may be used, or locations that are at least 200 feet from any noise-sensitive land use (e.g., residences).
- Perform noise and vibration monitoring during construction. The Contractor shall perform independent monitoring to check compliance in particularly sensitive areas. Contractors must modify and/or reschedule construction activities if monitoring determines that maximum limits are exceeded at residential land uses.

CI-NC-2: The Contractor shall implement the following control measures, as applicable, to minimize the potential impacts from construction vibration:

- Hours of vibration-intensive activities, such as vibratory rollers, will be restricted to minimize adverse impacts to the residents (e.g., weekdays during daytime hours only when as many residents as possible are away from home).
- When possible, the use of construction equipment that creates high vibration levels, such as vibratory rollers operating within 20 feet of commercial buildings, within 26 feet of residential buildings, and within 36 feet of sensitive land uses, such as historic properties, shall be limited.
- Contractors will be required to have a plan in place to use alternative procedures of construction, selecting the proper combination of equipment and techniques to generate the least overall vibration, in those cases where vibration from construction activities will exceed the established thresholds for buildings susceptible to vibration damage.
- Conduct a preconstruction building inspection/survey to document the preconstruction condition of building structures that are located within approximately 30 feet of planned construction activities that could generate high vibration levels (e.g.,

activities associated with vibratory rollers).

- Conduct vibration monitoring at the nearest buildings (within approximately 30 feet of activity) during vibration-intensive construction activities.

5.3.11 Energy

No adverse impacts have been identified, and no adverse effects have been identified; therefore, no mitigation or control measures are necessary to reduce excessive energy use.

5.3.12 Demographics and Neighborhoods

With the implementation of measures presented in Section 4.11.3, no additional mitigation and/or minimization measures are required.

5.3.13 Acquisitions and Displacements

With the implementation of measures presented in Section 4.12.3, no additional mitigation and/or minimization measures are required.

5.3.14 Public Services and Utilities

CI-PS-1: Contractor shall coordinate with the traffic departments of the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana and with all corridor emergency service providers in developing detour routes and other traffic handling plans to be used during the construction period.

CI-PS-2: Contractor shall provide advance notice of all construction-related street closures and detours to the affected local jurisdictions, community groups, emergency service providers, and motorists.

5.3.15 Safety and Security

Project construction would not result in any adverse safety and security impacts; therefore, no avoidance, minimization, or mitigation measures are required.

5.3.16 Parks and Recreation

None of the alternatives would impact park or recreational facilities; therefore, no avoidance, minimization, or mitigation measures are required.

CHAPTER 6 –
EVALUATION OF ALTERNATIVES

6.0 EVALUATION OF ALTERNATIVES

This chapter presents a comparative evaluation of the alternatives assessed in this EIR/EA. The intent of this evaluation is to demonstrate the relative effectiveness of the build alternatives compared with the No Build Alternative in meeting the project's stated purpose and need statement, project goals and objectives, and other evaluation measures.

6.1 Alternative Development

6.1.1 BRT Corridor

Omnitrans originally initiated an AA for the Holt Boulevard/Route 61 corridor to determine the best way to implement improvements to Omnitrans' highest-ridership route, Route 61. The *West Valley Connector Alternatives Analysis Report* (prepared in 2014 and adopted by Omnitrans board in 2015) evaluates and screens alternative alignments, transit modes or technologies, and station locations. The WVC AA process began in February 2013 and was funded through a Section 5339 AA planning grant under SAFETEA-LU, the previous transportation funding legislation.

During the WVC AA study, many alternatives were developed via a multi-tier screening process in conjunction with project stakeholders and local jurisdictions, as detailed in later sections of this report. As a result of this process, route alignment alternatives were developed and relevant local plans and studies were reviewed and analyzed. Based on input from stakeholders over the course of the WVC AA study, multiple hybrid alignment alternatives were developed, including portions of Route 61 and a portion of Route 66 on Foothill Boulevard. This hybrid alignment is referred to as the WVC Corridor.

The WVC AA included a detailed alternatives analysis that assessed a No Build Alternative, a TSM Alternative, and 14 potential viable build alternatives based on 5 categories (i.e., ridership and performance, capital costs, O&M costs, cost effectiveness, and financial viability).

As part of the initial environmental scoping process for the WVC Project in 2016, a range of alternatives was considered. Subsequently, six build alternatives were developed. In addition, alternatives suggested by the public and alternatives from the WVC AA were also evaluated as part of the initial screening. The results of the screening analysis and alternative analysis is provided in Section 2.12 (Alternatives Considered but Withdrawn from Further Consideration) of this report.

6.1.2 O&M Facility

The purpose of the new O&M facility is to provide operations and maintenance support to the existing full-service EVVMF. The new facility would be designed and constructed to provide Level I service maintenance with a capacity to be upgraded to provide

Level II service maintenance. Heavy repair functions and administrative functions would remain exclusively with the EVVMF in San Bernardino.

Three sites are being considered for placement of the new O&M facility (see Figure 2-14). All are owned by the City of Ontario and are located in the industrial zoned area, slightly more than 1 mile from the proposed BRT corridor alignment on Holt Boulevard. Selection of the final site would occur before the final environmental document is certified.

6.2 Summary of Transportation and Environmental Impacts of Project Alternatives

Detail regarding the estimated effects of the transit alternatives on many factors in the categories of transportation, community, and environmental impacts is summarized in Table S-4 of the Summary section. For more detailed information, refer to Chapter 3, Transportation Impacts; Chapter 4, Environmental Consequences; and Chapter 8, Public and Agency Outreach.

6.3 Summary of Achievement of Project Objectives and Other Effects

The following summarizes the effects of the alternatives with respect to project objectives and other transportation, community, and environmental effects.

No Build Alternative

The No Build Alternative does not achieve the project objectives, but it has no adverse community or environmental effects.

Build Alternatives

Alternatives A and B would achieve the four project objectives:

- The proposed project would improve transit service for current riders, including low-income and transit-dependent populations, with higher frequency, faster, and more reliable service, along with improved security, cleanliness, and comfort;
- The proposed project would attract new riders by offering improved transit service and facilities, transit travel times competitive with auto travel, and a rail-like experience proven to attract riders from autos;
- The proposed project would improve fleet speed and service efficiency by reducing delays from running in mixed-flow traffic and during slow boarding and alighting of passengers; and
- The proposed project would offer a strong sense of permanence that can help Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana attract investment in TOD and reinforce local planning objectives.

The proposed project has positive impacts on transit travel time, transit ridership, and minimal traffic impacts. The proposed project has no adverse impact on aesthetics; it would reduce emissions, has minimal impact to adjacent land uses, and

is consistent with local land use and zoning plans. There are no noise or vibration impacts and no adverse impacts to neighborhoods. The proposed project provides good service to low-income and minority populations, and it has strong support from the proposed project corridor cities.

The build alternatives are the best alternative for achieving the WVC Project objectives in an effective, affordable, cost-effective manner with sensitivity to transportation, community, and environmental considerations.

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CHAPTER 7 – CALIFORNIA ENVIRONMENTAL QUALITY ACT EVALUATION

7.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT EVALUATION

This chapter presents the environmental analysis of the proposed project pursuant to the CEQA requirements. The environmental checklist for both build Alternatives A and B are included in Appendix E of this report. Technical information used in responding to each environmental checklist is obtained from technical studies prepared for this proposed project.

7.1 Determining Significance under CEQA

The proposed project is subject to federal and State environmental review requirements because SBCTA proposes the use of federal funds and the proposed project requires a federal approval action. Project documentation, therefore, has been prepared in compliance with CEQA and NEPA. SBCTA is the project proponent and the lead agency under CEQA. FTA is responsible for environmental review, consultation, and any other action required in accordance with NEPA and other applicable federal laws for this proposed project.

One of the primary differences between NEPA and CEQA is the way that significance is determined. Under NEPA, significance is used to determine whether an EIS, or some other lower level of documentation, will be required. NEPA requires an EIS be prepared when the proposed federal action (proposed project) as a whole has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated, and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require SBCTA to identify each "significant effect on the environment" resulting from the proposed project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resources, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list mandatory findings of significance that also require preparation of an EIR. There are no types of actions under NEPA that parallel the mandatory findings of significance of CEQA. This chapter discusses the effects of this proposed project and CEQA significance based on the questions in the CEQA environmental checklist (see Appendix E), which is

consistent with Appendix G of the CEQA Guidelines. The analysis provided below also includes required CEQA significance determinations and the provision of feasible mitigation measures, if applicable. An analysis of global climate change and growth-inducing impacts is also included.

7.2 Notice of Preparation

On March 21, 2016, Omnitrans prepared and released a Notice of Preparation (NOP) indicating its intent to prepare an EIR/EA for the proposed WVC Project (proposed project). The NOP was circulated for 30 days for public comment. The environmental issues brought up during the scoping meetings for the proposed project formed the basis and preliminary conclusions for preparation of an EIR pursuant to CEQA.

It is noteworthy that SBCTA entered into a cooperative agreement with Omnitrans in January 2017, designating SBCTA as the lead agency for the proposed WVC Project. SBCTA intends to construct the WVC, which would then be operated by Omnitrans. SBCTA has assumed the CEQA lead agency role since then.

7.3 Impacts of the Proposed Project

The following CEQA evaluation considers the impacts of the build alternatives (Alternatives A and B) only because the No Build Alternative would not result in any impacts. It should be noted that the impacts to most environmental resources are the same under both build alternatives. The analysis presented below is applicable for both Alternatives A and B unless specified otherwise.

7.3.1 No Impacts

Agriculture and Forestry Resources

Neither of the build alternatives would affect agriculture and forestry resources.

Greenhouse Gas Emissions

The proposed project is a public transportation project that would reduce the amount of automobile VMT in the proposed project area. GHG emissions were quantified for the existing condition (2016), opening year (2023), and design year (2040) (see Section 4.17). When compared to the CEQA baseline of 2016, the build alternatives would generate substantially less GHG emissions in 2023 and 2040, because exhaust emissions decrease in future years as the vehicle fleet continues to turn over to newer, more-efficient vehicles and emission standards become more stringent.

Land Use and Planning

Both build alternatives would not affect land use and planning related to physically dividing an established community or conflicting with a habitat conservation plan or natural communities conservation plan. The areas subject to ROW acquisition are urbanized, containing few vacant parcels. It is possible that the presence of a new premium transit service corridor could result in localized changes in adjacent land parcels; however, the ROW acquisition process would take into account this potential, and the post-project

land use pattern is expected to foster continuing stability to those land uses through such methods as avoiding unusable small remnant parcels and providing adequate buffer space for sensitive land uses. Given these considerations, implementation of any build alternative would not result in indirect adverse effects on land use.

Mineral Resources

The build alternatives are located in an urbanized transportation corridor. There are no known mineral resource recovery sites designated on local, general, or specific plans, or other land use plans within the proposed project area.

Noise and Vibration during Operations

The proposed project would result in less than 1 dB increase in the overall noise level at screened portions of the proposed BRT alignment, which would not modify the noise environment in any appreciable manner, nor be in excess of standards established in any local general plans, noise ordinances, or other applicable standards.

The proposed project is located in the Ontario International Airport influence area; however, the proposed project is a transportation project within an urbanized transportation corridor designed to enhance public safety and improve public transportation. The proposed improvements of the build alternatives would not expose people residing or working in the area to excessive aircraft noise.

Under general geologic conditions, erosion of an impact margin of 4 dB is highly unlikely, especially considering the conservative building-to-alignment distance used in this estimation. Compensating for the maximum operating speed (45 mph) of the proposed BRT service, the estimated RMS vibration velocity level ranges from 65.5 to 67.4 VdB at 50 feet. This is more than 4 dB below the impact threshold for human annoyance vibration impact for residential (Land Use Category 2) buildings and more than 7 dB below the impact threshold for institutional (Land Use Category 3) buildings without any adjustments for environmental factors such as effective propagation soil conditions. Although these conditions do sometimes exist, they are not typically presumed unless evidence demonstrating the contrary is apparent; therefore, it is reasonable to conclude that human annoyance vibration impact would not be anticipated as a result of the proposed project.

Recreation

Both build alternatives would not affect recreational resources.

7.3.2 Less than Significant Impacts of the Proposed Project

Air Quality

Air Quality Plan Consistency

The most recent iteration of the applicable air quality plan is the 2016 AQMP prepared by SCAQMD. The 2016 AQMP relied on forecasted growth and emissions projections in the Basin that were derived

for the 2016 RTP/SCS. The 2016 RTP/SCS analyses incorporated all projects that are listed in the 2016 RTP/SCS Transportation System Project List. The project is included in the Transportation System Project List as a transit project under the RTP ID 4120213. As both the 2016 RTP/SCS and the 2016 AQMP have been adopted, the project is therefore consistent with the forecasted growth within the region and the applicable air quality plan.

Furthermore, a project would be consistent with the current AQMP if it is consistent with the growth anticipated by the relevant land use plans. Zoning changes, specific plans, general plan amendments, and similar land use plan changes that do not increase dwelling unit density, do not increase vehicle trips, and do not increase VMT are also considered consistent with the applicable attainment or maintenance plan. The project involves installation of a BRT line, as well as bus-only lanes under Alternative B. The project does not include general development that would require a zoning change or construct new dwelling units. Therefore, the proposed project would result in a less-than-significant impact related to conflicting with or obstructing implementation of the 2016 AQMP.

Odors

Construction activities would involve the use of a variety of gasoline- or diesel-powered equipment that emit exhaust fumes, as well as asphalt paving, which has a distinctive odor during application. It is anticipated that these emissions would occur intermittently throughout the workday, and the associated odors would dissipate rapidly within the immediate vicinity of the work area. Persons within close proximity to the construction work area may find these odors objectionable. Any emissions during the construction phase that create odors for nearby sensitive receptors would be addressed by enforcement of SCAQMD Rule 402 (Nuisance), which prohibits any emissions that cause injury, detriment, nuisance, or annoyance to a considerable number of people. Therefore, the proposed project would result in a less-than-significant impact related to construction odors.

Land uses and industrial operations commonly associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project would include a new transit system. Any unpleasant odors from transit operations would be subject to management under the odor complaint tracking system mandated by SCAQMD Rule 402 (Nuisance), which prevents nuisance odor conditions. As a result, the proposed project would have a minor, if any, impact with respect to odors. Therefore, the proposed project would result in a less-than-significant impact related to operational odors.

Geology, Soils, and Seismicity

There are no known mapped faults along the proposed project alignment or in the immediate proximity. No Alquist-Priolo

Earthquake Fault Zones have been designated along the alignment, and the proposed project is not considered susceptible to earthquake-induced liquefaction and landsliding caused by a seismic event.

The proposed project site is located in seismically active southern California near the boundary between the Pacific and North American tectonic plates. The proposed project area has potential to be subjected to strong earthquake shaking. However, project design features, including conformance with City, State, and geotechnical industry standards and guidelines, and incorporation of inspections and tests, would be implemented. During construction, the minor grading, cut, and fill activities required to construct the proposed project would not change the overall soil characteristics of the region or local area. As such, the proposed project would result in a less than significant impact to geology, soils, and seismicity.

See Section 5.3.5 for full measures pertaining to geological, soils, and seismicity resources.

Public Services

During construction, some access restriction could occur on a temporary basis. With implementation of the proposed TMP and continuing public outreach program, impacts would be considered less than significant.

Under both build alternatives, emergency vehicles would be unrestricted in their ability to access any property along the proposed project corridor.

Alternative B would retain full turning movements at key intersections along Holt Boulevard for fire and emergency vehicles access. Coordination between SBCTA and City of Ontario Fire Department would be required as engineering design progresses to ensure emergency vehicle response times would not be impacted. Implementation of the build alternatives would result in a less than significant impact.

7.3.3 Less than Significant Impacts of the Proposed Project with Mitigation Incorporated

Aesthetics and Visual Resources

Scenic Route

No scenic routes, vistas, or highways or potentially listed scenic routes, vistas, or highways have been identified within or adjacent to the proposed project area. Therefore, due to the absence of such a resource in the proposed project area, the build alternatives would not affect scenic routes, vistas, or highways.

Streetscape and Station Lighting

Both build alternatives would include new lighting at the proposed stations and removal of trees. Under Alternative A, the proposed project would require removal of approximately 62 trees to construct the side-running stations. Under Alternative B, the proposed project would require removal of approximately 364 trees along Holt Boulevard to accommodate the dedicated

bus-only lanes and center-running stations, and removal of approximately 42 trees to construct the side-running stations.

Alternatives A and B are not anticipated to change the overall visual character or quality of the corridor. The project's conformance with current streetscape and tree replacement policies, in addition to the incorporation of artwork in station design, would have the overall effect of maintaining the existing visual character and quality. All lighting at the stations shall include shielding and directionality to limit the extent of glare created at these locations. Implementation of these measures would result in a less than significant impact.

See Section 4.1.8 for full measures pertaining to aesthetics and visual resources.

Biological Resources

Implementation of the build alternatives would not result in impacts to special-status animal or plant species or be in conflict with any adopted habitat conservation or natural community conservation plans. However, temporary construction activities, including tree and shrub removal, may affect nesting birds protected under the MBTA. If tree and shrub removal activities are scheduled to occur during the breeding season (February 1 through August 31), the nesting bird surveys shall be conducted by a wildlife biologist 2 weeks prior to construction. If active nests are found, a no-disturbance buffer would be created around the active nests. Performing appropriate nesting bird surveys and establishing buffers as necessary would result in a less than significant impact.

Alternative A would require removal of approximately 62 trees to construct the side-running stations. Alternative B would require removal of approximately 364 trees along Holt Boulevard to accommodate the dedicated bus-only lanes and center-running stations, and removal of approximately 42 trees to construct the side-running stations. Pursuant to Section 10-2.06 of the Ontario Municipal Code, the City of Ontario requires approval and removal permits for parkway trees to be removed. If a tree planned for removal qualifies as a parkway tree, coordination and authorization with the City of Ontario would occur prior to removal or relocation of any parkway trees. As such, this impact would be minimized by the new trees that would be included with the proposed project, and the proposed project would not be in conflict with a local tree preservation ordinance.

Cultural Resources

Paleontological Resources

Impacts to sediments with the potential to contain paleontological resources are anticipated to be limited to excavations that exceed 5 feet in depth, including excavations for a storm drain (15-foot depth) and utility relocations (6-foot depth). Deeper excavations have the potential to impact older Quaternary deposits, which have produced numerous significant fossils within the proposed project vicinity; therefore, preparation and implementation of a PMP is recommended to reduce

impacts to below the level of significance. The remaining excavations for roadway widening, bus shelters, bus pads, and pylon installation are expected to be shallow (2.5 to 4 feet) and are anticipated to be entirely within low-sensitivity younger Quaternary deposits.

See Section 5.3.4 for full measures pertaining to paleontological resources.

Archaeological Resources

The three archaeological resources recorded within the proposed project APE (two of which no longer exist), in addition to the five archaeological resources that were recorded within 0.25 mile of the APE, are not expected to be impacted by any of the build alternatives; however, if cultural resources are encountered during project construction, then measures CI-CR-1, CI-CR-2, and CI-CR-3 will be implemented. See Section 5.3.4 for full measures pertaining to archaeological resources.

Tribal Cultural Resources Under CEQA

For addressing potential impacts to tribal cultural resources under CEQA, SBCTA has developed the following measure:

CI-TCR-1: Because of a potential for encountering tribal cultural resources, a Native American monitor shall be retained to monitor all project-related, ground-disturbing construction activities (e.g., grading, excavation, drilling) that may affect previously undisturbed sediments anticipated within the Holt Avenue Corridor. The appropriate Native American monitor shall be selected based on ongoing consultation under AB 52 and shall be identified in the Cultural Resources Monitoring and Mitigation Plan (CRMMP), as described in Measure CI-CR-1. Monitoring procedures and the role and responsibilities of the Native American monitor shall be outlined in the project CRMMP. In the event the Native American monitor identifies a tribal cultural resource or archeological resource, the monitor shall be given the authority to temporarily halt construction (if safe) within 100 feet of the discovery to investigate the find and contact the Project Archaeologist and SBCTA. The approaches identified in Measure CI-CR-2 to avoid or reduce impacts apply also to tribal cultural resources. The Native American monitor and consulting tribe(s) shall be provided an opportunity to participate in the documentation and evaluation of the find. If a Treatment Plan or Data Recovery Plan is prepared, the consulting tribe(s) shall be provided an opportunity to review and provide input on the Plan.

Measures CI-CR-1, CI-CR-2, CI-CR-3 and CI-TCR-1 would mitigate inadvertent impacts to the potential inadvertent discovery of subsurface archaeological deposits or tribal cultural resources, and includes provisions for Native American monitoring during project construction activities and ensuring the appropriate disposition of human remains, if encountered. Therefore, with mitigation, the proposed project would result in a less than significant impact related to

archaeological resources and/or tribal cultural resources.

Hazards and Hazardous Materials

Under both build alternatives, impacts related to hazardous waste and materials could result. Activities associated with corridor construction would necessitate ground disturbances and would have the potential to encounter hazardous materials or waste. For construction of the O&M facility, the ISA Addendum has determined Site 1 as an AOC and Site 3 as an REC. Appropriate cleanup and coordination with DTSC would be undertaken for the selected site prior to commencement of the construction activities.

In addition, the construction and operation phases would require the use of substances considered hazardous, such as fuels, paints, and degreasers.

Under Alternative B, some structures proposed for demolition may contain ACM or LBP. The removal of utility poles would be managed as TWW, while the pole-mounted overhead transformers may contain PCBs, which need to be profiled and managed appropriately.

Limited soil investigation shall be conducted for one of the partial acquisition properties and construction areas as described in Sections 4.6 and 5.2.6. A survey shall be conducted to screen for ACM and LBP prior to demolition of structures. An HASP and Soil Management Plan will be prepared by the proposed project Contractor to address the identification, excavation, handling, and disposal of hazardous wastes and materials that may be found in construction areas. Implementation of the standard hazardous material handling measures would result in a less than significant impact to the environment, including existing or proposed schools within 0.25 mile of the proposed project alignment.

See Section 5.3.6 for full measures pertaining to hazards and hazardous materials resources.

Construction-related delays are anticipated along the proposed project alignment, as well as surrounding arterials, and could result in effects on emergency response. Project construction-related closures would be addressed through a comprehensive TMP, as required by measure CI-TRA-1, which includes requirements for coordination with and notification to the corridor cities and emergency responders.

Though portions of the alignment are near Ontario International Airport, both build alternatives would not introduce a safety hazard for people residing or working in the proposed project area because the proposed project is a transportation project designed to enhance public safety and improve public transportation.

The proposed project is located along an existing and highly urbanized transportation corridor. As such, the proposed project would not expose people or structures to an increased risk of wildfires.

Hydrology and Water Quality

The build alternatives would include new stations and modifications to the West Valley O&M facility to house the new bus fleet, which would result in new sources of runoff pollutants including sediment, trash, hydrocarbons, oil, and grease. The new sources of runoff pollutants could adversely affect water quality through discharges downstream.

Under Alternative B, there would be an increase of 1.81 acres of impervious surface areas and encroachment on the West Cucamonga Channel at the culvert crossing. The proposed encroachment would occur to the culvert crossing on either side of Holt Boulevard where the street would be extended approximately 10 feet to accommodate new sidewalks and landscaping.

According to the Chino Basin Watermaster, groundwater is encountered at depths in excess of 250 bgs near the proposed project site. Recently reported groundwater depths to the west and south of the proposed project site are approximately 260 to 320 feet bgs, on average. Alternatives A and B would only require shallow excavation (less than 6 inches) in most areas. The maximum excavation depth for the dedicated lanes segment under Alternative B would be 2.5 feet. Impacts to groundwater and groundwater quality are not anticipated.

Project effects on water quality are primarily related to construction disturbed soil area, construction/modification of drainages/structures within drainages and dewatering during construction and stormwater runoff, and increased volumes related to increases in impervious surface area during operation. Project design features pertaining to drainage, stormwater runoff management, and water quality will be incorporated for all aspects of the build alternatives, coupled with compliance with State and federal water quality regulations, which would result in less than significant impacts.

See Section 5.3.7 for full measures pertaining to hydrology and water quality.

Noise and Vibration during Construction

Construction noise impacts would occur along the proposed project corridor at residential noise-sensitive locations if construction activities take place nearby and remain within that distance for at least an 8-hour period. Construction activities occurring during nighttime hours would notably increase the number of potentially impacted residences. Another area where construction noise impacts may occur would be at sensitive land uses that are adjacent to construction lay-down or staging areas. Implementation of noise measures CI-NC-1 and CI-NC-2 (see Section 5.3.10) would ensure that construction impacts related to noise are less than significant.

Population and Housing

The proposed project would be operated within existing city streets and would be consistent with land use policies and plans that would potentially affect population growth. Therefore, less than

significant impacts related to population and housing would result with implementation of either build alternative.

Alternative B would require full acquisition of 37 parcels and partial acquisition of 280 parcels. Located on the 37 parcels that would be fully acquired are 14 residential properties, 53 commercial businesses, and 8 industrial/ manufacturing businesses that would be acquired or relocated due to the proposed project. An RAMP shall be developed adhering to the requirements pertaining to land acquisition for projects funded by FTA as prescribed in Volume 49 CFR Part 24, Uniform Relocation Assistance and Real Property Acquisition Policies Act for Federal and Federally Assisted Programs, and the California Relocation Assistance Act, 1970. All acquisitions shall follow the State and local guidelines for compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act and would result in a less than significant impact.

Although relocations would occur as a result of the proposed project, there is no shortage of housing or nonresidential resources in the replacement area. As such, no significant relocation problems are anticipated as a result of the proposed project.

See Section 4.12.2 for full measures pertaining to property acquisitions.

Utilities and Service Systems

The proposed project is not anticipated to generate solid waste and/or wastewater in a quantity that would be beyond the handling capacity of area landfill and wastewater treatment providers.

Implementation of a build alternative would require replacement of stormwater drainage facilities that would be impacted; however, it is not anticipated that there would be substantial changes to hydraulic conveyance capacity. Culverts and other drainage facilities would be designed and constructed to maintain or provide greater hydraulic conveyance capacity resulting in less than significant impacts.

See Section 5.3.14 for full measures pertaining to utilities.

Cumulative Effects

With implementation of measures described in Section 5.3, most impacts associated with the build alternatives would be less than significant with mitigation. Similarly, the reasonably foreseeable projects contained in Table 2-3 would also be required to address potential impacts through mitigation as part of project approvals required by the implementing jurisdiction in which they are located.

7.3.4 Potentially Significant Impacts of the Proposed Project

Air Quality

Exposure of Sensitive Receptors to Substantial Pollutant Concentrations

Alternatives A and B

The greatest potential for sensitive receptor exposure TAC emissions during

construction would result from diesel PM emissions associated with heavy equipment operations. The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. The risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time. While the construction period for the proposed project would extend several months, local exposure to TAC emissions would range from weeks to months depending on the construction phase and location. The proposed project would be subject to the regulations and laws relating to TACs at the regional, State, and federal level that would protect sensitive receptors from substantial concentrations.

Construction activity would not occur in one particular location for extended periods of time as heavy-duty equipment would move along the 35-mile-long corridor at a steady pace. This type of corridor-related construction acivity limits the exposure period for individual receptors, and TAC emisisons would not cause an exceedance of the cancer or non-cancer significance thresholds. Therefore, the proposed project would result in a less-than-significant impact related to construction TAC emissions.

For operational actvities, SCAQMD recommends that a health risk assessment be conducted for substantial sources of long-term operational diesel PM emissions (e.g., truck stops and distribution facilities) and has provided guidance for analyzing mobile source diesel emissions. Omnitrans buses are powered by CNG and are not sources of diesel emissions. Although a new maintenance facility would be required, it will be undergoing a CEQA review process prior to project approval, with mitigation measures incorporated as necessary. Therefore, the proposed project would result in a less-than-significant impact related to exposing sensitive receptors to substantial operational pollutant concentrations.

Construction Emissions

Alternatives A and B

Construction activities associated with the build alternatives would exceed SCAQMD's CEQA localized significance threshold for PM. Mitigation measures would reduce fugitive dust emissions but not to below the significance thresholds. Therefore, the proposed project would result in a significant and unavoidable impact related to localized construction emissions. Because the Basin is designated as a State and/or federal nonattainment area for PM_{10} and $PM_{2.5}$, the proposed project would contribute to a short-term cumulative impact.

See Section 5.3.2 for full measures pertaining to air quality.

Transportation/Traffic

Traffic Operations

As analyzed in Chapter 3, the proposed project would result in adverse traffic impacts under both alternatives by the year 2020 and 2040. Several traffic impact reduction measures would be incorporated into the project design as outlined in Measures TRA-1 and TRA-2 (Chapter 3, Section 3.5.3); however, some of the measures may not be feasible to implement at the following intersections and would result in unavoidable impacts:

Alternatives A and B:

- Rochester Avenue/Foothill Boulevard
- Citrus Avenue/Foothill Boulevard
- Haven Avenue/Arrow Route
- Haven Avenue/Foothill Boulevard

Alternative B only:

- Euclid Avenue/Holt Boulevard

Parking

Implementation of both build alternatives would displace some on-street parking along the proposed corridor at side-running station platforms to accommodate the 60-foot-long articulated buses.

Alternative B would remove on-street parking along Holt Boulevard between Benson Avenue and Vineyard Avenue.

Impacts on parking were determined to be less than significant due to the low usage of parking in the area, as well as the reduced automobile demand resulting from the proposed project.

Cultural Resources

Historic Architectural Resources

Implementation of Alternative B would require partial acquisition of four NRHP-eligible buildings located at 541 E. Holt Boulevard, 961 W. Holt Boulevard, 724 W. Holt Boulevard in Ontario, and a partial acquisition of the Southern Pacific Railroad Depot Property in Pomona. In addition, Alternative B would require acquisition of 11 partial and 7 full properties that have been locally designated by the City of Ontario as historical resources.

Locally designated historically significant properties subject to partial acquisition:

- 545 E. Holt Boulevard
- 635 W. Holt Boulevard
- 741 E. Holt Boulevard
- 748 E. Holt Boulevard
- 745 E. Holt Boulevard
- 745 W. Holt Boulevard
- 765 E. Holt Boulevard
- 1101 E. Holt Boulevard
- 1300 E. Holt Boulevard
- 1670 E. Holt Boulevard
- 1744 E. Holt Boulevard

Locally designated historically significant properties subject to full acquisition:

- 204 E. Holt Boulevard
- 212-214 E. Holt Boulevard
- 220-222 E. Holt Boulevard
- 444 E. Holt Boulevard
- 616 E. Holt Boulevard
- 639 E. Holt Boulevard
- 754 E. Holt Boulevard

The demolition of locally significant properties cannot be mitigated to the level of less than significant; however, one or more of the following activities would be implemented to mitigate impacts on the City of Ontario's locally designated historical resources if Alternative B is selected and the historical resources cannot be avoided or relocated: preparing a contextual history of Holt Boulevard, with a focus on its historic resources; preparing photographic documentation of the CRHR-eligible buildings to be demolished; installing plaques in cases where historic buildings are removed; developing short videos consisting of oral interviews of persons associated with the area's history for the City of Ontario to post on their website; and installing historical information kiosks located at sbX bus stops.

Continued coordination between SBCTA and Ontario is ongoing to determine additional mitigation measures for project impacts to locally significant historical resources, including mitigation fees.

Mandatory Finding of Significance

As described in the respective sections in Chapter 4 and corresponding CEQA impact determinations in Chapter 7 for biology, the effects of the build alternatives would not significantly degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal.

As indicated earlier, implementation of Alternative B would require partial acquisition of four NRHP-eligible buildings located at 541 E. Holt Boulevard, 961 W. Holt Boulevard, 724 W. Holt Boulevard in Ontario, and a partial acquisition of the Southern Pacific Railroad Depot Property in Pomona. In addition, Alternative B would require acquisition of 11 partial and 7 full properties that have been locally designated by the City of Ontario as historical resources. The demolition of locally significant properties cannot be mitigated to the level of less than significant. However, CEQA requires that all feasible mitigation be undertaken even if it does not mitigate below a level of significance. Mitigation CI-CR-4 has been developed to mitigate the impacts if the properties cannot be avoided or relocated.

7.4 Growth-Inducing Impacts

Implementation of a build alternative would accommodate current and future residents and businesses by providing a public transportation service on already existing roads and would not require the extension of any of these roads to accommodate the proposed public transportation facilities. The build alternatives would be compatible with existing land uses and would serve to link regional activity centers within the area. As discussed in Section 4.8, Land Use and Planning, the proposed project could also serve as a catalyst for revitalization and stimulate joint development and TOD in the future, particularly near stations. It is

anticipated that in response to increased levels of transit in the SCAG region in general, communities in southern California will redirect growth to transit corridors, including the WVC Corridor. The proposed project is not anticipated to be incompatible with surrounding land uses, and implementation of the proposed project would not be expected to contribute to cumulatively considerable land use impacts. The San Bernardino County, Los Angeles County, and cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana General Plans all contain policies to maximize mobility and accessibility in the region to encourage land use and growth patterns that complement the regional transportation system. These policies are compatible with and support the WVC Project improvements. In addition, the General Plans of all stakeholder cities anticipate TOD along the proposed project corridor. As such, growth-inducing impacts are considered less then significant.

7.5 Environmentally Superior Alternative

CEQA requires that an EIR identify the environmentally superior alternative of a project other than the No Build Alternative (*CEQA Guidelines* Section 15126.6 (e)(2)). The determination of an environmentally superior alternative is based on the consideration of how the alternative fulfills the project objectives; reduces significant unavoidable impacts; or substantially reduces the impacts to the surrounding environment. Alternatives A and B both meet all of the project objectives. Alternative A is considered the environmentally superior alternative over Alternative B because it would result in a lesser extent of impacts on some environmental resources, as summarized in Table 7-1.

Table 7-1 Summary of Alternatives Analysis

	Alternative A (Full BRT with no Dedicated Bus Lanes and O&M Facility)	Alternative B (Full BRT with 3.5-Mile Dedicated Bus Lanes and O&M Facility) (Locally Preferred Alternative)	No Build Alternative
Meets Project Objectives	Yes	Yes	No
Issue			
Aesthetics	LSM	LSM	NI
Agriculture and Forestry Resources	NI	NI	NI
Air Quality	LSM	SU (construction only)	NI
Biological Resources	LSM	LSM	NI
Cultural Resources	LTS	SU	NI
Geology and Soils	LTS	LTS	NI
Greenhouse Gas Emissions	NI	NI	NI
Hazardous Waste and Hazardous Materials	LSM	LSM	NI
Hydrology and Water Quality	LSM	LSM	NI
Land use and Planning	NI	LTS	NI
Mineral Resources	NI	NI	NI
Noise	LSM	LSM	NI
Population and Housing	LTS	LSM	NI
Public Services	LTS	LTS	NI
Recreation	NI	NI	NI
Transportation and Traffic	SU	SU	NI
Utilities and Service Systems	LSM	LSM	NI
Mandatory Findings of Significance	SU	SU	NI

NI – No impact
LTS – Less than significant
LSM – Less than significant with mitigation
SU – Significant and unavoidable

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CHAPTER 8 –
SECTION 4(f) EVALUATION

8.0 SECTION 4(f) EVALUATION

8.1 Introduction

This Section 4(f) Evaluation identifies the Section 4(f) resources in and near the West Valley Connector (WVC) Project study area. The objectives of this analysis are to describe the regulatory setting, affected environment, impacts on Section 4(f) resources, and measures to minimize harm to the affected resources.

The proposed project would have a "use" of property protected by Section 4(f) as defined in Code of Federal Regulations (CFR) 774.17; therefore, documentation of compliance with Section 4(f) is required.

8.2 Regulatory Setting

Section 4(f) of the Department of Transportation Act of 1966 at 49 U.S.C. 303) declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) permits use of land from a publicly owned significant park, recreation area, or wildlife and waterfowl refuge, and historic sites only if:

1) There is no prudent and feasible alternative to using that land; and
2) The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use."

Section 4(f) further requires consultation with the Department of the Interior and, as appropriate, the involved offices of the Department of Agriculture and the Department of Housing and Urban Development in developing transportation projects and programs that use lands protected by Section 4(f). If historic sites are involved, then coordination with the State Historic Preservation Officer (SHPO) is also needed.

Coordination with the Department of Agricultural and Department of Housing and Urban Development is not required for the project because there would be no impacts to National Forest System lands or federal funding from the Department of Housing and Urban Development. Because historic sites are involved coordination with the State Historic Preservation Officer is needed.

8.2.1 Determining Section 4(f) Resources

There are two steps in determining whether Section 4(f) applies to a federal transportation project:

1) The project must involve a resource that is protected by the provisions of Section 4(f)
2) There must be a "use" of that resource.

Section 4(f) protects the following properties:

- Publicly owned and accessible parklands and recreational lands;
- Public wildlife/waterfowl refuges, regardless of public access; and
- Historic sites, regardless of ownership.

Significance for parks, recreation areas, and wildlife/waterfowl refuges is determined by the official with jurisdiction. When the official with jurisdiction determines that a park, recreation area, or wildlife and waterfowl refuge is not significant, FTA reviews the determination for reasonableness per 23 CFR 774.11(c). In the absence of a significance determination by the official with jurisdiction, FTA assumes the resource is significant and applies the requirements of Section 4(f). Historic sites listed on, or eligible for listing on the National Register of Historic Places (NRHP) are significant properties for Section 4(f) purposes.

8.2.2 Definition of Section 4(f) Use

As defined in 23 CFR Section 774.17, a "use" of a protected Section 4(f) property occurs when any of the following conditions are met:

Direct Use: Land is permanently incorporated into a transportation facility through partial or full acquisition.

Temporary Occupancy: There is a temporary use of land that is adverse in terms of the statute's preservation purpose as determined by the criteria in 23 CFR 774.13(d).

Constructive Use: There is a constructive use of a Section 4(f) property as determined by the criteria in 23 CFR 774.15. There is no permanent incorporation of land, but the proximity of a transportation facility results in impacts so severe that the protected activities, features, and/or attributes that qualify a property for protection under Section 4(f) are substantially impaired.

Direct Use

A direct use of a Section 4(f) resource takes place when part or all of the property designated for protection under Section 4(f) is permanently incorporated into a transportation project (23 CFR Section 774.17). This may occur as a result of partial or full acquisition of a fee simple interest, permanent easements, or temporary easements that exceed the regulatory limits noted below:

Temporary Occupancy

A temporary occupancy of a Section 4(f) property occurs when there is temporary use of a protected property for construction-related activities and when that temporary occupancy is not considered adverse in terms of the preservationist purposes of the Section 4(f) statute.

If the following five conditions set forth in 23 CFR Section 774.13(d) can be satisfied, Section 4(f) does not apply.

1) The duration of the occupancy must be temporary (i.e., shorter than the period of construction) and does not involve a change in ownership of the property.

2) The scope of the work must be minor, with only minimal changes to the protected resource.
3) There are no anticipated permanent adverse physical impacts to the protected resource and no temporary or permanent interference with the activities, features, attributes of the resource.
4) The land being used must be fully restored to a condition that at least equals the condition that existed prior to the proposed project.
5) There must be documented agreement by the appropriate officials having jurisdiction over the Section 4(f) resource regarding the above conditions.

Constructive Use

A constructive use of a Section 4(f) resource occurs when a transportation project does not permanently incorporate land from the resource in the transportation facility, but the proximity of the project to the Section 4(f) property results in impacts (i.e., noise, vibration, visual, access, and/or ecological impacts) so severe that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) are substantially impaired (23 CFR Section 774.15).

8.2.3 Determining *De Minimis* Impacts

The requirements of Section 4(f) evaluation are to determine if the project would adversely affect features, attributes, or activities qualifying the property for protection under Section 4(f), and the official with jurisdiction has concurred with this determination after there has been an opportunity for public review and comment. The provisions allow for avoidance, minimization, mitigation, and enhancement measures to be considered in making the *de minimis* determination. The official(s) with jurisdiction over the resource must be informed of FTA's intent to make a *de minimis* impact determination. In accordance with 23 CFR 774.17 a *de minimis* impact can be made when the following conditions are met:

- For parks, recreation areas, and wildlife/waterfowl refuges, a *de minimis* impact is one that would not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f). In order to meet this requirement, the official with jurisdiction should have concurred with this determination after there has been a chance for public review and comment [Note: For parks, recreation areas, and wildlife/waterfowl refuges, a public notice on the intent of making a *de minimis* impact finding and opportunity for public comment concerning the effects is required];
- For historic sites, a *de minimis* impact determination may be made if no historic property is affected by the project or if the project will have "no adverse effect" on the historic property in question. The determination can be made when the following occur:
  - The process required by Section 106 of the National Historic

Preservation Act of 1966 (NHPA) results in a determination of "no adverse effect" or "no historic properties affected," with concurrence from the SHPO;

- The SHPO is informed of FTA's intent to make a *de minimis* impact finding based on the agency's written concurrence in the Section 106 determination; and
- FTA has considered the views of any consulting parties, including the Advisory Council on Historic Preservation (ACHP), if participating in the Section 106 consultation.

8.3 Description of the Proposed Construction Activities

8.3.1 Construction Scenario

Construction work on the locally preferred alternative of the proposed project would occur within the existing street ROW along the side-running corridor segment. The proposed action would require construction of bus shelters and pylons and minor roadway reconfigurations.

New sbX bus shelters, as well as reconstruction of curbs and gutters in some locations, would be installed along the length of the project corridor. Station construction would involve installing components such as canopies, ticket vending equipment, drinking fountains, railings, lighting, signage, and station furniture. Construction of some side-running stations would require alteration of existing sidewalk widths. Stations could be constructed simultaneously with the various segments of the alignment; however, the Contractor may elect to construct them sequentially.

Construction work along the 3.5-mile-long exclusive bus lane segment in the City of Ontario would occur within and adjacent to the existing street ROW. The proposed action would require reconstruction of Holt Boulevard to accommodate exclusive bus lanes with center-running stations, and construction of bus shelters and pylons for side-running stations.

Completion of Final Design is anticipated for mid-2021. Construction of the Phase I/ Milliken Alignment is estimated to take approximately 20 to 24 months with testing to begin in late 2023. The Phase II/ Haven Alignment is scheduled to occur after completion of the Phase I/Milliken Alignment, pending funding availability.

8.4 Description of Section 4(f) Properties

8.4.1 Study Area

The following section describes the use of Section 4(f) properties. An assessment has been made as to whether any permanent or temporary occupancy of a property would occur and whether the proximity of the project would cause any effects (e.g., disruption, noise, vibration, or aesthetic) that would substantially impair the features or attributes that qualify the resources for protection under Section4(f) and, therefore, constitute a use.

Section 4(f) resources in the project study area were identified if they were:

- Existing publicly owned recreational and park resources, including local, regional, and State resources;
- Publicly owned wildlife and water fowl refuges and conservation areas; or
- NRHP listed or eligible historic properties.

Different study areas were used to conduct research and determine the presence of Section 4(f) properties, which varies by the resource, consistent with the study area in the respective technical reports prepared for the environmental document, and which are further described below.

Public Parks and Recreational Areas

The study area for public parks and recreational areas is 0.5 mile from the project alignment as defined in the Community Impact Report (April 2018) prepared for this project. Parsons planners reviewed the parks and recreation element of each of the applicable jurisdiction's general plan to determine the presence of public parks and recreational areas. In addition, a review of existing online geographic information system (GIS) maps of local parks resources was conducted.

Wildlife and Waterfowl Refuges

The study area for wildlife and waterfowl refuges is the Biological Study Area (BSA) developed for this project as defined in the Biological Study Report (April 2018). The BSA is defined as the area within a 500-foot buffer from the project centerline. A review of United States Geological Survey (USGS) San Dimas, Guasti, and Fontana 7.5-minute quadrangle maps, a literature and database review, and a field survey were conducted by a professional biologist.

Cultural Resources

The study area for historic sites is the Area of Potential Effects (APE) developed for this project in accordance with 36 CFR 800.4(a)(1). The APE is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, including archaeological sites. The APE incorporates the direct impact area for architectural and archaeological resources, and one parcel beyond the proposed ROW for the built environment (history and architecture). Historic sites were identified by cultural resources specialists in history, architecture, and archaeology who reviewed local historic landmark inventories and archaeological records, conducted background research, and performed field surveys of the project's APE as described in the Historic Property Survey Report (HPSR) (July 2018), Archaeological Survey Report (ASR) (July 2018), and Historic Resources Evaluation Report (HRER) (July 2018).

8.4.2 Identification of Section 4(f) Properties

Table 8-1 contains a summary of the resources that were identified in the study areas, based on a combination of various background informational sources reviewed and onsite field reviews

conducted, as discussed briefly in Section 5.1.1. As a result, 33 public parks and 33 public schools with recreational areas, 9 NRHP listed and/or eligible properties, and no wildlife and waterfowl refuges have been identified. See Figure 8-1 for a visual display of the Section 4(f) resources identified and the study area boundaries. Section 8.4.3 describes the Section 4(f) resources in the geographical study area boundary for each resource.

8.4.3 Description of Section 4(f) Properties

Public Parks and Public Schools with Recreational Facilities

Table 8-2 lists the parks and schools located within 0.5 mile of the proposed WVC corridor. The identification numbers (ID No.) associated with each park and school in Table 8-2 correspond to the feature numbers labeled in Figure 8-1.

Table 8-1 Summary of Properties Subject to Section 4(f) Consideration

Type of Property	Geographic Location to Project	Number of Properties Identified
Public Parks	Within 0.5 mile	33
Public Schools with Recreational Areas	Within 0.5 mile	33
Wildlife and Waterfowl Refuges	Within 500 feet	0
NRHP listed or eligible Historic Architectural Properties	Within Architectural APE	9
NRHP listed or eligible Archaeological Properties	Within project footprint	0

Table 8-2 List of Parks and Schools within the Section 4(f) Study Area

ID No.	City	Park/School Name	Map Sheet No.
P-1	Pomona	Central Park	Sheet 1 of 9
P-2	Pomona	Centennial Park	Sheet 1 of 9
P-3	Pomona	Garfield Park	Sheet 1 of 9
P-4	Montclair	Sunset Park	Sheet 2 of 9
P-5	Montclair	Saratoga Park	Sheet 2 of 9
P-6	Montclair	Kingsley Park	Sheet 2 of 9
P-7	Ontario	James R. Bryant Park	Sheet 2 of 9
P-8	Ontario	Ontario Dog Park	Sheet 3 of 9
P-9	Ontario	Euclid Avenue Parkway	Sheet 3 of 9
P-10	Ontario	Nugent's Park	Sheet 3 of 9
P-11	Ontario	Sam Alba Park	Sheet 3 of 9
P-12	Ontario	Veterans Memorial Park	Sheet 3 of 9
P-13	Ontario	James Galanis Park	Sheet 3 of 9
P-14	Ontario	Cucamonga-Guasti Regional Park	Sheet 4 of 9
P-15	Ontario	Ontario Motor Speedway Park	Sheet 4 of 9
P-16	Ontario	Carpenter's Union Park	Sheet 4 of 9
P-17	Rancho Cucamonga	Ralph M. Lewis Park	Sheet 6 of 9
P-18	Rancho Cucamonga	West Greenway Park	Sheet 6 of 9
P-19	Rancho Cucamonga	Milliken Park	Sheet 6 of 9
P-20	Rancho Cucamonga	Mountain View Park	Sheet 6 of 9
P-21	Rancho Cucamonga	Victoria Arbors Park	Sheet 6 of 9
P-22	Rancho Cucamonga	Garcia Park	Sheet 7 of 9
P-23	Fontana	Patricia Murray Park	Sheet 7 of 9
P-24	Fontana	McDermontt Sports Complex & McDermontt Park West	Sheet 7 of 9
P-25	Fontana	Northgate Park	Sheet 8 of 9
P-26	Fontana	Cypress Park	Sheet 8 of 9
P-27	Fontana	Seville Park	Sheet 8 of 9
P-28	Fontana	Bill Martin Park	Sheet 8 of 9
P-29	Fontana	Miller Park	Sheet 8 of 9
P-30	Fontana	Santa Fe Park	Sheet 8 of 9
P-31	Fontana	Veteran's Park	Sheet 8 of 9
P-32	Fontana	Jack Bulik Park	Sheet 9 of 9
P-33	Ontario	Bon View Park	Sheet 10 of 10
S-1	Pomona	Catholic Girls High School	Sheet 1 of 9
S-2	Pomona	Saint Pauls School	Sheet 1 of 9
S-3	Pomona	Western University of Health Sciences	Sheet 1 of 9

Table 8-2 List of Parks and Schools within the Section 4(f) Study Area

ID No.	City	Park/School Name	Map Sheet No.
S-4	Pomona	San Antonio Elementary School	Sheet 1 of 9
S-5	Pomona	Kingsley Elementary School	Sheet 1 of 9
S-6	Pomona	Village Academy High School	Sheet 1 of 9
S-7	Pomona	Park West High School	Sheet 1 of 9
S-8	Montclair	Lehigh Elementary School	Sheet 2 of 9
S-9	Montclair	Montera Elementary School	Sheet 2 of 9
S-10	Montclair	Kingsley Elementary School	Sheet 2 of 9
S-11	Ontario	University of La Verne College of Law	Sheet 3 of 9
S-12	Ontario	Lincoln Elementary School	Sheet 3 of 9
S-13	Ontario	Ray Wiltsey Middle School	Sheet 3 of 9
S-14	Ontario	Mariposa Elementary School	Sheet 3 of 9
S-15	Ontario	Ontario Center School	Sheet 4 of 9
S-16	Ontario	Argosy University Inland Empire	Sheet 4 of 9
S-17	Ontario	Platt College Ontario	Sheet 4 of 9
S-18	Rancho Cucamonga	Upland Christian Academy	Sheet 6 of 9
S-19	Rancho Cucamonga	Coyote Canyon Elementary School	Sheet 6 of 9
S-20	Rancho Cucamonga	Terra Vista Elementary School	Sheet 6 of 9
S-21	Rancho Cucamonga	Sacred Heart Parish School	Sheet 6 of 9
S-22	Rancho Cucamonga	Perdew Elementary School	Sheet 7 of 9
S-23	Fontana	West Heritage Elementary School	Sheet 7 of 9
S-24	Fontana	East Heritage Elementary School	Sheet 7 of 9
S-25	Fontana	Almond Elementary	Sheet 7 of 9
S-26	Fontana	Desert Sands Charter High School	Sheet 9 of 9
S-27	Fontana	Randall-Pepper School	Sheet 9 of 9
S-28	Fontana	Westech College	Sheet 9 of 9
S-29	Fontana	Cypress Elementary School	Sheet 9 of 9
S-30	Fontana	Almeria Middle School	Sheet 8 of 9
S-31	Fontana	Tokay Elementary School	Sheet 8 of 9
S-32	Fontana	Fontana Middle School	Sheet 8 of 9
S-33	Fontana	Chaffey College	Sheet 8 of 9

Source: WVC Community Impact Report, April 2018

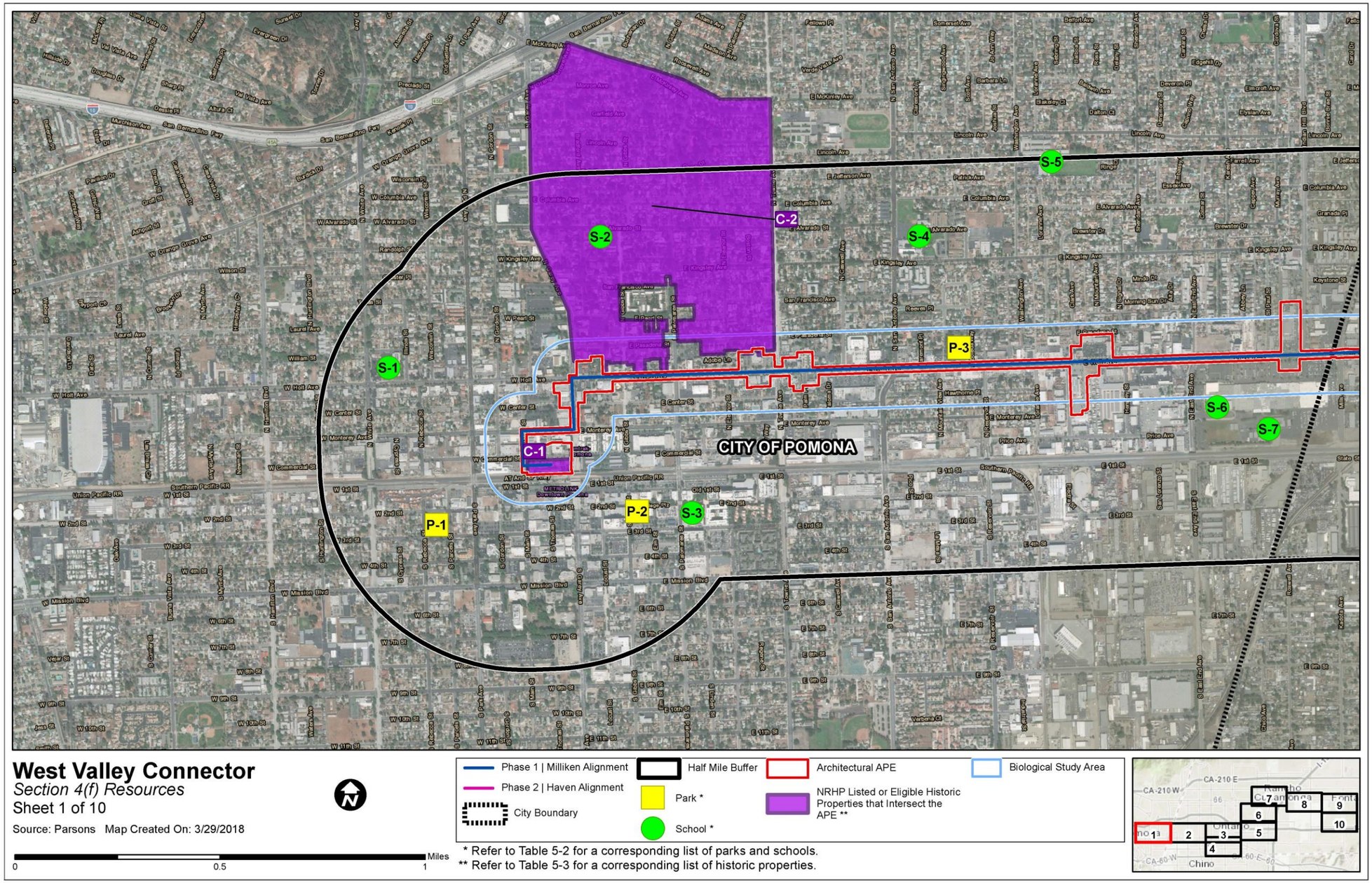

Figure 8-1 Section 4(f) Resources Sheet 1 of 10

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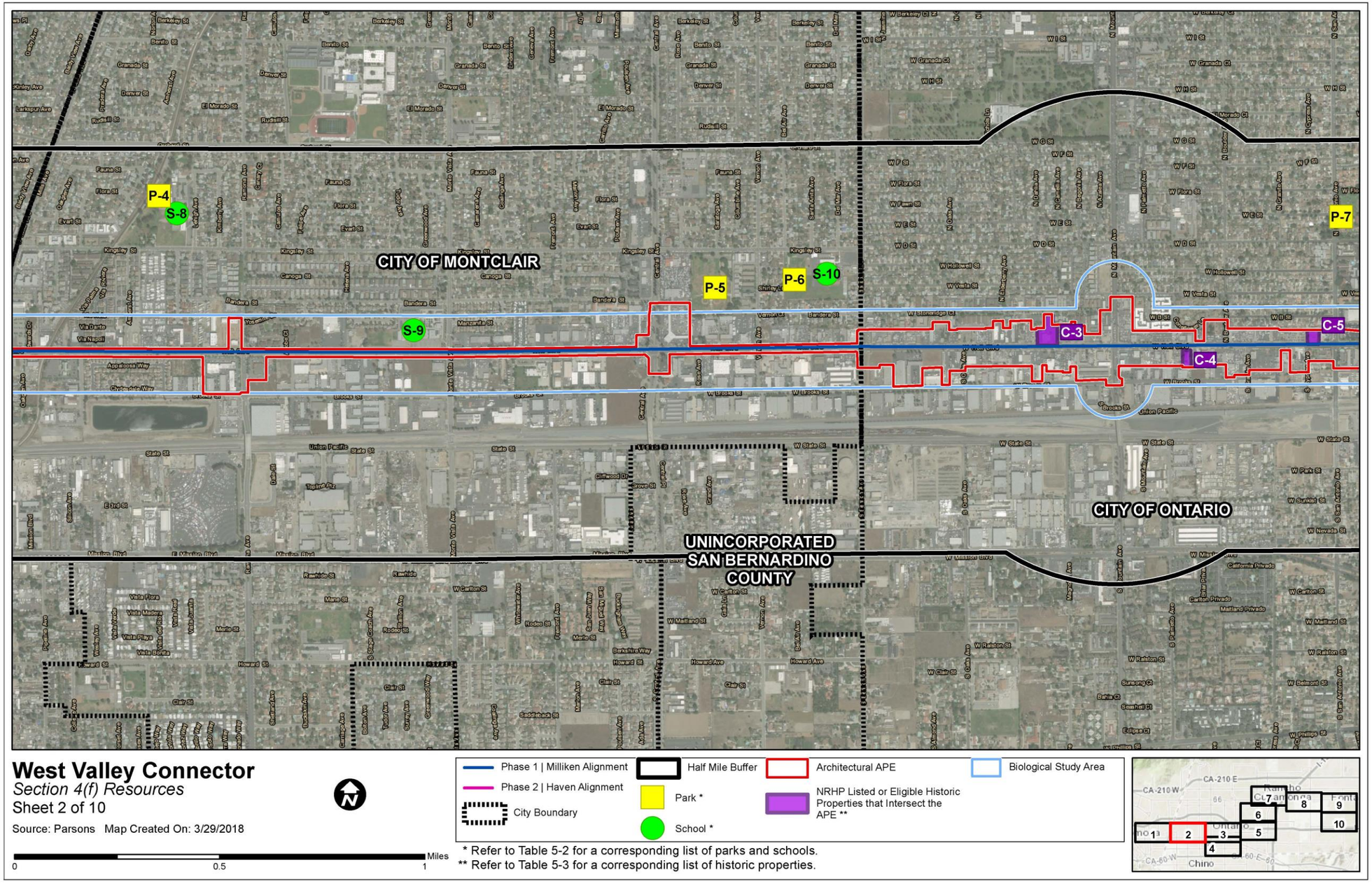

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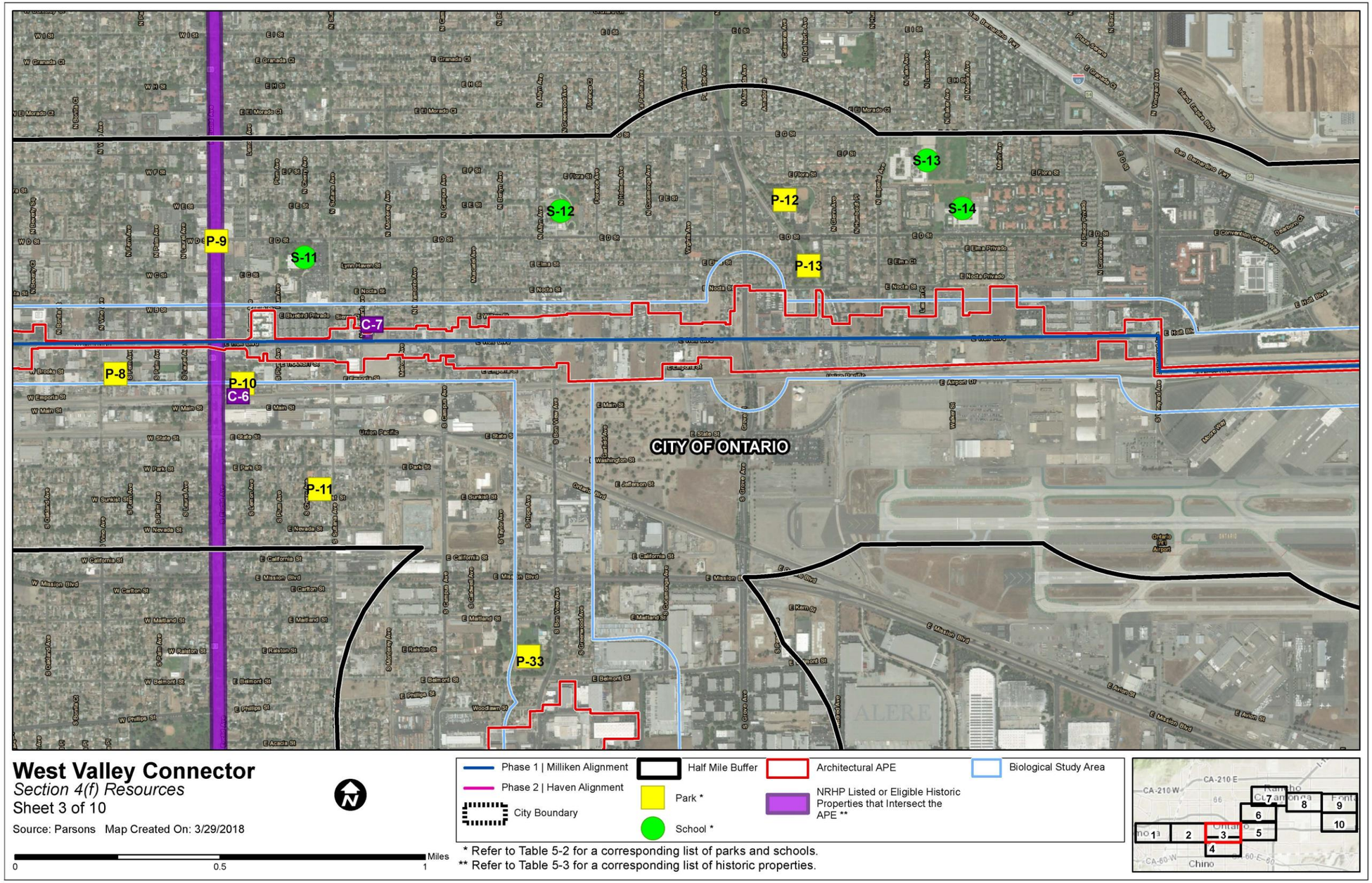

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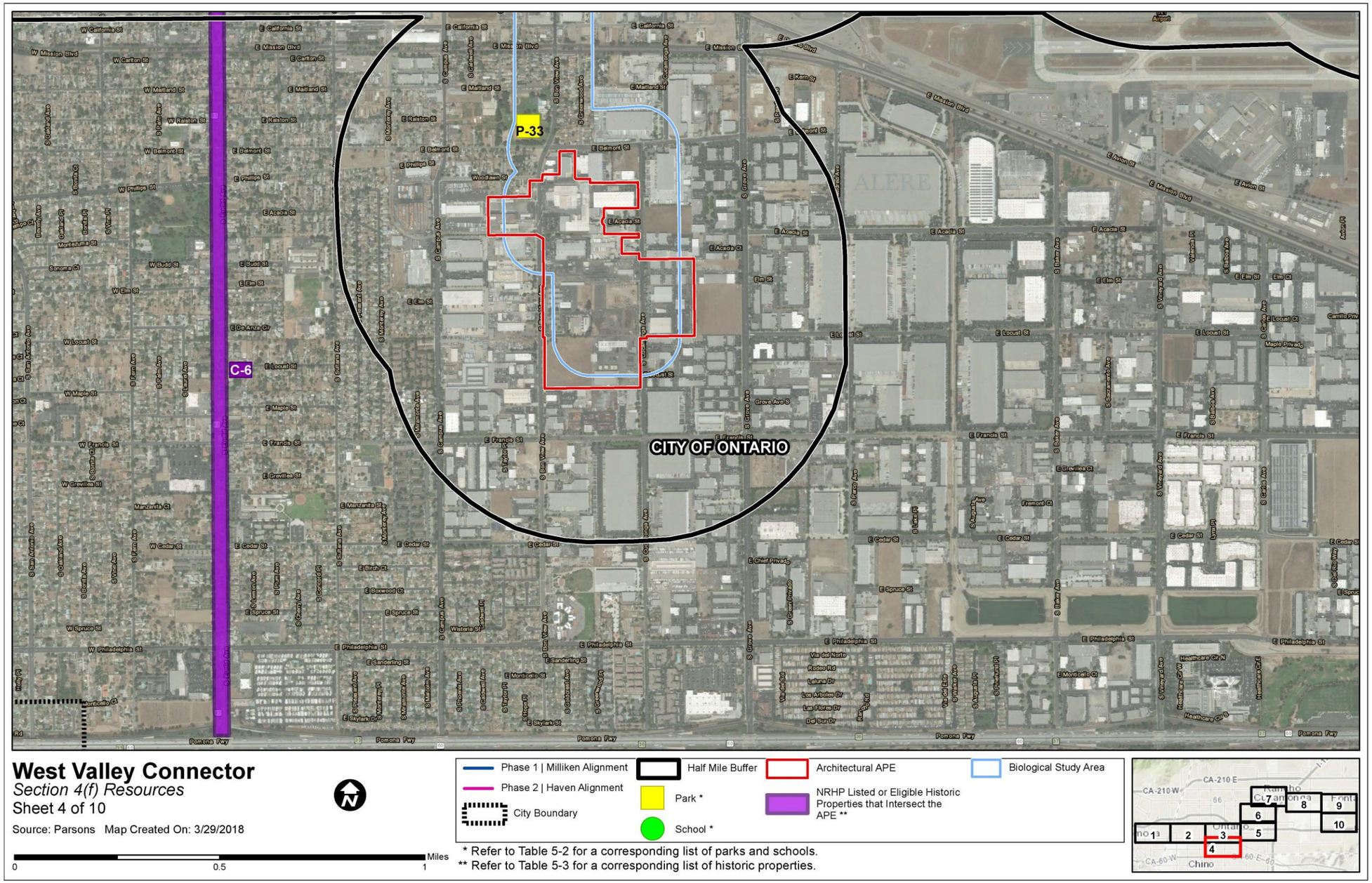

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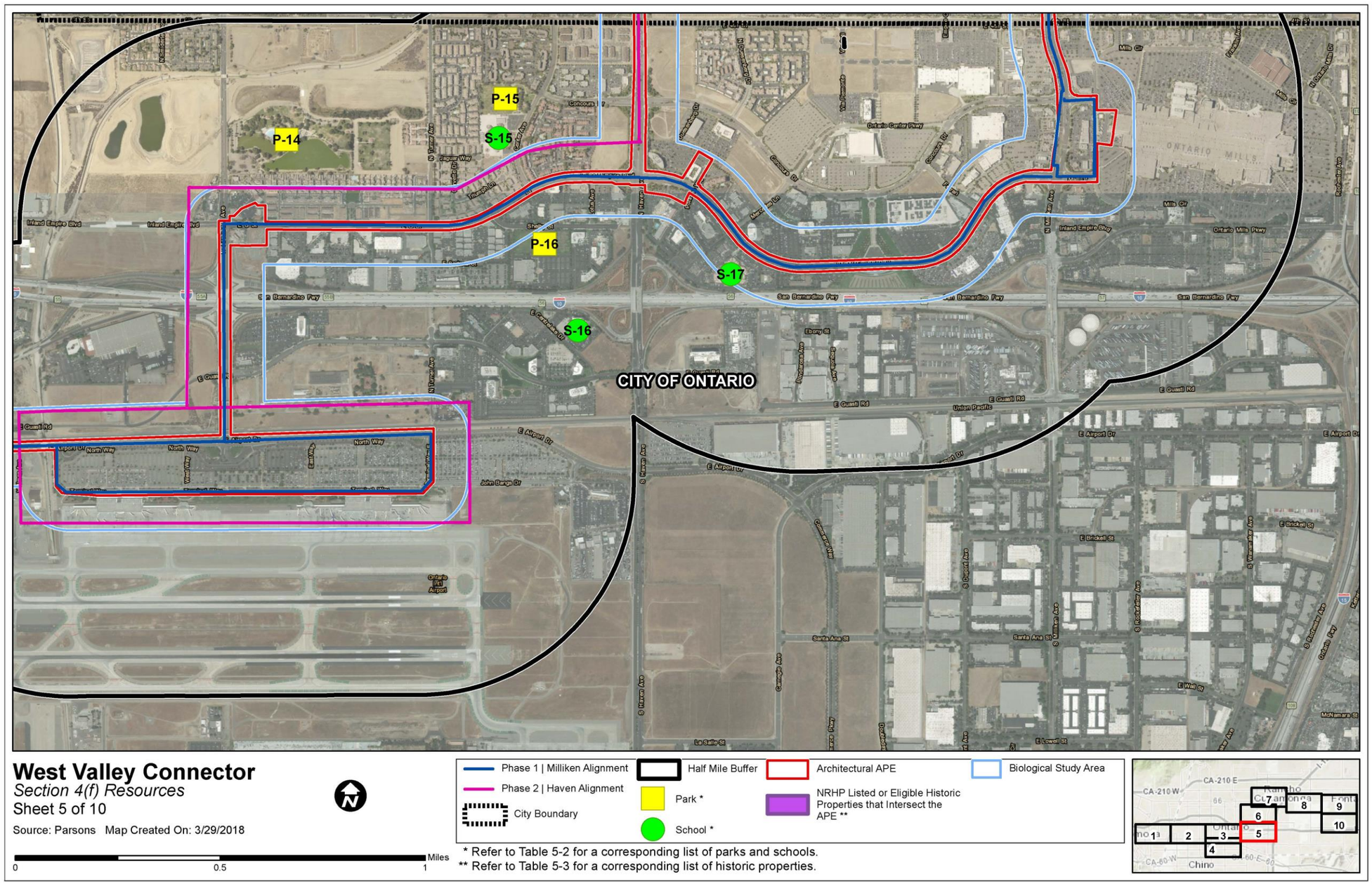

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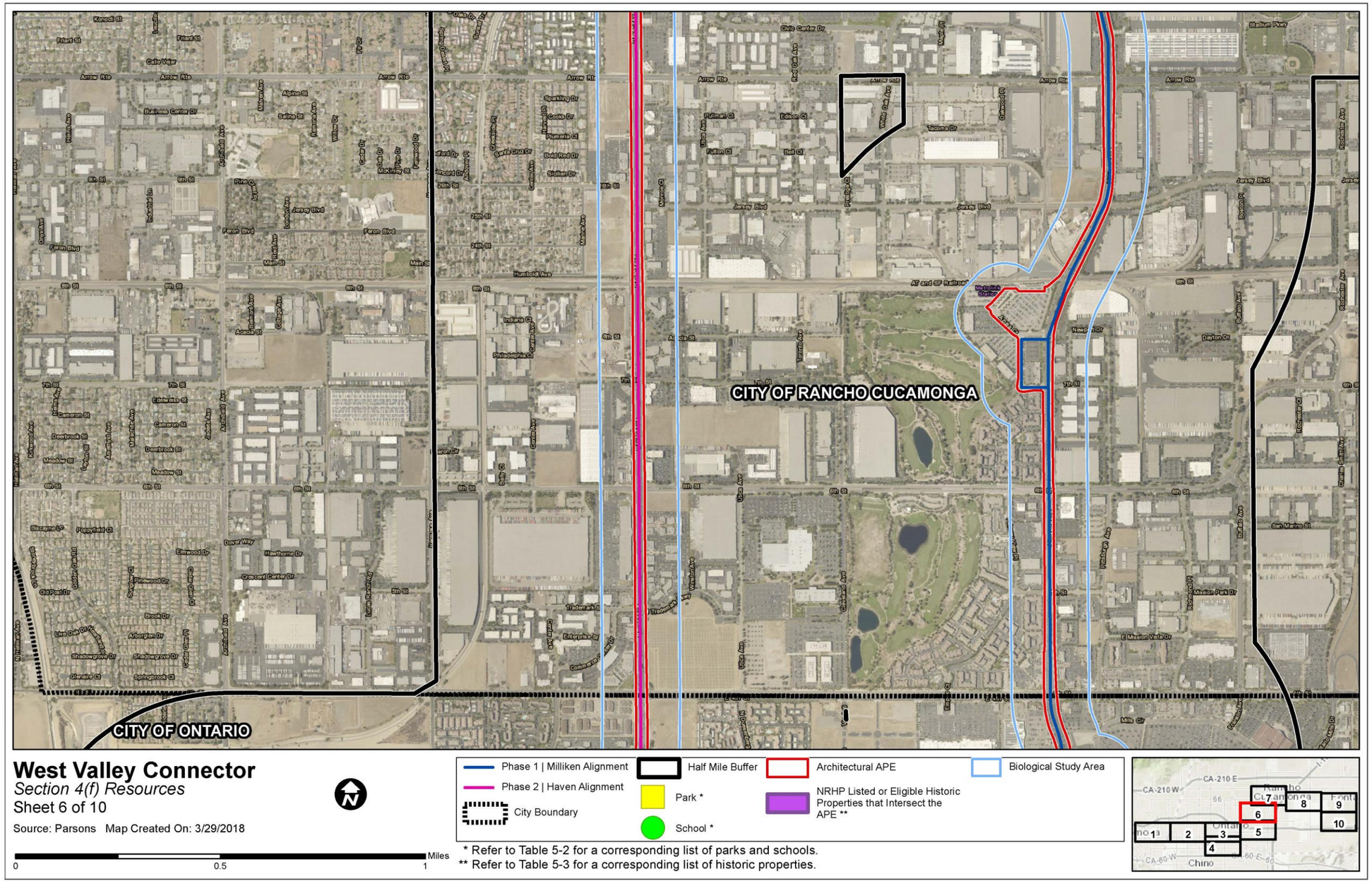

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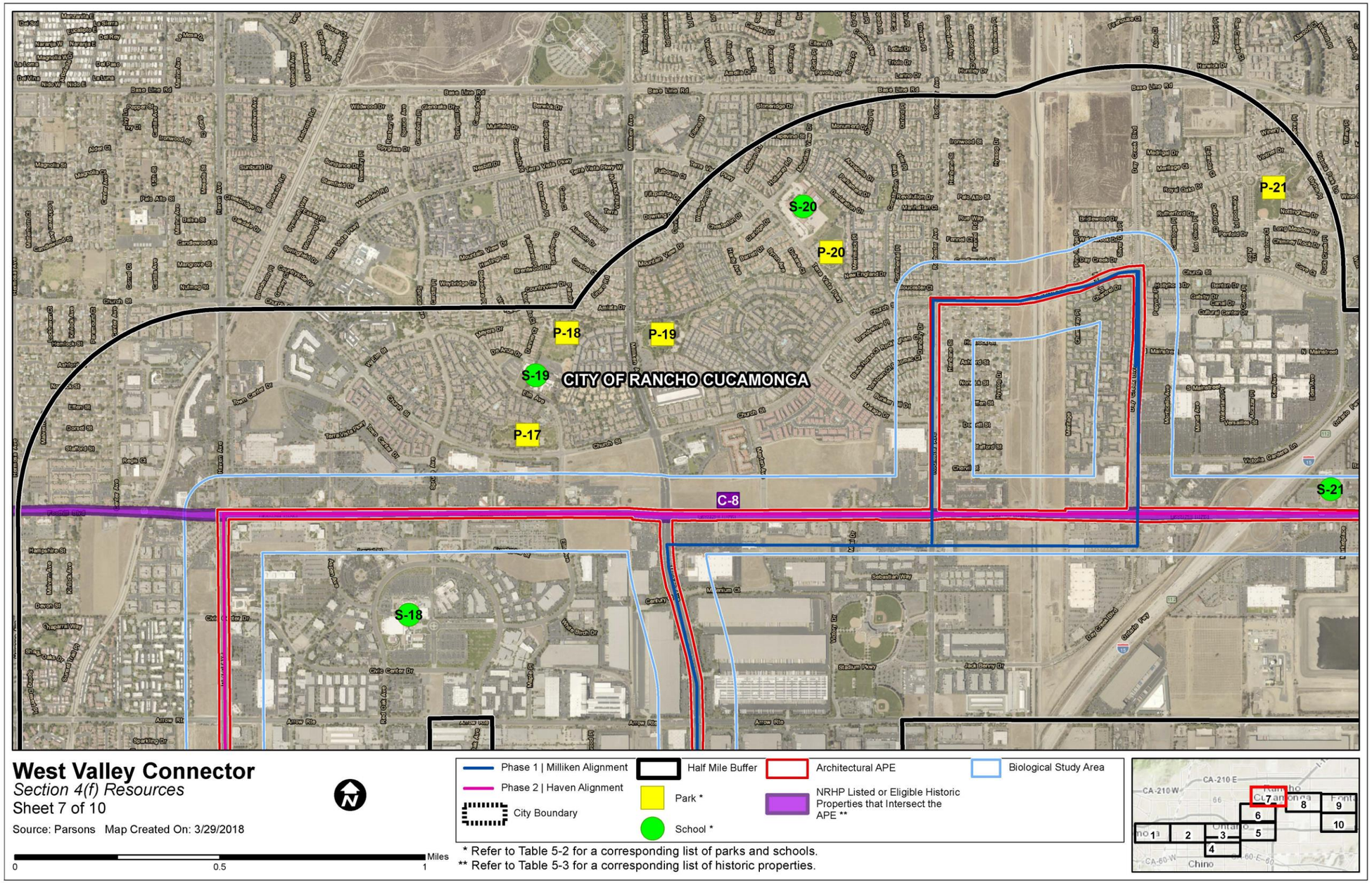

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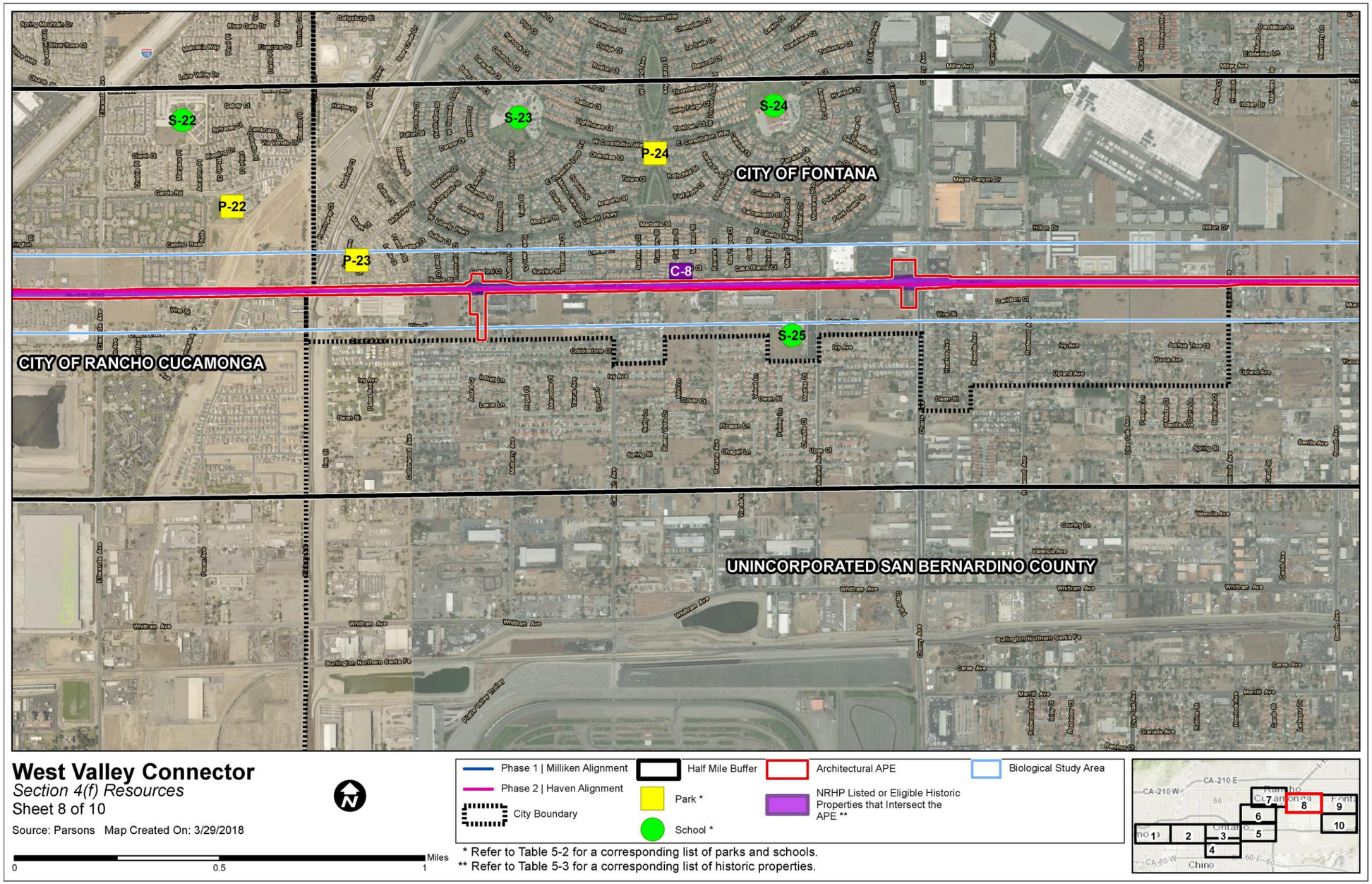

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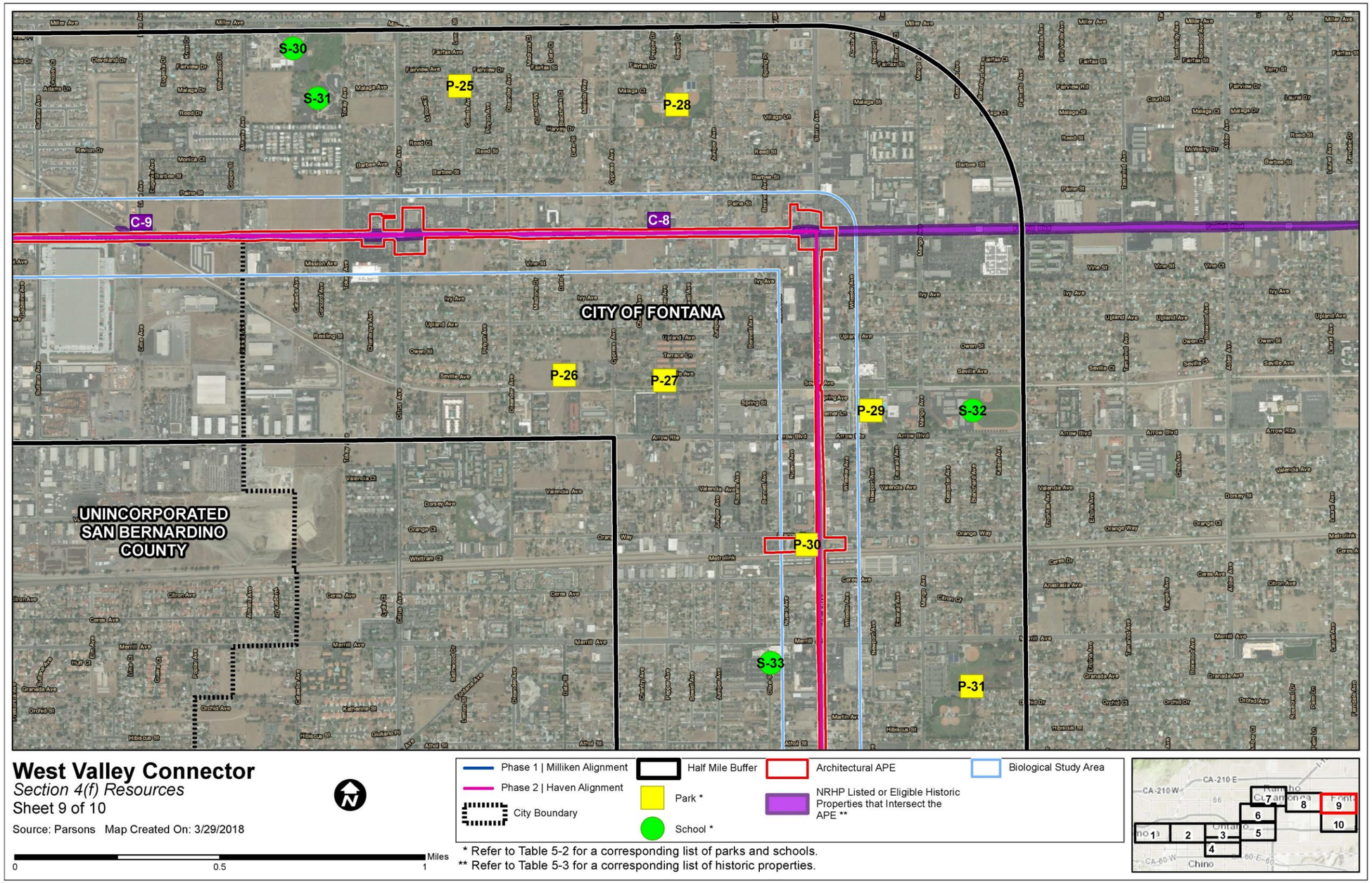

Figure 8-1 Section 4(f) Resources Sheet 9 of 10

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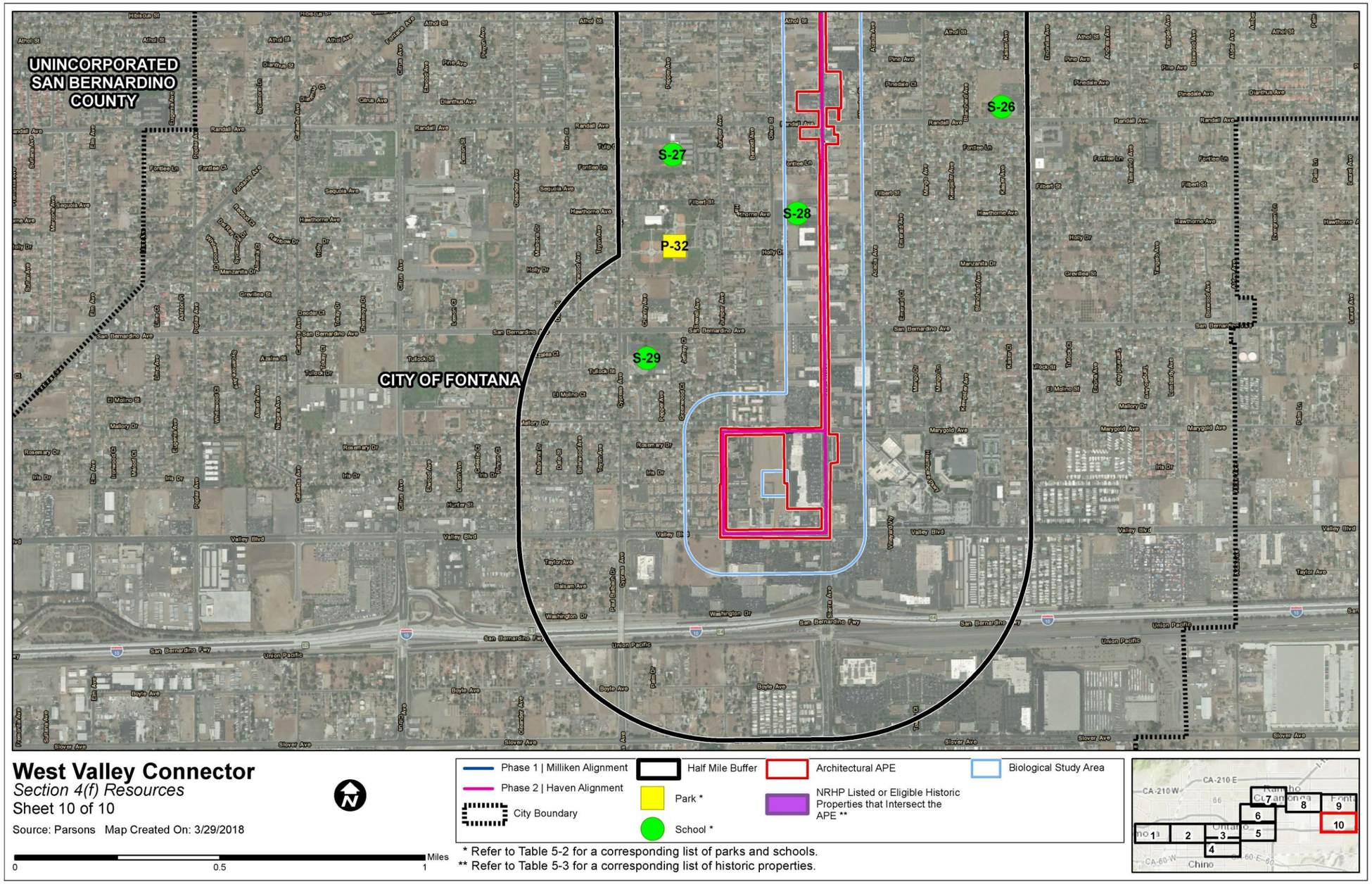

Figure 8-1 Section 4(f) Resources Sheet 10 of 10

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8.4.4 Wildlife and Waterfowl Refuges

No wildlife and waterfowl refuges were identified in the BSA.

8.4.5 Cultural Resources

Historic Properties

Identification of historic properties is documented in the project's HPSR, HRER, and ASR.

Historic properties that are listed in or eligible for the NRHP under Criteria A, B, or C are generally important for preservation in place and are considered Section 4(f) resources. Properties eligible for or listed in the NRHP under Criterion A are important for their associations with historically important events, while those eligible or listed under Criterion B are important for their associations with historically important people. Properties that are eligible for or listed on the NRHP under Criterion C are those that represent the work of a master; are good representatives of a particular type, style, or method of construction; or have high artistic value. Generally, Criterion C applies to buildings or structures. Criterion D of the NRHP (i.e., the potential to yield important data) may or may not be judged to be important for its preservation in place, a requirement for an NRHP property to be considered a Section 4(f) resource, and which is made on a case-by-case basis. In addition to meeting significance criteria, an NRHP property must retain sufficient integrity in terms of its location, design, setting, materials, workmanship, feeling, and association. Five NRHP eligible or listed properties were previously identified within the APE. The project team conducted a field review of the previously identified resources and confirmed all five continue to possess sufficient integrity to meet the NRHP criteria as historic properties. An additional four properties within the APE were found to be eligible as a result of the cultural resources evaluations completed for this project. Table 8-3 lists each of the nine NRHP eligible or listed properties that are within the APE and are subject to Section 4(f). The identification numbers (ID No.) associated with each property in Table 8-3 correspond to the feature numbers labeled in Figure 8-1. A description of each property follows.

Southern Pacific Railroad Depot

Located in the City of Pomona, the Southern Pacific Railroad Depot in 2004 was determined eligible for the NRHP under Criteria A and C at the State level of significance. Built in 1940, and in a design reflecting a Mission Revival architectural style, the station still serves as a rail station and provides an example of the importance of rail lines in the western United States as a means of transporting people and goods.

Table 8-3 Historic Properties Determined Eligible or Listed in the NRHP within the APE

ID No.	Map Sheet No.	Property Name	Address	Parcel Number	Listed in the National Register of Historic Places?	Details
C-1	Sheet 1 of 9	Southern Pacific Railroad Depot	100 W. Commercial Street, Pomona	8336-031-90	Eligible	In 2004, the Southern Pacific Railroad Depot in Pomona was determined eligible for the NRHP under Criteria A and C at the State level of significance. The station, built in 1940, and reflecting the Mission Revival architectural style, continues to function as a rail station for Metrolink.
C-2	Sheet 2 of 9	Lincoln Park Historic District	Pomona	N/A	Listed	This historic district in Pomona was listed in the NRHP in 2004 and is bounded roughly by McKinley Avenue, Towne Avenue, Pasadena Street, and Garey Avenue. The main contributors to the district are residences reflecting popular architectural styles spanning the 1880s to 1945.
C-3	Sheet 2 of 9	Vince's Spaghetti	1206 W. Holt Boulevard, Ontario	1010-543-01 and -02	Eligible	Determined eligible for the NRHP under Criterion A as a contributor to the history of the local and regional community as part of U.S. Route 99, and Criterion C as a distinctive example of a Mid-Century Modern commercial building type. Evaluated as part of the cultural resources studies prepared for this project.
C-4	Sheet 2 of 9	A.C. Moorhead House	961 W. Holt Boulevard, Ontario	1011-141-07	Eligible	Determined eligible for the NRHP under Criterion A for its place in local history and Criterion C as a distinctive example of the Queen Anne architectural style. Evaluated as part of the cultural resources studies prepared for this project.
C-5	Sheet 2 of 9	The Grinder Haven	724 W. Holt Boulevard, Ontario	1048-604-14	Eligible	Determined eligible for the NRHP under Criterion C as a distinctive example of a Mid-Century Modern commercial building type reflecting the Googie style. Evaluated as part of the cultural resources studies prepared for this project.

Table 8-3 Historic Properties Determined Eligible or Listed in the NRHP within the APE

ID No.	Map Sheet No.	Property Name	Address	Parcel Number	Listed in the National Register of Historic Places?	Details
C-6	Sheet 3 of 9	Euclid Avenue/ State Route 83	In APE – project alignment crosses Euclid Avenue along Holt Boulevard in Ontario in between N. Laurel Avenue and S. Lemon Avenue	N/A	Listed	Euclid Avenue, between 24th Street in Upland and Philadelphia Street in Ontario, was listed as a single structure in the NRHP in 2005 under Criteria A and C as a representative example of early 20th century transportation development and highway design and construction. The road is considered a district with many adjacent properties and objects being considered as contributors.
C-7	Sheet 3 of 9	Jacob Lerch House	541 E. Holt Boulevard, Ontario	1048-523-17	Eligible	Determined eligible for the NRHP under Criterion C as a distinctive example of the Stick Style architectural style. Evaluated as part of the cultural resources studies prepared for this project.
C-8	Sheets 6, 7, and 8 of 9	National Old Trails Road/ Route 66	In APE – project alignment runs along Foothill Boulevard/Route 66 between Haven Avenue and Sierra Avenue	N/A	Listed	This route is significant under NRHP Criterion A and Criterion C as a representative example of early twentieth century transportation development and highway design and construction. The road is considered a district with many adjacent properties and objects being considered as contributors.
C-9	Sheet 8 of 9	Malaga Underpass Bridge	Route 66/Foothill Boulevard, Fontana	N/A	Eligible	This bridge, dating from 1931, was determined eligible for the NRHP under Criterion A due to its importance as a railroad grade separation and its association with historic Route 66.

Source: WVC Historic Property Survey Report, July 2018.

Lincoln Park Historic District

The Lincoln Park Historic District in Pomona was listed in the NRHP in 2004 and is bounded roughly by McKinley Avenue, Towne Avenue, Pasadena Street, and Garey Avenue. The main contributors to the district are single-family residences reflecting popular architectural styles spanning from the 1880s to 1945. Prominent designs include residences reflecting the Queen Anne, Shingle, Craftsman Bungalow, Spanish Colonial Revival, Tudor Revival, Mission Revival, and Minimal Tradition architectural styles, among others.

Vince's Spaghetti, 1206 West Holt Boulevard, Ontario, CA

Vince's Restaurant, at 1206 W. Holt Boulevard, Ontario, has been determined eligible for listing in the NRHP under Criteria A and C. It is a property associated with the important theme of roadside-serving uses along a stretch of former U.S. Highway 99 and has had a continuous presence and been under the same family ownership at this location since 1945, a claim no other restaurant establishment in Ontario can make. The building possesses the significant characteristics of a type and period; therefore, it also appears eligible under Criterion C. It is a good example of Mid-Century modern commercial architecture, largely pioneered in southern California, with its character-defining irregular shape, flat roof with overhanging canopy, steel I beam supports, and the mixed use of building materials. In addition, the building's low one-story entry, and the fenestration pattern and dominance of large windows, together unite the façade and combine to emphasize the horizontality of the building which, when paired with its original 1950s roadside neon sign, are all a hallmark of the Mid-Century Modern design aesthetic. The property retains integrity of location, design, setting, materials, feeling, and association.

A.C. Moorhead House, 961 West Holt Boulevard, Ontario, CA

The A.C. Moorhead House at 961 W. Holt Boulevard, Ontario, has been determined eligible for the NRHP under Criteria A and C, which reflects its significance as a rural residence, as well as the period it served as the Orange Grove Inn/Southern House, a once popular roadside restaurant and local landmark attracting motorists traveling along what was then the state highway and U.S. Highway 99. In terms of its architecture, the property is an excellent example of the Queen Anne style. Under Criterion C, the building embodies many of the character-defining features of the Queen Anne style, including an octagonal tower, steep pitched gable roof, shingles for exterior walls, a large recessed porch, spindle work friezes, and decorative brackets. The A.C. Moorhead House retains much of its integrity, notwithstanding alterations made to the building. The property's integrity of location, design, materials, and workmanship remain largely intact despite the alterations; the original setting, feeling, and association have been slightly compromised over time with the general

urbanization of the Holt Boulevard corridor. However, the A.C. Moorhead House retains sufficient integrity to adequately exhibit both its historical significance under Criterion A and its architectural significance under Criterion C.

The Grinder Haven, 724 West Holt Boulevard, Ontario, CA

The building located at 724 W. Holt Boulevard, Ontario, has been determined eligible for the NRHP under Criterion C based on its architecture, as a good example of Mid-Century Modern commercial roadside architecture. D'Elia's Grinder Haven was constructed in 1958 as a drive-in restaurant. It appears to be a good example of the style, with its signature triple A-structural steel beams projecting through the roofline and original neon sign with a swooping arrow near the front of the parcel, reflecting what is commonly referred to as the Googie architectural style, named after a popular 1950s southern California coffee shop that employed expressive shapes and materials as design elements. This building, in its intent to attract the passing motorist's attention, has two primary characteristic features of the Googie style, employing unusual geometric shapes to stand out among other nearby buildings and its use of colorful neon signage. The property retains integrity of location, design, setting, materials, feeling, and association.

Euclid Avenue/State Route 83

Euclid Avenue/State Route (SR) 83 in Upland and Ontario was formally determined eligible for listing in the NRHP by the Keeper of the Register (Keeper) in 1977, was formally nominated for listing in the NRHP in 1979, and was listed in the NRHP in 2005. Euclid Avenue, between 24th Street in Upland and Philadelphia Street in Ontario, was listed as a single structure in the NRHP in 2005 under Criteria A and C. Character-defining features of the historic property include the landscape, the road itself, two fountains, and a statue. Euclid Avenue/SR-83 has also been designated as a local historic district by the City of Ontario. The boundary of this district is Interstate10 to the north and G Street to the south. All properties that front this section of Euclid Avenue are included in the historic district. The contributing features of the locally designated historic district also include the median and street trees, consisting of silk oak and coast live oak trees. Other contributing features include the scored sidewalks, stone and concrete curbs, King Standard lampposts, and front yard setbacks and open space in the residential areas of the district.

Jacob Lerch House, 541 East Holt Boulevard, Ontario, CA

The Jacob Lerch house located at 541 E. Holt Boulevard in Ontario has been determined eligible for listing in the NRHP under Criteria C at the local level of significance as a distinctive example of the Shingle style of architecture. Built in the first decade of the 20th century, the

two-story building is a distinctive example of the style, with character-defining features such as the uniform covering of wood shingle siding, including an enclosed wraparound porch, steeply pitched and multi-planed gable roofs, louvered vents, and small casement and sash windows grouped into twos. The Jacob Lerch House retains a good degree of integrity. The location, setting, materials, association, and workmanship remain. The building retains most of its early 20th century scale, massing, and historic feeling to its original use, though it has had alterations. Period landscaping is considered a contributing element of the property.

CA-SBr-2910H; National Old Trails Road/Route 66

This is an NRHP property that is a historic road corridor composed of two roads: the National Old Trails Road that originally ran between Baltimore, Maryland, and San Diego, California, and U.S. Highway 66, known colloquially as Route 66, which originally ran from Chicago, Illinois, to Santa Monica, California. Built and designated in 1926, the road was part of the first nationally designated highway system. The route is significant under Criteria A and C as a representative example of important state and local trends in 20th century transportation development and highway design and construction. The road segment is part of a 300-mile-long linear resource in California with many associated properties considered as contributors. These may include the physical features of the road (e.g., bridges, culverts, and guard rails) and other road-related structures. Property contributors also include associated resources purposely located along the highway during its period of significance, such as gasoline service stations, mechanics garages, motels, restaurants, and original signage.

Malaga Underpass Bridge

This bridge was constructed on a 30-degree skew alignment across Route 66/Foothill Boulevard, immediately adjacent to the City of Fontana in 1931 to accommodate trains passing through the area. The bridge was found eligible for the NRHP under Criterion A due to its importance as a railroad grade separation and its association with historic Route 66. The bridge retains integrity of location and design.

Archaeological Resources

Archaeological sites that are eligible for listing or are listed in the NRHP may also come under the purview of Section 4(f), if their chief value is preservation in place, rather than their scientific value. An ASR (July 2018), which included a records search and archaeological field surveys, was prepared to determine whether historic archaeological or prehistoric archaeological resources are present along the project alignment. Two archaeological resources were previously recorded within the project APE. One was a residential site (P-36-007144) that no longer exists, and the other is the NRHP-listed National Old Trails Road/Route 66 (P-36-002910) (now Foothill Boulevard in

Fontana). There are an additional 4 resources that are archaeological in nature that were recorded within 0.25 mile of the APE, all of which were historic-age (i.e., 50 years old or older) resources. No prehistoric resources were recorded within 0.25 mile of the APE. Of 91 known resources within 0.25 mile of the APE, 85 are historic-age architectural resources and 6 are historic-age archaeological resources. The 6 historic-age archaeological resources consist of the remains of residences, agricultural sites, utility features, and a road (Route 66). The 2 previously recorded resources and 11 newly identified archaeological resources within the project APE are all historic-age sites with limited surface manifestations of building foundations and remnants of parking lots and have been determined to be ineligible for the NRHP. Given the nature of these sites and the level of disturbance within the APE, the potential for significant, intact subsurface historic deposits is considered low.

8.5 Impacts on Section 4(f) Properties

The No Build Alternative and Alternatives A and B would not result in any permanent use, temporary occupancy, or impairment of land from public parks and recreational areas, wildlife and waterfowl refuges, or archaeological resources.

This section describes how the project build alternatives would affect six NRHP-eligible or listed properties, all Section 4(f) properties. An assessment was made to determine whether any permanent use or temporary use of land from these Section 4(f) properties would result in direct effects that would substantially impair the activities, features, and/or attributes that trigger the provisions of Section 4(f).

The following subsections describe the permanent uses and temporary occupancy of the NRHP-eligible and listed properties from each project alternative. The effects on the Section 4(f) properties related to facilities, functions, and activities potentially affected are also addressed. The impacts on accessibility, visual changes, and noise are also evaluated for each project alternative. Table 8-4 summarizes, by build alternative, the permanent use and/or temporary occupancy of all nine NRHP-eligible or listed properties located in the APE. Alternative A would result in the direct use of one NRHP-eligible or listed properties (the Southern Pacific Railroad Depot) and the temporary occupancy of two NRHP-eligible or listed properties (the Southern Pacific Railroad Depot and Route 66). Alternative B would result in the direct use of four NRHP-eligible or listed properties (A.C Moorhead House, Jacob Lerch House, Grinder Haven, and the Southern Pacific Railroad Depot) and the temporary occupancy of six NRHP-eligible or listed properties (A.C Moorhead House, Jacob Lerch House, Vince's Spaghetti, The Grinder Haven, the Southern Pacific Railroad Depot and Route 66. Measures to minimize harm to these Section 4(f) properties are provided in Section 8.6.

Table 8-4 Section 4(f) Impact Summary for Build Alternatives

Property	Alternative A				Alternative B			
	Direct Use (square feet)	Temporary Occupancy (square feet)	Constructive Use (square feet)	*De Minimis* Finding	Direct Use (square feet)	Temporary Occupancy (square feet)	Constructive Use (square feet)	*De Minimis* Finding
Southern Pacific Railroad Depot	4,346	7,841	None	Yes	4,346	7,841	None	Yes
Lincoln Park Historic District	None	None	None	N/A	None	None	None	N/A
Vince's Spaghetti	None	None	None	N/A	None	2,222	None	Yes
A.C. Moorhead House	None	None	None	N/A	274	1,363	None	Yes
The Grinder Haven	None	None	None	N/A	1,747	1,721	None	Yes
Euclid Avenue/ SR-83	None	None	None	N/A	None	None	None	N/A
Jacob Lerch House	None	None	None	N/A	35	353	None	Yes
National Old Trails Road/Route 66	None	9,239	None	Yes	None	9,239	None	Yes
Malaga Underpass Bridge	None	None	None	N/A	None	None	None	N/A

Source: Parsons, 2018

8.5.1 No Build Alternative

The No Build Alternative would not construct any of the improvements proposed in Alternative A and Alternative B; therefore, it would not result in the permanent use, temporary occupancy, or impairment of land from any Section 4(f) properties, including any NRHP listed or eligible properties.

8.5.2 Build Alternatives

The following subsections describe the use of six NRHP eligible or listed properties under each build alternative (Southern Pacific Railroad Depot, A.C. Moorhead House, Jacob Lerch House, Vince's Spaghetti, The Grinder Haven, and National Old Trails Road/Route 66). The build alternatives would not require use of the remaining three NRHP properties (Malaga Underpass Bridge, Euclid Avenue/SR-83, and Lincoln Park Historic District). An evaluation was also done to determine if indirect impacts from the build alternatives would result in substantial impairment of these properties. This is more formally referred to as a constructive use under Section 4(f). That analysis did not identify any proximity impacts resulting from the build alternatives that would be so severe that the activities, features, and/or attributes that qualify these properties for protection under Section 4(f) would be substantially impaired. The proximity impacts of the build alternatives in the vicinity of these properties would not meaningfully reduce or remove the values of these properties in terms of their Section 4(f) significance; therefore, the build alternatives were determined not to result in substantial impairment of any properties protected under Section 4(f).

Southern Pacific Railroad Depot

Significance of Property

The Southern Pacific Railroad Depot, located at 100 West Commercial Street in Pomona (APN 8336-031-90), was determined eligible for the National Register in 2004 under NRHP Criteria A and C. It is owned by the City of Pomona.

Application of Section 4(f) Criteria for Use

Direct Use

Alternatives A and B would require direct use of approximately 4,356 square feet of the Southern Pacific Railroad Depot parcel, which consists of a portion of a lawn, sidewalk, a small sliver of the parking lot that is used for motorcycles, and approximately four trees to accommodate a BRT station and a new bus pad to be placed northwest of the depot station building (see Figure 8-2). This minor proposed direct use would not adversely affect any of the activities, features, or attributes of the Southern Pacific Railroad Depot. Alternatives A and B would not materially impair the building (i.e., demolish or substantially alter the physical characteristics). The building would continue to convey its historic and architectural significance without any impacts to its integrity, with respect to its location, design, setting, materials, workmanship, feeling, or association.

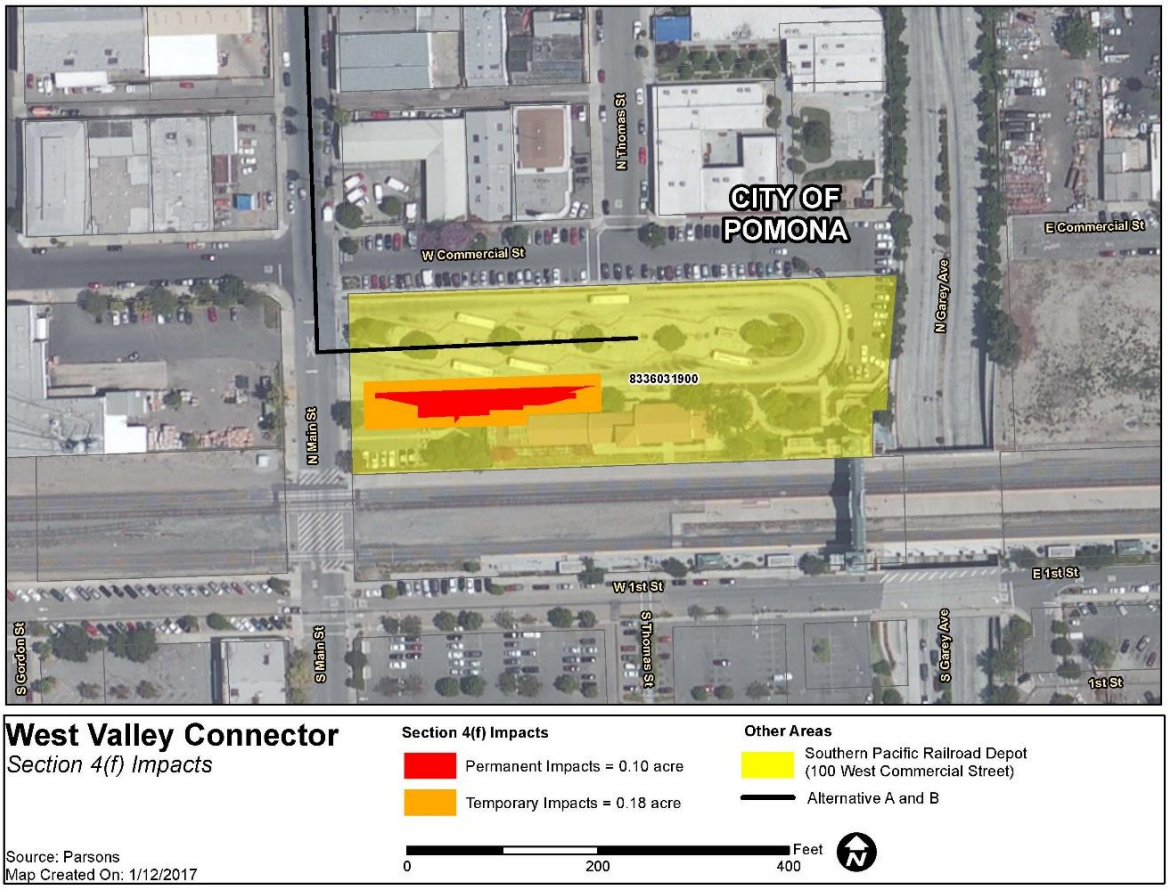

Figure 8-2 Alternative A and B Impacts to Southern Pacific Railroad Depot

Temporary Occupancy

Alternatives A and B would require temporary occupancy of approximately 7,841 square feet of the Southern Pacific Railroad Depot property to construct the new BRT station and to reconstruct the sidewalk located northwest of the Southern Pacific Railroad Depot station building (see Figure 8-2). The affected area consists of the front lawn, sidewalk, and a small portion of the parking lot. This minor proposed temporary occupancy would not adversely affect any of the activities, features, or attributes of the Southern Pacific Railroad Depot. A TCE would be required. Access to the Southern Pacific Railroad Depot would be maintained at all times during project construction.

Constructive Use

The build alternatives would not result in a constructive use of the Southern Pacific Railroad Depot. An indirect impact would be considered a constructive use under Section 4(f) if the impact were so severe that the public did not have access to the Southern Pacific Railroad Depot and/or activities occurring within the Southern Pacific Railroad Depot were severely affected by the project's impacts. Potential indirect impacts related to the build alternatives are discussed below.

Accessibility. Vehicular and pedestrian access to the Southern Pacific Railroad Depot would be maintained at all times during construction and operation of the

build alternatives. A small sliver of the designated parking lot used for motorcycles at the Southern Pacific Railroad Depot would be impacted as result of the build alternatives.

Visual. Visual impacts during construction would be typical of roadway construction projects, including construction fencing, construction equipment, material stockpiles, and vegetation removal, which would collectively temporarily disturb the Southern Pacific Railroad Depot's existing landscape aesthetic. Temporarily disturbed areas would be returned to pre-project conditions once construction is completed; therefore, the minor visual changes associated with the build alternatives would not be considered a Section 4(f) constructive use.

Noise and Vibration. Indirect noise and vibration impacts as a result of the build alternatives are not expected to result in a constructive use of Southern Pacific Railroad Depot. According to the Noise and Vibration Technical Study (April 2018), no BRT operational noise or vibration impacts are anticipated at any of the sensitive receptors of the proposed alignment; therefore, no noise or vibration impacts resulting from the proposed project operations are anticipated. During construction, the project would generate noise and vibration impacts that are typical from construction activities and from using construction equipment and vehicles. BMPs would be incorporated to minimize these short-term, temporary impacts. These include vibration monitoring by the contractor and having a plan in place before construction begins for the use of alternative equipment and techniques when established thresholds may be exceeded (see Section 8.6.1). The incremental increase in noise and vibration impacts during construction and once the proposed project is in operation would not inhibit existing functions of the Southern Pacific Railroad Depot. The proposed project would not result in a Section 4(f) constructive use of the Southern Pacific Railroad Depot due to indirect noise and vibration impacts.

Applicability of Section 4(f)

Neither build alternative would result in direct and temporary occupancy of the parcel on which the Southern Pacific Railroad Depot sits. No constructive use of this resource is anticipated under either build alternative.

Both build alternatives would result in a direct use of 4,356 square feet of the parcel on which the Southern Pacific Railroad Depot is located in the form of permanent impact, but which would not diminish the original parcel size. The area to be impacted consists primarily of existing sidewalks and landscaping, changes that do not detract or alter any of the character-defining features of the station property that qualify it as a resource under Section 4(f). The sidewalks would also be reconstructed.

Both build alternatives would result in temporary occupancy of 7,841 square feet of the parcel on which the Southern Pacific Railroad Depot sits; however, work would be minor in scope, and there are no anticipated permanent adverse physical

effects or other interference with the activities or purpose of the resource. The affected area would consist of a small portion of the parking lot, sidewalks, and existing landscaping. The existing sidewalks would be connected to the new sidewalks to match pre-project conditions. Any disturbed turf grass and landscaping would be replaced in the TCE areas to match pre-project conditions in consultation with the property owner during and at the completion of construction. By doing so, the land used as a TCE would have a similar function and value as it did prior to project construction. Temporarily disturbed areas would be fully restored to pre-project conditions once temporary impacts are complete. Temporary occupancy of the parcel on which the Southern Pacific Railroad Depot sits would be considered a *de minimis* impact.

Documentation of Consultation

SBCTA and FTA have coordinated and consulted with the SHPO, the official with jurisdiction, to identify properties listed or eligible for listing in the NRHP, for which concurrence was reached on August 7, 2018, and they are also consulting with the SHPO regarding potential effects of the project on those properties under 36 CFR 800.5.

Formal consultation with the SHPO to confirm concurrence on the *de minimis* impact finding for the Southern Pacific Railroad Depot, including revision to any minimization and mitigation measures proposed, will occur both prior to and during the public review stage of the Draft EIR/EA.

Vince's Spaghetti, 1206 West Holt Boulevard, Ontario, CA

Significance of Property

Vince's Spaghetti, located at 1206 West Holt Boulevard in Ontario (APNs 1010-543-01 and -02), has been determined eligible for the National Register under Criteria A and C.

Application of Section 4(f) Criteria for Use

Direct Use

The build alternatives would not require any direct use of land from the two parcels on which Vince's Spaghetti sits.

Temporary Occupancy

Alternative A would not require any temporary occupancy of land from the two parcels on which Vince's Spaghetti sits.

Alternative B would require temporary occupancy of approximately 2,222 square feet of the two parcels on which Vince's Spaghetti sits to reconstruct the driveways and the sidewalk on the southern end of Holt Boulevard (see Figure 8-3). The affected area would be the two driveways and a small sliver of the parking lot. This minor proposed temporary occupancy would not adversely affect any of the activities, features, or attributes of Vince's Spaghetti. A TCE would be required. Access to the restaurant would be maintained at all times during project implementation. No impacts to parking spaces within the two lots are anticipated.

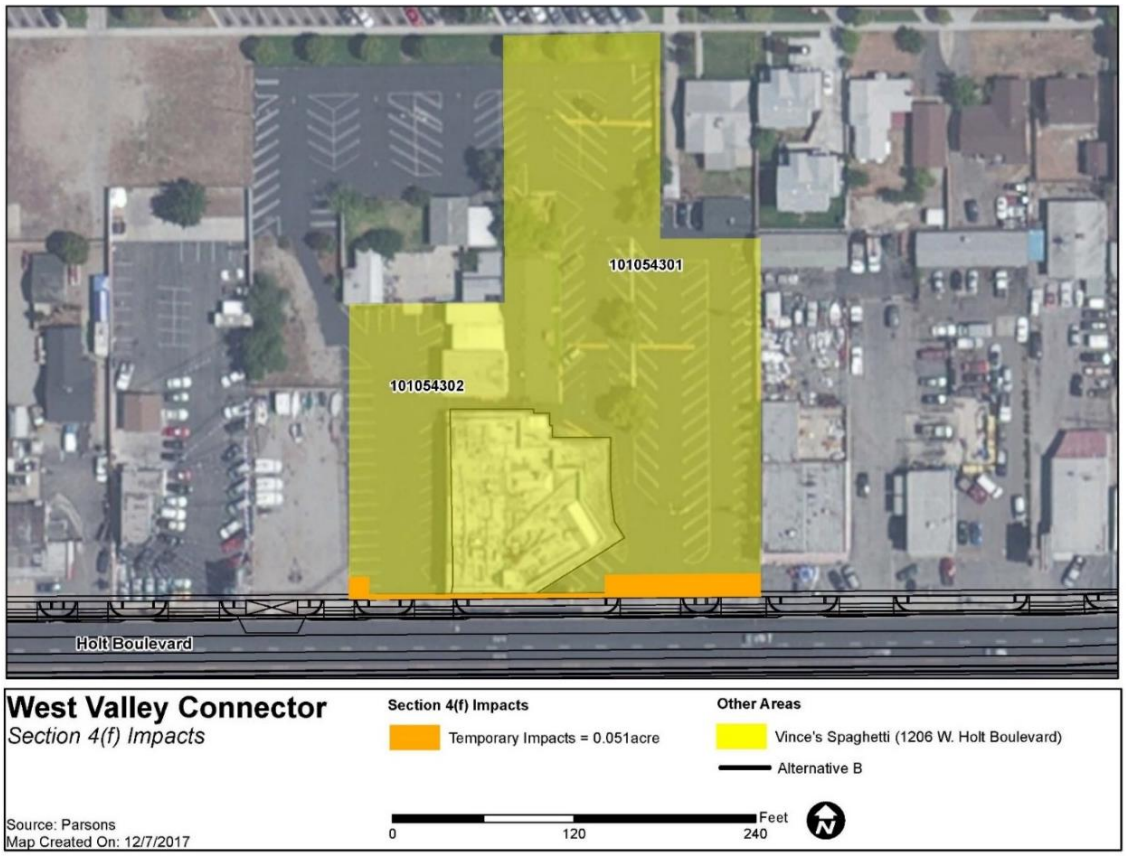

Figure 8-3 Alternative B Impacts to Vince's Spaghetti

Constructive Use

The build alternatives would not result in a constructive use of Vince's Spaghetti. An indirect impact would be considered a constructive use under Section 4(f) if the impacts were so severe that the public did not have access to Vince's Spaghetti and/or activities occurring within the property were severely affected by the project's impacts. Potential indirect impacts related to both build alternatives are discussed below.

Accessibility. Vehicular and pedestrian access to Vince's Spaghetti would be maintained at all times during construction and operation of the build alternatives. No impacts to designated parking at Vince's Spaghetti would result from either build alternative.

Visual. Visual impacts during construction would be typical of roadway construction projects, including construction fencing, construction equipment, and material stockpiles, which would collectively temporarily disturb Vince's Spaghetti parking lot area. Temporarily disturbed areas would be returned to pre-project conditions once construction is completed; therefore, the minor visual changes associated with the build alternatives would not be considered a Section 4(f) constructive use.

Noise and Vibration. Indirect noise and vibration impacts as a result of the build alternatives are not expected to result in a constructive use of Vince's Spaghetti. According to the Noise and Vibration

Technical Study (April 2018), no BRT operational noise or vibration impacts are anticipated at any of the sensitive receptors of the proposed alignment; therefore, no noise or vibration impacts resulting from the proposed project operations are anticipated. During construction, the project would generate noise and vibration impacts that are typical from construction activities and from using construction equipment and vehicles. It is anticipated that ground-borne vibration from construction activities could exceed the building damage criteria under Alternative B; however, there should only be isolated cases where it is necessary to use vibratory compaction rollers close to buildings. BMPs would be incorporated to minimize these short-term, temporary impacts. These include vibration monitoring by the contractor and having a plan in place before construction begins for the use of alternative equipment and techniques when established thresholds may be exceeded (see Section 8.6.1). The incremental increase in noise and vibration impacts during construction and once the proposed project is in operation would not inhibit existing functions of Vince's Spaghetti. The proposed project would not result in a Section 4(f) constructive use of Vince's Spaghetti due to indirect noise and vibration impacts.

Applicability of Section 4(f)

Alternative A would not result in direct use, temporary occupancy, or constructive use of either of the two parcels on which Vince's Spaghetti sits.

Alternative B would result in temporary occupancy of the two parcels on which Vince's Spaghetti sits. No direct use or constructive use of this resource is anticipated under Alternative B. Alternative B would result in temporary occupancy of approximately 2,222 square feet of the parcels on which Vince's Spaghetti sits; however, work would be minor in scope, and there are no anticipated permanent adverse physical effects or other interference with the activities or purpose of the resource. Temporarily disturbed areas would be fully restored to pre-project conditions once temporary impacts are complete. Temporary occupancy of Vince's Spaghetti would be considered a *de minimis* impact.

Documentation of Consultation

SBCTA and FTA have coordinated and consulted with the SHPO, the official with jurisdiction, to identify properties listed or eligible for listing in the NRHP, for which concurrence was reached on August 7, 2018, and they are also consulting with the SHPO regarding potential effects of the project on those properties under 36 CFR 800.5.

Formal consultation with the SHPO to confirm concurrence on the *de minimis* impact finding for Vince's Spaghetti, including revision to any minimization and mitigation measures proposed, will occur both prior to and during the public review stage of the Draft EIR/EA.

A.C. Moorhead House, 961 West Holt Boulevard, Ontario, CA

Significance of Property

The A.C. Moorhead House, located at 961 West Holt Boulevard in Ontario (Assessor Parcel Number [APN] 1011-141-07), has been determined to be eligible for the National Register under Criterion C.

Application of Section 4(f) Criteria for Use

Direct Use

Alternative A would not require any direct use of land from the parcel on which the A.C. Moorhead House sits.

Alternative B would require partial acquisition of a 274-square-foot strip of the A.C. Moorhead House parcel, which consists of a portion of the front lawn and landscaping, which is not itself original, to accommodate a new sidewalk on the southern-end of Holt Boulevard (see Figure 8-4). The current lot size of the A.C. Moorhead House is 0.5539 acre, and the new lot size would be 0.5476 acre. This minor proposed direct use would not adversely affect any of the activities, features, or attributes of the A.C. Moorhead House. Alternative B would not materially impair the building (i.e., demolish or substantially alter the physical characteristics), as the property is significant for its architecture. The building would continue to convey its architectural significance without any substantive impacts to the property's overall integrity with respect to its location, design, setting, materials, workmanship, feeling, or association.

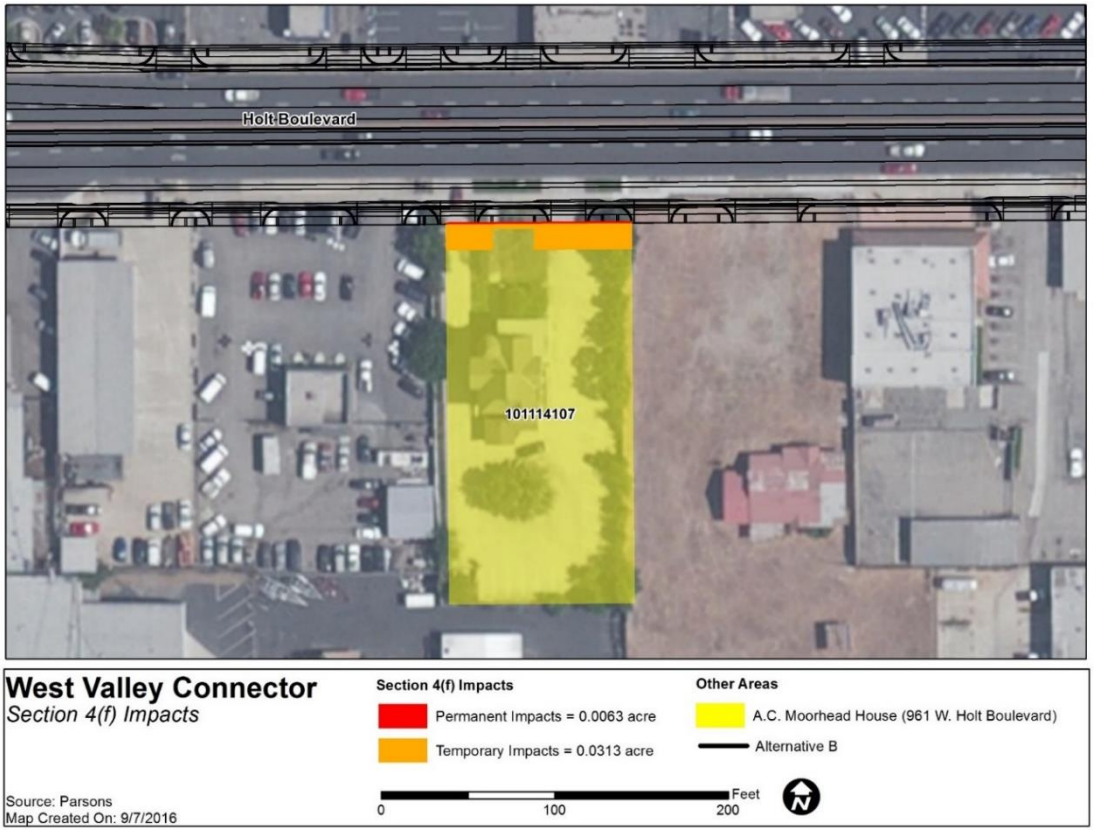

Figure 8-4 Alternate B Impacts to A.C Moorhead House

Temporary Occupancy

Alternative A would not require any temporary occupancy of land from the A.C. Moorhead House.

Alternative B would require a temporary occupancy of a 1,363-square-foot area of the A.C. Moorhead House parcel to reconstruct the sidewalk on the southern-end of Holt Boulevard and to reconstruct the two driveways (see Figure 8-4). The affected area consists of the two driveways, the front lawn, and landscaping, none of which is considered historic. This minor proposed temporary occupancy would not adversely affect any of the activities, features, or attributes of the A.C. Moorhead House. A temporary construction easement (TCE) would be required. Access to the A.C. Moorhead House would be maintained at all times during project construction.

Constructive Use

The build alternatives would not result in a constructive use of the A.C. Moorhead House. An indirect impact would be considered a constructive use under Section 4(f) if the impact were so severe that the public did not have access to the A.C. Moorhead House and/or activities occurring within the A.C. Moorhead House were severely affected by the project's impacts. Potential indirect impacts related to the build alternatives are discussed below.

Accessibility. Vehicular and pedestrian access to the A.C. Moorhead House would be maintained at all times during construction and operation of the build alternatives. No impacts to designated parking at the A.C. Moorhead House would result from the build alternatives.

Visual. Visual impacts during construction would be typical of roadway construction projects, including construction fencing, construction equipment, material stockpiles, and vegetation removal, which would collectively temporarily disturb the A.C. Moorhead House's existing landscape aesthetic. Temporarily disturbed areas would be returned to pre-project conditions once construction is completed; therefore, the minor visual changes associated with the build alternatives would not be considered a Section 4(f) constructive use

Noise and Vibration. Indirect noise and vibration impacts as a result of the build alternatives are not expected to result in a constructive use of the A.C. Moorhead House. According to the Noise and Vibration Technical Study (April 2018), no BRT operational noise or vibration impacts are anticipated at any of the sensitive receptors of the proposed alignment; therefore, no noise or vibration impacts resulting from the proposed project operations are anticipated. During construction, the project would generate noise and vibration impacts that are typical from construction activities and from using construction equipment and vehicles. It is anticipated that ground-borne vibration from construction activities could exceed the building damage criteria under Alternative B; however, there should only be isolated cases where it is necessary to use vibratory compaction

rollers close to buildings. Best management practices (BMPs) will be incorporated to minimize these short-term, temporary impacts. These include vibration monitoring by the contractor and having a plan in place before construction begins for the use of alternative equipment and techniques when established thresholds may be exceeded (see Section 8.6.1). The incremental increase in noise and vibration impacts anticipated during construction, and once the proposed project is in operation, would not inhibit the existing functions of the A.C. Moorhead House. The proposed project would not result in a Section 4(f) constructive use of the A.C. Moorhead House due to indirect noise and vibration impacts.

Applicability of Section 4(f)

Alternative A would not result in direct use, temporary occupancy, or constructive use of the parcel on which the A.C. Moorhead House sits.

Alternative B would result in direct and temporary occupancy of the parcel on which the A.C. Moorhead House sits. No constructive use of this resource is anticipated under Alternative B.

Alternative B would require direct use of a 274 square-foot-strip of the parcel on which the A.C. Moorhead House sits in the form of permanent acquisition, which represents 1.1 percent of the parcel's pre-project size. Given its small area, the proposed 274-square-foot acquisition of the A.C. Moorhead House parcel is considered a *de minimis* impact. In addition, the area to be acquired is primarily the two driveways and landscaping, which does not contribute to the historic architectural significance of the building itself, which is setback from Holt Boulevard and that qualifies the A.C. Moorhead House as a resource under Section 4(f). The two driveways would also be reconstructed. Given that the five conditions set forth in 23 CFR Section 774.13(d) are satisfied, and the proposed acquisition would not adversely affect the activities, features, or attributes of the A.C. Moorhead House, Section 4(f) does not apply.

In addition, Alternative B would result in a temporary occupancy of a 1,363-square-foot portion of the parcel on which the A.C. Moorhead House sits; however, work would be minor in scope, and there are no anticipated permanent adverse physical effects or other interference with the activities or purpose of the resource. Temporarily disturbed areas would be fully restored to pre-project conditions once temporary impacts are complete. Temporary occupancy of the parcel on which the A.C. Moorhead House sits would be considered a *de minimis* impact.

Documentation of Consultation

SBCTA and FTA have coordinated and consulted with the SHPO, the official with jurisdiction, to identify properties listed or eligible for listing in the NRHP, for which concurrence was reached on August 7, 2018, and they are also consulting with the SHPO regarding potential effects of the project on those properties under 36 CFR 800.5.

Formal consultation with the SHPO to confirm concurrence on the *de minimis* impact finding for the A.C. Moorhead House, including revision to any minimization and mitigation measures proposed, will occur both prior to and during the public review stage of the Draft EIR/EA.

The Grinder Haven, 724 West Holt Boulevard, Ontario, CA

Significance of Property

The Grinder Haven, located at 724 West Holt Boulevard in Ontario (APN 1048-604-14), has been determined eligible for the National Register under Criterion C.

Application of Section 4(f) Criteria for Use

Direct Use

Alternative A would not require any direct use of land from the parcel on which The Grinder Haven sits.

Alternative B would require partial acquisition of a 1,747-square-foot strip of The Grinder Haven parcel, which consists of a portion of the driveway and surface parking lot area, which is not actually used for parking, to accommodate a new sidewalk (see Figure 8-5). The current lot size of the drive-in restaurant is 0.5165 acre, and the new lot size would be 0.4764 acre. This minor proposed direct use would not adversely affect any of the activities, features, or attributes of The Grinder Haven. Alternative B would not materially impair the building or its historic neon sign (i.e., demolish or substantially alter the physical characteristics). The building would continue to convey its significance without any substantive impacts to the property's overall integrity with respect to its location, design, setting, materials, workmanship, feeling, or association

Temporary Occupancy

Alternative A would not require any temporary occupancy of land from the parcel on which The Grinder Haven sits.

Alternative B would require temporary occupancy of approximately 1,721 square feet of the parcel on which The Grinder Haven sits to reconstruct the driveways and the sidewalk on Holt Boulevard (see Figure 8-5). The affected area would be the two driveways and a small sliver of the parking lot. This minor proposed temporary occupancy would not adversely affect any of the activities, features, or attributes of The Grinder Haven, a building that is set back more than 75 feet from the proposed construction work. A TCE would be required. Access to The Grinder Haven would be maintained at all times during project construction. No impacts to parking spaces within the lot are anticipated.

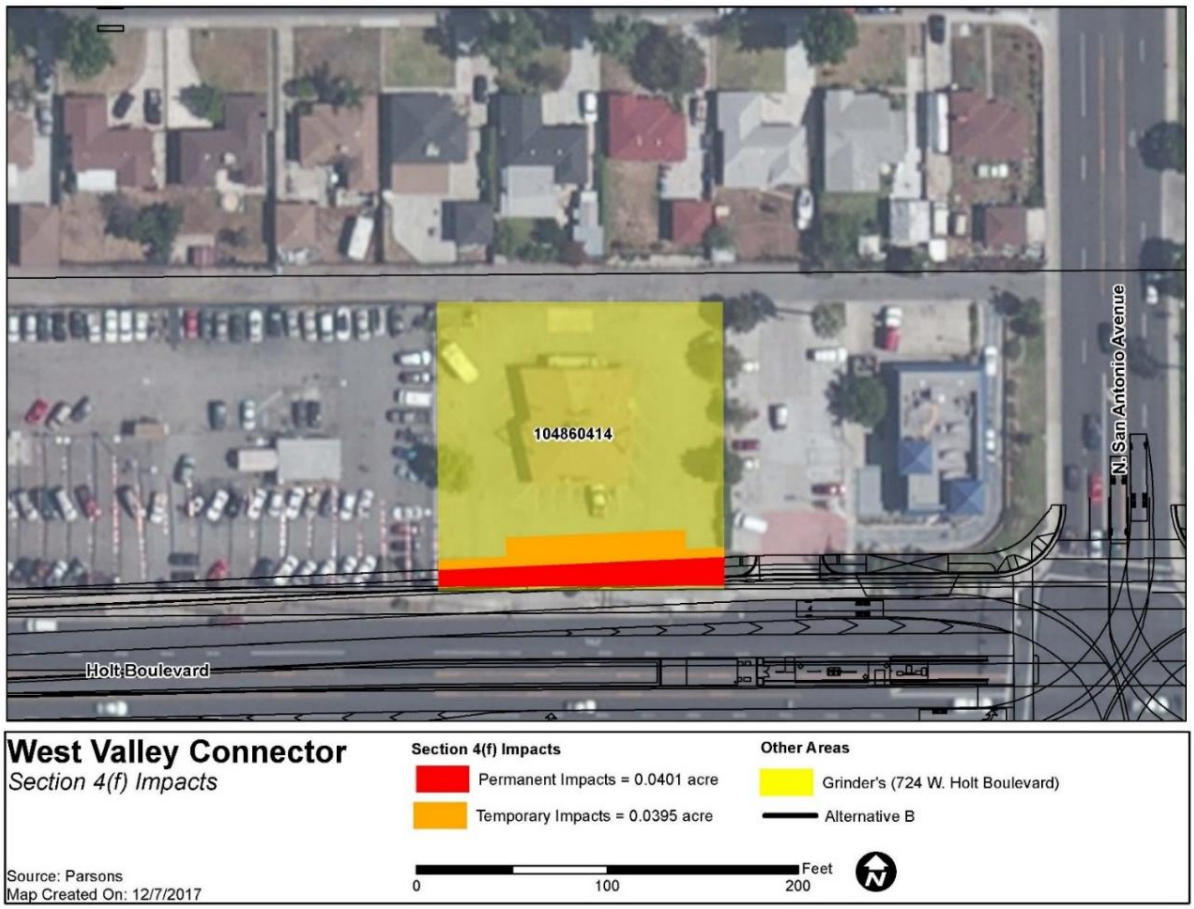

Figure 8-5 Alternate B Impacts to The Grinder Haven

Constructive Use

The build alternatives would not result in a constructive use of The Grinder Haven. An indirect impact would be considered a constructive use under Section 4(f) if the impact were so severe that the public did not have access to The Grinder Haven and/or activities occurring within the property were severely affected by the project's impacts. Potential indirect impacts related to both build alternatives are discussed below.

Accessibility. Vehicular and pedestrian access to The Grinder Haven would be maintained at all times during construction and operation of the build alternatives. No impacts to designated parking at The Grinder Haven would result from either build alternative.

Visual. Visual impacts during construction would be typical of roadway construction projects, including construction fencing, construction equipment, and material stockpiles, which would collectively temporarily disturb The Grinder Haven parking lot area. Temporarily disturbed areas would be returned to pre-project conditions once construction is completed; therefore, the minor visual changes associated with the build alternatives would not be considered a Section 4(f) constructive use.

Noise and Vibration. Indirect noise and vibration impacts as a result of the build alternatives are not expected to result in a constructive use of The Grinder Haven. According to the Noise and Vibration Technical Study (April 2018), no BRT operational noise or vibration impacts are anticipated at any of the sensitive receptors of the proposed alignment; therefore, no noise or vibration impacts resulting from the proposed project operations are anticipated. During construction, the project would generate noise and vibration impacts that are typical from construction activities and from using construction equipment and vehicles. It is anticipated that ground-borne vibration from construction activities could exceed the building damage criteria under Alternative B; however, there should only be isolated cases where it is necessary to use vibratory compaction rollers close to buildings. BMPs would be incorporated to minimize these short-term, temporary impacts. These include vibration monitoring by the contractor and having a plan in place before construction begins for the use of alternative equipment and techniques when established thresholds may be exceeded (see Section 8.6.1). The incremental increase in noise and vibration impacts during construction and once the proposed project is in operation would not inhibit the existing functions of The Grinder Haven. The proposed project would not result in a Section 4(f) constructive use of The Grinder Haven due to indirect noise and vibration impacts.

Applicability of Section 4(f)

Alternative A would not result in direct use, temporary occupancy, or constructive use of the parcel on which The Grinder Haven sits.

Alternative B would result in direct and temporary occupancy of the parcel on which The Grinder Haven sits. No constructive use of this resource is anticipated under Alternative B.

Alternative B would require direct use of approximately 1,747 square feet of the parcel on which The Grinder Haven sits in the form of permanent acquisition, which represents 0.08 percent of the historic property's pre-project square footage. Given this small area, this is considered a *de minimis* impact. In addition, the area to be acquired is a portion of the surface area that is not actually used for parking, nor involves the restaurant portion that qualifies the resource for protection under Section 4(f).

In addition, Alternative B would result in temporary occupancy of approximately 1,721 square feet of the parcel on which The Grinder Haven sits; however, work would be minor in scope, and there are no anticipated permanent adverse physical effects or other interference with the activities or purpose of the resource. Temporarily disturbed areas would be fully restored to pre-project conditions once temporary impacts are complete. Temporary occupancy of The Grinder Haven would be considered a *de minimis* impact.

Documentation of Consultation

SBCTA will be coordinating with the City of Ontario regarding potential project impacts and potential avoidance and minimization measures to be implemented during construction on The Grinder Haven parcel. Meetings and dialogue between the City and SBCTA will occur throughout development of the Draft EIR/EA. Formal consultation with the SHPO to confirm concurrence on the *de minimis* impact finding for The Grinder Haven will occur both prior to and during public review of the Draft EIR/EA.

Jacob Lerch House, 541 East Holt Boulevard, Ontario, CA

Significance of Property

The Jacob Lerch House, located at 541 East Holt Boulevard in Ontario (APN 1048-523-17), has been determined eligible for the National Register under Criterion C.

Application of Section 4(f) Criteria for Use

Direct Use

Alternative A would not require any direct use of land from the parcel on which the Jacob Lerch House sits.

Alternative B would require partial acquisition of approximately 35 square feet of the Jacob Lerch House parcel, which consists of a portion of the front lawn, to accommodate a curb return located northeast of the intersection of Holt Boulevard/Pleasant Avenue (see Figure 8-6). The original lot size of the Jacob Lerch House is 0.1652 acre, and the new lot size would be 0.1644 acre. This minor proposed direct use would not adversely affect any activities or historic features or attributes of the Jacob Lerch House. Alternative B would not materially impair the building (i.e., demolish or substantially alter the physical characteristics). The building would continue to convey its significance without any substantive impacts to the property's overall integrity, with respect to its location, design, setting, materials, workmanship, feeling, or association.

Temporary Occupancy

Alternative A would not require any temporary occupancy of land from the parcel on which the Jacob Lerch House sits.

Alternative B would require the temporary occupancy of approximately 353 square feet of the parcel on which the Jacob Lerch House sits to reconstruct the sidewalk on the northern end of Holt Boulevard (see Figure 8-6). The affected area consists of the front lawn. This minor proposed temporary occupancy would not adversely affect any of the activities, features, or attributes of the Jacob Lerch House. A TCE would be required. Access to the Jacob Lerch House would be maintained at all times during project construction.

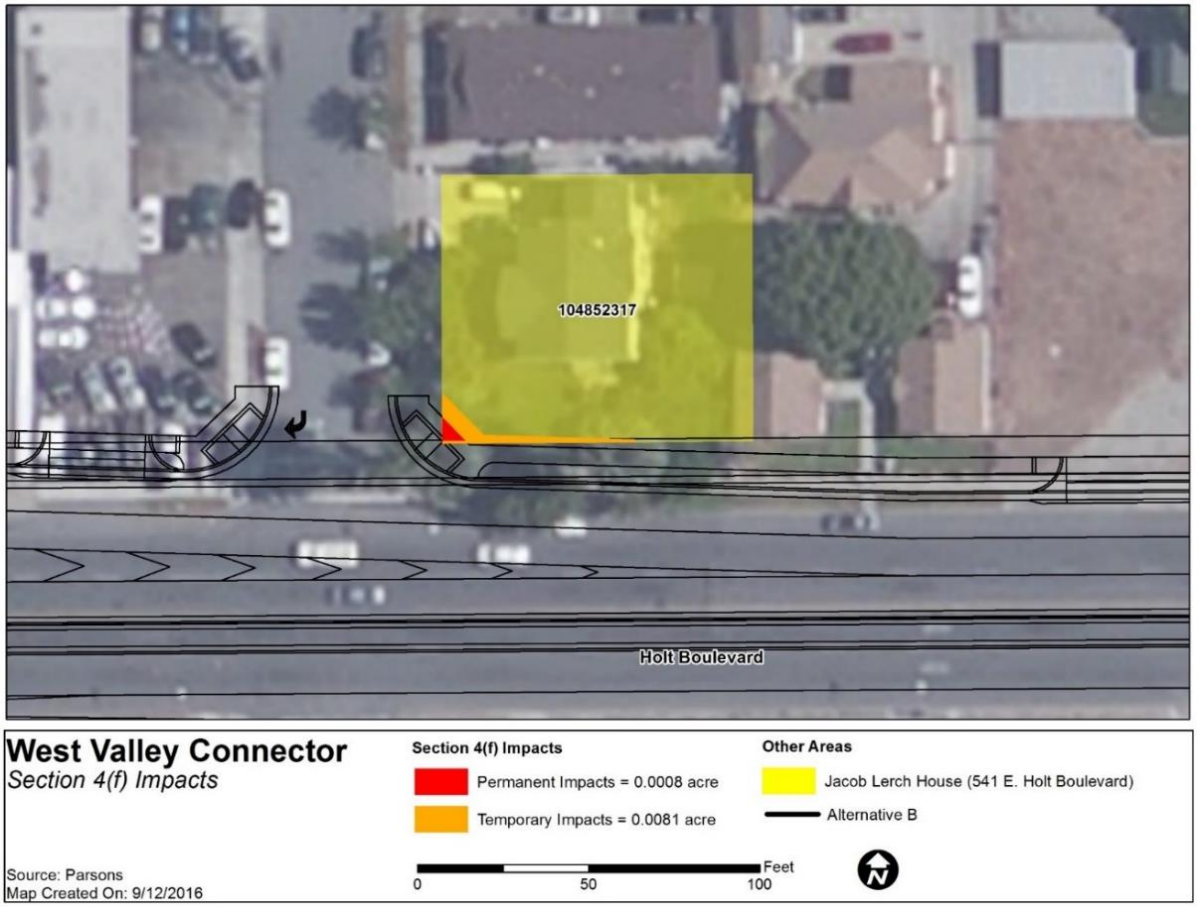

Figure 8-6 Alternate B Impacts to Jacob Lerch House

Constructive Use

The build alternatives would not result in a constructive use of the Jacob Lerch House. An indirect impact would be considered a constructive use under Section 4(f) if the impact were so severe that the public did not have access to the Jacob Lerch House and/or activities occurring within the Jacob Lerch House were severely affected by the project's impacts. Potential indirect impacts related to the build alternatives are discussed below.

Accessibility. Vehicular and pedestrian access to the Jacob Lerch House would be maintained at all times during construction and operation of either build alternative. No impacts to designated parking at the Jacob Lerch House would result from the build alternatives.

Visual. Visual impacts during construction would be typical of roadway construction projects, including construction fencing, construction equipment, material stockpiles, and vegetation removal, which will collectively temporarily disturb the Jacob Lerch House's existing landscape aesthetic. Temporarily disturbed areas would be returned to pre-project conditions once construction is completed; therefore, the minor visual changes associated with the build alternatives

would not be considered a Section 4(f) constructive use.

Noise and Vibration. Indirect noise and vibration impacts as a result of the build alternatives are not expected to result in a constructive use of the Jacob Lerch House. According to the Noise and Vibration Technical Study (April 2018), no BRT operational noise or vibration impacts are anticipated at any of the sensitive receptors of the proposed alignment; therefore, no noise or vibration impacts resulting from the proposed project operations are anticipated. During construction, the project would generate noise and vibration impacts that are typical from construction activities and from using construction equipment and vehicles. It is anticipated that ground-borne vibration from construction activities could exceed the building damage criteria under Alternative B; however, there should only be isolated cases where it is necessary to use vibratory compaction rollers close to buildings. BMPs would be incorporated to minimize these short-term, temporary impacts. These include vibration monitoring by the contractor and having a plan in place before construction begins for the use of alternative equipment and techniques when established thresholds may be exceeded (see Section 8.6.1). The incremental increase in noise and vibration impacts during construction and once the proposed project is in operation would not inhibit the existing functions of the Jacob Lerch House. The proposed project would not result in a Section 4(f) constructive use of the Jacob Lerch House due to indirect noise and vibration impacts.

Applicability of Section 4(f)

Alternative A would not result in direct use, temporary occupancy, or constructive use of the parcel on which the Jacob Lerch House sits.

Alternative B would result in direct and temporary occupancy of the parcel on which the Jacob Lerch House sits. No constructive use of this resource is anticipated under Alternative B.

Alternative B would require direct use of approximately 35 square feet of the parcel on which the Jacob Lerch House sits in the form of permanent acquisition, which represents 0.5 percent of the historic property's pre-project square footage. Given this small area, this is considered a *de minimis* impact. In addition, the area to be acquired is primarily a portion of the front lawn, which does not contribute to the historic architectural significance of the building itself that qualifies the Jacob Lerch House as a resource under Section 4(f).

In addition, Alternative B would result in temporary occupancy of approximately 353 square feet of the parcel on which the Jacob Lerch House sits; however, work would be minor in scope, and there are no anticipated permanent adverse physical effects or other interference with the activities or purpose of the resource. Temporarily disturbed areas would be fully restored to pre-project conditions once temporary impacts are complete.

Temporary occupancy of the Jacob Lerch House would be considered a *de minimis* impact.

Documentation of Consultation

SBCTA has been coordinating with the City of Ontario regarding potential project impacts and potential avoidance and minimization measures to be implemented during construction at the Jacob Lerch House. Meetings and further dialogue between the City and SBCTA will continue to occur throughout development of the Draft EIR/EA.

Formal consultation with the SHPO to confirm the concurrence on the *de minimis* impact finding for the Jacob Lerch House will occur both prior to and during public review of the Draft EIR/EA.

SBCTA and FTA have coordinated and consulted with the SHPO, the official with jurisdiction, to identify properties listed or eligible for listing in the NRHP, for which concurrence was reached on August 7, 2018, and they are also consulting with the SHPO regarding potential effects of the project on those properties under 36 CFR 800.5.

Formal consultation with the SHPO to confirm concurrence on the *de minimis* impact finding for the Jacob Lerch House, including revision to any minimization and mitigation measures proposed, will occur both prior to and during the public review stage of the Draft EIR/EA.

National Old Trails Road/Route 66, Foothill Boulevard from Haven Avenue to Sierra Avenue, Rancho Cucamonga and Fontana, CA

Significance of Property

This route is significant under Criteria A and C of the NRHP as a representative example of important state and local trends in 20th century transportation development and highway design and construction. The road segment is part of a 300-mile-long linear resource in California with many associated properties considered as contributors. These may include the physical features of the road (e.g., bridges, culverts, and guard rails) and other road-related structures. Property contributors also include associated resources purposely located along the highway during its period of significance, such as gasoline service stations, mechanics garages, motels, restaurants, and original signage.

Application of Section 4(f) Criteria for Use

Direct Use

The build alternatives would not require any direct use of land from the National Old Trails Road/Route 66, hereafter referred to as Route 66.

Temporary Occupancy

Both build alternatives would require temporary occupancy of approximately 9,239 square feet of Route 66 to construct bus pads at 14 proposed side-running stations along Foothill Boulevard between Haven Avenue and Sierra Avenue.

Figure 8-7 provides an example of where typical bus pads would be constructed on Route 66. The 14-proposed side-running stations on Route 66 are located at the following 8 intersections:

- Haven Avenue/Foothill Boulevard (1 side-running)
- Foothill Boulevard/Spruce Avenue (2 side-running)
- Foothill Boulevard/Mayten Avenue (2 side-running)
- Foothill Boulevard/Day Creek Boulevard (2 side-running)
- Foothill Boulevard/Mulberry Avenue (2 side-running)
- Foothill Boulevard/Cherry Avenue (2 side-running)
- Foothill Boulevard/Citrus Avenue (2 side-running)
- Foothill Boulevard/Sierra Avenue (1 side-running)

The size of a typical bus pad totals approximately 660 square feet. The excavation depth to install a bus pad is approximately 2.5 feet depending on the existing pavement conditions. This minor proposed temporary occupancy would not permanently affect any activities, features, or attributes of Route 66. The bus pads would not change the character or integrity of Route 66.

Constructive Use

The build alternatives would not result in a constructive use of Route 66. An indirect impact would be considered a constructive use under Section 4(f) if the impact were so severe that the public did not have access to the roadway and/or activities occurring within the roadway were severely affected by the project's impacts. Potential indirect impacts related to the build alternatives are discussed below.

Accessibility. Vehicular access to Route 66 would be maintained at all times during construction and operation of the build alternatives.

Visual. Visual impacts during construction would be typical of roadway construction projects, including construction fencing, construction equipment, and material stockpiles, which would not substantially impair the appearance of Route 66 in the City of Rancho Cucamonga or the City of Fontana because it is already being used as an existing roadway. The construction of side-running stations on Route 66 would be consistent with the look and design of the existing streetscape in this area.

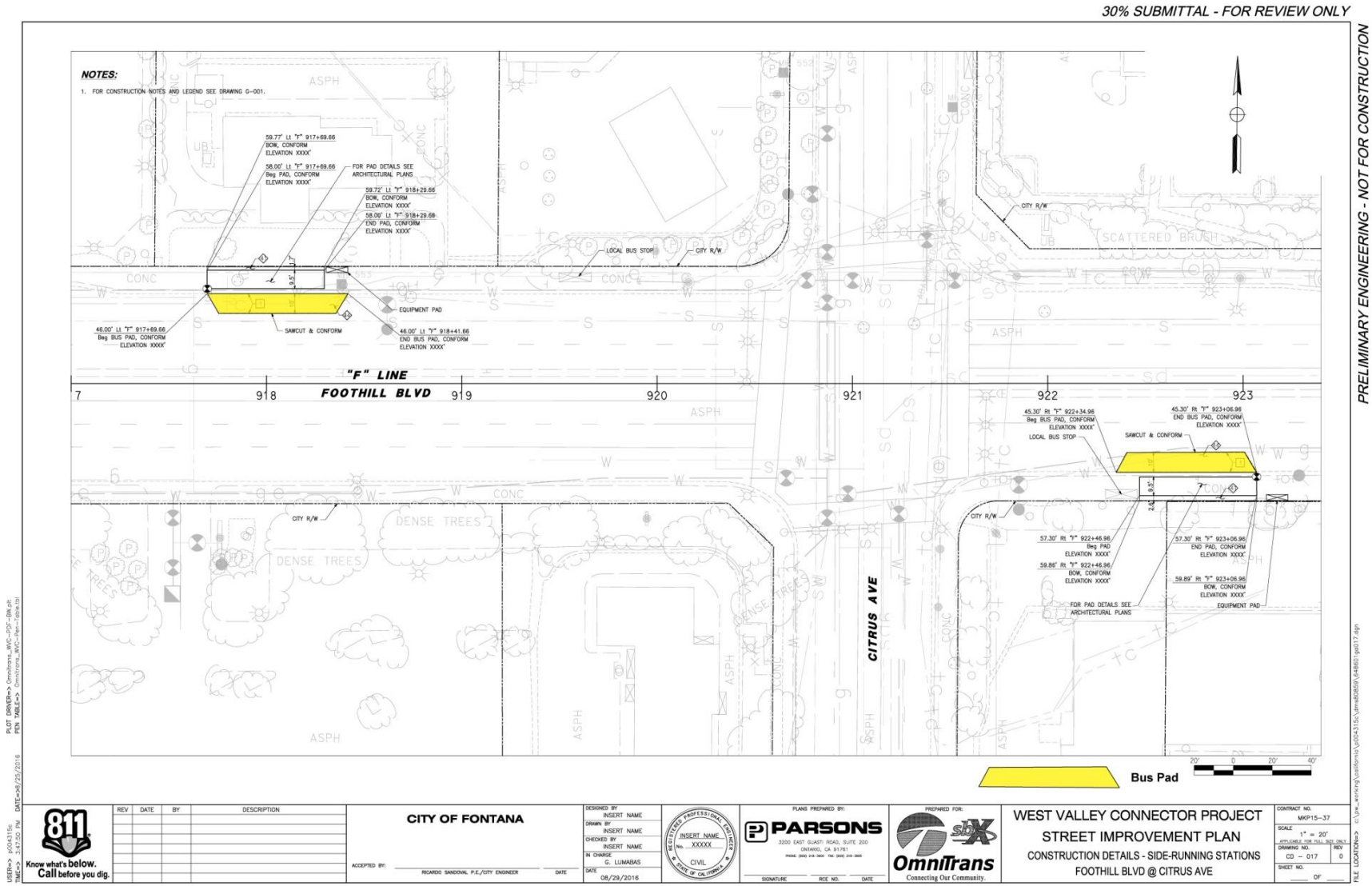

Figure 8-7 Typical Bus Pad Locations for Side-Running Stations along Route 66

Noise and Vibration. Indirect noise and vibration impacts as a result of the build alternatives are not expected to result in a constructive use of Route 66. According to the Noise and Vibration Technical Study (April 2018), no BRT operational noise or vibration impacts are anticipated at any of the sensitive receptors of the proposed alignment; therefore, no noise or vibration impacts resulting from the proposed project operations are anticipated. During construction, the project would generate noise and vibration impacts typical of construction activities and from using construction equipment and vehicles. BMPs would be incorporated to minimize these short-term, temporary impacts. These include vibration monitoring by the contractor and having a plan in place before construction begins for the use of alternative equipment and techniques when established thresholds may be exceeded (see Section 8.6.1). The incremental increase in noise and vibration impacts during construction, and once the proposed project is in operation, would not inhibit the existing functions of, or activities on, Route 66. The proposed project would not result in a Section 4(f) constructive use of Route 66 due to indirect noise and vibration impacts.

Applicability of Section 4(f)

Both build alternatives would result in temporary occupancy of Route 66. No direct use or constructive use of this resource is anticipated under either build alternative. Both build alternatives would result in a temporary occupancy of approximately 9,239 square feet of Route 66; however, work would be minor in scope, and there are no anticipated permanent adverse physical effects or other interference with the activities or purpose of the resource. Temporarily disturbed areas would be fully restored to pre-project conditions once temporary impacts are complete. Temporary occupancy of Route 66 would be considered a *de minimis* impact.

Documentation of Consultation

SBCTA and FTA have coordinated and consulted with the SHPO, the official with jurisdiction, to identify properties listed or eligible for listing in the NRHP, for which concurrence was reached on August 7, 2018, and they are also consulting with the SHPO regarding potential effects of the project on those properties under 36 CFR 800.5.

Formal consultation with the SHPO to confirm concurrence on the *de minimis* impact finding for Route 66, including revision to any minimization and mitigation measures proposed, will occur both prior to and during the public review stage of the Draft EIR/EA.

8.6 Measures to Minimize Harm

8.6.1 Minimization and Mitigation Measures

Several common measures have been identified during development of the environmental studies to minimize potential impacts in the WVC Project area, including areas in which Section 4(f) properties are located, and are discussed in more detail in Section 8.6.1.

Planning efforts regarding reducing the size of parcel acquisition will continue during Preliminary Engineering to refine the initial concept designs used in the WVC EIR/EA analysis with the expected outcome that the SHPO would concur that project plans would not result in an adverse effect to affected historic properties. Concurrence by the SHPO will provide demonstrable evidence that harm to the Section 4(f) resources has been avoided and that the impacts would be *de minimis.*

Alternative A would not result in adverse impacts to the activities, features, or attributes of Section 4(f) properties. Alternative B would require the direct use and/or temporary occupancy of six NRHP eligible or listed properties (Southern Pacific Railroad Depot; Vince's Spaghetti; A.C Moorhead House; Grinder Haven; Jacob Lerch House; and Route 66) that are protected Section 4(f) properties. Both common and property-specific measures to minimize harm to these properties are specified below. None of the effects under 36 CFR 800.5 are anticipated to be adverse, and a confirmation of that finding will be made with the California SHPO, the official with jurisdiction, including revision to any minimization and mitigation measures proposed, as part of the consultation process.

Common Measures to Minimize Harm

Several common measures have been identified during development of the technical studies and the Draft EIR/EA to minimize potential project impacts to Section 4(f) properties.

Common Visual Measures

For common visual measures to minimize harm, please see Section 4.1.9 of this Draft EIR/EA. The measures relevant to Section 4(f) properties are as follows:

- Tree removal will be minimized to the greatest extent possible.
- All lighting at the stations shall include shielding and directionality to limit the extent of glare.
- Trees will be replaced at a 1:1 ratio with a minimum size of 36-inch box for all street trees and 24-inch box for any replacements associated with adjacent property owners.
- The project will meet any currently established City requirements for streetscape design for roadways within the project area that are disturbed by project construction and work with community stakeholders to ensure implementation.
- Within the Holt Boulevard/Euclid Avenue intersection, any work will comply with requirements of the historic designations of the roadway regarding landscape and other contributing factors.

Common Noise and Vibration Measures

For common noise measures to minimize harm, please see Section 5.3.10 of this Draft EIR/EA. The measures relevant to Section 4(f) properties are as follows:

- All equipment shall have sound-control devices. Each internal combustion engine shall be equipped with a muffler of a type recommended by the manufacturer.
- Construction methods or equipment that will provide the lowest level of noise impact will be used.
- Idling equipment shall be turned off.
- Truck loading, unloading, and hauling operations shall be restricted through residential neighborhoods to the greatest possible extent.
- Temporary noise barriers shall be used, as necessary and practicable, to protect sensitive receptors against excessive noise from construction activities.
- Newer equipment with improved noise muffling shall be used, and all equipment items shall have the manufacturers' recommended noise abatement measures (e.g., mufflers, engine covers, and engine vibration isolators) intact and operational.
- All construction equipment shall be inspected at periodic intervals to ensure proper maintenance and presence of noise-control devices (e.g., mufflers and shrouding).
- Construction activities shall be minimized in residential areas during evening, nighttime, weekend, and holiday periods. Coordination with each city shall occur before construction can be performed in noise-sensitive areas.
- Construction lay-down or staging areas shall be selected in industrially zoned districts. If industrially zoned areas are not available, commercially zoned areas may be used, or locations that are at least 100 feet from any noise-sensitive land use (e.g., residences).
- Noise and vibration monitoring will be conducted during construction. Contractors must modify and/or reschedule construction activities if monitoring determines that maximum limits are exceeded.
- Hours of vibration-intensive activities, such as vibratory rollers, will be restricted to minimize adverse impacts to the residents (e.g., weekdays during daytime hours only when most residents are away from home).
- When possible, the use of construction equipment that creates high vibration levels, such as vibratory rollers operating within 20 feet of commercial buildings, within 26 feet of residential buildings, and within 36 feet of sensitive land uses, such as historic properties, will be limited.
- Contractors will be required to have a plan in place to use alternative procedures of construction, selecting the proper combination of equipment and techniques to generate the least overall vibration, in those cases where vibration from construction activities would exceed the established thresholds for buildings susceptible to vibration damage. The owner of a building close enough to a construction vibration source will be entitled to a preconstruction building inspection to document the condition of that structure.

Specific Measures to Minimize Harm

Southern Pacific Railroad Depot

The affected area of the historic property consists of a small area currently used as a parking lot, sidewalks, and landscaping; the project proposes a new bus pad, sbX platform, and sidewalks with ramps (see Figure 8-2). The existing sidewalks will be connected to the new sidewalks to match pre-project conditions. Any disturbed turf grass and landscaping not used by the project will be replaced to match pre-project conditions in consultation with the property owner during and at the completion of construction. Alterations to the property will adhere to the Secretary of the Interior's Standards (SOIS) for the Treatment of Historic Properties (36 CFR 68). The Standards provide guidance for making alterations to historic resources, including related landscape features and the building's site and environment. The historic character of the property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property will be avoided. The new work will protect the historic integrity of the property and its environment. Project features will not damage or destroy any character-defining materials or features associated with the historic property.

Vince's Spaghetti

The affected area of the historic property consists of a small sliver involving two driveways and two parking lots for purposes of reconstructing the driveways and the sidewalk on the southern end of Holt Boulevard (see Figure 8-3). A historic neon sign near the edge of the easternmost driveway will be retained. The driveways will be reconstructed to pre-project conditions in consultation with the property owner during and at the completion of construction. The new work will adhere to the SOIS for the Treatment of Historic Properties (36 CFR 68) to protect the historic integrity of the property and its environment.

A.C. Moorhead House

The affected area of the historic property consists of the two driveways, the front lawn, and landscaping (see Figure 8-4). The two driveways will be reconstructed, and turf grass and landscaping will be replaced. Original landscaping on the property will be retained. Alterations to the property will adhere to the SOIS for the Treatment of Historic Properties (36 CFR 68). The Standards provide guidance for making alterations to historic resources, including related landscape features and the building's site and environment. The historic character of the property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property will be avoided. The new work will protect the historic integrity of the property and its environment. Project features will not be close to the historic building, and they will not damage or destroy any character-defining materials or features associated with the historic property.

The Grinder Haven

The affected area of the historic property consists of both driveways from Holt Boulevard and a portion of an asphalt parking lot (see Figure 8-5). The sliver portion necessitated by the project will not affect character-defining features of the historic property. A historic neon sign near the edge of the property, between the two driveways, will be retained. Alterations to the property will adhere to the SOIS for the Treatment of Historic Properties (36 CFR 68). The Standards provide guidance for making alterations to historic resources, including related landscape features and the building's site and environment. The historic character of the property shall be retained and preserved. The alteration of features that characterize a property shall be avoided. The new work will protect the historic integrity of the property and its environment. Project features will not damage or destroy character-defining materials or features associated with the historic property.

Jacob Lerch House

The affected area of the historic property consists of a sliver portion, which is currently lawn (see Figure 8-6). Turf grass will be replaced in areas to match pre-project conditions in consultation with the property owner during and at the completion of construction. Original landscaping on the property will be retained. Alterations to the property will adhere to the SOIS for the Treatment of Historic Properties (36 CFR 68). The Standards provide guidance for making alterations to historic resources, including related landscape features and the building's site and environment. The historic character of the property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided. The new work will protect the historic integrity of the property and its environment. Project features will not be close to the historic building, and they will not damage or destroy character-defining materials or features associated with the historic property.

National Old Trails Road/Route 66

The affected area of the historic linear property consists of small pavement areas needed to construct bus pads. Alterations to the property will adhere to the SOIS for the Treatment of Historic Properties (36 CFR 68). The Standards provide guidance for making alterations to historic resources, including related landscape features and the building's site and environment. The historic character of the property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property will be avoided. The new work will protect the historic integrity of the property and its environment. Project features will not damage or destroy any character-defining materials or features associated with the historic property.

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CHAPTER 9 –
PUBLIC AND AGENCY OUTREACH

9.0 PUBLIC AND AGENCY OUTREACH

Early and continuing coordination with the general public and appropriate public agencies is an important part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and it assists in identifying potential impacts, mitigation measures, and related environmental requirements. Agency consultation and public participation for this proposed project have been accomplished through a variety of formal and informal methods, including Project Development Team (PDT) meetings, interagency coordination meetings, and a public outreach program.

This chapter summarizes the results of FTA and SBCTA's efforts to identify, address, and resolve project-related issues through early and continuing coordination.

9.1 Holt Boulevard Mobility and Streetscape Strategic Plan

The *Holt Boulevard Mobility and Streetscape Strategic Plan* (Plan) was completed in 2013. The Plan provides a framework to guide anticipated growth along Holt Boulevard and to ensure the ROW is designed to meet a variety of mobility options (e.g., transit, BRT, bike, rail, and pedestrian) for all income levels in the community and to provide linkages and transitions between those mobility options. The WVC Project alignment traverses the same segment of Holt Boulevard that was studied in the Plan.

During development of the Plan, public outreach was conducted to gather input from the community to incorporate the most feasible and best mobility practices into the Plan. Public outreach efforts consisted of establishing a Citizens Advisory Committee (CAC), two public workshops, and distribution of a survey to the general public. Further information on these public outreach efforts is provided below.

9.1.1 Citizens Advisory Committee

A CAC, which consisted of local residents and business owners, was formed to provide broader input into developing the Plan. This committee met on five occasions after the first workshop and was made up of the following individuals:

- Octavio Vasquez – Business Owner
- Peter Boor – Resident
- Skip Pace – Resident
- Erina Higa – Resident
- Judy Taylor – Resident
- Jonathan Edwards – Bethel Church Pastor/Resident
- Javier Gomez – Resident

9.1.2 Public Workshops

Two public workshops were held on February 9 and August 14, 2012, both at the Ontario Senior Center located at 225 East B Street, Ontario, CA. Promotion

of the workshops was conducted using a variety of methods, such as mailers and multimedia, and included bilingual information. Information on the Plan was provided at the workshops, and public input was gathered on the overall vision, goals and objectives, issues and concerns, opportunities, and alternative ways on how to better integrate vehicles, pedestrians, bikes, transit users, and commercial uses.

9.1.3 Survey

The survey, referred to as the Holt Boulevard Mobility & Streetscape Plan Public Input Questionnaire, consisted of questions pertaining to transit/parking issues, activities, usage and improvements of Holt Boulevard, business development, walkability, bikeability, and aesthetics. The survey was available online and was distributed as a mailer and at the public workshops.

9.2 WVC Alternatives Analysis Phase

Community outreach and participation have been integrated into the project development process from the outset, including the development of alternatives. In addition to public scoping, there has been ongoing public and agency stakeholder involvement. The stakeholder outreach activities began during the WVC AA phase of the proposed project in 2014. During the WVC AA phase, a PDT was established, which is comprised of representatives from local jurisdictions traversed by the WVC Corridor and other affiliated agencies and businesses, to review all of the technical work and provide input on the preferred transit solution. The PDT includes representatives from:

- Omnitrans
- SANBAG (currently SBCTA)
- SCAG
- County of San Bernardino
- City of Fontana
- City of Montclair
- City of Ontario
- City of Pomona
- City of Rancho Cucamonga
- Foothill Transit
- LA Metro
- SCRRA/Metrolink
- Los Angeles World Airports (LAWA)
- Simon Group (Ontario Mills)
- Kaiser Permanente

As part of the WVC AA phase, Omnitrans conducted public outreach activities in May and June 2014 to explain the purpose and objectives of the proposed project and to provide a range of opportunities to answer questions and collect comments from the public. Specific outreach activities included two public information meetings, two rider information sessions, a transit operator information session, and a community survey.

9.3 Public Scoping Process

To initiate the environmental documentation phase, public scoping meetings were held in each of the five project corridor cities between April 12

and 20, 2016. The purpose of the public scoping meetings was to provide the public an opportunity to comment and identify potential environmental impacts and methods to reduce, avoid, and mitigate impacts.

Information contained below was derived from the *Scoping Summary Report for the West Valley Connector Project* (Arellano, 2016).

9.3.1 Scoping Meetings

Public involvement is an important requirement of NEPA, especially in determining the appropriate scope of the analysis. The proposed project scope includes identifying the range of alternatives that will be considered and potentially significant impacts that should be evaluated in the environmental compliance document. This public involvement process, which also includes other State and federal agencies, and Native American tribes, is referred to as *scoping*. NEPA-related scoping is one aspect of the public participation process. Public and agency scoping occurs early in the project development process, and comments received at this time set the stage for the environmental compliance document by focusing and identifying issues to be addressed.

Omnitrans held five public scoping meetings on the following days and locations:

- Tuesday, April 12, 2016
  Ontario Senior Center
  225 East B Street, Ontario
- Thursday, April 14, 2016
  Purpose Church, Room H100
  601 Garey Avenue, Pomona
- Saturday, April 16, 2016
  Terra Vista Farmers Market
  10808 East Foothill Boulevard,
  Rancho Cucamonga
- Tuesday, April 19, 2016
  Fontana Woman's Club
  16880 Seville Avenue, Fontana
- Wednesday, April 20, 2016
  Montclair Senior Center
  5111 Benito Street, Montclair

9.3.2 Outreach Activities

Public Noticing

The NOP was sent to federal, State, regional, and local government agencies; business groups; and other interested parties on March 21, 2016. These groups were also invited to the scoping meetings.

Newspaper Advertisements

To notify the public of the preparation of the Draft EIR/EA, as well as the public scoping meetings, advertisements were placed in publications that covered the region serviced by SBCTA and Omnitrans, including English and Spanish newspapers. Altogether, the combined reach exceeded 542,000 readers, including online users. The first print advertisements ran on March 24, 2016, and included a website notice that ran through the duration of the public scoping meetings. Additional online ads were placed in two publications beginning on

April 3 through April 20, 2016. Following are the newspapers with the number of publication times noted in parentheses:

- *La Voz* (Spanish) – newspaper (1)
- *Impacto* (Spanish) – newspaper (1)
- *Inland Valley Daily Bulletin* – online and newspaper (2)
- *San Bernardino Sun* – online and newspaper (1)

Mailers

Full-color bilingual (English and Spanish) postcard notices for the public scoping meetings were mailed in March 2016 to approximately 1,035 addresses, including businesses and stakeholders identified from previous outreach activities. The postcard included information on preparation of the Draft EIR/EA, as well as information on the date, time, and location of each scoping meeting. Additionally, the postcard included information on the open comment period, as well as the relevant contact information for Omnitrans staff.

Website

At the initiation of the environmental review process of the WVC project, a website page was created as part of the Omnitrans Website (http://www.omnitrans.org/about/west-valley-connector/) to share project information. The web page provides an overview of the proposed project, as well as goals, schedule, information on the environmental process, public meetings, and contact information. Project documents are also included on the website, such as the NOP, the Notice of Completion (NOC), and public scoping meeting materials (e.g., meeting notice (English and Spanish), fact sheet (English), comment card form (English and Spanish), PowerPoint presentation, and exhibit display boards.

Social Media Outreach

Facebook

An ad hoc Facebook page was developed to provide followers with information on the proposed project and preparation of the Draft EIR/EA. Regular postings were made prior to and immediately following each public scoping meeting for the purposes of updating and further informing the public of the meetings.

E-Blasts

Electronic notices (e-blasts) were distributed via e-mail to a database of 353 key stakeholder organizations and community members to encourage public participation at the meetings. Five rounds of notices were sent prior to the public scoping meetings (March 21 and 28, and April 4, 11, and 18, 2016).

Extended Outreach

Throughout each of the five project corridor cities, full-color bilingual (English and Spanish) flyers announcing the public scoping meetings were distributed to libraries, community centers, City halls, senior centers, and other public centers (45 locations in total). Accompanying each package of flyers was a cover letter, which included an introduction to the proposed project; the dates, times, and locations of

each meeting; and special instructions regarding placement of the flyers where they would be most visible to members of the public, such as public counters and community bulletin boards.

City Council Announcements

SBCTA staff attended a City council meeting in each of the five cities to inform City council members of the upcoming public scoping meetings. The announcement took place during the public comment portion of each council meeting. The announcement provided an overview of the proposed project, a brief highlight of the alignment in the respective city, and the schedule of when and where each public scoping meeting would take place. Dates of the City council announcements are presented below.

- Pomona – Monday, April 4, 2016
- Montclair – Monday, April 18, 2016
- Ontario – Tuesday, April 5, 2016
- Rancho Cucamonga – Wednesday, April 6, 2016
- Fontana – Tuesday, April 12, 2016

Newsletter and Blog

SBCTA included announcements about the upcoming public scoping meetings in the SBCTA blog, as well as the onboard bilingual SBCTA newsletter, *Connections.* The blog story was viewed 496 times. A total of 4,000 copies of *Connections* were placed on buses beginning April 4, 2016.

Onboard Posters

To specifically target bus riders, onboard bus posters were placed on buses throughout the proposed project corridor. For a period of 9 days between March and April 2016, 175 buses featured posters promoting the public scoping meetings. The poster referred riders to a newsletter with project information.

Public Comment Period

The public comment period for the scoping component of the proposed project was initiated on March 24, 2016, and terminated on April 23, 2016.

Agency Consultation

The list below represents key contacts included in the stakeholder database of more than 1,045 listings. The database will expand throughout the proposed project as the project team continues public involvement and information activities:

- Property owners and tenants specifically affected by potential project impacts
- Major businesses along the corridor, including Kaiser Permanente and Simon Group (Ontario Mills)
- SBCTA
- SCAG
- County of San Bernardino
- City of Fontana
- City of Montclair
- City of Ontario
- City of Pomona
- City of Rancho Cucamonga
- Access Services
- Foothill Transit
- LA Metro
- SCRRA/Metrolink

- LAWA
- Local nonprofit and social service agencies
- Participants in previous sbX outreach activities
- SBCTA/Omnitrans bus riders
- Other stakeholders as identified during the project development process.

9.3.3 Summary of Scoping Comments Received

Public Participation and Information Meetings

At each of the five public scoping meetings, project staff members provided a PowerPoint presentation of the proposed project. Project exhibit boards were also on display, and fact sheets and comment cards were distributed to attendees. Project staff members were available to answer questions from the public before, during, and after the meetings.

The section below provides an overview of comments and questions generated at the public scoping meetings via verbal and written input.

Emerging Themes

Over the course of the five meetings across five cities, much of the public comment hinged upon how the individual communities would be best served by enhanced bus service. Although public input received was limited in Ontario, Pomona, and Montclair, much can be learned from the support and concerns raised at the Rancho Cucamonga and Fontana meetings.

Overall connectivity to major activity centers such as Ontario Mills, Citizen Bank Arena, Ontario Civic Center, and Ontario Convention Center, as well as to other transit service providers such as Metrolink, was an important factor among those who voiced support for the proposed project. To truly take advantage of the increased connectivity, however, members of the public suggested extended hours of operation and continuing the service into the weekend.

In Rancho Cucamonga, the virtues and shortcomings of service designation along Milliken Avenue as the initial project alignment (identified during the AA) versus the three optional routes (Option 1 along Haven Avenue, Option 2 along 4th Street and Haven Avenue, and Option 3 along Jersey Boulevard and Haven Avenue) was the primary area of discussion.

Each comment received during the scoping meetings was individually considered by the project team to further inform the development of a bus service that would best serve the riders and commuters, as well as local businesses along the proposed project corridor. A listing of each public comment can be found in the *Scoping Summary Report for the West Valley Connector Project* (Arellano, 2016), bound separately.

9.3.4 Agency Personnel in Attendance at Scoping Meetings

State Agencies

Caltrans

- Adrineh Melkonian

County Agencies

San Bernardino County

- Jeff Sorenson

Local Agencies

City of Pomona

- Paula Lantz
- Rene Guerrero

City of Montclair

- Michael Diaz

City of Ontario

- Louis Abi-younes
- Melanie Mullis
- Tom Danna
- David Sheasby

City of Fontana

- Monique Reza
- Alex Rico

9.4 Holt Boulevard Focused Outreach Program

The purpose of the Holt Boulevard focused outreach meetings was to continue efforts to inform, involve, and collaborate with the general public and, in particular, with affected property owners and tenants and environmental justice communities, during the environmental planning process to gather feedback on the project's proposed design elements. Due to the considerable number of properties and parking to be permanently or temporarily affected by the proposed project, FTA initiated a more robust outreach approach to inform area businesses, residents, and property owners of these potential impacts. Information contained below was derived from the *Holt Boulevard Outreach Summary Report for the West Valley Connector Project* (Arellano, 2017).

Three meetings were held as part of the focused outreach on the following days and locations:

- Tuesday, June 13, 2017
  Ontario Senior Center
  225 East B Street
  Ontario, CA 91764
- Wednesday, June 14, 2017
  North Hills Community Church
  10601 Church Street #118
  Rancho Cucamonga, CA 91730
- Thursday, June 15, 2016
  Purpose Church, Room H100
  601 N. Garey Avenue
  Pomona, CA 91768

A variety of public notification strategies was executed in advance of the Holt Boulevard focused outreach meetings. The following section outlines the numerous methods used to notify the public of the meetings, including traditional and other expanded outreach strategies.

9.4.1 Postcard Mailers

Bilingual full color (English and Spanish) meeting notification postcards were mailed to property owners and tenants within 0.25 mile of Holt Boulevard, between Benson Avenue and Vineyard Avenue, and to environmental justice groups. The notification postcards included information on the proposed project; the purpose of the meetings; the date, time, and location of the meetings; SBCTA contact information; and a project exhibit showing the BRT alignment and station locations.

A total of 7,242 mailers were sent via United States Postal Service (USPS) on May 30, 2017 (2,343 mailers were sent to property owners, 4,738 mailers were sent to tenants, and 161 mailers were sent to environmental justice groups). In addition, the mailer was e-mailed to two environmental justice groups (United Voices of Pomona for Environmental Justice and Healthy in Pomona) on June 6, 2017, because these environmental justice groups did not have a physical mailing address.

Impacted Property Owners and Tenants

Letters in English and Spanish were sent to affected property owners and tenants along Holt Boulevard, between Benson Avenue and Vineyard Avenue, on May 23, 2017 via USPS. A total of 1,317 letters were sent (398 letters were sent to property owners and 924 letters were sent to tenants). The letter included information on the proposed project; the purpose of the meetings; the date, time, and location of the meetings; and SBCTA contact information.

Focused Environmental Justice Groups

Additional outreach identified 21 environmental justice groups. Copies of the postcard mailers were sent to the targeted environmental justice groups via USPS on June 6, 2017. The mailers were sent with a cover letter requesting the environmental justice group to help promote the upcoming public outreach meetings by posting the mailer on their bulletin or message board.

City Council Announcements

SBCTA staff attended a City council meeting in Pomona, Montclair, Ontario, and Rancho Cucamonga to inform City council members of the upcoming public outreach meetings. The City council meeting in Fontana was cancelled. The announcement provided an overview of the proposed project, the purpose of the meetings, and the schedule of when and where each of the public meetings would take place.

9.4.2 Outreach Meetings

SBCTA and project staff were on hand to answer questions from the public and encouraged attendees to provide feedback on the proposed project and to submit a comment card. Spanish speakers and bilingual staff were made available at each of the meetings.

Meeting Format

The meetings featured an open house format that allowed the public to review project exhibit boards on display.

Upon arrival, meeting participants were asked to sign-in for the public record and for incorporation into the project stakeholder database, which is used to disseminate proposed project updates and subsequent public involvement opportunities. As part of the registration process, attendees received one of the postcard mailers for reference and a comment card in English and Spanish for submittal of written comments during or after the meeting or by e-mail to SBCTA.

Meeting Exhibits

Exhibit boards on display provided information on the proposed project, including the proposed project alignment, station design elements, and potential ROW impacts. The exhibit boards provided a visual reference tool for attendees and SBCTA and project staff to interact and have an open dialogue on specific locations of interest along the proposed project alignment. There were 19 display boards, including 3 boards that showed potential ROW impacts along Holt Boulevard. The display boards were arranged by 7 stations. Attendees were encouraged to talk one-on-one with SBCTA and project staff to provide their comments about the proposed project and areas of interest or concern.

9.4.3 Summary of Comments Received

An overview of comments and questions received at the meetings via verbal and written input is summarized below.

Main Concerns from the Public

Most of the comments received were from property owners concerned about Alternative B, which entails widening Holt Boulevard. Property owners had three main concerns pertaining to Alternative B:

- Addition of raised medians and removal of two-way left turns in the middle of Holt Boulevard
- Acquisition.
  - Impacts to existing ROW/ structures
  - Ability for property owners to operate their business
  - Compensation for loss of property
- Maintenance of driveway access during and after construction

Ontario Meeting

Many participants wanted to understand the difference between the build alternatives and were concerned about impacts to their property and voiced concern about property acquisitions. Overall, the Spanish-speaking participants were very supportive of the BRT concept and the proposed project alignment routes. In total, 33 individuals signed in on the meeting sign-in sheets. It is estimated that 7 additional participants attended but chose to not sign in, bringing the total meeting attendance to approximately 40.

Rancho Cucamonga Meeting

While some attendees were skeptical of the proposed project, several participants shared strong support for the proposed project. Six individuals attended the meeting, with no participants requiring Spanish interpretation.

Pomona Meeting

Participants at the Pomona meeting sought to understand the alternatives and potential impacts. Nine individuals attended the meeting, with no participants requiring Spanish interpretation.

Additional written comments were received from participants via comment cards during each meeting.

9.5 Consultation and Coordination with Public Agencies

9.5.1 Resource and Regulatory Agencies

Construction of the dedicated lanes and the center-running station at Holt Boulevard and Grove Avenue in the City of Ontario under Alternative B would result in temporary impacts to approximately 0.2 acre to West Cucamonga Channel. Authorization to work under a nationwide permit would be required in order to comply with Section 404 of the CWA. In order to apply for authorization to work under a nationwide permit, a jurisdictional delineation and report will be needed.

Coordination with USACE was initiated in February 2018. A coordination conference call with Ms. Shannon Pankratz, USACE Project Manager for Los Angeles and San Bernadino County areas, was arranged on April 4, 2018. Ms. Pankrats stated that a USACE Nationwide Permit (NWP) 33 will be needed for the temporary impact to the West Cucamonga Channel. A Preliminary jurisdictional delineation (PJD) shall be submitted with the application when the work area is identified.

9.5.2 Intergovernmental Consultation for Air Quality

Intergovernmental coordination through the SCAG Transportation Conformity Working Group (TCWG) began in November 2017 regarding the Clean Air Act conformity requirements. The agencies involved included SCAG, EPA, FTA, and SBCTA. The TCWG concurred that the proposed project is not a project of air quality concern (POAQC) on December 5, 2017.

9.5.3 Native American Heritage Commission and Associate Cultural Resources Consultation

Both Omnitrans/SBCTA and FTA have reached out to the Native American contact list provided by the NAHC during the course of cultural resources study for the proposed project. Please refer to Section 4.4.4 for the detailed outreach activities carried out as part of this project.

9.6 Continuing Outreach Efforts

Public outreach and involvement will continue throughout the proposed project development. The Draft EIR/EA is being circulated for a 45-day review by agencies and members of the public between July 20 and September 7, 2018. The document is made available for public viewing at the following locations:

- Fontana Lewis Library, 8437 Sierra Avenue, Fontana, CA 92335
- Ovitt Family Community Library, 215 E. C Street, Ontario, CA 91764
- Pomona Public Library, 625 S. Garey Avenue, Pomona, CA 91766
- Law Library for San Bernardino County, 8409 Utica Avenue, Rancho Cucamonga, CA 91730
- Rancho Cucamonga Public Library, 12505 Cultural Center Drive, Rancho Cucamonga, CA 91739

The document can also be viewed online at the following link: www.gosbcta.com/westvalleyconnector[gosbcta.com].

Four public meetings have been planned to take place during the public review period of this Draft EIR/EA.

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APPENDIX A
REFERENCES

Appendix A REFERENCES

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Terry A. Hayes Associates (TAHA). 2018a. *Air Quality Study:* W*est Valley Connector Project*. April.

——————— 2018b. *Energy Study: West Valley Connector Project.* April.

———————. 2018c. *Greenhouse Gas Emissions Study: West Valley Connector Project.* April.

APPENDIX B
LIST OF PREPARERS

Appendix B LIST OF PREPARERS

Parsons

Greg Berg, Senior Scientist. B.A. in Acoustics, Columbia College Chicago. 11 years of experience. Contribution: Author of the Noise and Vibration Technical Study.

Stephanie Blanco, Principal Planner. B.S., Biology, University of California, Riverside. Master of Public Administration, California State University, San Bernardino. 17 years of experience in environmental planning and management. Contribution: QA/QC review of Initial Site Assessment (ISA) and Biological Study Report.

Joza M. Burnam, Senior Planner. B.S., Environmental Sciences, University of California, Riverside. 9 years of air quality and noise experience. Contribution: Reviewed the Noise Study Report and Air Quality Study; contributing author of the draft environmental document.

Monica Corpuz, Associate Planner. M.A., Anthropology-Public Archaeology, California State University, Northridge. 3 years of environmental planning experience, more than 10 years of academic and professional experience in California archaeology. Contribution: Author of the Historic Properties Survey Report (HPSR), Historic Resources Evaluation Report (HRER), and Archaeological Survey Report (ASR) and contributing author of the draft environmental document.

Theresa Dickerson, Principal Planner. B.S., Landscape Architecture. 28 years of land use and environmental planning experience. Contribution: QA/QC review of the Visual Impact Assessment and contributing author to the draft environmental document.

Amy Eckland, Senior Environmental Planner. B.S., Natural Resources Conservation and Management, University of Kentucky. M.S., Plant and Soil Science, University of Kentucky. 18 years of NEPA/environmental planning experience. Contribution: QA/QC review of draft environmental document.

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Greg King, Senior Project Planner. B.A., History, University of California, Santa Barbara. Master of Arts, Public Historical Studies, University of California, Santa Barbara. 35 years of environmental planning experience. Contribution: Reviewed the HRER and ASR, and contributed evaluations of properties for the HRER.

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Group Delta

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APPENDIX C
LIST OF ACRONYMS

Appendix C LIST OF ACRONYMS

°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
AA	Alternatives Analysis
AADT	average annual daily traffic
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
ADA	Americans with Disabilities Act
AMS	Alternative Management Standards
AOC	Area of Concern
APE	Area of Potential Effect
APN	Assessor Parcel Number
APTA	American Public Transportation Association
AQMP	Air Quality Management Plan
ARA	Agricultural Resource Areas
ARB	California Air Resources Board
ASR	Archaeological Survey Report
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
Basin	South Coast Air Basin
BFE	base flood elevation
bgs	below ground surface
BMPs	Best Management Practices
BRT	Bus rapid transit
BSA	Biological Study Area
BTU	British thermal unit
BTEX	benzene, toluene, ethylbenzene, and xylene
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAC	Citizens Advisory Committee
CAGN	California gnatcatcher

CalEPA	California Environmental Protection Agency
CALGreen	Green Building Standards Code
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CAT	Climate Action Team
CCR	*California Code of Regulations*
CCTV	Closed-Ciruit Television
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CE/CE	Categorical Exemption/Categorical Exclusion
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CESA	California Endangered Species Act
CFR	*Code of Federal Regulations*
CGP	Construction General Permit
CH	critical habitat
CH_4	methane
CNDDB	California Natural Diversity Database
CNG	compressed natural gas
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CR+6	hexavalent chromium
CRHR	California Register of Historic Resources
CRMMP	Cultural Resources Monitoring and Mitigation Plan
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DEH	Department of Environmental Health

DGE	diesel gallon equivalent
DHHS	Department of Health and Human Services
DOT	United States Department of Transportation
DPR	California Department of State Parks and Recreation
DSF	Delhi sands flower-loving fly
DTSC	Department of Toxic Substances Control
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EO	Executive Order
EPA	United States Environmental Protection Agency
EPD	Employment Protection District
ESA	environmentally sensitive area
EVVMF	East Valley Vehicle Maintenance Facility
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FONSI	Finding of No Significant Impact
FR	*Federal Register*
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
GHG	greenhouse gas
GIS	Geographic Information System
GPS	Global Positioning System
HASP	Health and Safety Plan
HCM	Highway Capacity Manual
H_2S	hydrogen sulfide
HPSR	Historic Property Survey Report
HREC	Historical Recognized Environmental Condition
HRER	Historical Resources Evaluation Report

HSA	hydrologic subarea
HVAC	heating, ventilation, and air conditioning
Hz	hertz
I-10	Interstate 10
I-15	Interstate 15
I-215	Interstate 215
IEPR	Integrated Energy Policy Report
IEUA	Inland Empire Utilities Agency
IGP	General Industrial Activity Storm Water Permit
ISA	Initial Site Assessment
ITS	Intelligent Transportation System
LAWA	Los Angeles World Airports
lb/day	pounds per day
LBP	lead-based paint
L_{dn}	day night average noise level
L_{eq}	equivalent noise level
LEV	Low Emission Vehicle
LID	low impact development
L_{max}	maximum level for a single event
LOS	Level of Service
LPA	locally preferred alternative
LST	Localized Significance Threshold
LUC	Land use Control
MAP-21	Moving Ahead for Progress in the 21st Century
MBTA	Migratory Bird Treaty Act
Metro	Los Angeles County Metropolitan Transportation Authority
MLD	Most Likely Descendant
MMBtu	one million British Thermal Units
MOU	Memorandum of Understanding
mpg	miles per gallon
mph	miles per hour
MS4	municipal separate storm sewer system
MSAT	mobile source air toxics

MSWMP	Master Stormwater System Maintenance Program
MTBE	Methyl tert-butyl ether
MWD	Metropolitan Water District of Southern California
NAAQS	National Ambient Air Quality Standard
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act of 1969
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
N_2O	nitrous oxide
NO	nitric oxide
NO_2	nitrogen dioxide
NOC	Notice of Completion
NOI	Notice of Intent
NOP	Notice of Preparation
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NRWS	Non-Reclaimable Wastewater System
O_3	ozone
OCP	organochlorine pesticide
O&M	Operations and Maintenance
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Act
PA	public address
Pb	lead
PCBs	polychlorinated biphenyls
PD	Police Department
PDT	Project Development Team
PEL	planning and environmental linkage
PM	particulate matter
PM	Post Mile
PM_{10}	particulate matter less than 10 microns in diameter

$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PMP	Paleontological Monitoring Plan
PMR	Paleontological Monitoring Report
POAQC	project of air quality concern
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PS&E	Plans, Specifications, and Estimate
PUSD	Pomona Unified School District
RAMP	Real Estate Acquisition Management Plan
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act of 1976
RCTC	Riverside County Transportation Commission
REAP	Rain Event Action Plan
RECs	Recognized Environmental Conditions
RMS	root mean square
ROG	reactive organic gas
ROW	right-of-way
RSS	Regional Sewer System
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SB	Senate Bill
SBCOG	San Bernardino Council of Governments
SBCTA	San Bernardino County Transportation Authority* * Consolidated with SANBAG (San Bernardino Association of Governments) in 2017
SBKR	San Bernardino kangaroo rat
sbX	San Bernardino Valley Express Express passenger bus service operated by Omnitrans in San Bernardino
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison

SCRRA	Southern California Regional Rail Authority
SCS	Sustainable Communities Strategy
SEA	Significant Ecological Area
SEL_{ref}	single event level reference
SHPO	State Historic Preservation Officer
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SLF	Sacred Lands File
SMP	Soil Management Plan
SO_2	sulfur dioxide
SOIS	Secretary of the Interior's Standards
SR	State Route
SRA	Source Receptor Area
SSMP	System Safety Management Plan
SSPP	System Safety Program Plan
SWIP	Southwest Industrial Park
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCE	temporary construction easement
TCWG	Transportation Conformity Working Group
TMDL	total maximum daily load
TMP	Traffic Management Plan
TNM	Traffic Noise Model
TOD	transit-oriented development
TPH	total petroleum hydrocarbons
TPH-g	total petroleum hydrocarbons as gasoline
TSM	Transportation Systems Management
TSP	Transit Signal Priority
TUA	Traditional Use Area
TVMWD	Three Valleys Municipal Water District
TWW	treated wood waste
UPRR	Union Pacific Railroad

USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
USPS	United States Postal Service
VdB	vibration decibels
VIP	Visual Improvement Plan
VMT	vehicle miles traveled
VOC	volatile organic compound
WEAP	Workers Environmental Awareness Program
WQO	Water Quality Objectives
WVC	West Valley Connector
WVVMF	West Valley Vehicle Maintenance Facility

APPENDIX D
DISTRIBUTION LIST

Appendix D DISTRIBUTION LIST

Notices of Availability of this Environmental Impact Report/Environmental Assessment (EIR/EA) have been sent to all property owners within 300 feet of the build alternatives. In addition, notices have been sent to interested parties that have attended public meetings on the project or requested to be added to a notification list for the project.

Copies of the document have been provided on disks (DVDs) to the following agencies, elected officials, and organizations:

Elected Officials

Federal

The Honorable Kamala Harris, U.S. Senator	312 N. Spring Street, Suite 1748 Los Angeles, CA 90012
The Honorable Dianne Feinstein, U.S. Senator	11111 Santa Monica Boulevard, Suite 915 Los Angeles, CA 90025
The Honorable Pete Aguilar U.S House of Representatives, 31st District	385 E. Carnegie Drive Suite 100, San Bernardino, CA 92408.
Congresswoman Norma Torres California State Senate, 35th District	3200 Inland Empire Boulevard, Suite 200B Ontario, CA 91764

State

Senator Mike Morell California State Senate, 23rd District	10350 Commerce Center Drive, Suite A-220, Rancho Cucamonga, CA 91730
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Federal Agencies

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Local Agencies

Ken Hunt, City Manager City of Fontana, Public Works	8353 Sierra Avenue, Fontana, CA 92335
Scott Ochoa, City Manager, City of Ontario	303 East "B" Street, Ontario, CA 91764
Debbie Brazill, Deputy City Manager City of Fontana, City Manager's Office	8353 Sierra Avenue, Fontana, CA 92335
Scott Murphy, Planning Director, City of Ontario	303 East "B" Street, Ontario, CA 91764
Noel Castillo, Public Works Director/City Engineer City of Montclair,	5111 Benito Street, Montclair, CA 91763
Rudy Zeledon, Senior Planner, City of Ontario	303 East "B" Street, Ontario, CA 91764
Jay Bautista, Traffic/Transportation Manager City of Ontario, Engineering	303 East “B” Street, Ontario, CA 91764
David Tan, Senior Associate Civil Engineer City of Ontario, Engineering	303 East “B” Street, Ontario, CA 91764
Kathy Raasch, Senior Engineer City of Fontana	8353 Sierra Avenue, Fontana, CA 92335
Jesus Sanchez, Senior Plans Examiner City of Fontana	8353 Sierra Avenue, Fontana, CA 92335
Adelaida Bostan, Administrative Clerk City of Fontana, Planning	8353 Sierra Avenue, Fontana, CA 92335
Gary Hutton, Building Inspector II City of Fontana, Planning	8353 Sierra Avenue, Fontana, CA 92335

Eric Corral, Plans Examiner I City of Fontana, Planning	8353 Sierra Avenue, Fontana, CA 92335
Garth Nelson, Director of Community Development, City of Fontana	8353 Sierra Avenue, Fontana, CA 92335
Cathy Wahlstrom, Director City of Ontario, Planning	303 East "B" Street, Ontario, CA 91764
Emily Stadnicki, Development Services Manager, City of Pomona	505 S. Garey Avenue, Pomona, CA 91766
Mario Suarez, Director of Development City of Pomona, Development Services	505 S. Garey Avenue, Pomona, CA 91766
Kevin Ryan, Engineering Manager City of Fontana	8353 Sierra Avenue, Fontana, CA 92335
Louis Abi-Younes, City Engineer City of Ontario, Engineering	303 East "B" Street, Ontario, CA 91764
Rina Leung, Planner, City of Fontana	8353 Sierra Avenue, Fontana, CA 92335
Melanie Mullis, Principal Planner - Mobility City of Ontario, Engineering	303 East "B" Street, Ontario, CA 91764
Zai Abu Bakar, Director of Community Development, City of Fontana, Public Works	8353 Sierra Avenue, Fontana, CA 92335
John Andrews, Director of Economic Development City of Ontario, Economic Development	303 East "B" Street, Ontario, CA 91764
Maria Torres, Administrative Secretary City of Fontana, Planning	8353 Sierra Avenue, Fontana, CA 92335
Brent Schultz, Housing Director City of Ontario, Housing	303 East "B" Street, Ontario, CA 91764
Edward Starr, City Manager, City of Montclair	5111 Benito Street, Montclair, CA 91763
Ron Chan, Engineering Associate City of Pomona	505 S. Garey Avenue, Pomona, CA 91766
Marilyn Staats, Executive Director City of Montclair, Office of Economic & Community Development	5111 Benito Street, Montclair, CA 91763
Meg McWade, Public Works Director City of Pomona, Public Works	505 S. Garey Avenue, Pomona, CA 91766
Rene Guerrero, City Engineer City of Pomona, Public Works	505 S. Garey Avenue, Pomona, CA 91766
Brad Johnson, Planning Manager City of Pomona	505 S. Garey Avenue, Pomona, CA 91766
Mike Diaz, City Planner City of Montclair, Planning	5111 Benito Street, Montclair, CA 91763
Linda Lowry, City Manager, City of Pomona	505 S. Garey Avenue, Pomona, CA 91766

Silvia Gutierrez, Associate Planner City of Montclair	5111 Benito Street, Montclair, CA 91763
Rene Salas, Public Works Director City of Pomona, Public Works	505 S. Garey Avenue, Pomona, CA 91766
John Gillison, City Manager City of Rancho Cucamonga, Economic and Community Development	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Candyce Burnett, City Planner City of Rancho Cucamonga	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Lory Sassoon, Deputy City Manager City of Rancho Cucamonga, City Manager's Office	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Craig Cruz, Associate Traffic Engineer City of Rancho Cucamonga, Engineering	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Mike Smith, Senior Planner City of Rancho Cucamonga, Planning	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Jerry Dyer, Principal Civil Engineer City of Rancho Cucamonga, Engineering	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Jason Welday, City Engineer City of Rancho Cucamonga	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Dominick Perez, Associate Planner City of Rancho Cucamonga, Planning	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Matt Burris, Deputy City Manager City of Rancho Cucamonga, Economic and Community Development	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Albert Espinoza, Assistant City Engineer/Traffic Engineer (Acting) City of Rancho Cucamonga, Engineering	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Lori Sassoon, Deputy City Manager City of Rancho Cucamonga, Civic and Cultural Services	10500 Civic Center Drive Rancho Cucamonga, CA 91730

Native American

Gayle Totton, M.A., PhD, Native American Heritage Commission (NAHC)	915 Capitol Mall, Room 364 Sacramento, CA 95814
James Ramos Native American Heritage Commission (NAHC)	1550 Harbor Boulevard, Suite 100 West Sacramento, CA 95691
Cynthia Gomez Native American Heritage Commission (NAHC)	1550 Harbor Boulevard, Suite 100 West Sacramento, CA 95691
Andreas Heredita, Cahuilla Band of Indians	52701 Highway 371, Suite B-1 Anza, CA 92539

Joseph Hamilton Ramona Band of Cahuilla Mission Indians	56310 Highway 371, Suite B, Anza, CA 92540
Lynn Valbuena San Manuel Band of Mission Indians	26569 Community Center Drive Highland, CA 92346
Anthony Morales, Gabrielino/Tongva San Gabriel Band of Mission Indians	1999 Avenue of Stars, Suite 1100 Los Angeles, CA 90089
Samuel Dunlap, Gabrielino Tongva Nation	P.O. Box 86908, Los Angeles, CA 90089
John Tommy Rosas Tongva Ancestral Territorial Nation	578 Washington Boulevard #384 Marina Del Ray, CA 90292
Robert Martin Morongo Band of Mission Indians	12700 Pumarra Road, Banning, CA 92220
Goldie Walker, Serrano Nation of Mission Indians	P.O. Box 343, Patton, CA 92369
Mark Macarro Pechanga Band of Mission Indians	12705 Pechanga Road, Temecula, CA 92592
Joseph Ontiveros Soboba Band of Mission Indians	23906 Soboba Road, San Jacinto, CA 92583
Patricia Garcia-Plotkin Agua Caliente Band of Cahuilla Indians	5401 Dinah Shore Drive, Palm Springs, CA 92264
Jeff Grubbe Agua Caliente Band of Cahuilla Indians	5401 Dinah Shore Drive, Palm Springs, CA 92264
Amanda Vance Augustine Band of Cahuilla Mission Indians	P.O. Box 846, Coachella, CA 92236
Doug Welmas Cabazon Band of Mission Indians	84-245 Indio Springs Parkway, Indio, CA 92203
Daniel Salgado Cahuilla Band of Indians	52701 U.S. Highway 371, Anza, CA 92539
Andrew Salas Gabrieleno Band of Mission Indians – Kizh Nation	P.O. Box 393, Covina, CA 91723
Anthony Morales Gabrieleno/Tongva San Gabriel Band of Mission Indians	P.O. Box 693, San Gabriel, CA 91778
Sandonne Goad Gabrielino/Tonva Nation	106 ½ Judge John Aiso Street, #231, Los Angeles, CA 90012
Robert Dorame Gabrielino Tongva Indians of California Tribal Council	P.O. Box 490, Bellflower, CA 90707
Charles Alvarez Gabrielino – Tonva Trive	23454 Vanowen Street, West Hills, CA 91307
John Perada Los Coyotes Band of Mission Indians	P.O. Box 189, Warner Springs, CA 92086

Shane Chapparosa Los Coyotes Band of Mission Indians	P.O. Box 189, Warner Springs, CA 92086
Robert Martin Morongo Band of Mission Indians	12700 Pumarra Road, Banning, CA 92220
Denisa Torres Morongo Band of Mission Indians	12700 Pumarra Road, Banning, CA 92220
Ternet Aguilar Pauma Band of Luiseno Indians – Pauma & Yuima Reservation	P.O. Box 369, Pauma Valley, CA 92061
Joseph Hamilton Ramona Band of Cahuilla Mission Indians	P.O. Box 391670, Anza, CA 92539
John Gomez Ramona Band of Cahuilla Mission Indians	P.O. Box 391670, Anza, CA 92539
John Valenzuela San Fernando Band of Mission Indians	P.O. Box 221838, Newhall, CA 91322
Lee Clauss San Manuel Band of Mission Indians	26569 Community Center Drive, Highland, CA 92346
Steven Estrada Santa Rosa Band of Mission Indians	P.O. Box 391820, Anza, CA 92539
Goldie Walker Serrano Nation of Mission Indians	P.O. Box 343, Patton, CA 92369
Joseph Ontiveros Soboba Band of Luiseno Indians	P.O. Box 487, San Jacinto, CA 92581
Carrie Garcia Soboba Band of Luiseno Indians	P.O. Box 487, San Jacinto, CA 92581
Scott Cozart Soboba Band of Luiseno Indians	P.O. Box 487, San Jacinto, CA 92581
Michael Mirelez Torres-Martinez Desert Cahuilla Indians	P.O. Box 1160, Thermal, CA 92274

Planning Commission

Phil Cothran, Chairperson City of Fontana Planning Commission	8353 Sierra Avenue, Fontana, CA 92335
Nicola Ricci, Commissioner City of Ontario Planning Commission	303 East "B" Street, Ontario, CA 91764
Larry Meyer, Vice Chairperson City of Fontana Planning Commission	8353 Sierra Avenue, Fontana, CA 92335
Jim Willoughby, Chairman City of Ontario Planning Commission	303 East "B" Street, Ontario, CA 91764
Peter Garcia, Secretary City of Fontana Planning Commission	8353 Sierra Avenue, Fontana, CA 92335

Sheila Mautz, Commissioner City of Ontario Planning Commission	303 East "B" Street, Ontario, CA 91764
Daniel Quiroga, Commissioner City of Fontana Planning Commission	8353 Sierra Avenue, Fontana, CA 92335
Denton Mosier, Chairman City of Pomona Planning Commission	505 S. Garey Avenue, Pomona, CA 91766
Janie Rowland, Commissioner City of Fontana Planning Commission	8353 Sierra Avenue, Fontana, CA 92335
Edward C. Starr, Vice Chairman City of Pomona Planning Commission	505 S. Garey Avenue, Pomona, CA 91766
Ysela Aguirre, Commission Secretary City of Fontana Planning Commission	8353 Sierra Avenue, Fontana, CA 92335
Juan Carlos Garcia, Commissioner City of Pomona Planning Commission	505 S. Garey Avenue, Pomona, CA 91766
Tenice Johnson, Chairman City of Montclair Planning Commission	5111 Benito Street, Montclair, CA 91763
Ismael Arias, Commissioner City of Pomona Planning Commission	505 S. Garey Avenue, Pomona, CA 91766
Luis Flores, Vice Chairman City of Montclair Planning Commission	5111 Benito Street, Montclair, CA 91763
Carolyn Hemming, Commissioner City of Pomona Planning Commission	505 S. Garey Avenue, Pomona, CA 91766
Manny Martinez, Member City of Montclair Planning Commission	5111 Benito Street, Montclair, CA 91763
Samuel Tharpe, Commissioner City of Pomona Planning Commission	505 S. Garey Avenue, Pomona, CA 91766
Sergio Sahagun, Member City of Montclair Planning Commission	5111 Benito Street, Montclair, CA 91763
Ray Wimberly, Chairman City of Rancho Cucamonga Planning Commission	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Don Vodvarka, Member City of Montclair Planning Commission	5111 Benito Street, Montclair, CA 91763
Frances Howdyshell, Vice-Chairman City of Rancho Cucamonga Planning Commission	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Richard Delman, Commissioner City of Ontario Planning Commission	303 East "B" Street, Ontario, CA 91764
Richard B. Fletcher, Commissioner City of Rancho Cucamonga Planning Commission	10500 Civic Center Drive Rancho Cucamonga, CA 91730

James Downs, Vice Chairman City of Ontario Planning Commission	303 East "B" Street, Ontario, CA 91764
Lou Munoz, Commissioner City of Rancho Cucamonga Planning Commission	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Rick Gage, Commissioner City of Ontario Planning Commission	303 East "B" Street, Ontario, CA 91764
Rich Macias, Commissioner City of Rancho Cucamonga Planning Commission	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Bob Gregorek, Commissioner City of Ontario Planning Commission	303 East "B" Street, Ontario, CA 91764
Ray Wimberly, Chairman City of Rancho Cucamonga Planning Commission	10500 Civic Center Drive Rancho Cucamonga, CA 91730

Transportation Agencies

Nalini Ahuja, Chair, Access Services	P.O. Box 5728, El Monte, CA 91734
Doran Barnes, Chair, Access Services	P.O. Box 5728, El Monte, CA 91734
Art Ida, Vice Chair, Access Services	P.O. Box 5728, El Monte, CA 91734
Dolores Nason, Vice Chair, Access Services	P.O. Box 5728, El Monte, CA 91734
Exer Jackson, Covenant Transport	1300 E. Franklin, Pomona, CA 91766
Henry Lopez, Transit Planner, Foothill Transit	100 S. Vincent Avenue, #200 West Covina, CA 91790
Vy Phan-Hoang, Transit Planner Foothill Transit	100 S. Vincent Avenue, #200 West Covina, CA 91790
Joe Raquel, Director of Planning Foothill Transit	100 S. Vincent Avenue, #200 West Covina, CA 91790
Josh Landis, Planning Manager Foothill Transit	100 S. Vincent Avenue, #200 West Covina, CA 91790
Martha Butler, Los Angeles County Metropolitan Transportation Authority (Metro)	One Gateway Plaza, Los Angeles, CA 90012
Meghna Khanna, Senior Manager Los Angeles County Metropolitan Transportation Authority (Metro)	One Gateway Plaza, Los Angeles, CA 90012
Bart Reed, Executive Director The Transit Coalition	P.O. Box 567, San Fernando, CA 91341
Nicholas Ventrone, Community Engagement Director The Transit Coalition	P.O. Box 567, San Fernando, CA 91341

Ron Mathieu, Manager in Planning and Development. Metrolink (SCRRA), Senior Public Projects Specialist	One Gateway Plaza, Los Angeles, CA 90012
Rory Vaughn, Manager Research and Planning, Metrolink (SCRRA)	One Gateway Plaza, Los Angeles, CA 90012
Roderick Diaz, Director, Planning & Development, Contracts, Purchasing & Contract Compliance, Metrolink (SCRRA)	One Gateway Plaza, Los Angeles, CA 90012
P. Scott Graham, CEO/General Manager Omnitrans, Executive Office	1700 W. 5th Street, San Bernardino, CA 92411
Anna Jaiswal, Development Planning Manager Omnitrans, Marketing and Planning	1700 W. 5th Street, San Bernardino, CA 92411
Wendy Williams Director of Planning and Marketing, Omnitrans	1700 W. 5th Street, San Bernardino, CA 92411
Diane Caldera Director of Operations, Omnitrans	1700 W. 5th Street, San Bernardino, CA 92411
Jeremiah Bryant Service Planning Manager, Omnitrans	1700 W. 5th Street, San Bernardino, CA 92411
Kelly Fredericks, CEO Ontario International Airport Authority	303 E. B Street, Ontario, CA 91764
Rohan Kuruppu, Director of Planning Riverside Transit Agency	P.O. Box 59968, Riverside, CA 92517

Public Institutions

Pomona City Hall	505 S. Garey Avenue, Pomona, CA, 91766
Pomona Public Library	625 S. Garey Avenue, Pomona, CA 91766
Pomona Chamber of Commerce	101 W. Mission Boulevard, Pomona, CA 91766
Harriet K. & Philip Pumerantz Library	287 E. 3rd Street, Pomona, CA 91766
Fontana City Hall	8353 Sierra Avenue, Fontana, CA 92335
Fontana Lewis Library	8437 Sierra Avenue, Fontana, CA 92335
Summit Branch Library	15551 Summit Avenue, Fontana, CA 92336
Fontana Chamber of Commerce	8491 Sierra Avenue, Fontana, CA 92335
Ontario City Hall	303 East B Street, Ontario, CA 91764
Ontario Chamber of Commerce	520 N. Euclid Avenue, Ontario, CA 91762
South Ontario Library	3850 E. Riverside Drive, Ontario CA 91761
Ovitt Family Community Library	215 E. C Street, Ontario CA 91764
Montclair City Hall	5111 Benito Street, Montclair, CA 91763

Montclair Chamber of Commerce	8880 Benson Avenue, #110 Montclair, CA 91763
Montclair Branch Library	9955 Fremont Avenue, Montclair, CA 91763
Rancho Cucamonga City Hall	10500 Civic Center Drive Rancho Cucamonga, CA 91730
Rancho Cucamonga Public Library	12505 Cultural Center Drive Rancho Cucamonga, CA 91739
Archibald Library	7368 Archibald Avenue Rancho Cucamonga, CA 91730
Law Library for San Bernardino County	8409 Utica Avenue Rancho Cucamonga, CA 91730
Rancho Cucamonga Chamber of Commerce	9047 Arrow Route #180 Rancho Cucamonga, CA 91730

Educational Institutions

Richard Martinez, Superintendent Pomona Unified School District	800 S. Garey Avenue, Pomona, CA 91766
Enrique Medina Jr., Director Pomona Unified School District Career Readiness	1515 W. Mission Boulevard Pomona, CA 91766
James Hammond, Superintendent Ontario Montclair School District	950 W. D Street, Ontario, CA 91762
Irma Sanchez, Executive Assistant to the Superintendent Ontario Montclair School District	950 W. D Street, Ontario, CA 91762
Jana Dupree, Senior Assistant to the Superintendent Ontario Montclair School District	950 W. D Street, Ontario, CA 91762
Cindy Green, Supervisor of Safety and Training Ontario-Montclair Unified School District - Transportation Services	1442-B S. Bon View Avenue Ontario, CA 91761
Martin Willis, Manager Ontario-Montclair Unified School District - Transportation Services	1442-B S. Bon View Avenue Ontario, CA 91761
Matthew Holton, Superintendent Chaffey Joint Union High School District	211 W. Fifth Street, Ontario, CA 91762
Sandra Alvarez, Executive Assistant to Superintendent Cucamonga School District	8776 Archibald Avenue Rancho Cucamonga, CA 91730
Eric Montague, Board President Cucamonga School District	8776 Archibald Avenue Rancho Cucamonga, CA 91730

David Ortega, Board President Cucamonga School District	8776 Archibald Avenue Rancho Cucamonga, CA 91730
Yolanda Strong Reed, Board Vice President Cucamonga School District	8776 Archibald Avenue Rancho Cucamonga, CA 91730
Leslie Boozer, Ed.D., J.D., Superintendent Fontana Unified School District	P.O. Box 5090, Fontana, CA 92335
Mary Stevens, Director of Transportation Fontana Unified School District	P.O. Box 5090, Fontana, CA 92335
Cindy Stimmell, Executive Assistant Fontana Unified School District	P.O. Box 5090, Fontana, CA 92335
Eric Bishop, Dean, Chaffey College	16855 Merrill Avenue, Fontana, CA 92335
Brian Jeffrey, Assistant Principle of Business Services, Montclair High School	4725 Benito Street, Montclair, CA 91763
Jill Dolan, VP Public Relations Mt. San Antonio College	1100 N. Walnut Avenue, Walnut, CA 91789
Mountainview Christian Preschool	7986 Haven Avenue Rancho Cucamonga, CA 91730
Scott Wardall, Executive Director of Operations American Career College	3130 E. Sedona Court, Ontario, CA 91764
Olivia Horton, Dean National University of Ontario	3800 Concours Street, #150 Ontario, CA 91764
Andrea Burgess, American Career College	151 Innovation Drive, Irvine, CA 92617
Stephanie Allen, Associate Regional Dean National University of Ontario	3800 Concours Street, #150 Ontario, CA 91764
Argosy University Inland Empire	3401 N. Centre Lake Drive, Suite 200 Ontario, CA 91761
Patrick Pierson, Campus Director Brandman University of Chapman University System	3990 E. Concours Street, Suite 100 Ontario, CA 91764
Sandra Vaughan-Acton, Director of Real Estate Development, Cal Poly Pomona	3801 W. Temple Avenue, Building 55 Pomona, CA 91768
Soraya M. Coley, President, Cal Poly Pomona	3801 W. Temple Avenue, Pomona, CA 91768
Cambridge College	8686 Haven Avenue Rancho Cucamonga, CA 91730
Chaffey College Extension	16855 Merrill Avenue, Fontana, CA 92335
Cheryl, Manager of Business Office UEI College	4730 Ontario Mills Parkway, Ontario, CA 91764
Vanessa Orosco, Student Services Platt College	3700 Inland Empire Boulevard Ontario, CA 91764
Ken Chan, VP Education, DeVry University	901 Corporate Center Drive Pomona, CA 91767

Universal Technical Institute – Los Angeles	9494 Haven Avenue Rancho Cucamonga, CA 91730
Norma Estrada, Administrative Assistant Everest College	1460 S. Milliken Avenue, Ontario, CA 91761
Abe Helou, Dean University of La Verne – Inland Empire Campus	3237 Guasti Road., Suite 300 Ontario, CA 91761
Linda Holden, Director, Westech College	3491 E. Concours Street, Ontario, CA 91764
Krystal Lyons, University of La Verne College of Law,	320 E. D Street, Ontario, CA 91764
Jeff Keating, President Western University of H.S.	309 E. Second Street, Pomona, CA 91766
University of Phoenix Ontario Learning Center	3110 E. Guasti Road, Ontario, CA 91761
Philip Pumerantz, President Western University of Health Sciences	309 E. Second Street, Pomona, CA 91767
Patty Zurita, Marketing/PR University of Redlands School of Business	9680 Haven Avenue, #150 Rancho Cucamonga, CA 91737

Utilities

Robert Young, General Manager Fontana Water Company	15966 Arrow Route, Fontana, CA 92335
Donna Lee, Region Manager Southern California Edison	800 Cienega, San Dimas, CA 91773
Eunice Ulloa, General Manager Chino Basin Water Conservation District	4594 San Bernardino Street Montclair, CA 91763
Christian Nelson, Board Member/Public Affairs Southern California Edison	2000 E. Convention Center Way Ontario, CA 91764
Matt Yucelen, Chief Engineer Fontana Water Company	15966 Arrow Route, Fontana, CA 92335
Veronica Gutierrez, Vice President of Local Public Affairs, Southern California Edison	1351 E. Francis Street, Ontario, CA 91761
Patti Arlt, Senior Government, Regional Affairs Rep, Metropolitan Water District of Southern California	700 N. Alameda Street, Los Angeles, CA 90012
Kristine Scott, Public Affairs Manager Southern California Gas Company	155 South 'G" Street San Bernardino, CA 92401
Mark Kinsey, General Manager Monte Vista Water Authority	10575 Central Avenue, Montclair, CA 91763
Robert Visconti, Regional Public Affairs Manager Southern California Gas Company	155 South 'G" Street San Bernardino, CA 92401
Scott Burton, Utilities General Manger Ontario Municipal Utilities	1425 South Bon View Avenue Ontario, CA 91761

East Valley Vehicle Maintenance Facility	1700 W. 5th Street, San Bernardino, CA 92411
West Valley Vehicle Maintenance Facility	4748 Arrow Highway, Montclair, CA 91763

Chamber of Commerce

Evelyn Mendoza Claremont Chamber of Commerce/Packing House Wine Merchants	205 Yale Avenue, Claremont, CA 91711
Maureen Aldridge Claremont Chamber of Commerce/Packing House Wine Merchants	205 Yale Avenue, Claremont, CA 91711
Troy Lagasca, Fairplex	1101 W. McKinley Avenue, Pomona, CA 91768
Erica Frausto, Executive Director Pomona Chamber of Commerce	101 W. Mission Boulevard, #222 Pomona, CA 91766
Cyndie O'Brien, Board President Pomona Chamber of Commerce/Inter Valley Health Plan	300 Park Avenue, #300, Pomona, CA 91769
Bill Hawkins, President Fontana Chamber of Commerce/AMS Paving, Inc.	17520 Valley Boulevard, Fontana, CA 92335
Idilio Sanchez, President Fontana Chamber of Commerce/ABS Collision Center	17520 Valley Boulevard, Fontana, CA 92335
Armando Yepes, Chairman Fontana Hispanic Chamber of Commerce	7426 Cherry Avenue, Suite 210-433 Fontana, CA 92336
Salina, Executive Assistant Fontana Chamber of Commerce	8491 Sierra Avenue, Fontana, CA 92335
Gloria Martinez, Executive Director Fontana Chamber of Commerce	8491 Sierra Avenue, Fontana, CA 92335
Darren Cook, Board Member Ontario Chamber of Commerce	520 N. Euclid Avenue, Ontario, CA 91762
Dan LeBouf, Board Member Ontario Chamber of Commerce	3200 Inland Empire Boulevard, Suite 130 Ontario, CA 91764
Jeff Roberts, Chairman Ontario Chamber of Commerce/City Rentals	3200 Inland Empire Boulevard, Suite 130 Ontario, CA 91764
Darleen Curley, President/CEO Montclair Chamber of Commerce	5220 Benito Street, Montclair, CA 91763
Tim Walborn, Chair Montclair Chamber of Commerce	5220 Benito Street, Montclair, CA 91763
Sean Keliiholokai, Chairman Ontario Chamber of Commerce/Greater Ontario Convention & Visitor Bureau	520 N. Euclid Avenue, Ontario, CA 91762

Peggi Hazlett, President/CEO Ontario Chamber of Commerce	520 N. Euclid Avenue, Ontario, CA 91764
Michelle Gartin, President/CEO Rancho Cucamonga Chamber of Commerce	9047 Arrow Route, Suite 180 Rancho Cucamonga, CA 91730
Tracy Elefante, Operations Director Rancho Cucamonga Chamber of Commerce	9047 Arrow Route, Suite 180 Rancho Cucamonga, CA 91730
Dwayne Thomas, Director Rancho Cucamonga Chamber of Commerce/ Dignity Health Community Hospital of San Bernardino	9047 Arrow Route, Suite 180 Rancho Cucamonga, CA 91730
Karen Gaffney, Executive Director Rancho Cucamonga Chamber of Commerce	9047 Arrow Route, Suite 180 Rancho Cucamonga, CA 91730
Maribel Brown, President Rancho Cucamonga Chamber of Commerce/Minutemen Press	9047 Arrow Route, Suite 180 Rancho Cucamonga, CA 91730

Community-Based Organizations

Doug Wagner, Sergeant, Fontana Police	15218 Summit, #300-639, Fontana, CA 92336
Friends of Ontario International Airport	P.O. Box 2556, Guasti, CA 91743
Sue Felt, President Fontana Teachers Association	16850 Seville Avenue, Fontana, CA 92336
Mickey Gallivan, Historical Society of Pomona Valley	585 E. Holt Boulevard, Pomona, CA 91766
Yvonee West, Office Administrator Inland Valley Hope Partners	1753 N. Park Avenue, Pomona, CA 91768
Marven Norman, Executive Director Inland Empire Biking Alliance	P.O. Box 8636, Redlands, CA 92375
Josh Matlock, Pastor Bethany Baptist Church of Montclair	9950 Monte Vista Avenue, Montclair, CA 91763
Inland Empire Biking Alliance	P.O. Box 8636, Redlands, CA 92375
Chris Taylor, Lead Pastor Launchpoint Community Church	3045 S. Archibald, #H-214, Ontario, CA 91761
Gregory Bradbard, Director of Development Inland Empire United Way	9644 Hermosa Avenue, Ontario, CA 91730
Chris, Launchpoint Community Church	3045 S. Archibald, #H-214, Ontario, CA 91761
Jamie Lamb, Director of Development Inland Empire United Way	9644 Hermosa Avenue, Ontario, CA 91730
Elizabeth Bingham, Senior Minister Pilgrim Congregational Church	600 N. Garey Avenue, Pomona, CA 91767
Sid Lehman, Treasurer Kiwanis Club of Fontana	P.O. Box 1027, Fontana, CA 92334

Pastor, Pilgrim Congregational Church	600 N. Garey Avenue, Pomona, CA 91767
Jason Brooks, President Kiwanis Club of Pomona Inc.	P.O. Box 2099, Pomona, CA 91769
Johnny, Praise Chapel	P.O. Box 9567, Ontario, CA 91762
Greg Shapton, Kiwanis Club of Pomona Inc.	P.O. Box 2099, Pomona, CA 91769
Dan Carrol, Senior Pastor, Water of Life Church	7623 E. Avenue, Fontana, CA 92335
Dayle Coleman, Assistant Director Los Angeles Urban League of Pomona	264 E. Monterey Avenue, Pomona, CA 91767
Pastor, Water of Life Church	7623 E. Avenue, Fontana, CA 92335
Marcia Richter, Director of Human Services Montclair Senior Center	5111 Benito Street, Montclair, CA 91763
Executive Director Boys & Girls Club of Fontana	7723 Almeria Avenue, Fontana, CA 92336
Ester Vargas Pipersky, Senior Program Specialist, Montclair Senior Center	5111 Benito Street, Montclair, CA 91763
Steve Johnson, President Boys & Girls Club of Pomona Valley	1420 S. Garey Avenue, Pomona, CA 91769
Steve and Dody, Pastors Mountainview Faith Community	7986 Haven Avenue Rancho Cucamonga, CA 91730
Mike Schaub, President Boys & Girls Club of Pomona Valley	P.O. Box 1149, Pomona, CA 91769
Stephanie Campbell, Executive Director Bright Prospect	281 S. Thomas Street, #302 Pomona, CA 91766
Michael Shaw, President Ontario Host Lions Club	P.O. Box 463, Ontario, CA 91761
Patti Cridland, Lieutenant Governor Cal-Nev-Ha Kiwanis	8360 Red Oak Street, #201 Rancho Cucamonga, CA 91730
Dan McIntyre, President, Pomona Heritage	P.O. Box 2813, Pomona, CA 91776
Mark W. McDonald, Executive Director Cal-Nev-Ha Kiwanis	8360 Red Oak Street, #201 Rancho Cucamonga, CA 91730
Michael Schowalter, President Pomona Heritage	P.O. Box 2813, Pomona, CA 91776
Bob Terry, President Camp Fire Inland Southern California/Silver Oak Landscaping	9037 Arrow Route, #140 Rancho Cucamonga, CA 91730
Amanda Behnke, Pomona Host Lions	P.O. Box 3085, Pomona, CA 91769
John MacMillan, President Rotary Club of Fontana	P.O. Box 313, Fontana, CA 92334
Brian Rachielles, Branch Manager Rancho Cucamonga/Fontana Family YMCA	P.O. Box 248, Rancho Cucamonga, CA 91730

Joseph Patrick Vlietstra, President Rotary Club of Ontario	P.O. Box 4791, Ontario, CA 91761
President, Rotary Club of Fontana	P.O. Box 313, Fontana, CA 92334
President, Creekside Village Easte Master Homeowners Association	1235 E. Francis, Suite E, Ontario, CA 91761
President, Rotary Club of Ontario	P.O. Box 4791, Ontario, CA 91761
President Creekside Village Homeowners Association	2601 Deer Creek Loop, Ontario, CA 91761
Bernie Bernstein, Rotary Club of Pomona	740 N. Garey Avenue, Pomona, CA 91767
Laura Monroy, Property Manager Emporia Arts District	211 W. Emporia #205, Ontario, CA 91762
David Speidel, President Rotary Club of Pomona	740 N. Garey Avenue, Pomona, CA 91767
President, Fontana Breakfast Lions Club	16756 Arrow Boulevard, Fontana, CA 92335
Mark Strickert, Southern California Transit Advocates	335 S. Acacia, Rialto, CA 92376
Fontana Historical Society	16830 Spring Street, Fontana, CA 92335
Director The Historical Society of Pomona Valley	585 E. Holt Avenue, Pomona, CA 91767
Darlene Scalf, President, Fontana Kiwanis Club	P.O. Box 1027, Fontana, CA 92334
Director, YMCA Ontario-Montclair	215 W. C Street, Ontario, CA 91762
Matt Slowik, Fontana Rotary Club	P.O. Box 313, Fontana, CA 92334
Director, YMCA Pomona Valley	1460 E. Holt Avenue, Pomona, CA 91767
Susan Gordon, President Friends of Ontario City Library	215 E. 'C' Street, Ontario, CA 91764
Director, YMCA Rancho Cucamonga & Fontana	10970 Arrow Route, #106 Rancho Cucamonga, CA 91730

Agencies Attending and Commenting on the Scoping Meeting of the Environmental Review Process

Louis Abi-Younes, City of Ontario	303 East B Street, Ontario, CA 91764
Melanie Mullis, City of Ontario	303 East B Street, Ontario, CA 91764
Tom Danna, Traffic/Transportation Manager	303 East B Street, Ontario, CA 91764
David Sheasby, Sr. Legislative Assistant City of Ontario	303 East B Street, Ontario, CA 91764
Jeff Sorenson, Policy Advisor Board of Supervisor, Fourth District	385 N. Arrowhead Avenue, 5th Floor San Bernardino, CA 92415
Paula Lantz	505 S. Garey Avenue, Pomona, CA 91769

Rene Guerrero, City Engineer, City of Pomona	505 S. Garey Avenue, Pomona, CA 91769
Monique Reza, San Bernardino County Transportation Authority (former City of Fontana employee; currently not with the City)	8353 Sierra Avenue, Fontana, CA 92335
Alex Rico, City of Fontana	8353 Sierra Avenue, Fontana, CA 92335
Adrineh Melkenian, Caltrans	464 W. 4th Street, San Bernardino, CA 92401
Michael Diaz, City Planner, City of Montclair	5111 Benito Street P.O. Box 2308, Montclair, CA 91763
Gayle Totton Native American Heritage Commission	1550 Harbor Boulevard, Suite 100 West Sacramento, CA 95691
Zac Appleton, NEPA Reviewer, Region 9 U.S. Environmental Protection Agency	75 Hawthorne Street, ENF-4-2 San Francisco, CA 94105
Yahaira Ortiz, Senior District Representative, CA State Senate, Senator Tony Mendoza, 32nd District	17315 Studebaker Road, Suite 332 Cerritos, CA 90703
Diana Watson, IGR/CEQA Branch Chief Department of Transportation, District 7	100 Main Street, MS # 16 Los Angeles, CA 90012
Nidham Aram Alrayes, Public Works Engineer Department of Public Works	825 E. Third Street, San Bernardino, CA 92415
Ping Chang, Southern California Association of Governments	818 W. 7th Street, 12th Floor Los Angeles, CA 90017
Ron Mathieu, Senior Public Project Specialist Metrolink	One Gateway Plaza, Floor 12 Los Angeles, CA 90012

General Public Attending and Commenting on the Scoping Meeting of the Environmental Review Process

Maria Rojas	Lemon Avenue, Apt. 209, Ontario, CA 91764
Maribel Aldana	4200 Concourse Street, Suite 345 Pomona, CA
Fran Givens	9971 Juniper Avenue, Apt. 507 Fontana, CA 92335
Darlene Bennett	446 W Foothill Boulevard, #C, Rialto, CA 92376
Mark Strickert, Southern California Transit Advocates	P.O. Box 1171, Rialto, CA 92377
Robert Rader	7301 Lavender Court, Fontana, CA 92336
Michael Landa	238 W. 7th Street, Claremont, CA 91711
Mike Chaudhry	1125 W. Stone Ridge Court, #7 Ontario, CA 91762
Hank Fung	576 Lincoln Avenue, Pomona, CA 91767

Marcus Garcia	10808 Foothill Boulevard, Unit 160356 Rancho Cucamonga, CA 91730
Bruce Culp	255 N. Lone Hill Avenue, San Dimas, CA 91773
Marven Norman, Executive Director, Inland Empire Biking Alliance	P.O. Box 8636, Redlands, CA 92375

General Public Attending and Commenting at Holt Boulevard Focused Outreach Meetings

William and Audree Short, Business Owner	909 W. Holt Boulevard, Ontario, CA 91762
Gary Astfalk, Business Owner	1363 W. Holt Boulevard, Ontario, CA 91762
Hideo Kikumoto, Business Owner	1315 E. Holt Boulevard, Ontario, CA 91762
Frank and Susan Cuccia, Business Owner	1206 W. Holt Boulevard, Ontario, CA 91762
Michael P. Farrell, Esq.	32072 Camino Capistrano, 2nd Floor San Juan Capistrano, CA 92675
Louis Soltero, Business Owner	1225 W. Holt Boulevard, Ontario, CA 91762
Ariel Greensbasm, Business Owner	815 W. Holt Boulevard, Ontario, CA 91762
Teri Rowlands Ludwig, Business Owner	1744 E. Holt Boulevard, Ontario, CA 91762
Jocelyn Sida, Resident	14924 Longview Drive, Fontana, CA 92337
Luis Alejandro Montes, Resident	14924 Longview Drive, Fontana, CA 92337
Edith Wellar, Business Owner	755 E. Holt Boulevard, Ontario, CA 91762
Linda Ghabril, Business Owner	P.O. Box 7601, Alhambra, CA 91803
Victor Ghabril, Business Owner	741 W. Holt Boulevard, Ontario, CA 91762
Taylor Valmore	2632 Lincoln Park, Ontario, CA 91761
Gary Astfalk, Business Owner	1363 W. Holt Boulevard, Ontario, CA 91762
Reyna Murillo	829 E. Elma Street, Apt. C, Ontario, CA 91764
Susan Garcia	1206 W. Holt Boulevard, Ontario, CA 91762
Helen Olivas	1757 S. Monterey, Ontario, CA 91761
Magdalena Ramos	548 E. Sunkist, Ontario, CA 91761
Olivia Becena	548 E. Sunkist, Ontario, CA 91761
Earl and Loretta Campse	1340 W. Holt Boulevard, Ontario, CA 91762
Cynthia Garcia	1906 Spruce Road, Ontario, CA 91761
Anthony D. Tommaso	1317 N. First Avenue, Upland, CA 91786
Mike Flores	P.O. Box 874, Ontario, CA 91762
Wayne Young	608 E. Main Street, Ontario, CA 91761
Rich Smith	505 W. Holt Boulevard, Ontario, CA 91762

Nancy Bumstead	1744 E. Holt Boulevard, Ontario, CA 91762
Daniel Olivos	527 E. Holt Boulevard, Ontario, CA 91762
Lee Smith, Senior Land Agent	11801 Pierce Street, Suite 200 Riverside, CA 95841
Pablo Meza, Broker/Realtor	525 W. Holt Boulevard, Ontario, CA 91762
Alan Kaitz	2045 Winston Court, Upland, CA 91784
Paula Lantz	505 S. Garey Avenue, Pomona, CA 91769
E. Cuellar	755 E. Holt Boulevard, Ontario, CA 91762

Interested Party

Pamela Barden, Chief of Operations Purpose Church	586 N. Main Street, Pomona, CA 91768
Jon Yasuda, Vice President for Development Fuller Theological Seminary	135 N. Oakland Avenue, Pasadena, CA 91182

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APPENDIX E
CALIFORNIA ENVIRONMENTAL QUALITY ACT CHECKLIST

Appendix E CALIFORNIA ENVIRONMENTAL QUALITY ACT CHECKLIST

The following checklist has been prepared according to the California Environmental Quality Act (CEQA) Guidelines and was used to identify physical, biological, and social and economic impacts of the project. Evaluation of environmental impacts is documented in Chapters 3, 4, 5, and 7 of this Environmental Impact Report/Environmental Assessment (EIR/EA), for each impact category and issue in turn.

In many cases, background studies performed in connection with the project indicate no impacts. A No Impact answer in the last column reflects this determination. Where there is a need for clarifying discussion, the discussion is included within the body of the environmental document itself. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not National Environmental Policy Act (NEPA) impacts.

Alternative A

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☒	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐
II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
VI. GEOLOGY AND SOILS – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
VII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
h) Expose people or structures to a significant risk of loss, injury, or death involving wildlife fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY – Would the project?				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in erosion or siltation on- or off-site?	☐	☒	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☒	☐	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
g) Place housing within a 100-year flood area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place housing within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
X. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environment effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
X. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒
XI. NOISE – Would the project result in:				
a) Exposure of persons to a generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
XIII. POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES – Would the project:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐
XV. RECREATION –				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC – Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒
XVI. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?	☐	☒	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒
XVII. MANDATORY FINDINGS OF SIGNIFICANCE –				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Alternative B

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☒	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☒	☐	☐
II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☒	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒
VI. GEOLOGY AND SOILS – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
VII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☒	☐
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☒	☐	☐
h) Expose people or structures to a significant risk of loss, injury, or death involving wildlife fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY – Would the project?				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in erosion or siltation on- or off-site?	☐	☒	☐	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☒	☐	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☒	☐	☐
f) Otherwise substantially degrade water quality?	☐	☒	☐	☐
g) Place housing within a 100-year flood area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place housing within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
X. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environment effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
X. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒
XI. NOISE – Would the project result in:				
a) Exposure of persons to a generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
XIII. POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES – Would the project:				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐
XV. RECREATION –				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI. TRANSPORTATION/TRAFFIC – Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒
XVI. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?	☐	☒	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒
XVII. MANDATORY FINDINGS OF SIGNIFICANCE –				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

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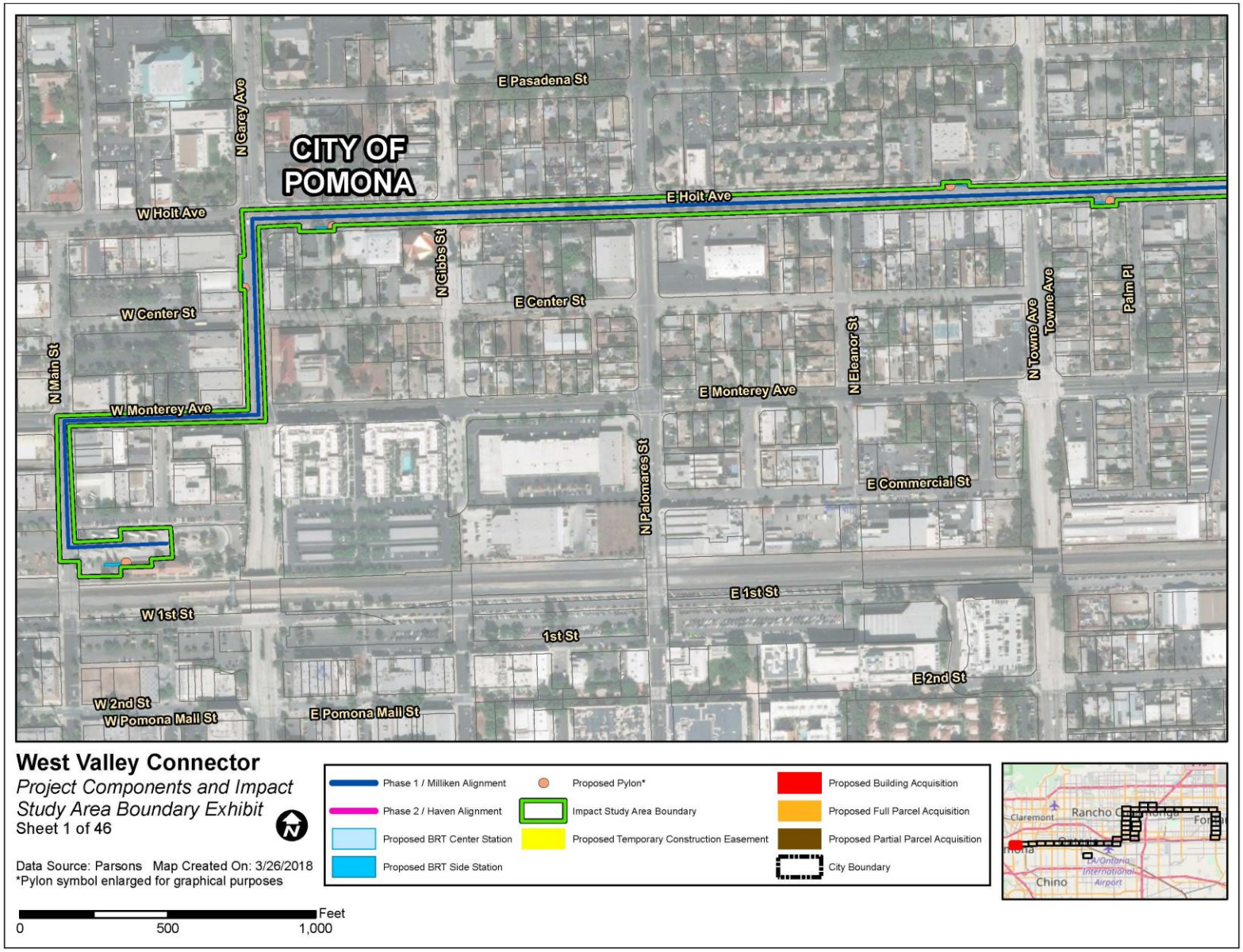
APPENDIX F
PROJECT IMPACT STUDY BOUNDARY MAPS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E Center St
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N Main St
W Monterey Ave
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N Eleanor St
N Towne Ave
Towne Ave
Palm Pl
N Palomares St
E Commercial St
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W 1st St
1st St
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W 2nd St
W Pomona Mall St
E Pomona Mall St
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 1 of 46
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Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
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Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
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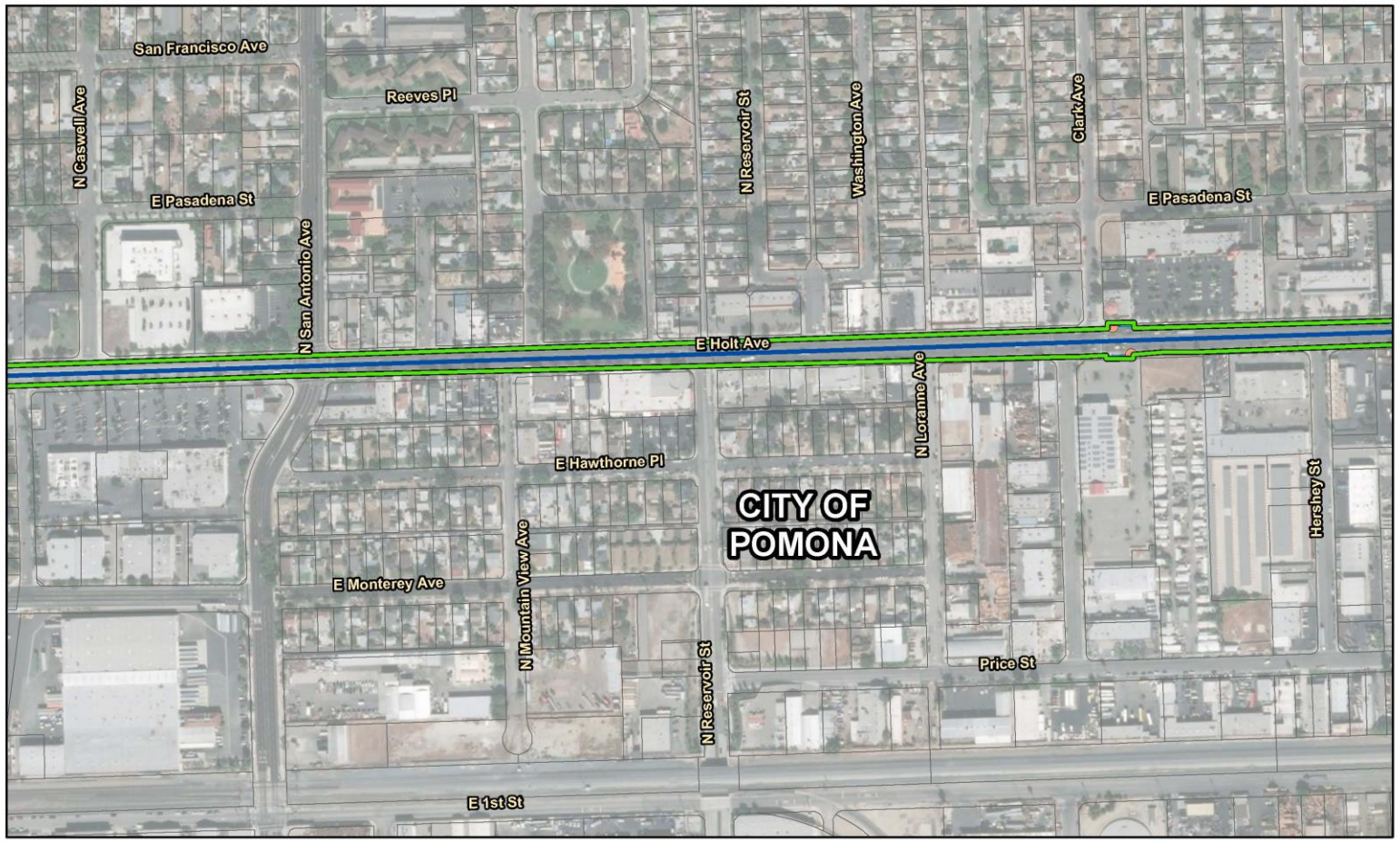
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E Pasadena St
N San Antonio Ave
N Reservoir St
Washington Ave
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E Holt Ave
N Loranne Ave
E Hawthorne Pl
CITY OF POMONA
Hershey St
E Monterey Ave
N Mountain View Ave
N Reservoir St
Price St
E 1st St
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 2 of 46
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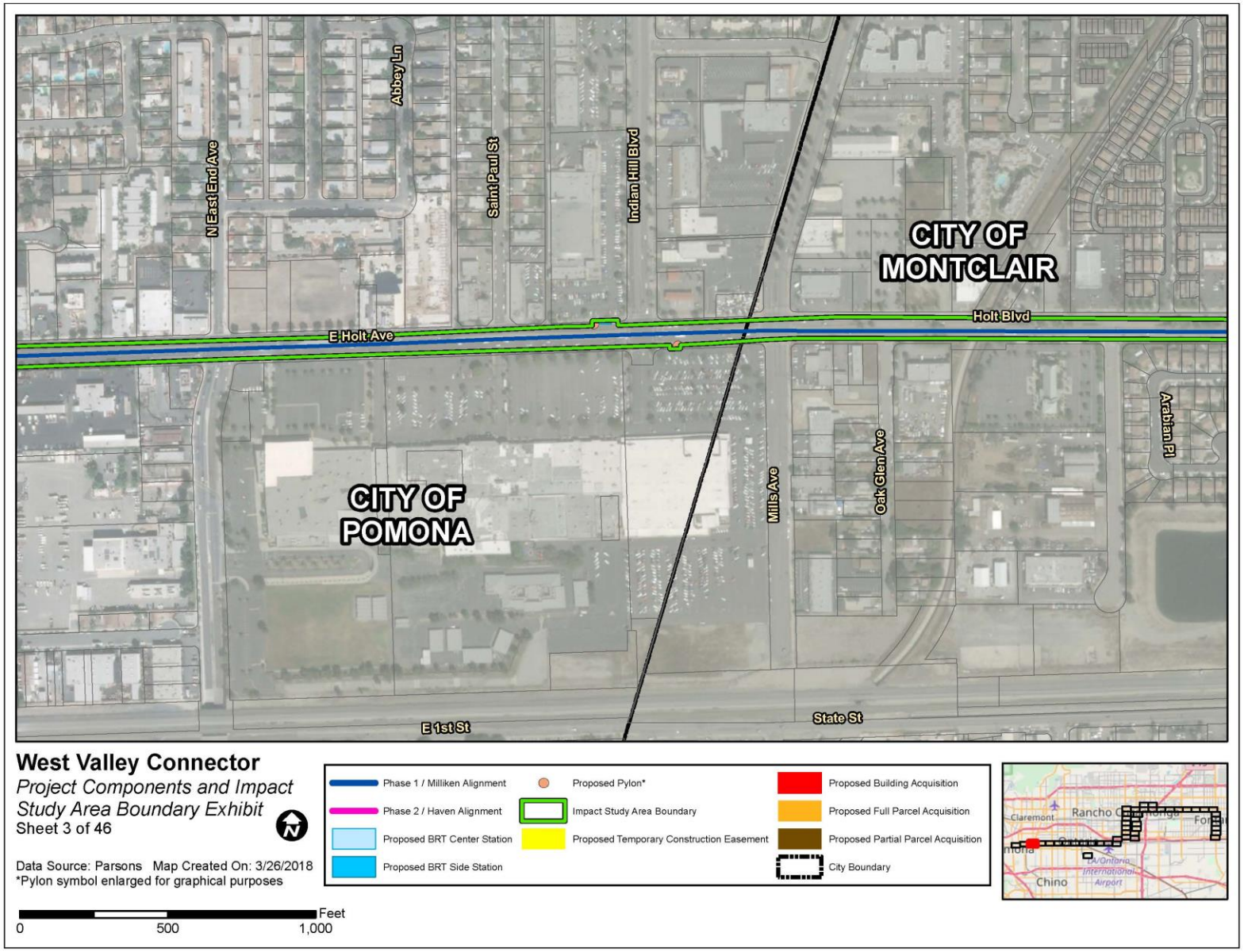
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Indian Hill Blvd
CITY OF MONTCLAIR
Holt Blvd
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Arabian Pl
Oak Glen Ave
Mills Ave
CITY OF POMONA
E 1st St
State St
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 3 of 46
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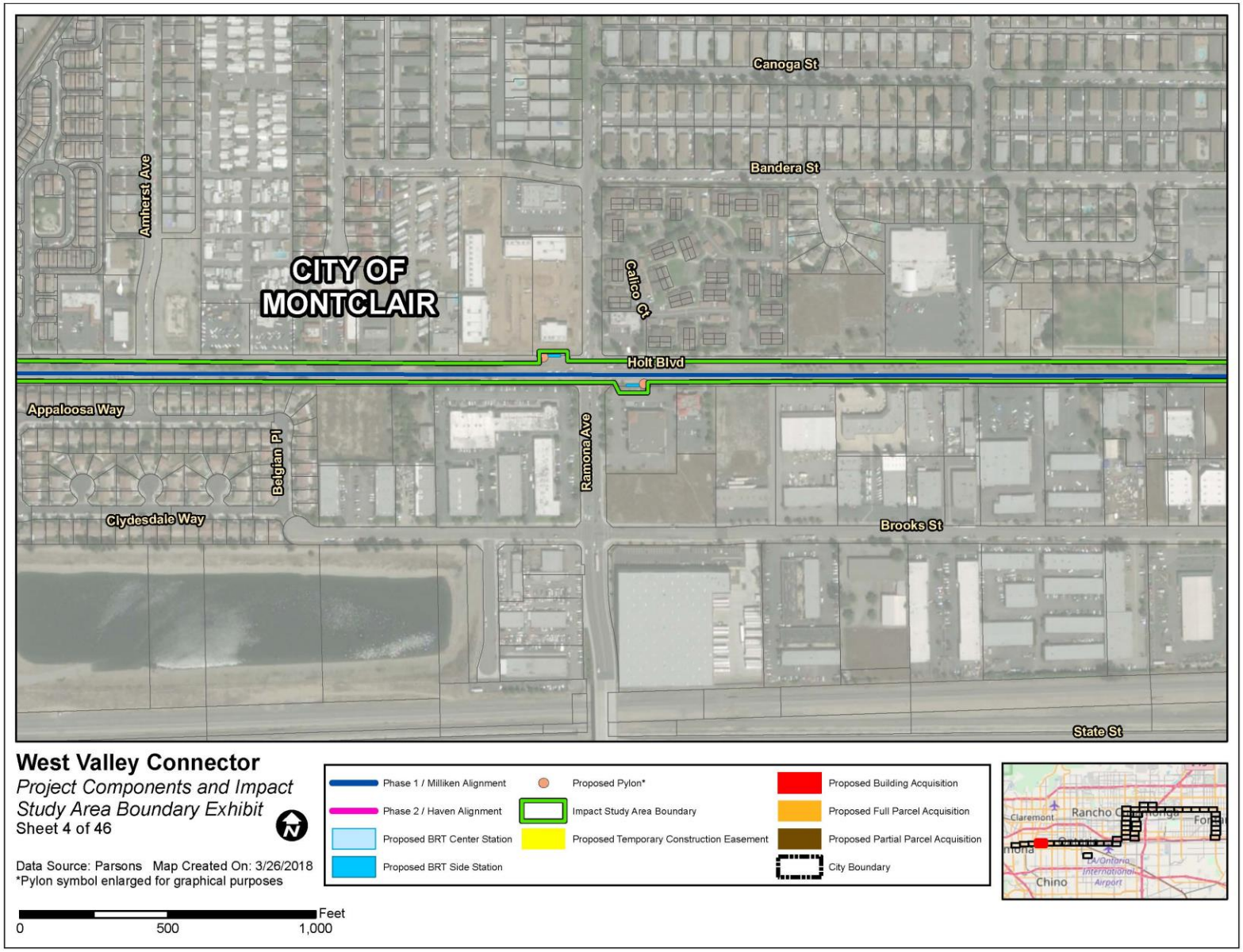
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Calico Ct
Holt Blvd
Appaloosa Way
Belgian Pl
Ramona Ave
Clydesdale Way
Brooks St
State St
West Valley Connector
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Sheet 4 of 46
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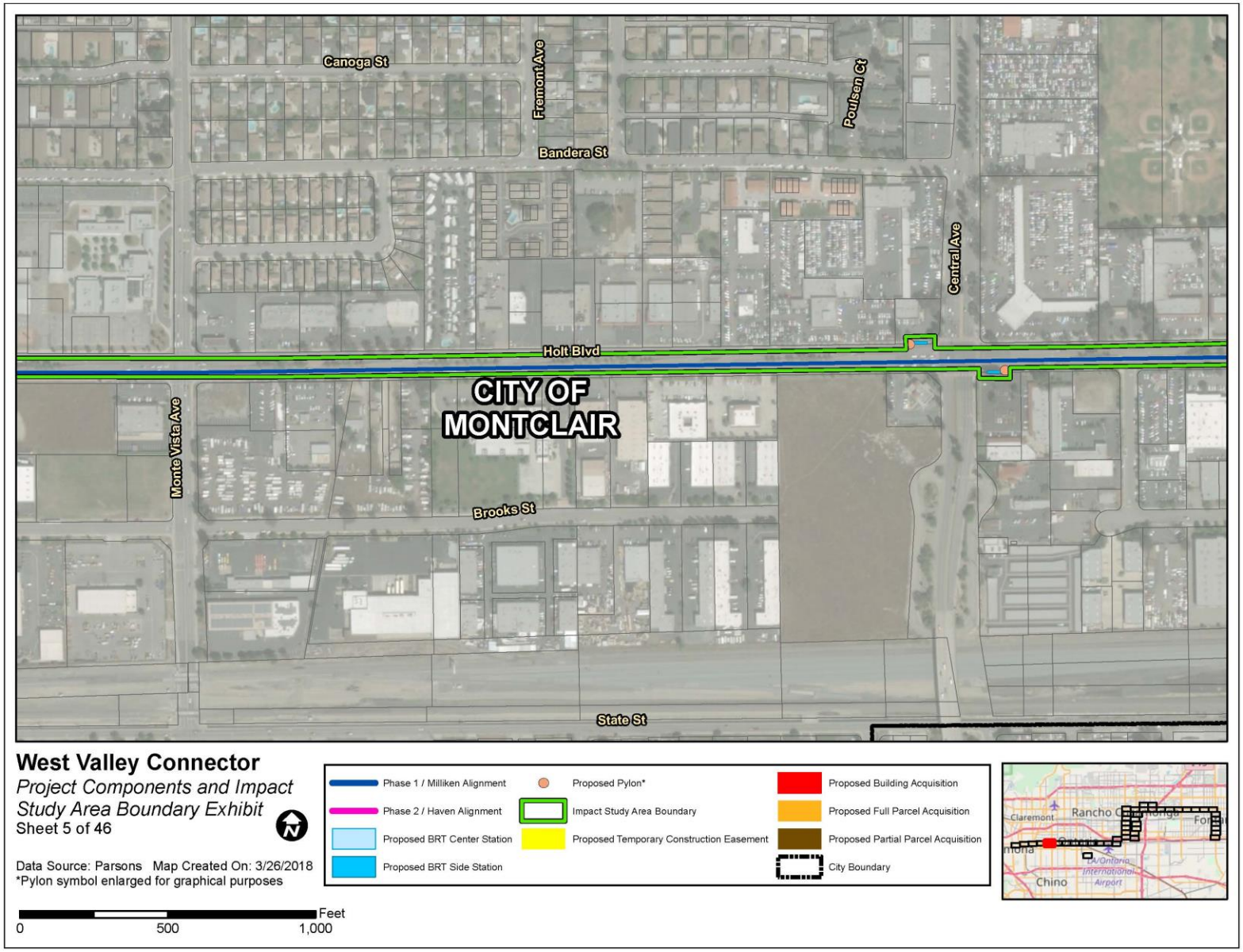
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Central Ave
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Monte Vista Ave
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West Valley Connector
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Sheet 5 of 46
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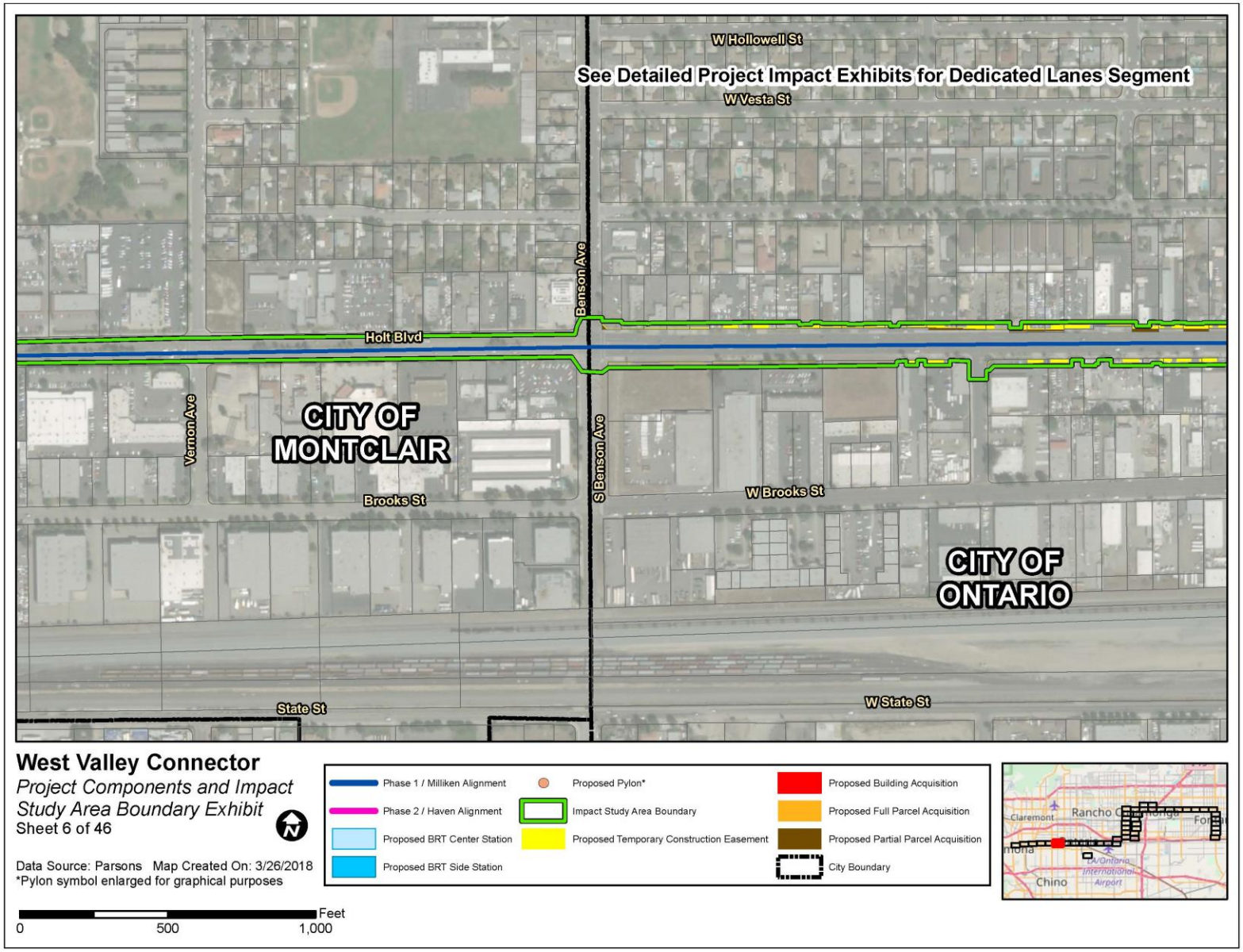
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Project Components and Impact Study Area Boundary Exhibit
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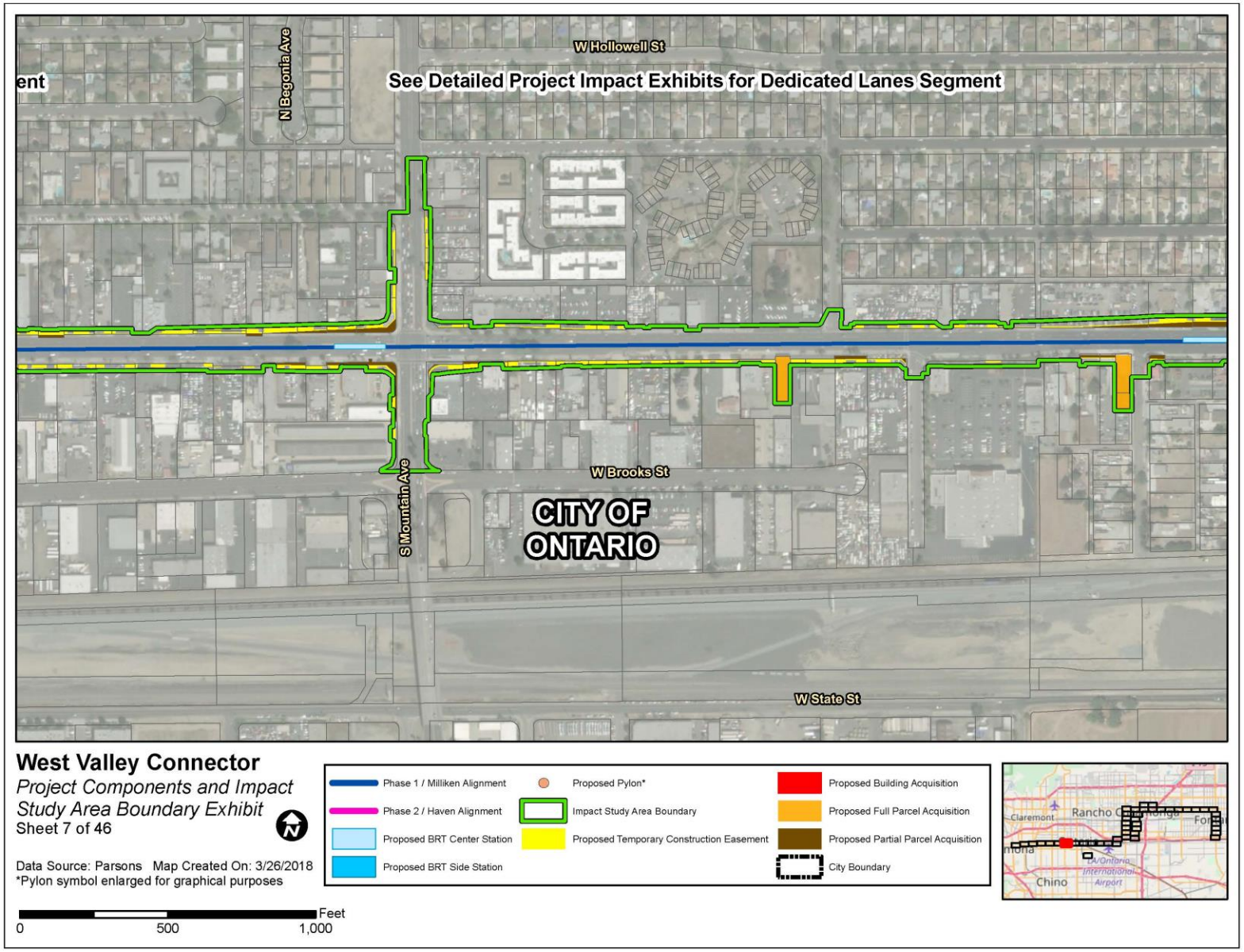
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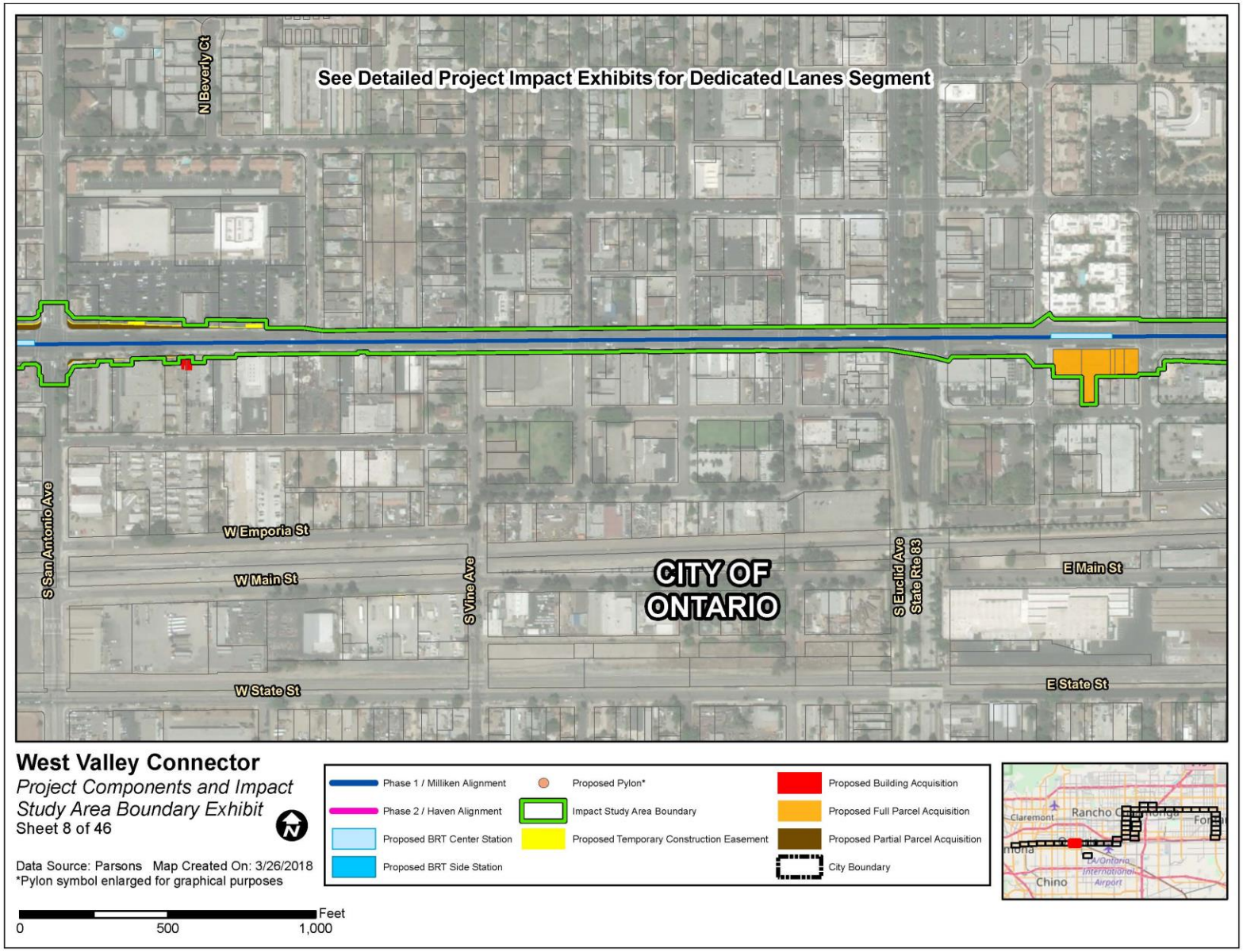
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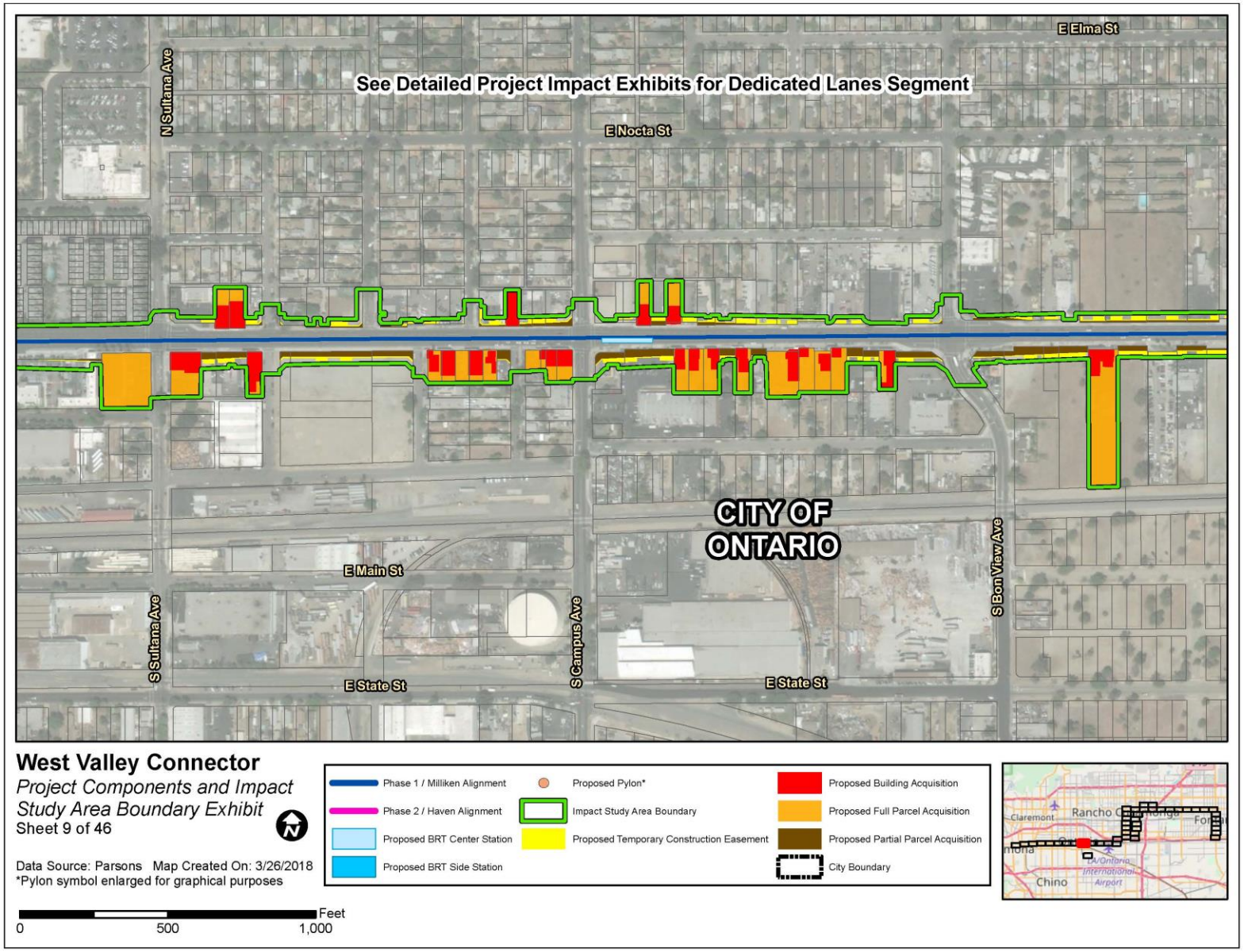
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Sheet 9 of 46
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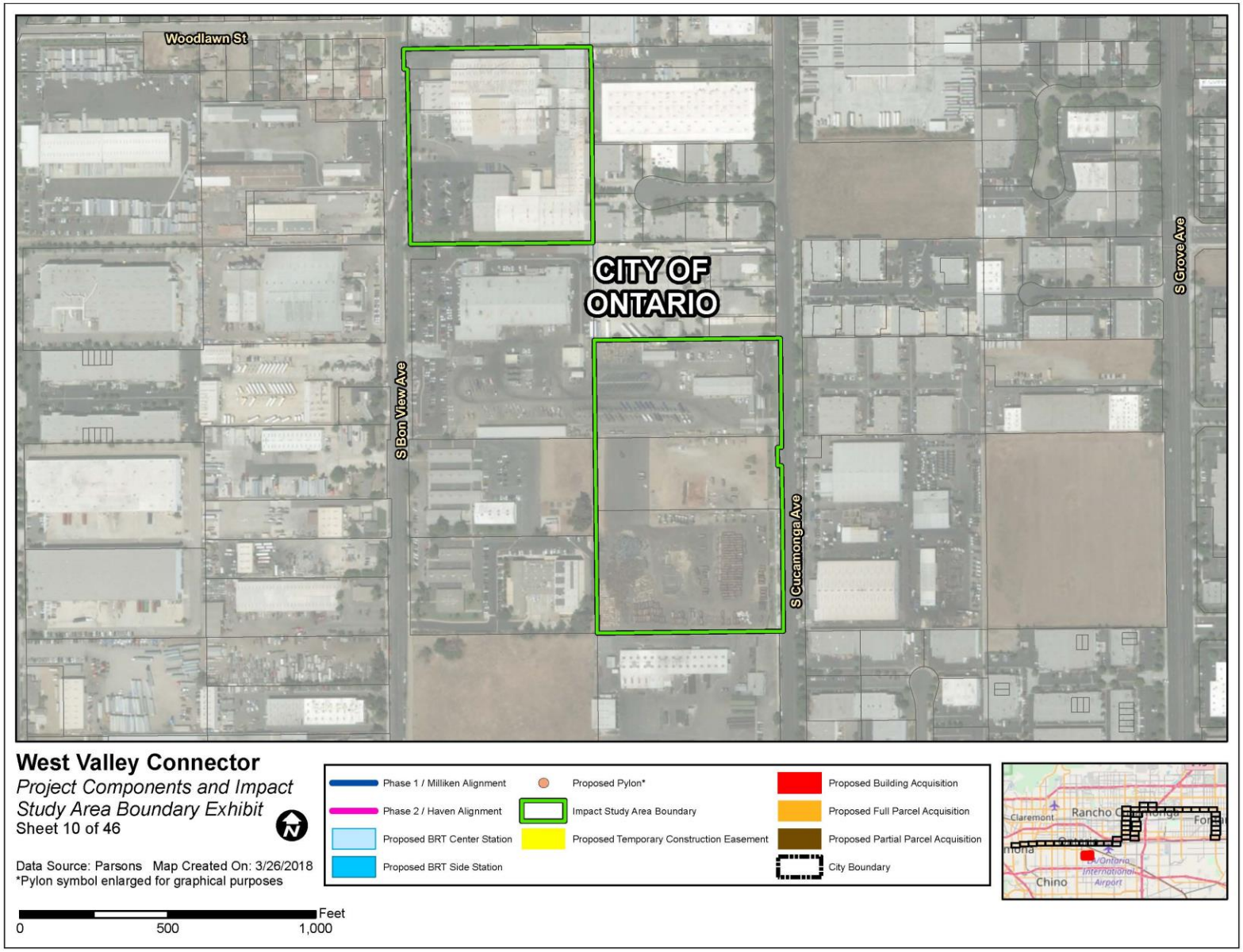
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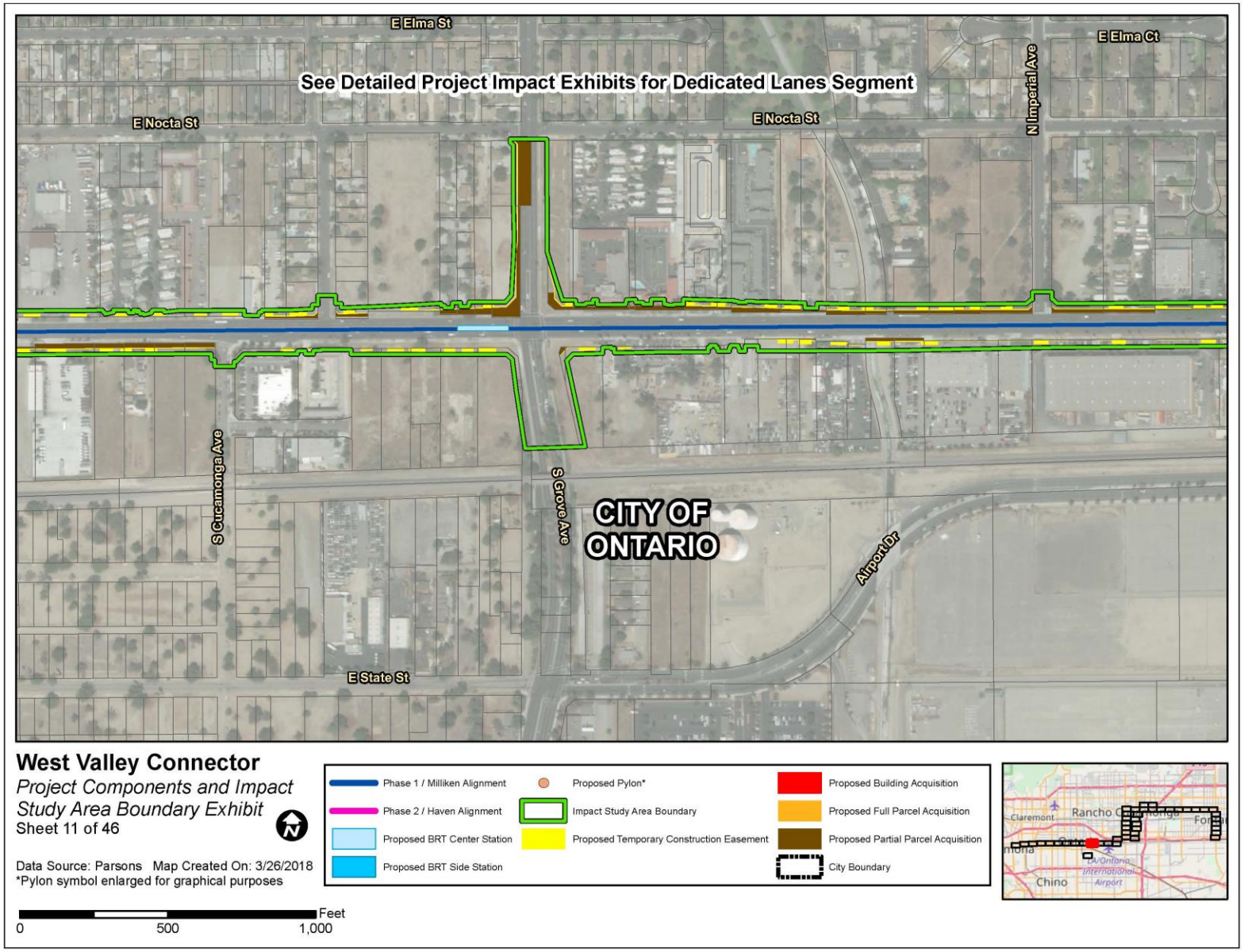
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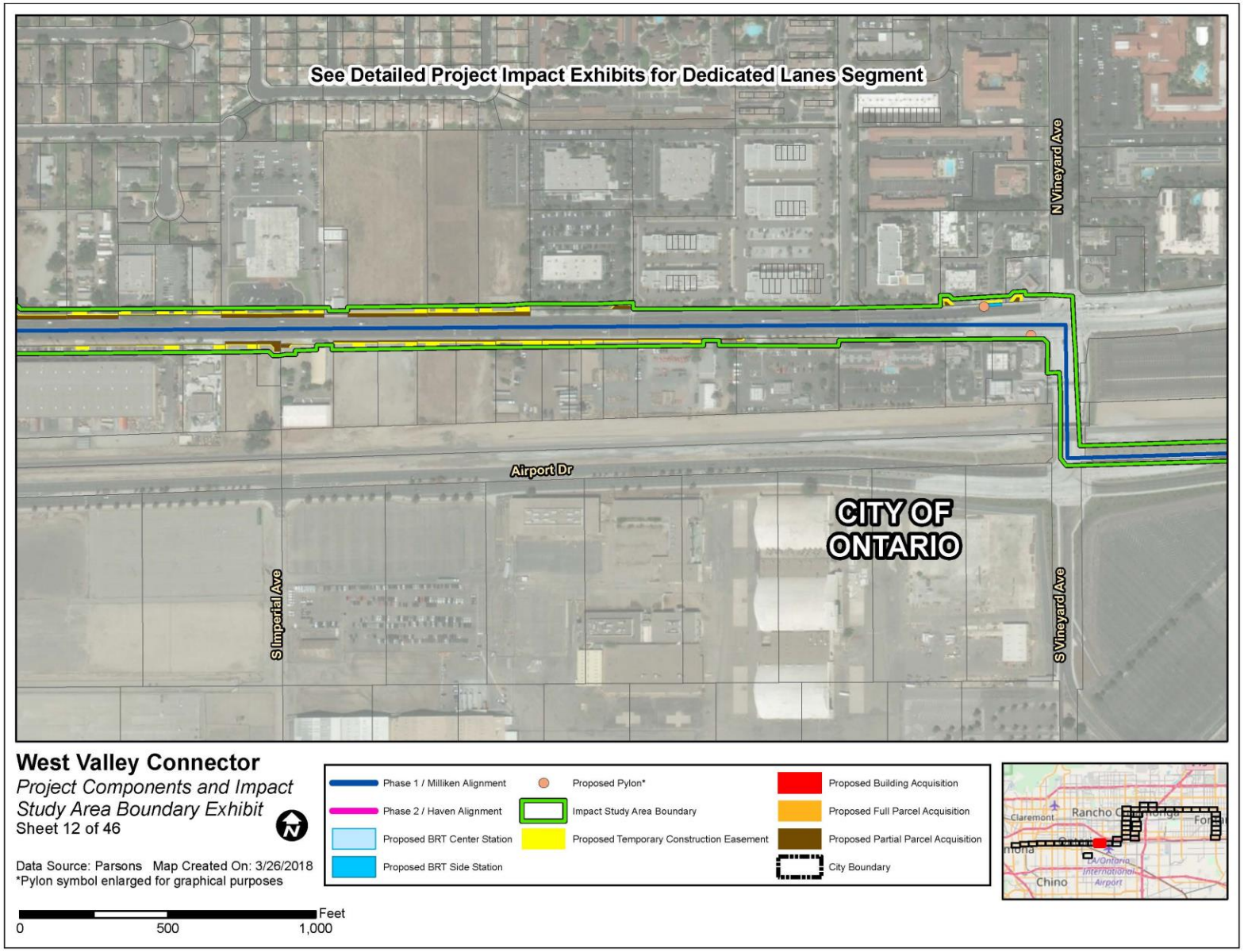
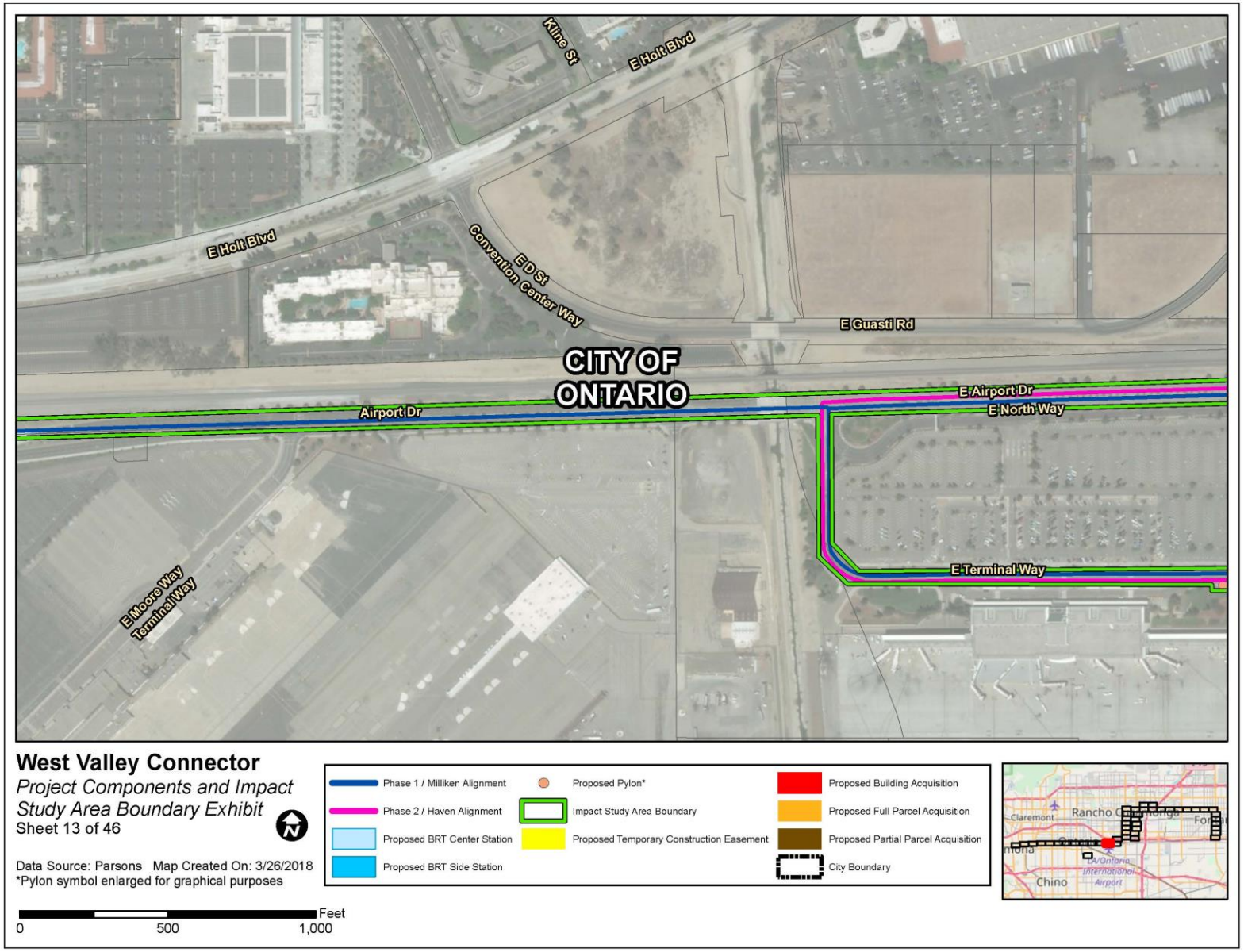
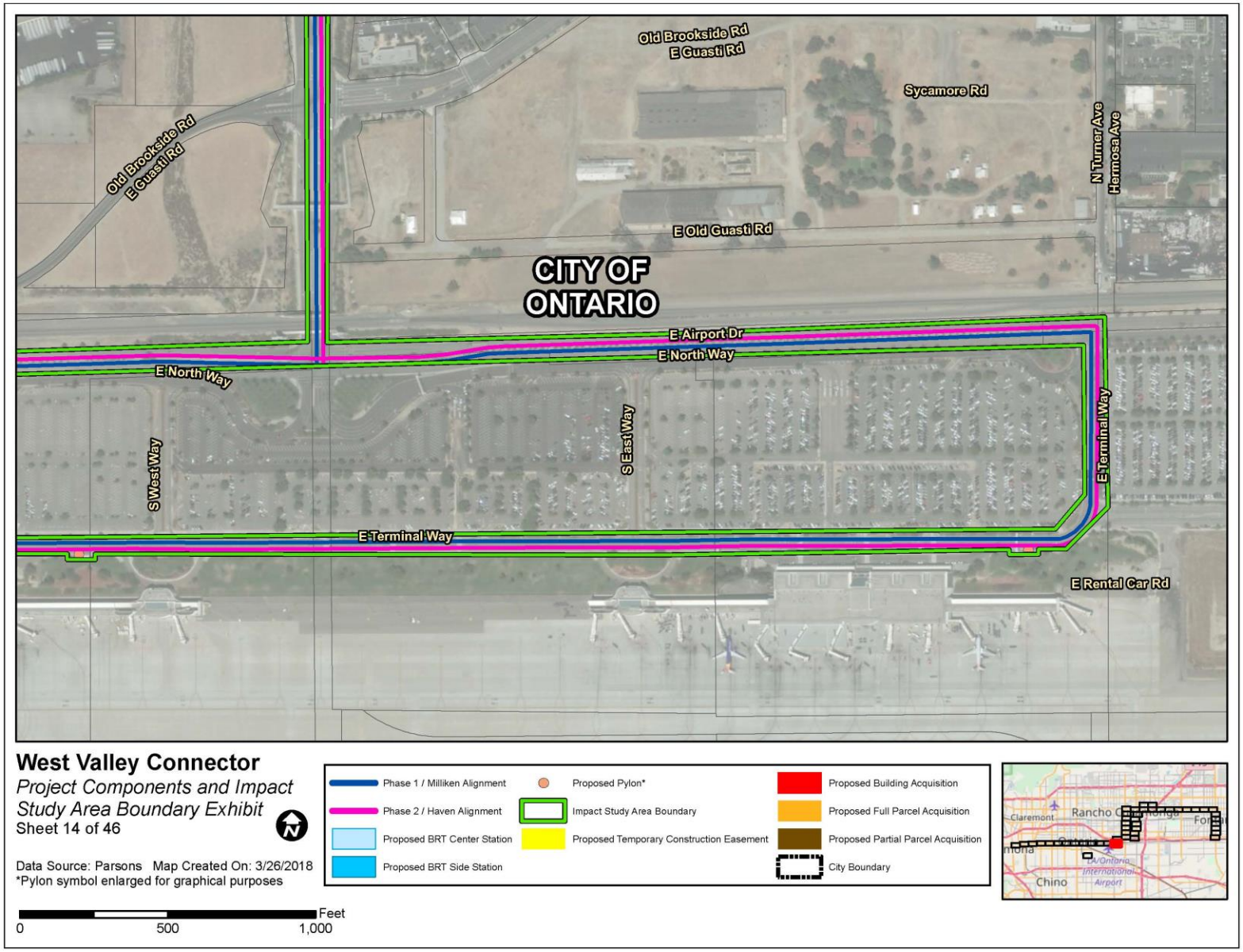
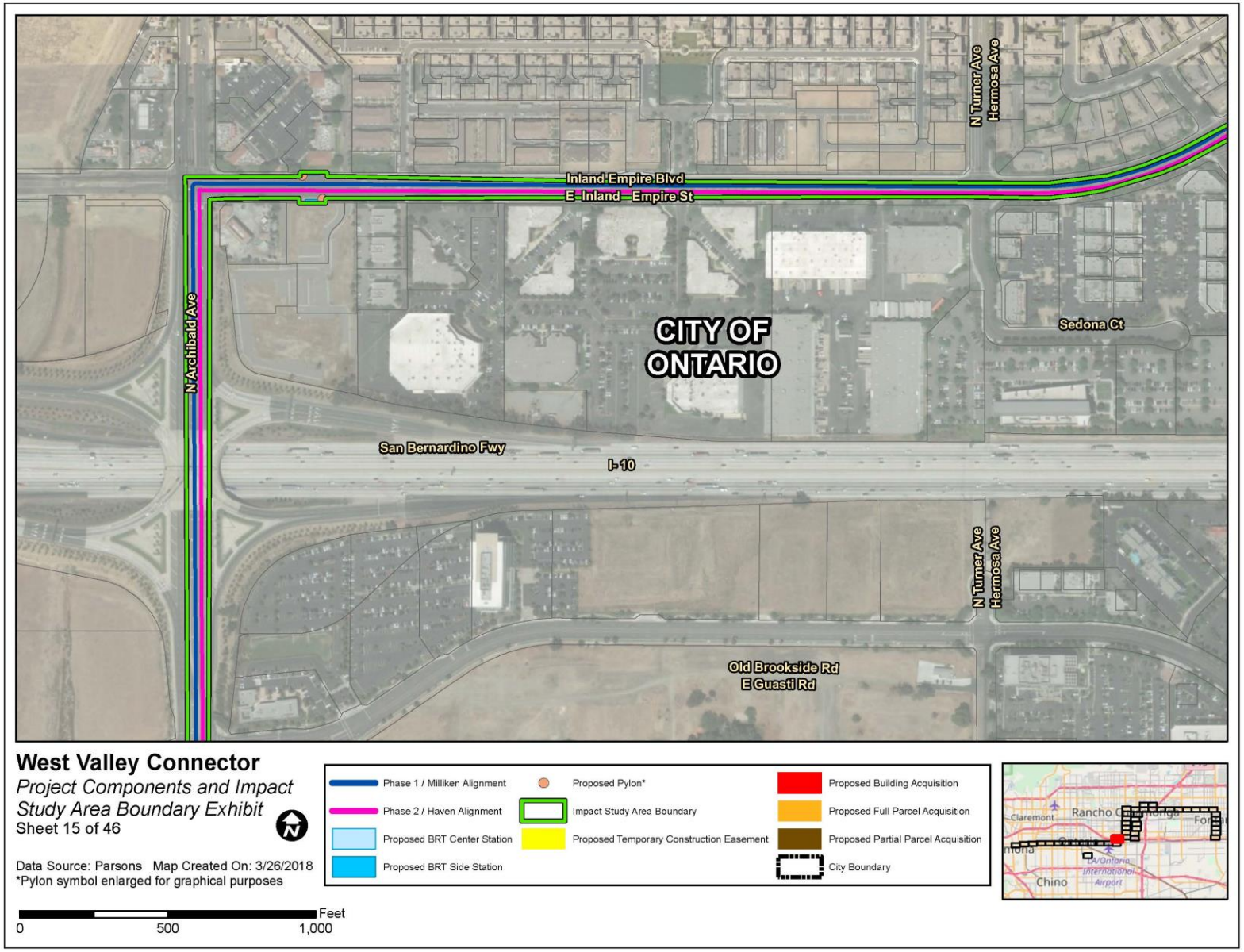
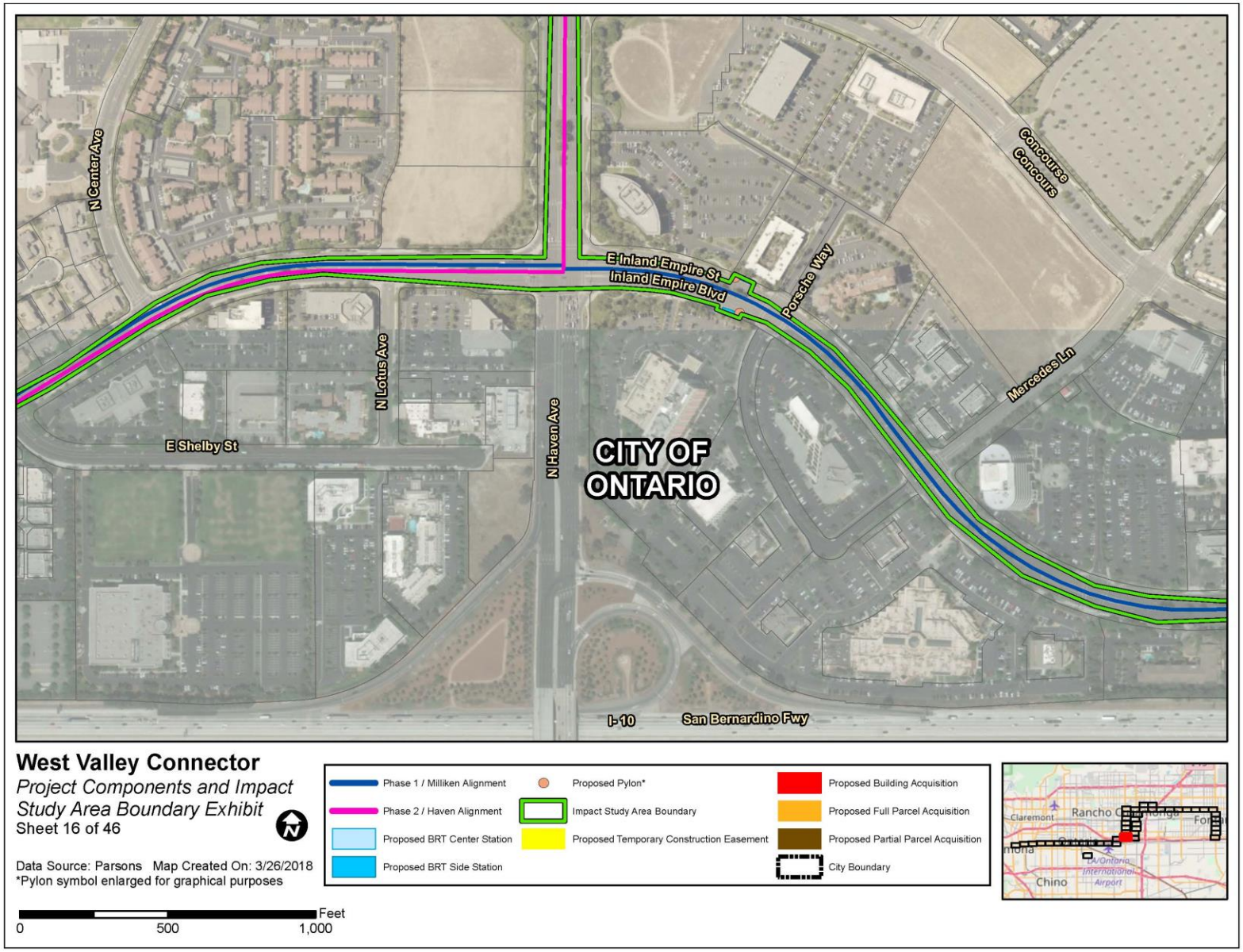
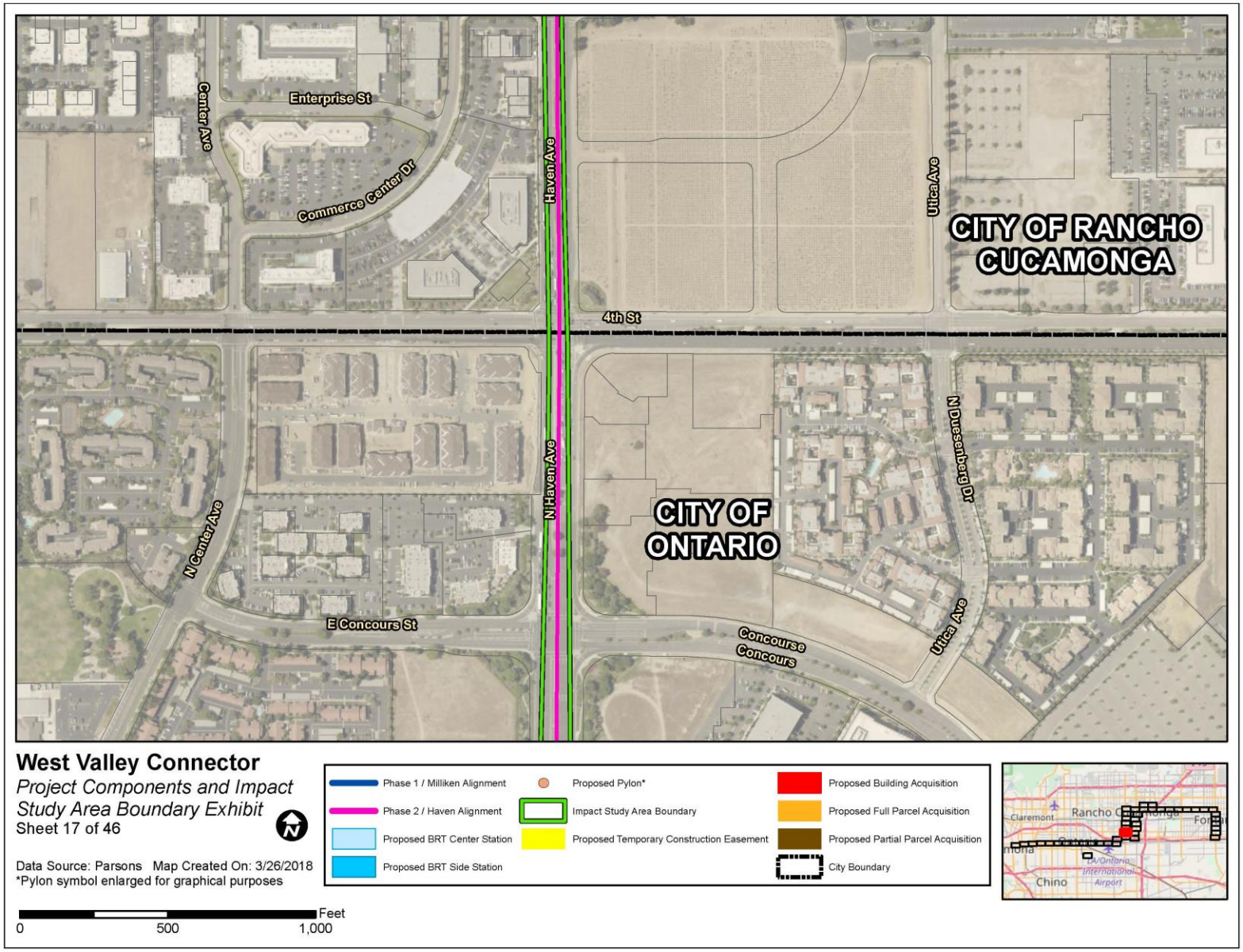

See Detailed Project Impact Exhibits for Dedicated Lanes Segment
N Vineyard Ave
Airport Dr
CITY OF ONTARIO
S Imperial Ave
S Vineyard Ave
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 12 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Feet
0
500
1,000

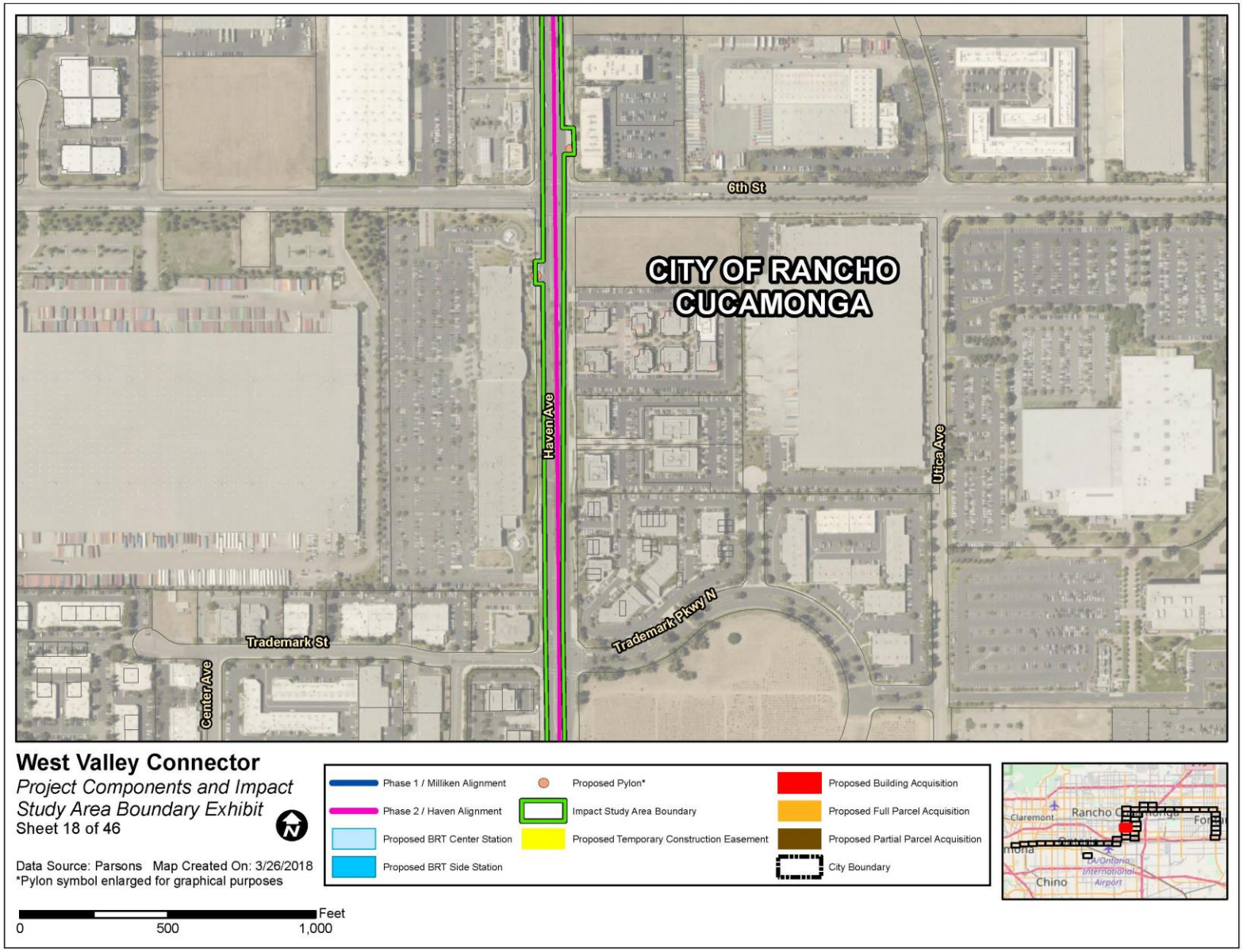

Kline St
E Holt Blvd
E Holt Blvd
Convention Center Way
E D St
E Guasti Rd
CITY OF
ONTARIO
Airport Dr
E Airport Dr
E North Way
E Terminal Way
E Moore Way
Terminal Way
West Valley Connector
Project Components and Impact
Study Area Boundary Exhibit
Sheet 13 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario
International
Airport
Feet
0
500
1,000

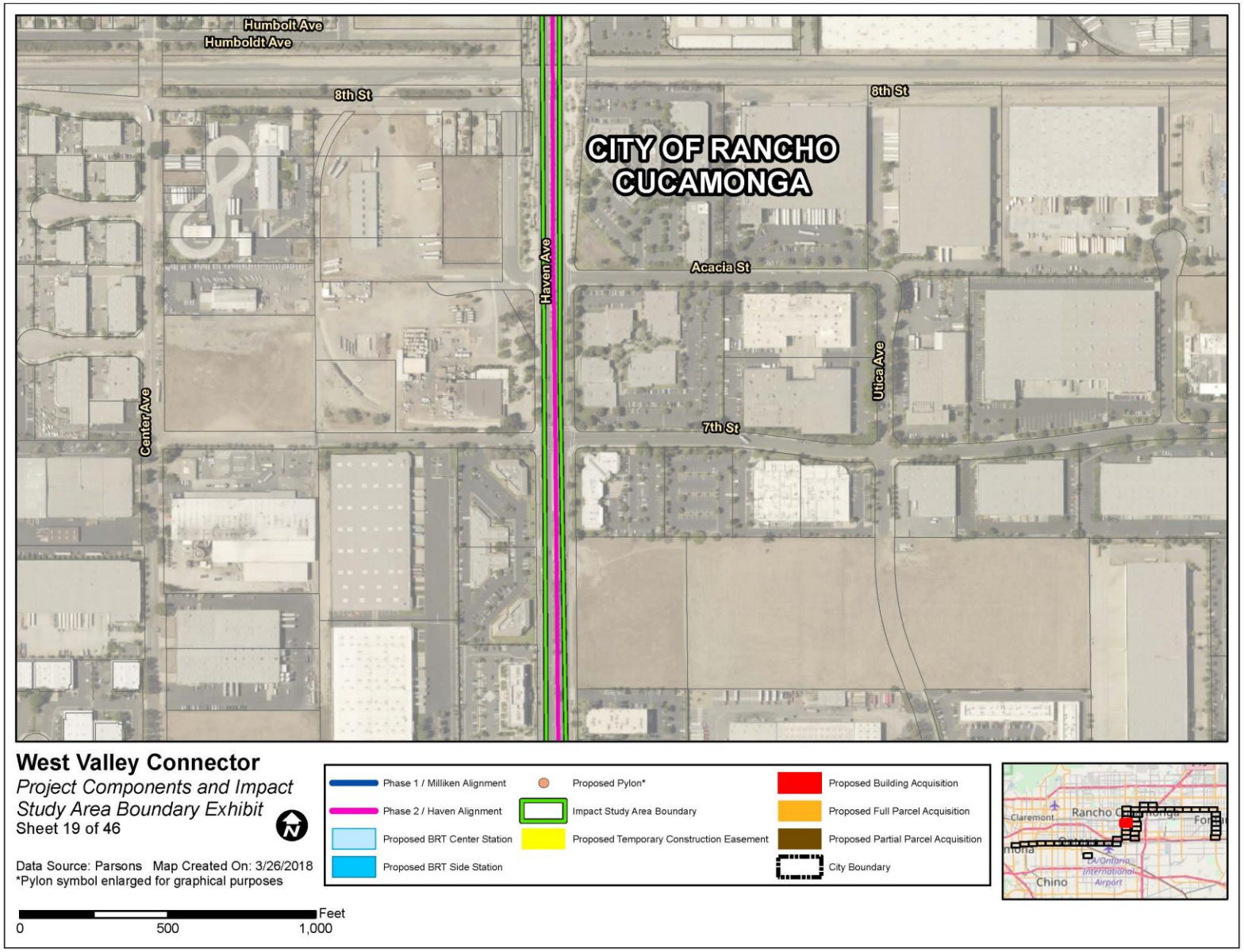

Old Brookside Rd
E Guasti Rd
Sycamore Rd
N Turner Ave
Hermosa Ave
Old Brookside Rd
E Guasti Rd
E Old Guasti Rd
CITY OF
ONTARIO
E Airport Dr
E North Way
E North Way
S West Way
S East Way
E Terminal Way
E Terminal Way
E Rental Car Rd
West Valley Connector
Project Components and Impact
Study Area Boundary Exhibit
Sheet 14 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario
International
Airport
0
500
1,000
Feet

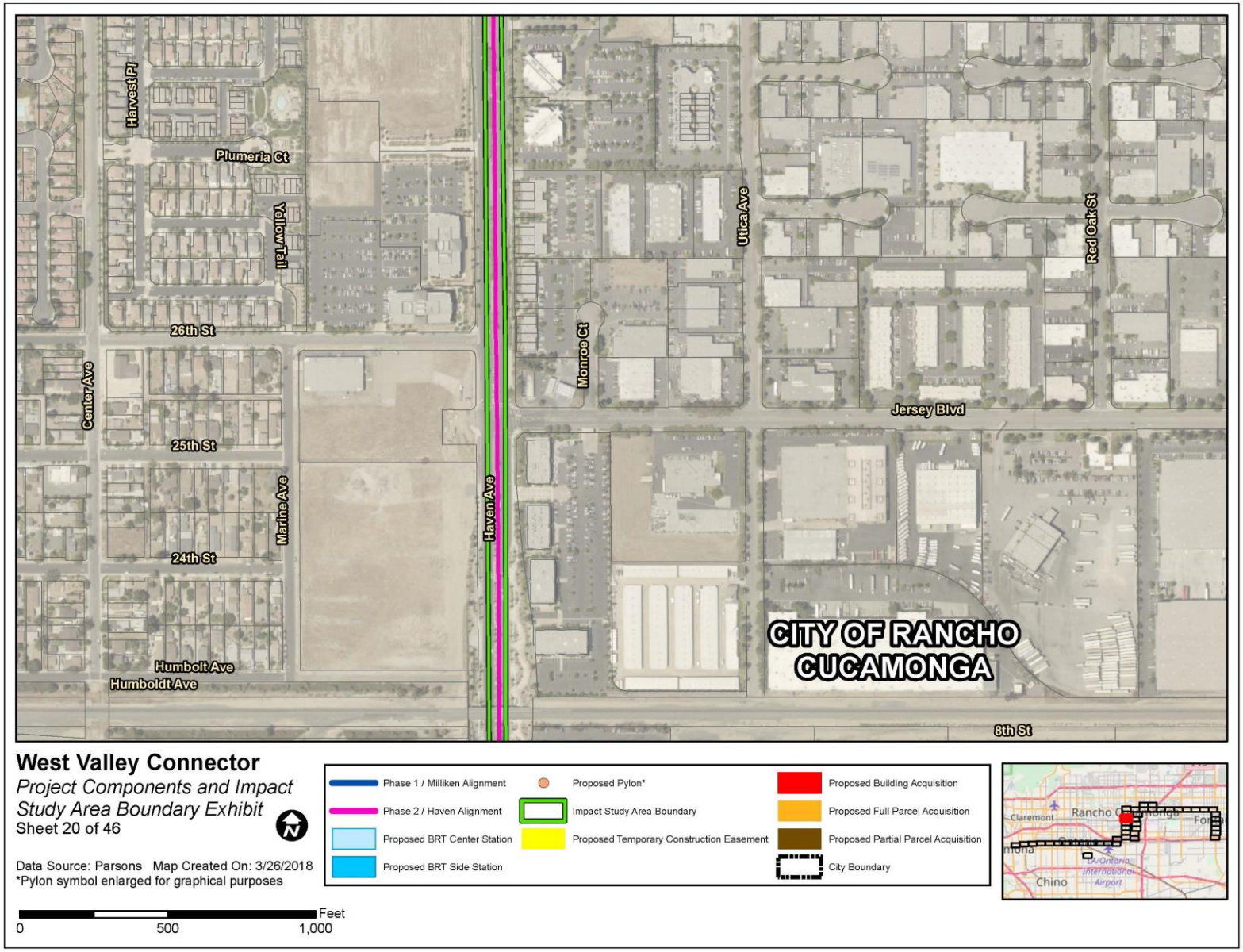

Inland Empire Blvd
E Inland Empire St
N Turner Ave
Hermosa Ave
N Archibald Ave
CITY OF ONTARIO
Sedona Ct
San Bernardino Fwy
I-10
N Turner Ave
Hermosa Ave
Old Brookside Rd
E Guasti Rd
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 15 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
0
500
1,000

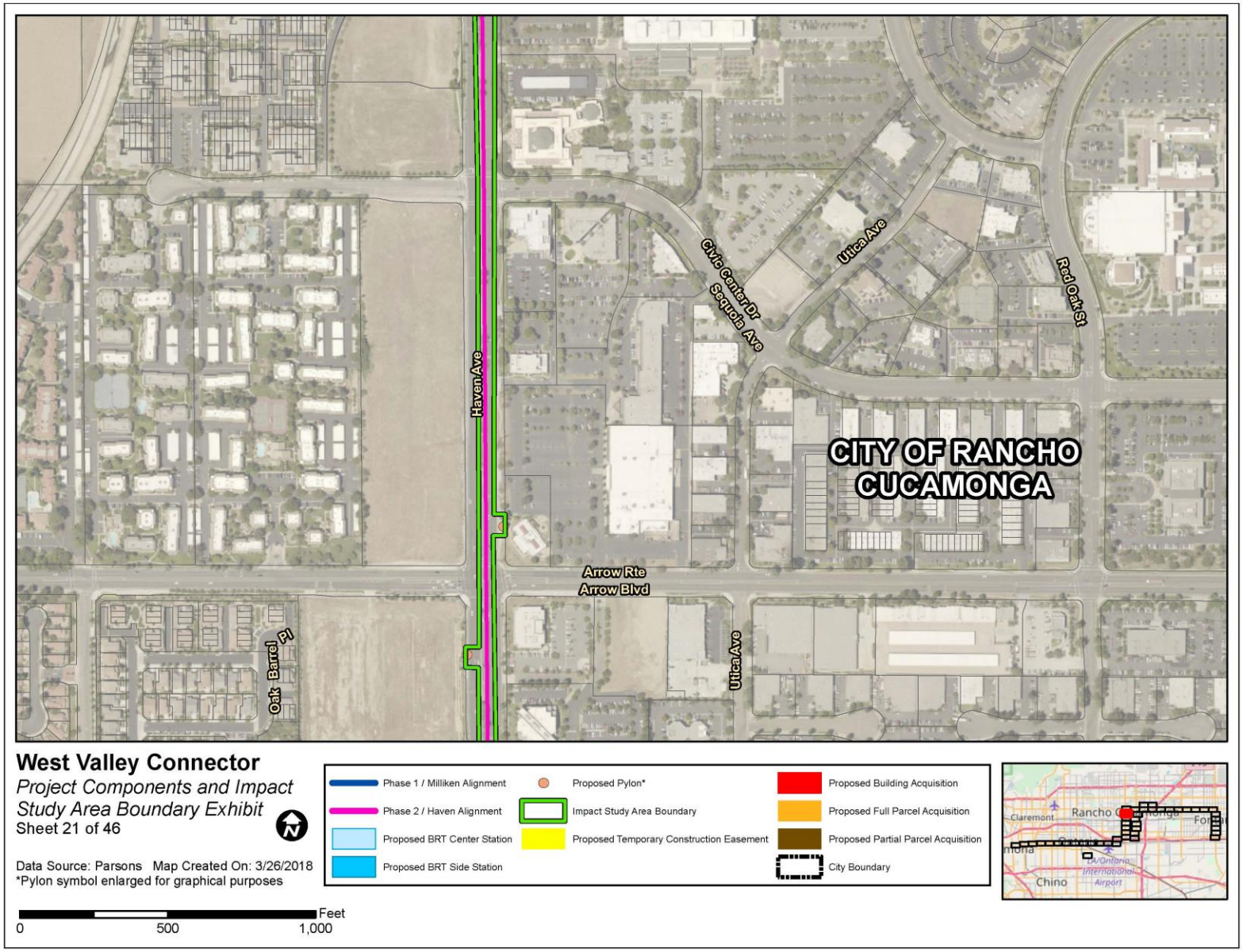

N Center Ave
E Inland Empire St
Inland Empire Blvd
Porsche Way
Concourse
Concours
N Lotus Ave
N Haven Ave
Mercedes Ln
E Shelby St
CITY OF
ONTARIO
I-10
San Bernardino Fwy
West Valley Connector
Project Components and Impact
Study Area Boundary Exhibit
Sheet 16 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario
International
Airport
Feet
0
500
1,000


Enterprise St
Center Ave
Commerce Center Dr
Haven Ave
Utica Ave
CITY OF RANCHO CUCAMONGA
4th St
N Haven Ave
N Center Ave
CITY OF ONTARIO
N Duesenberg Dr
E Concours St
Concourse
Concours
Utica Ave
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 17 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
0
500
1,000


6th St
CITY OF RANCHO CUCAMONGA
Haven Ave
Utica Ave
Trademark Pkwy N
Trademark St
Center Ave
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 18 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
0
500
1,000


Humbolt Ave
Humboldt Ave
8th St
8th St
CITY OF RANCHO CUCAMONGA
Haven Ave
Acacia St
Utica Ave
Center Ave
7th St
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 19 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Chino
Feet
0
500
1,000


Harvest Pl
Plumeria Ct
Yellow Tail
26th St
Center Ave
25th St
Marine Ave
24th St
Humbolt Ave
Humboldt Ave
Haven Ave
Monroe Ct
Utica Ave
Red Oak St
Jersey Blvd
CITY OF RANCHO CUCAMONGA
8th St
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 20 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
0
500
1,000


Haven Ave
Civic Center Dr
Sequoia Ave
Utica Ave
Red Oak St
CITY OF RANCHO CUCAMONGA
Arrow Rte
Arrow Blvd
Utica Ave
Oak Barrel Pl
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 21 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
0
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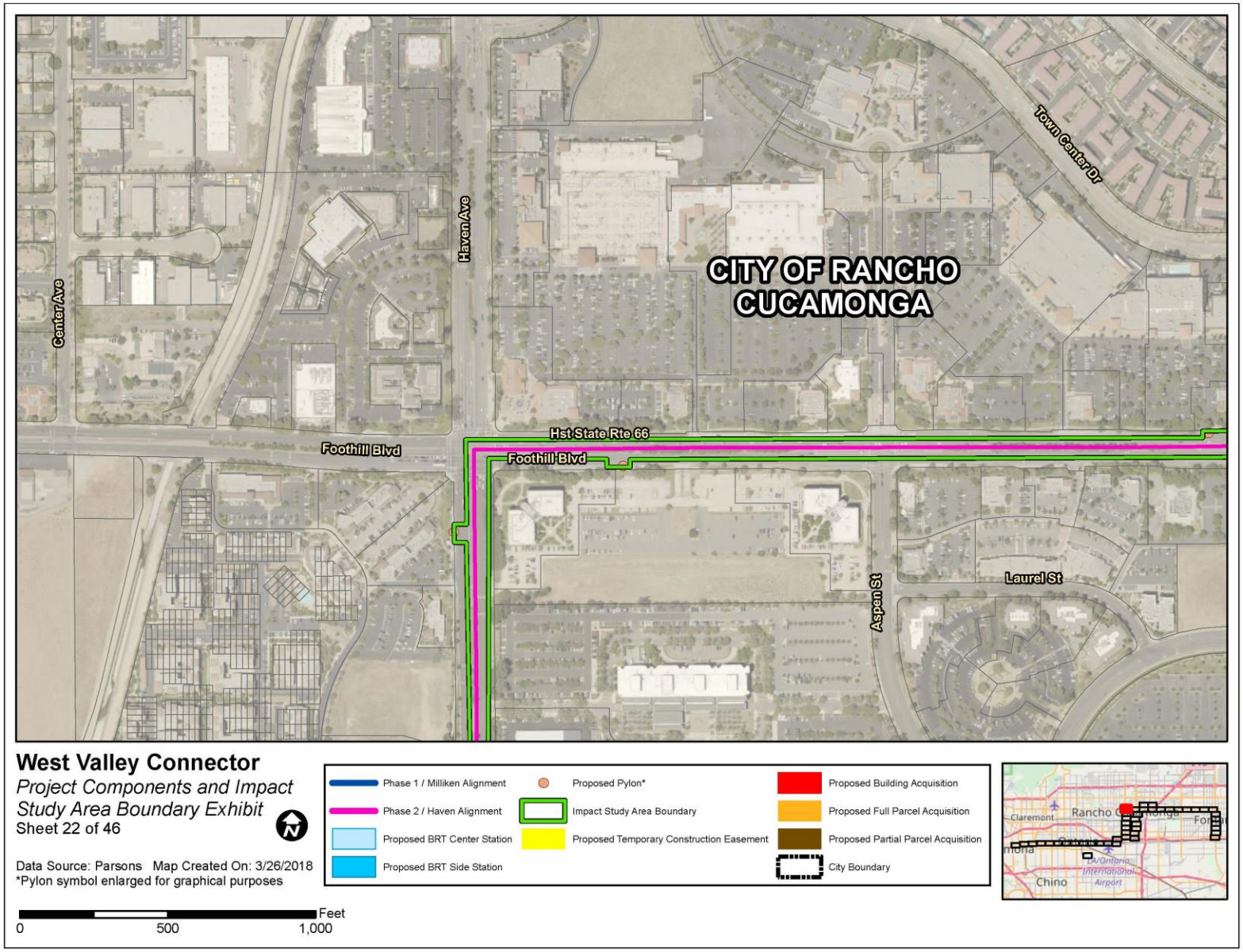
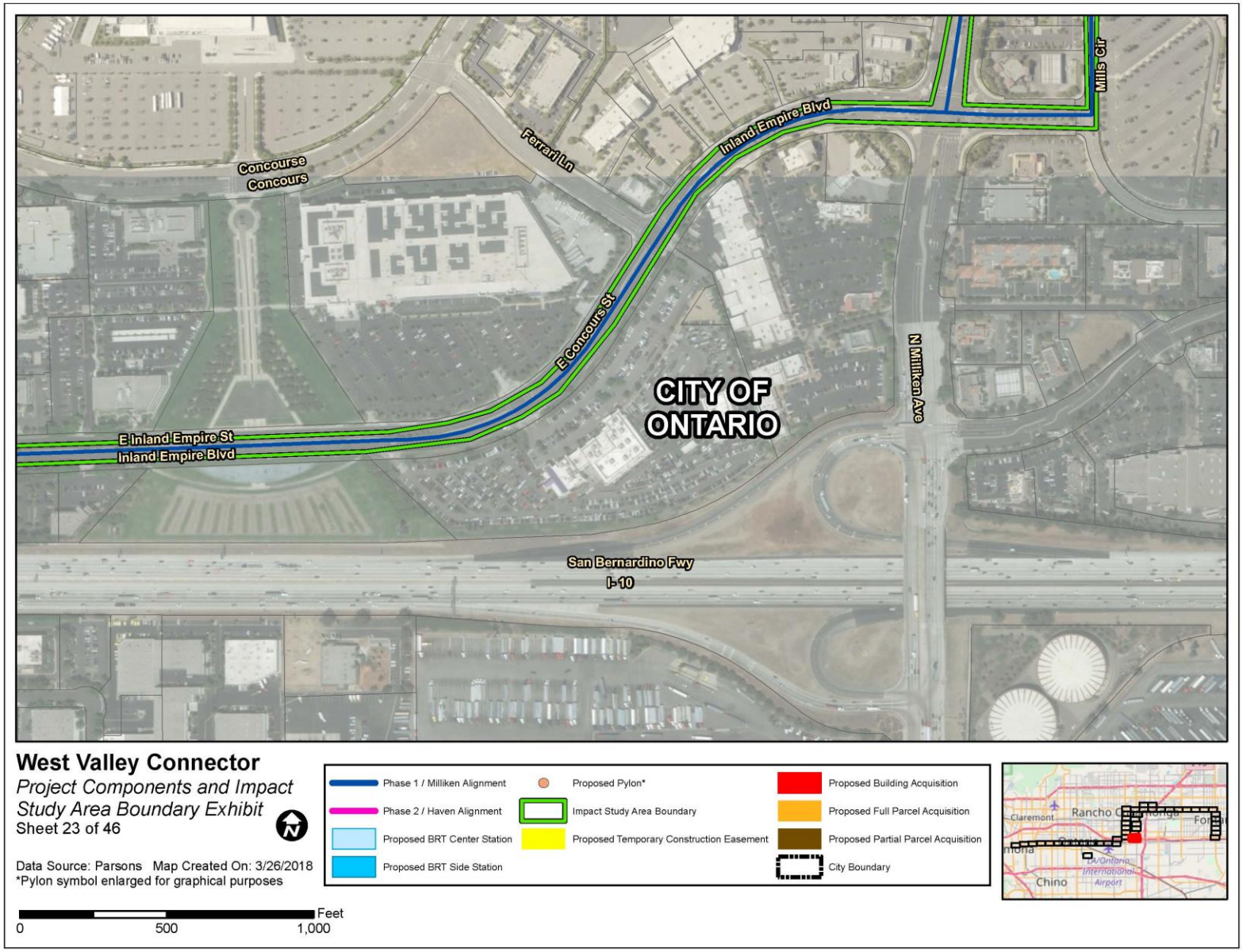
1,000


CITY OF RANCHO CUCAMONGA
Town Center Dr
Haven Ave
Center Ave
Foothill Blvd
Hst State Rte 66
Foothill Blvd
Aspen St
Laurel St
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 22 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
0
500
1,000


Concourse
Concours
Ferrari Ln
Inland Empire Blvd
Mills Cir
E Concours St
CITY OF
ONTARIO
N Milliken Ave
E Inland Empire St
Inland Empire Blvd
San Bernardino Fwy
I-10
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 23 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Feet
0
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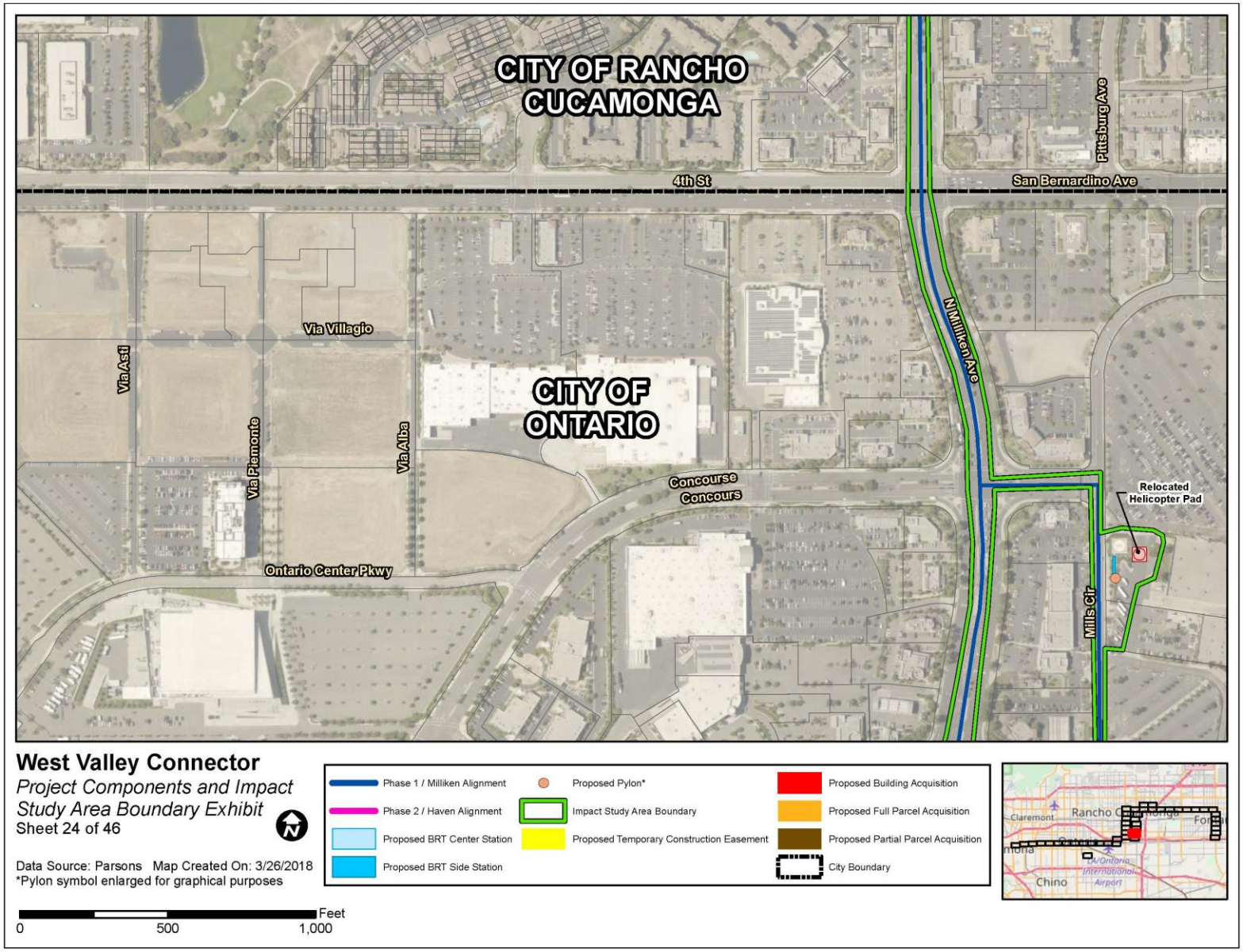
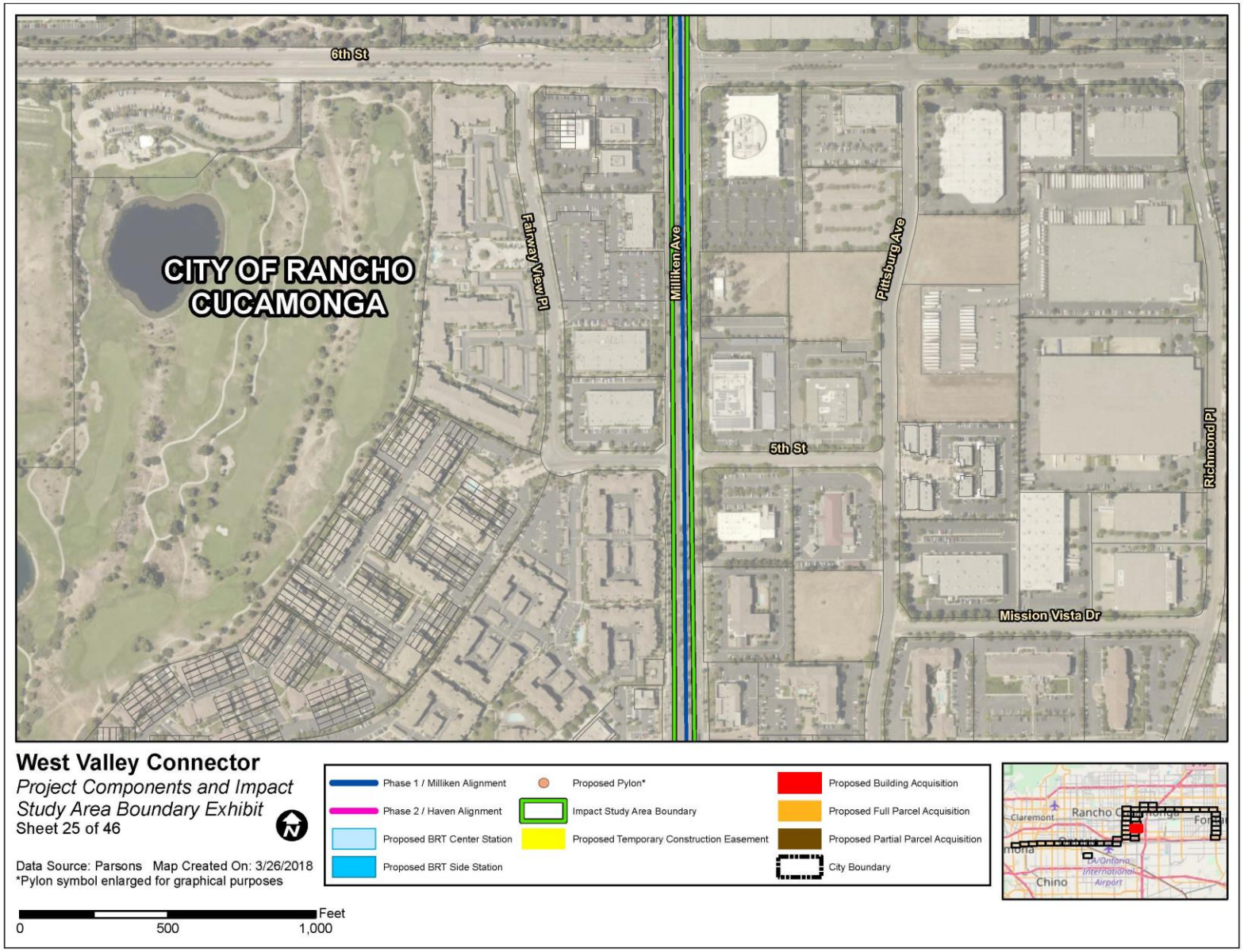
1,000


CITY OF RANCHO CUCAMONGA
CITY OF ONTARIO
4th St
San Bernardino Ave
Pittsburg Ave
N Milliken Ave
Via Villagio
Via Asti
Via Piemonte
Via Alba
Concourse
Concours
Ontario Center Pkwy
Relocated Helicopter Pad
Mills Cir
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 24 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
0
500
1,000


6th St
CITY OF RANCHO CUCAMONGA
Fairway View Pl
Milliken Ave
Pittsburg Ave
5th St
Richmond Pl
Mission Vista Dr
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 25 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
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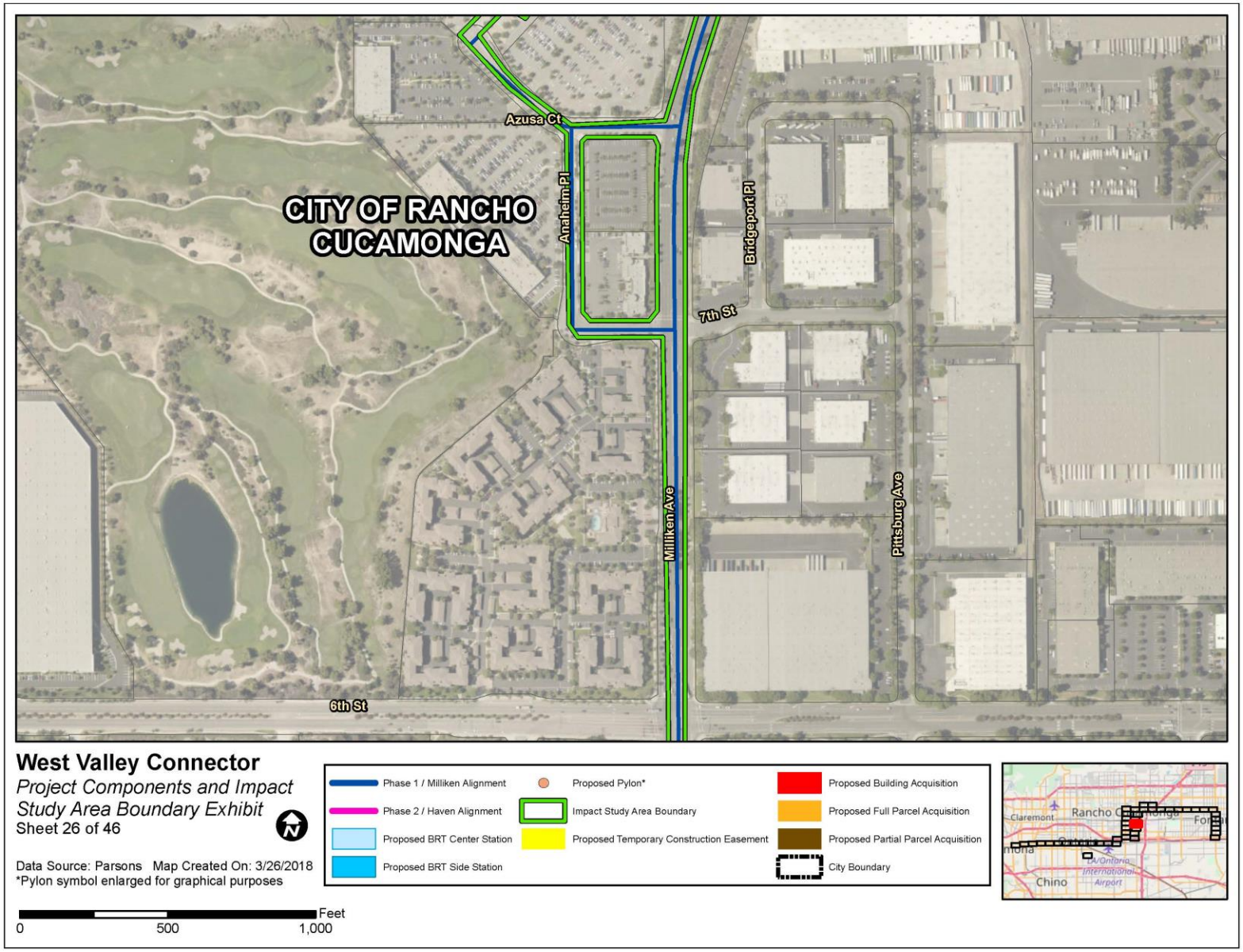
500
1,000


CITY OF RANCHO CUCAMONGA
Azusa Ct
Anaheim Pl
Bridgeport Pl
7th St
Milliken Ave
Pittsburg Ave
6th St
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 26 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
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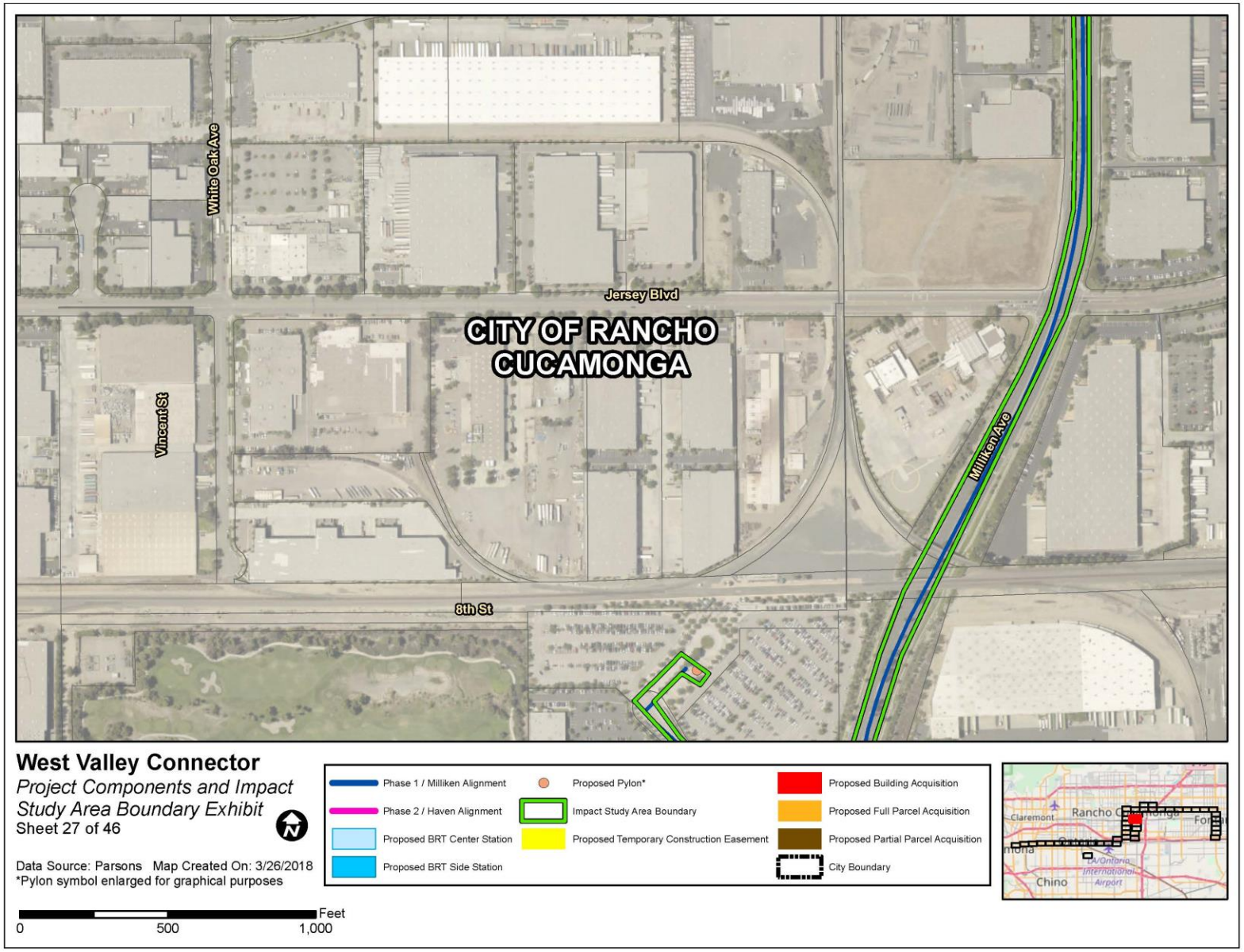
White Oak Ave
Jersey Blvd
CITY OF RANCHO CUCAMONGA
Vineyard St
Milliken Ave
8th St
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 27 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
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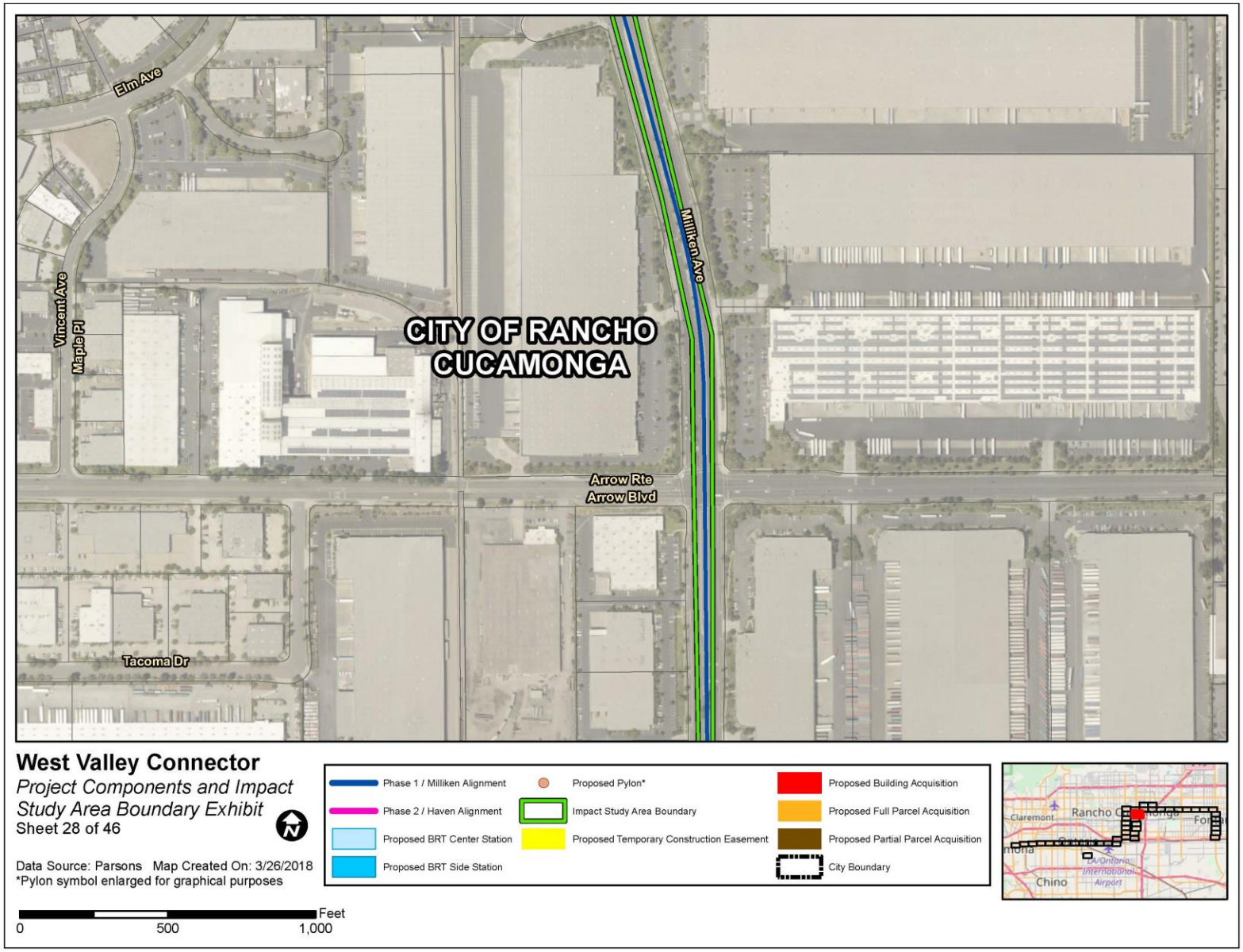
1,000


Elm Ave
Vincent Ave
Maple Pl
CITY OF RANCHO CUCAMONGA
Milliken Ave
Arrow Rte
Arrow Blvd
Tacoma Dr
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 28 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Feet
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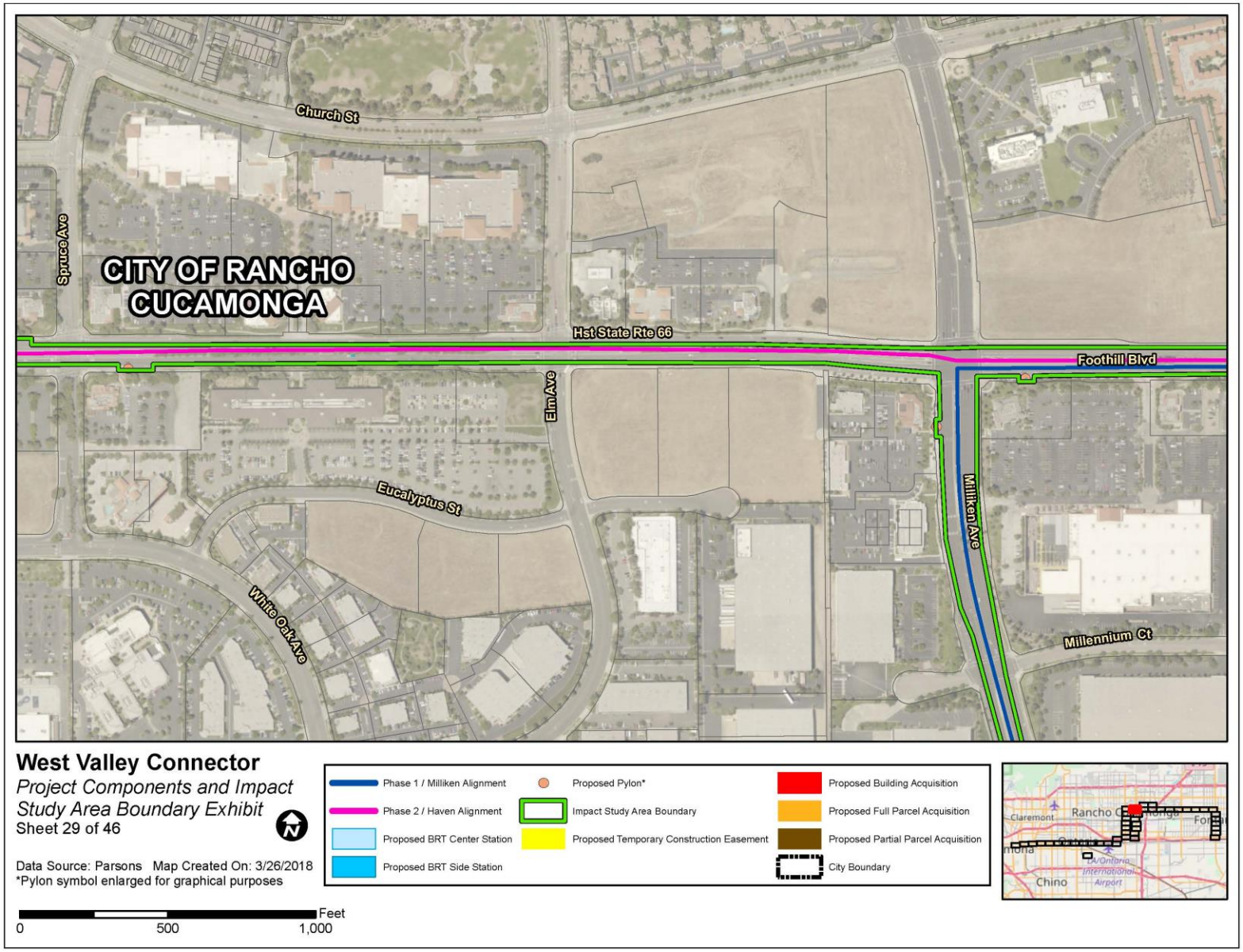
Church St
Spruce Ave
CITY OF RANCHO CUCAMONGA
Hst State Rte 66
Foothill Blvd
Elm Ave
Eucalyptus St
Milliken Ave
White Oak Ave
Millennium Ct
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 29 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho Cucamonga
Chino
Ontario International Airport
Feet
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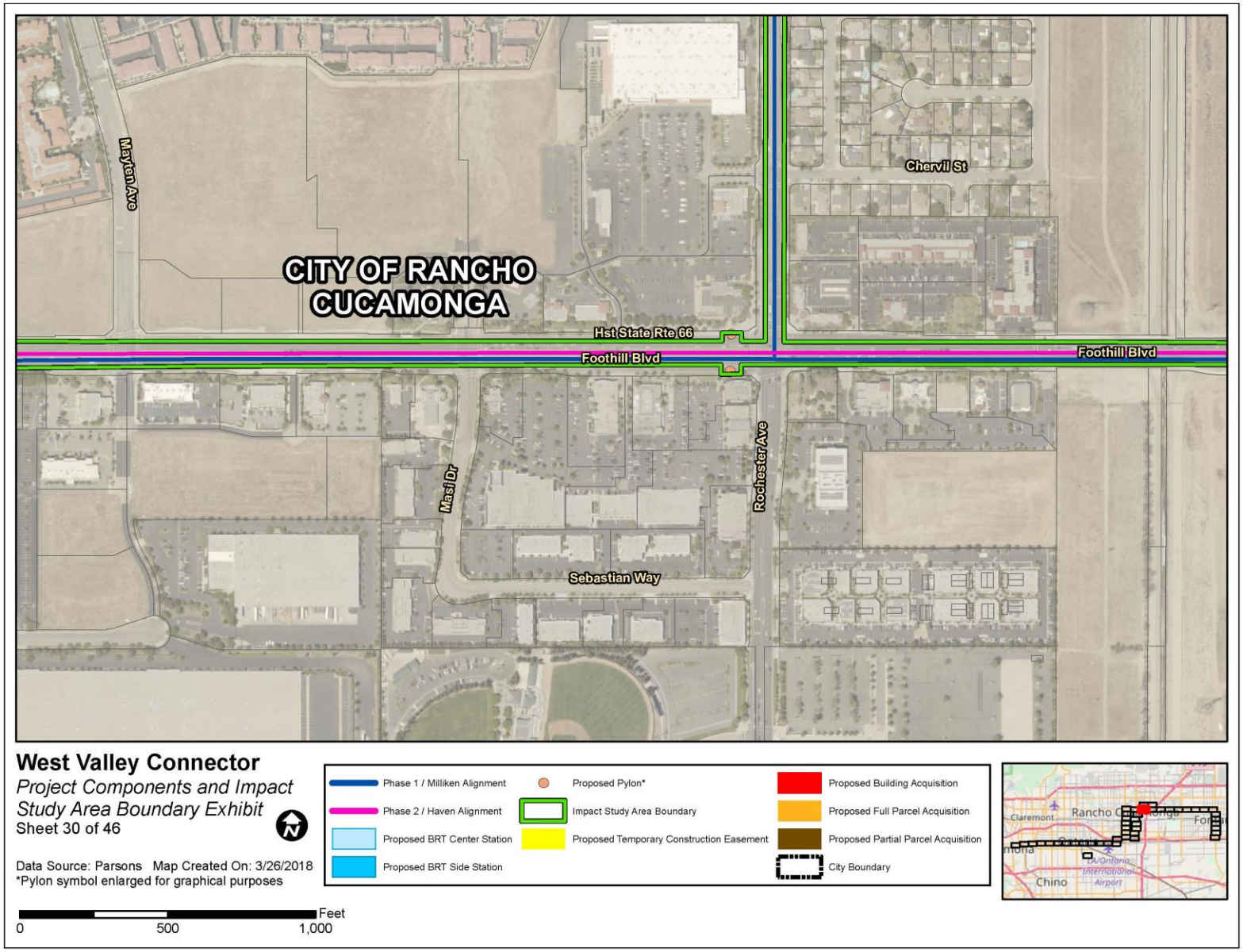
1,000


Mayten Ave
CITY OF RANCHO CUCAMONGA
Chervil St
Hst State Rte 66
Foothill Blvd
Foothill Blvd
Masi Dr
Rochester Ave
Sebastian Way
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 30 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
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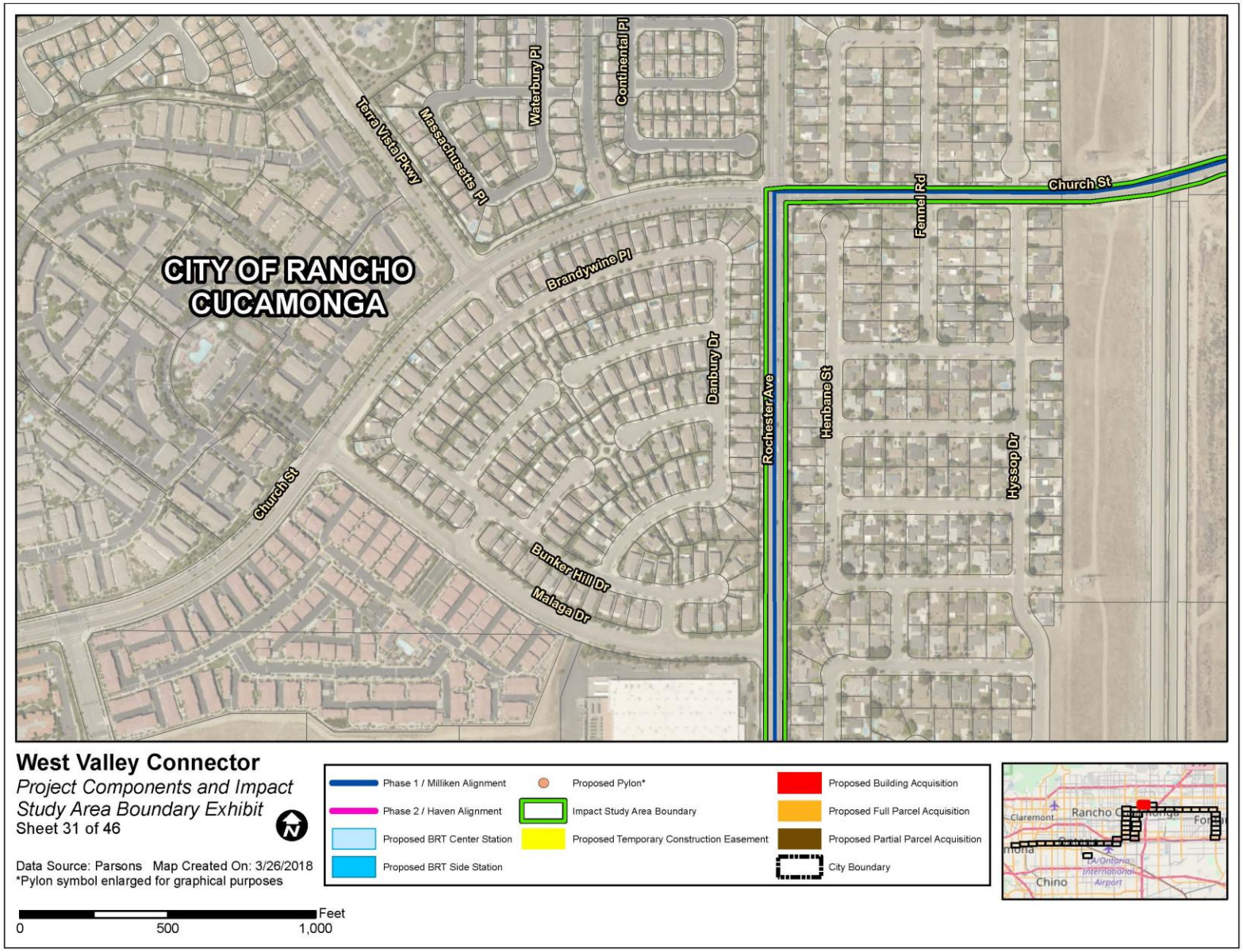
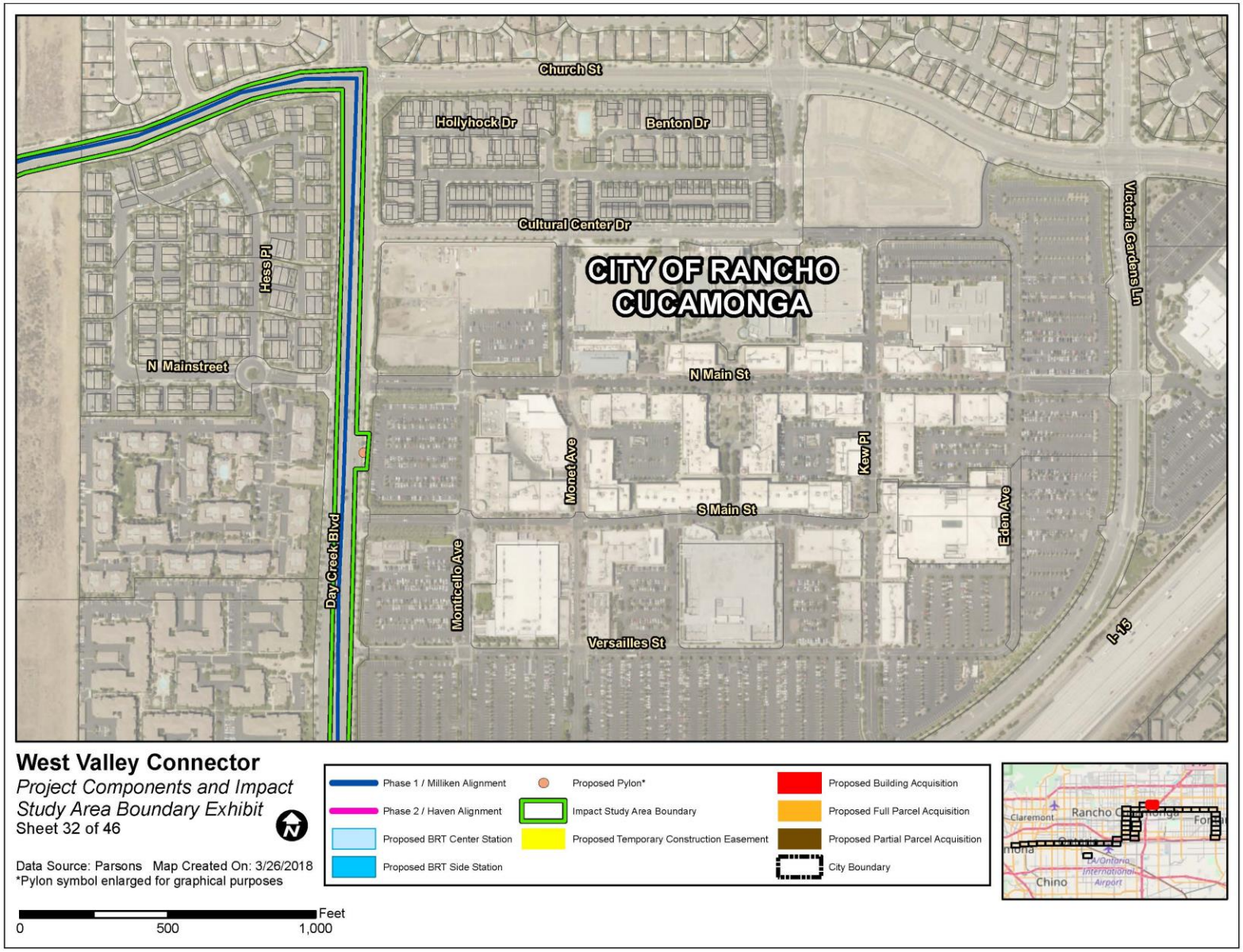

CITY OF RANCHO CUCAMONGA
Terra Vista Pkwy
Massachusetts Pl
Waterbury Pl
Continental Pl
Brandywine Pl
Danbury Dr
Rochester Ave
Henbane St
Fennel Rd
Church St
Hyssop Dr
Church St
Bunker Hill Dr
Malaga Dr
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 31 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
0
500
1,000
Feet


Church St
Hollyhock Dr
Benton Dr
Cultural Center Dr
Victoria Gardens Ln
Hess Pl
CITY OF RANCHO CUCAMONGA
N Mainstreet
N Main St
Monet Ave
Kew Pl
S Main St
Eden Ave
Day Creek Blvd
Monticello Ave
Versailles St
I-15
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 32 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
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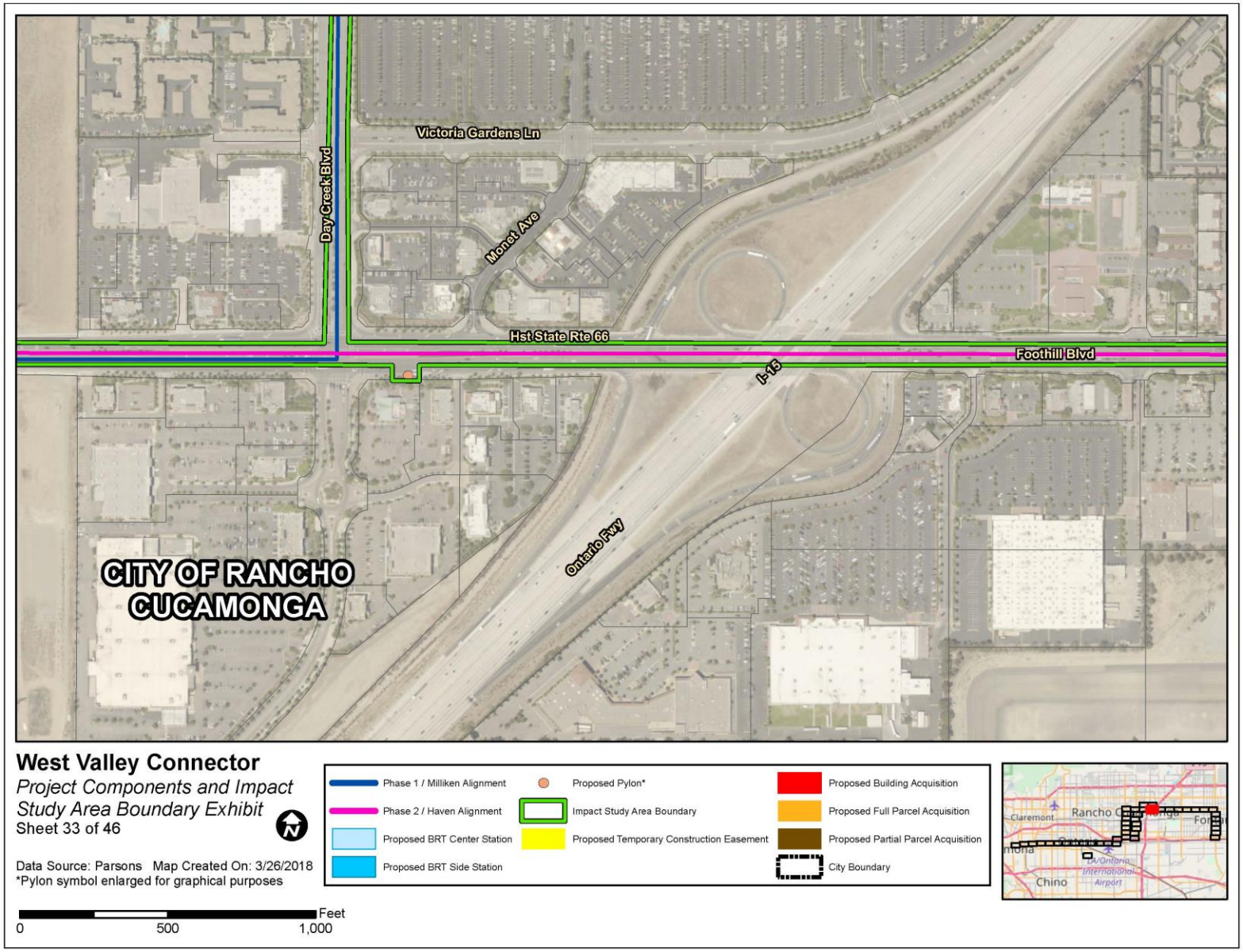
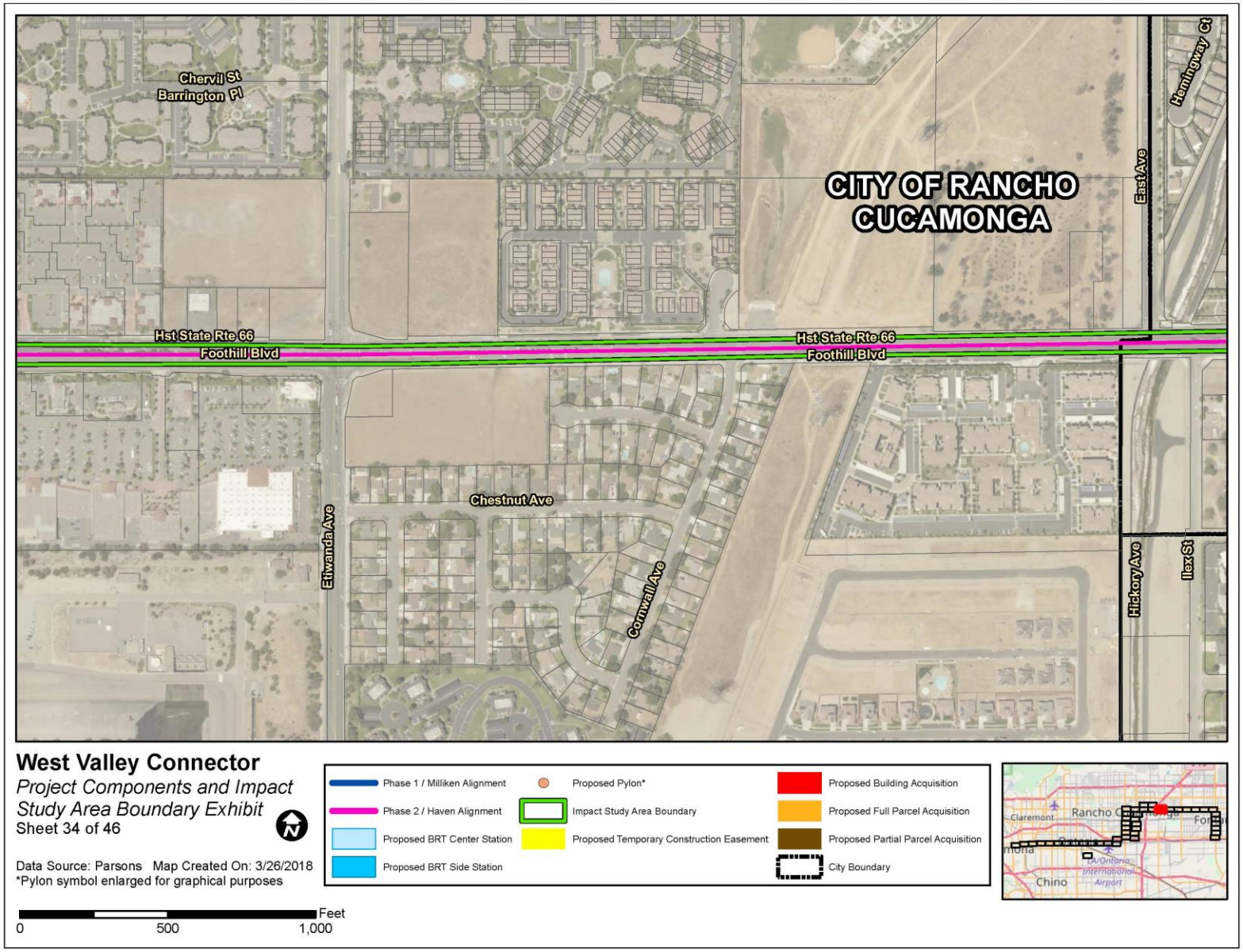
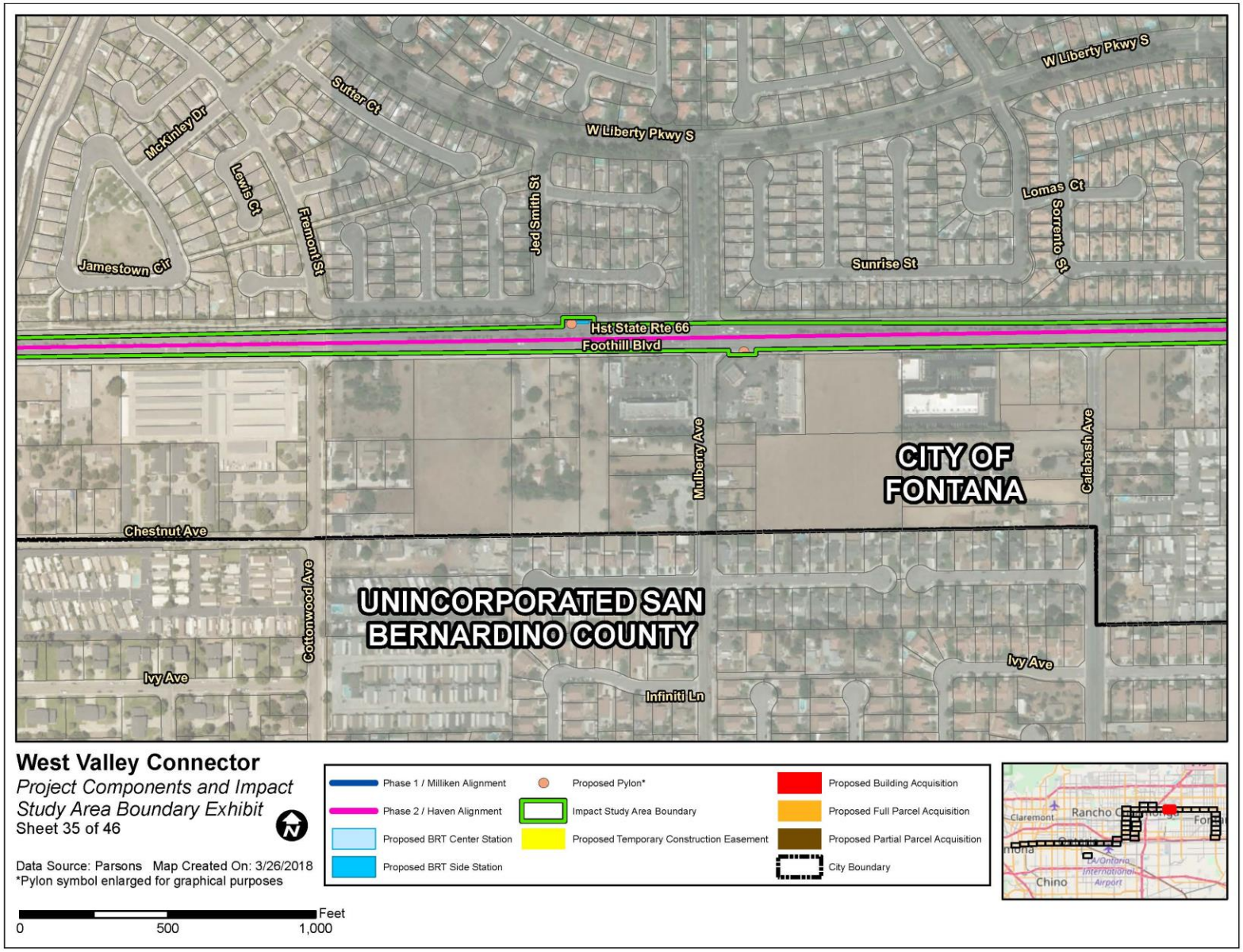
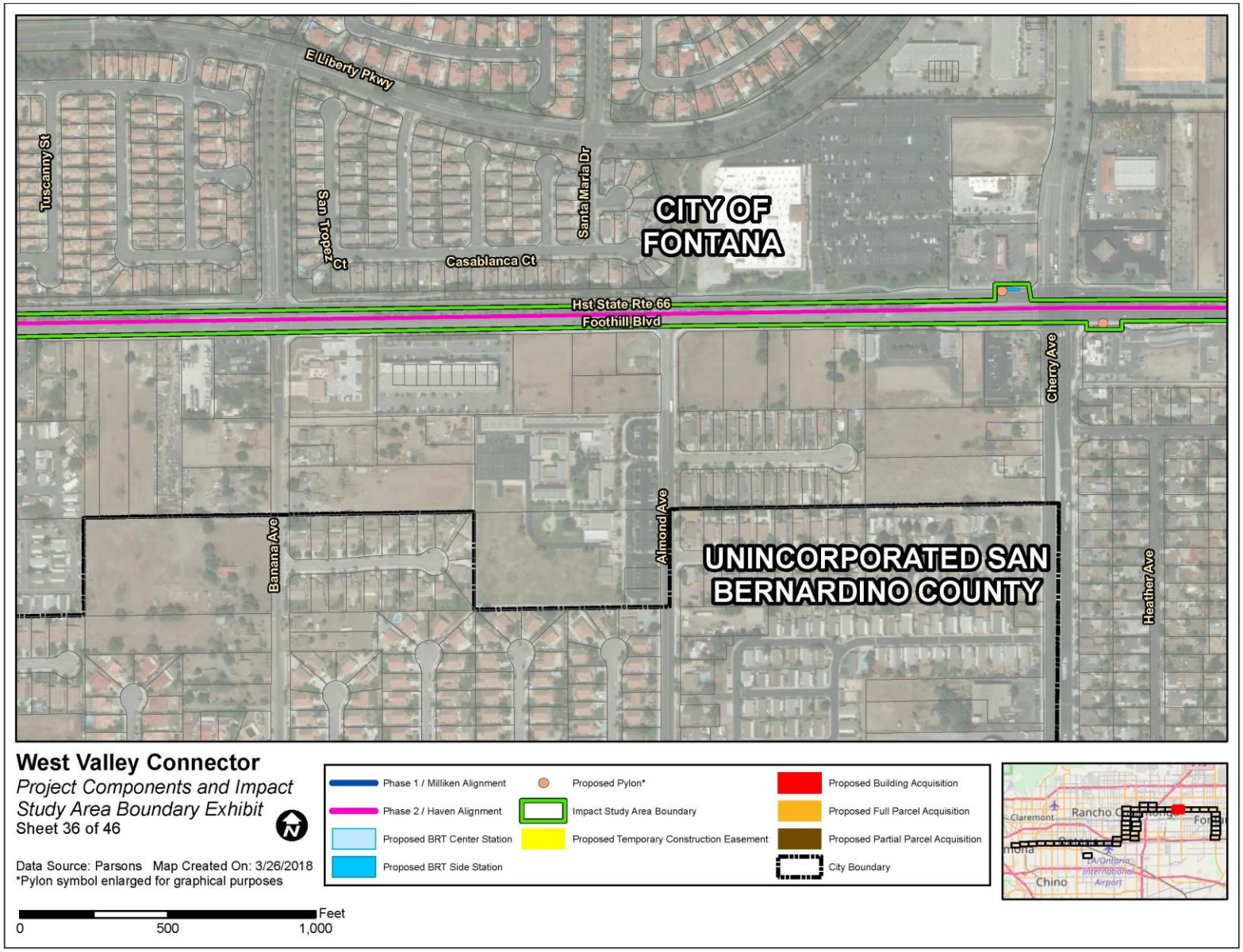
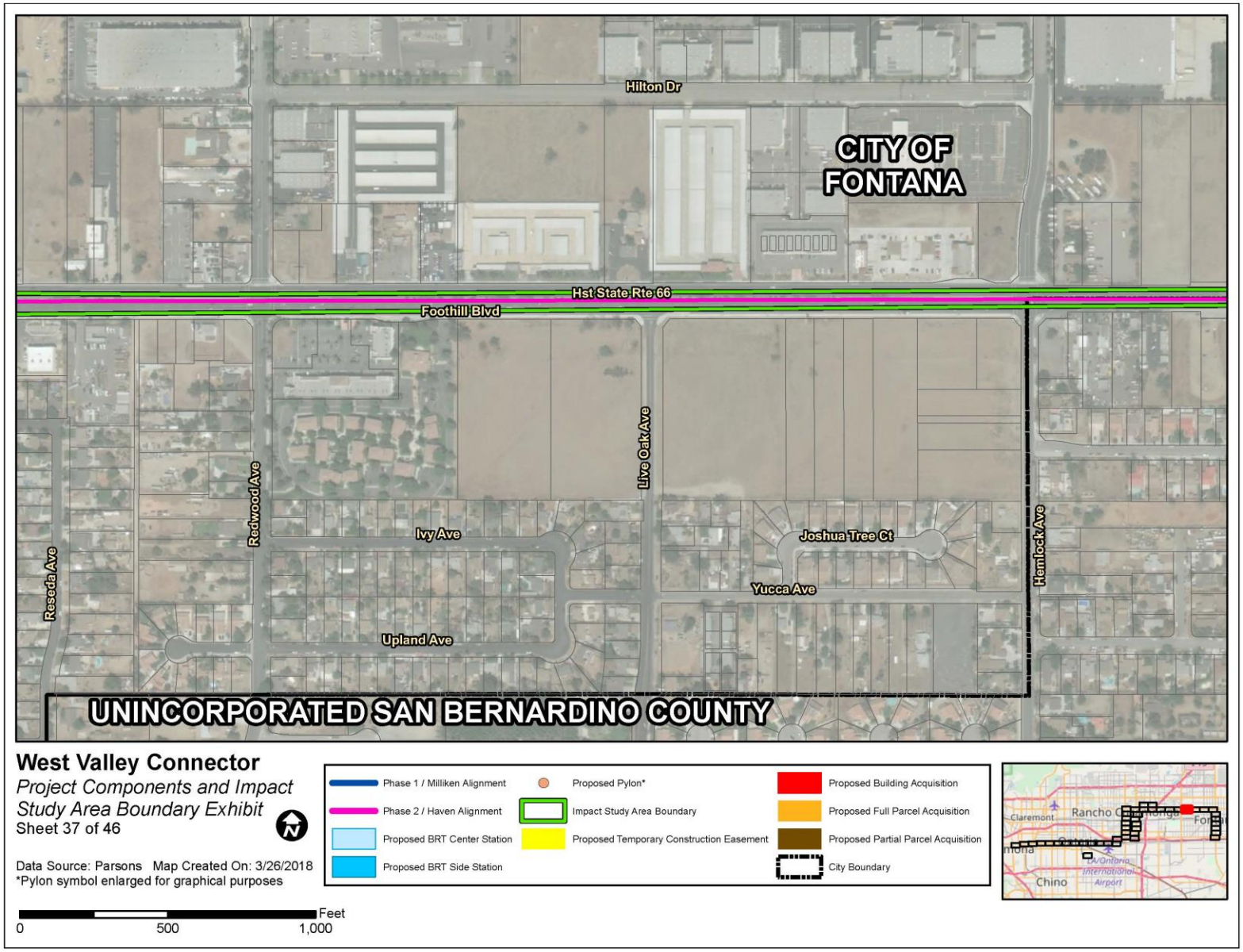
500
1,000

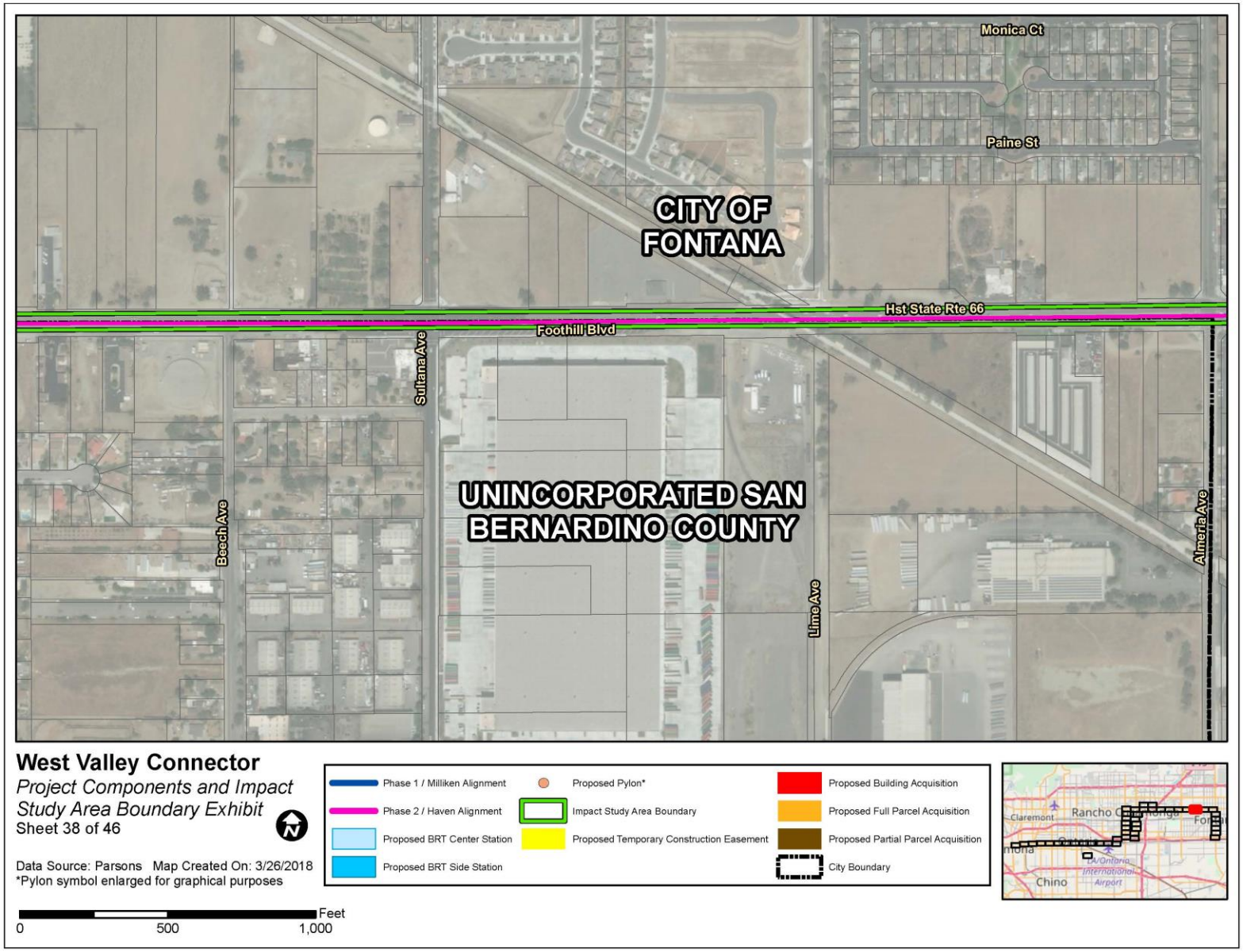

Victoria Gardens Ln
Day Creek Blvd
Monet Ave
Hst State Rte 66
Foothill Blvd
I-15
Ontario Fwy
CITY OF RANCHO CUCAMONGA
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 33 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
0
500
1,000

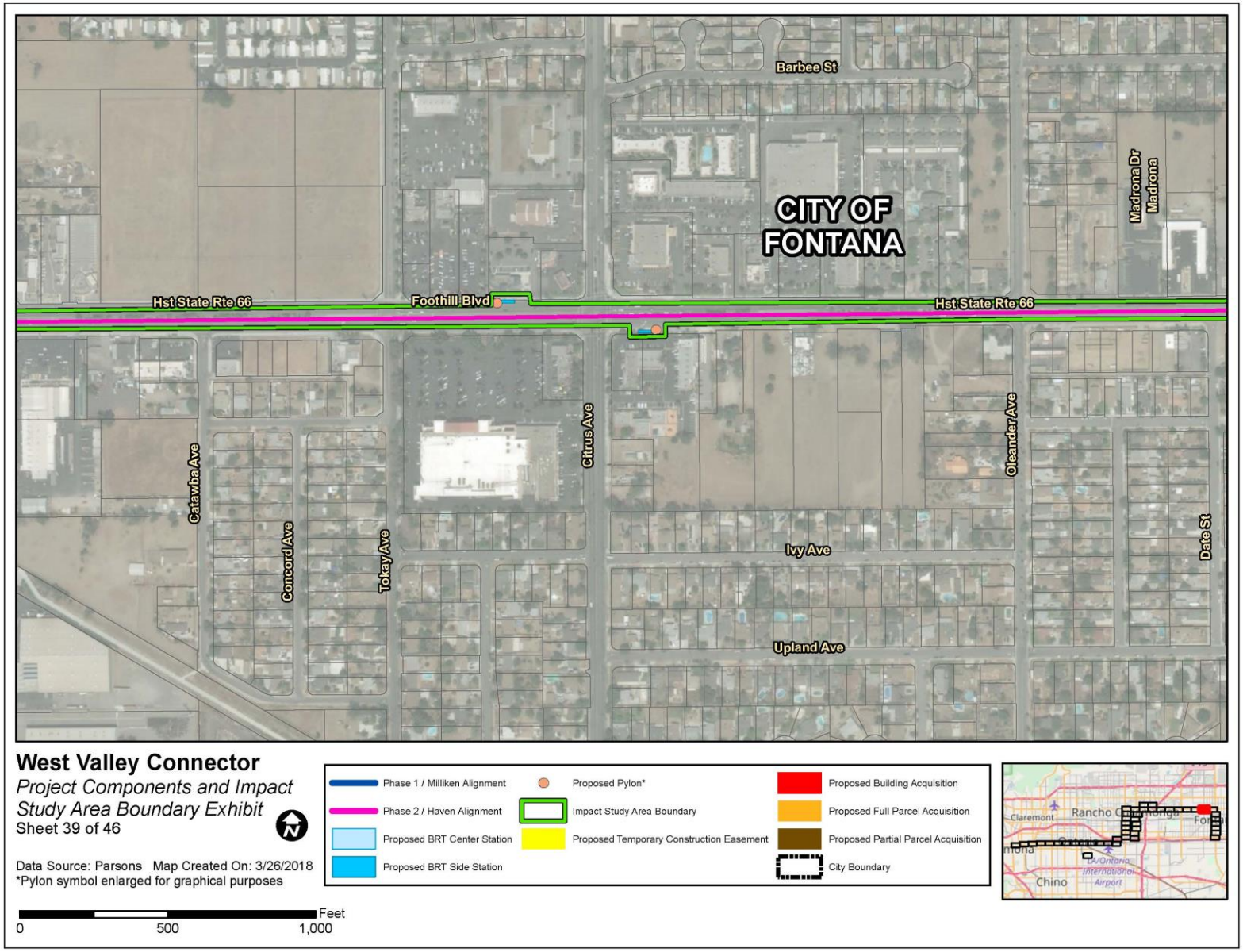

Chervil St
Barrington Pl
CITY OF RANCHO CUCAMONGA
East Ave
Hemingway Ct
Hst State Rte 66
Foothill Blvd
Hst State Rte 66
Foothill Blvd
Chestnut Ave
Etiwanda Ave
Cornwall Ave
Hickory Ave
Ilex St
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 34 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
0
500
1,000

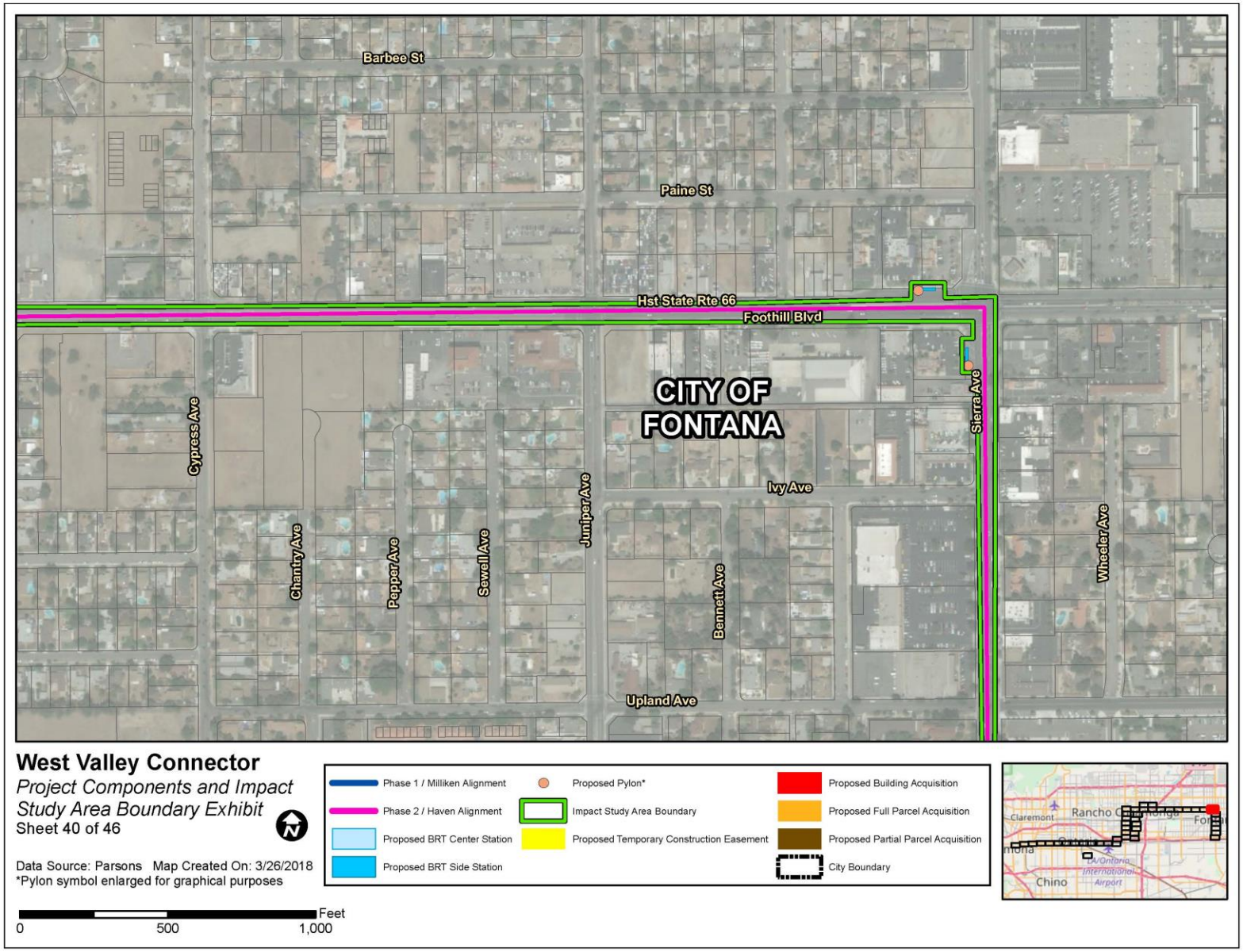

W Liberty Pkwy S
Sutter Ct
McKinley Dr
W Liberty Pkwy S
Lewis Ct
Fremont St
Jed Smith St
Lomas Ct
Sonoma St
Jamestown Cir
Sunrise St
Hst State Rte 66
Foothill Blvd
Mulberry Ave
CITY OF FONTANA
Calabash Ave
Chestnut Ave
Cottonwood Ave
UNINCORPORATED SAN BERNARDINO COUNTY
Ivy Ave
Infiniti Ln
Ivy Ave
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 35 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Feet
0
500
1,000

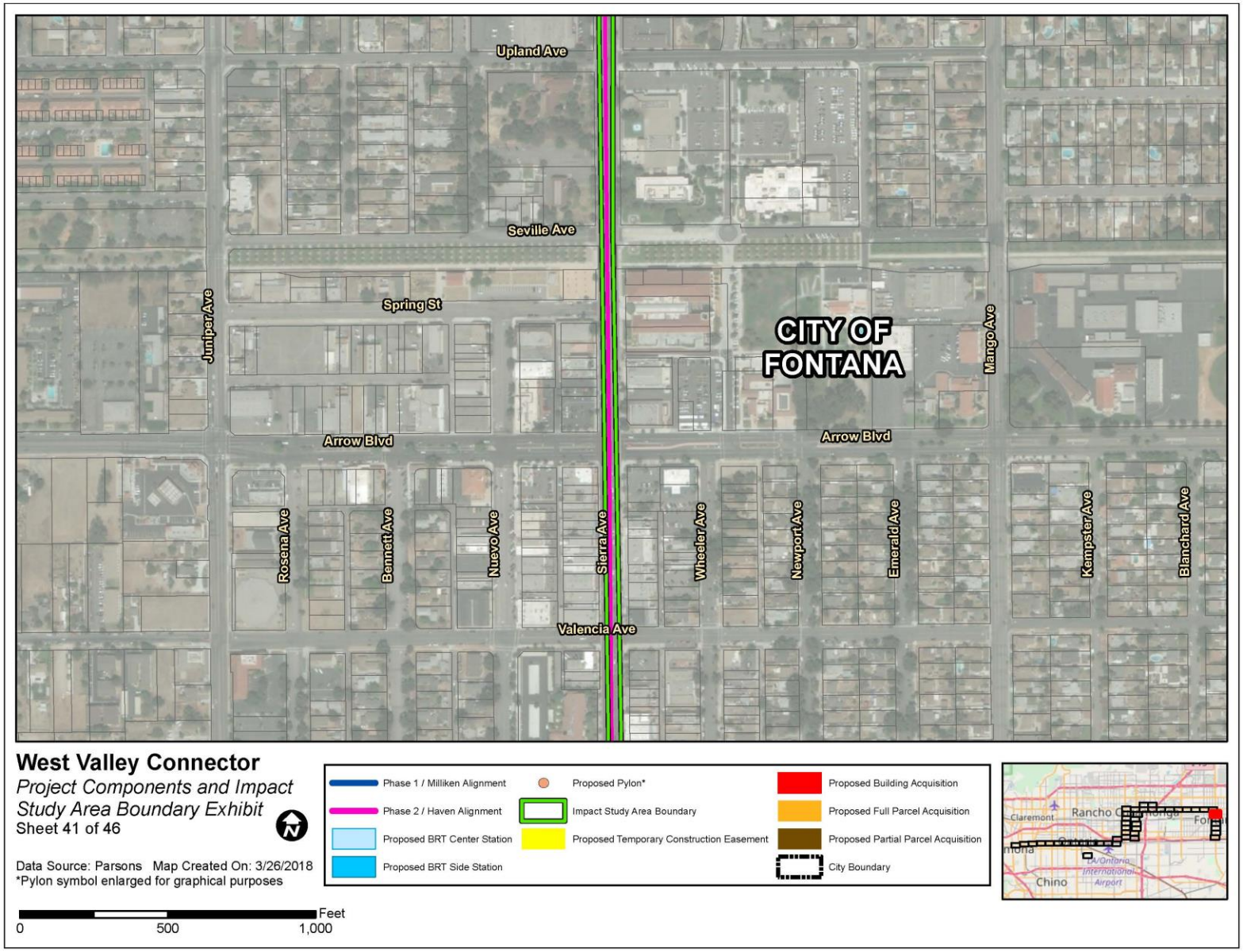

E Liberty Pkwy
Tuscanny St
San Tropez Ct
Casablanca Ct
Santa Maria Dr
CITY OF FONTANA
Hst State Rte 66
Foothill Blvd
Cherry Ave
Banana Ave
Almond Ave
UNINCORPORATED SAN BERNARDINO COUNTY
Heather Ave
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 36 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
0
500
1,000

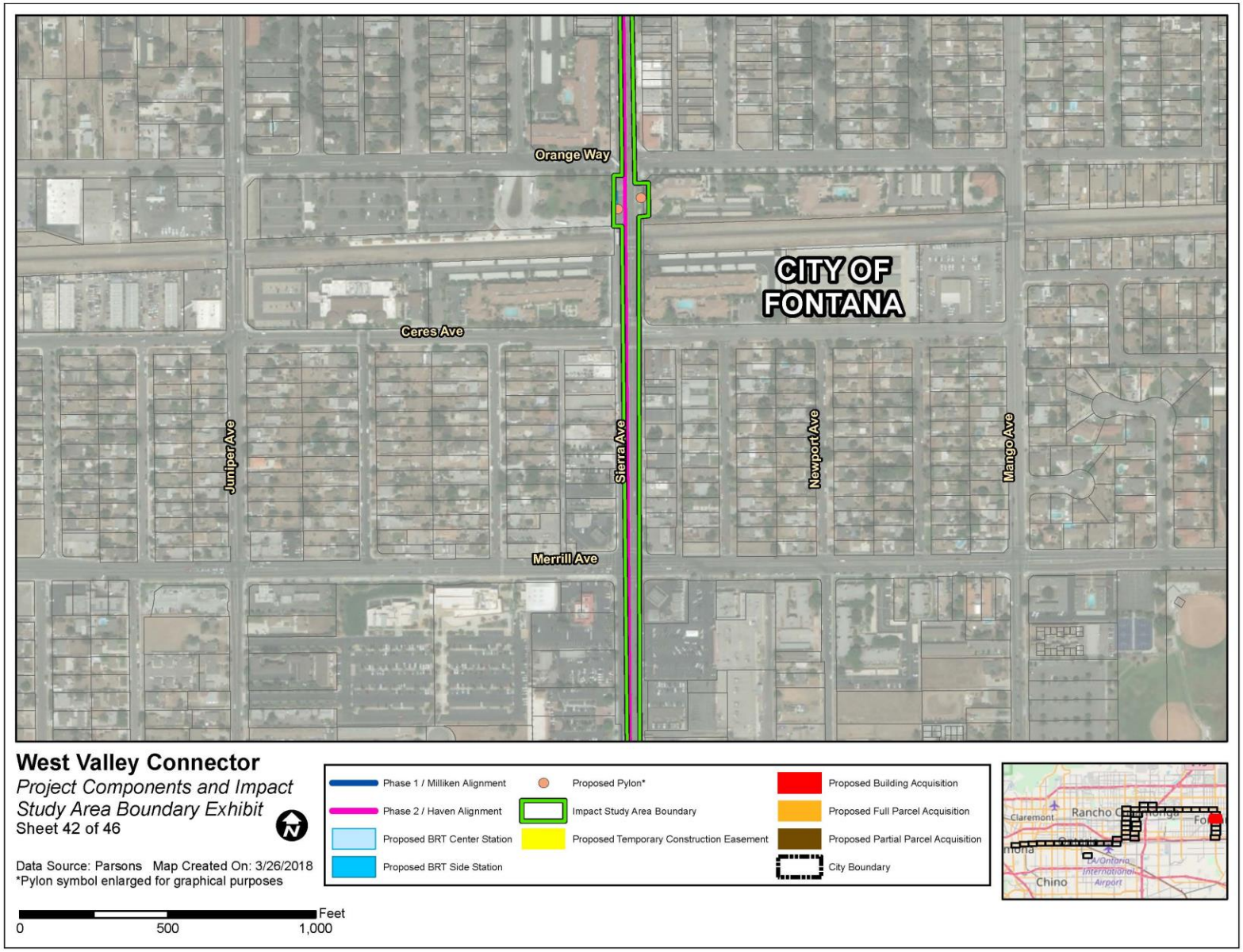

Hilton Dr
CITY OF FONTANA
Hst State Rte 66
Foothill Blvd
Live Oak Ave
Redwood Ave
Reseda Ave
Ivy Ave
Joshua Tree Ct
Hemlock Ave
Yucca Ave
Upland Ave
UNINCORPORATED SAN BERNARDINO COUNTY
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 37 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Chino
Feet
0
500
1,000

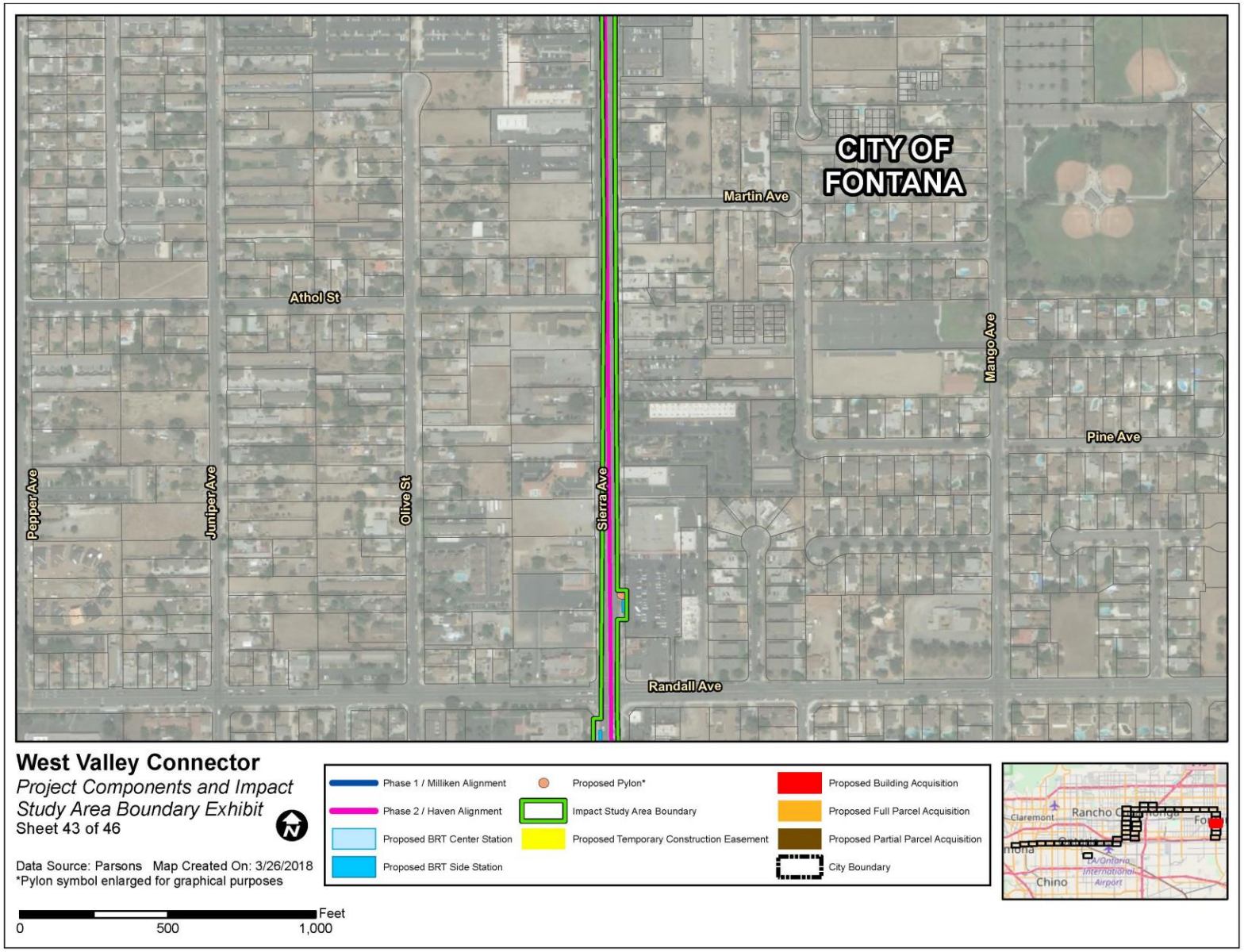

Monica Ct
Paine St
CITY OF FONTANA
Hst State Rte 66
Foothill Blvd
Sultana Ave
Beech Ave
UNINCORPORATED SAN BERNARDINO COUNTY
Lime Ave
Almeria Ave
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 38 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Feet
0
500
1,000

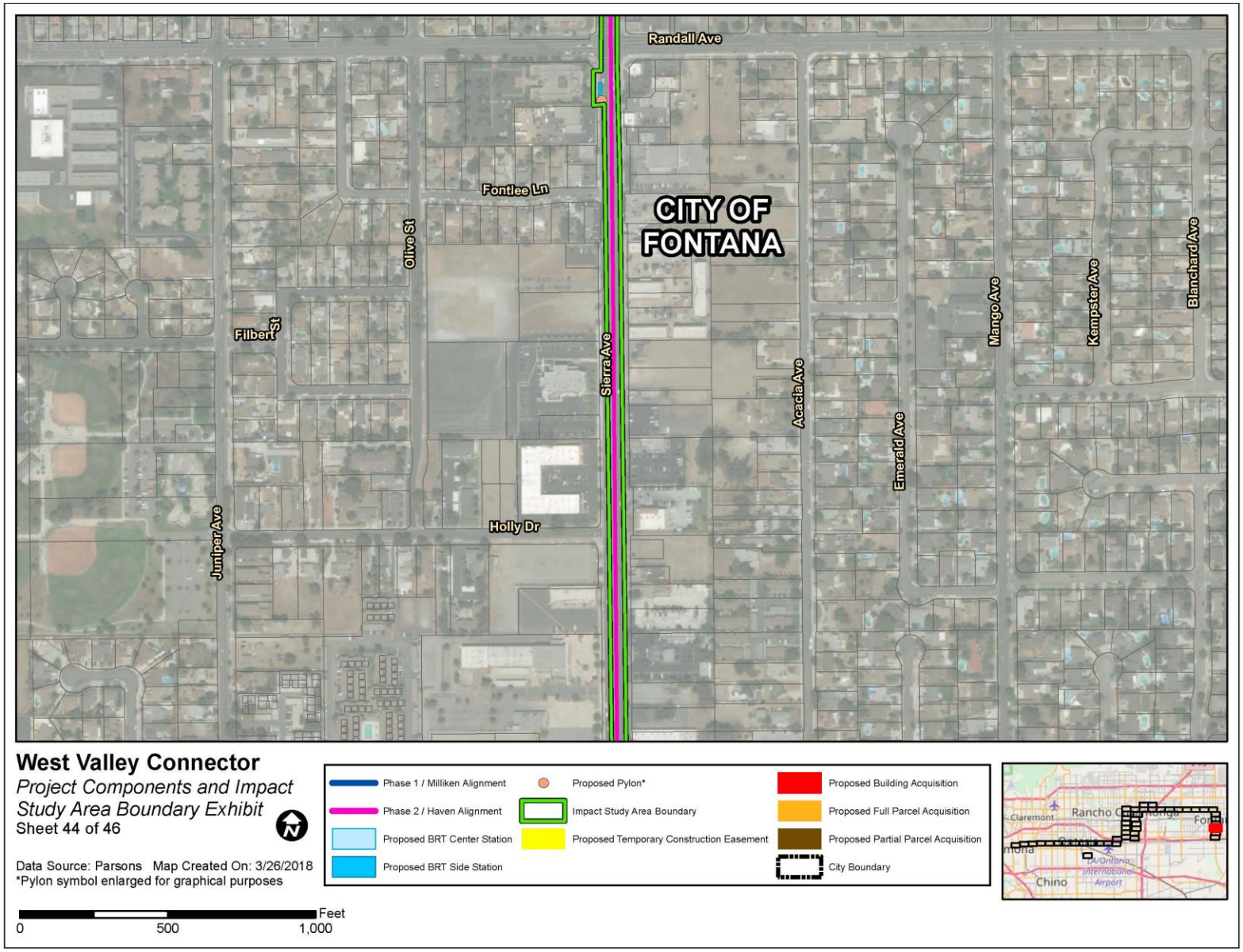

Barbee St
CITY OF FONTANA
Madrona Dr
Madrona
Hst State Rte 66
Foothill Blvd
Hst State Rte 66
Citrus Ave
Oleander Ave
Catawba Ave
Concord Ave
Tokay Ave
Ivy Ave
Date St
Upland Ave
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 39 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
0
500
1,000

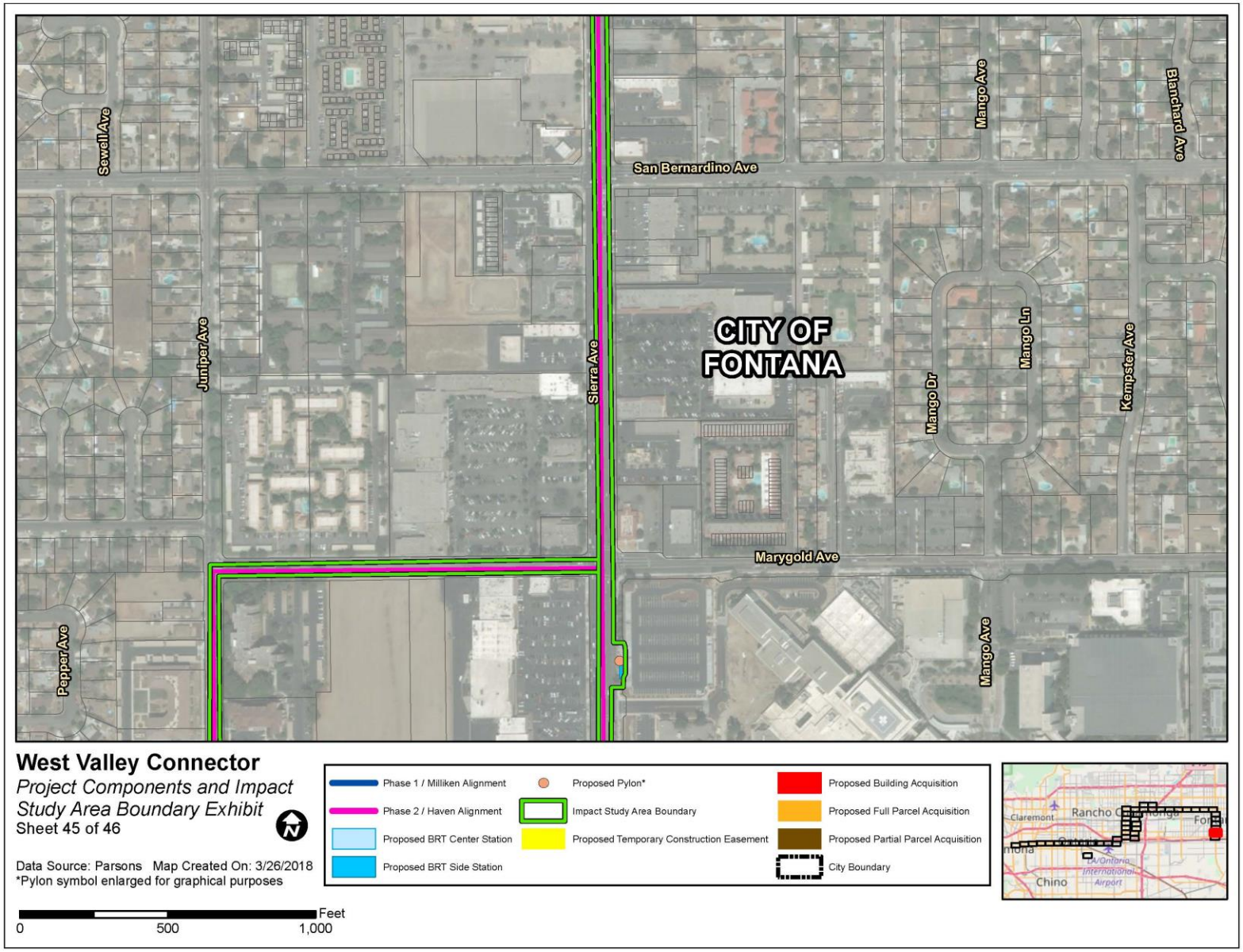

Barbee St
Paine St
Hst State Rte 66
Foothill Blvd
CITY OF
FONTANA
Cypress Ave
Chantry Ave
Pepper Ave
Sewell Ave
Juniper Ave
Ivy Ave
Bennett Ave
Sierra Ave
Wheeler Ave
Upland Ave
West Valley Connector
Project Components and Impact
Study Area Boundary Exhibit
Sheet 40 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario
International
Airport
0
500
1,000
Feet

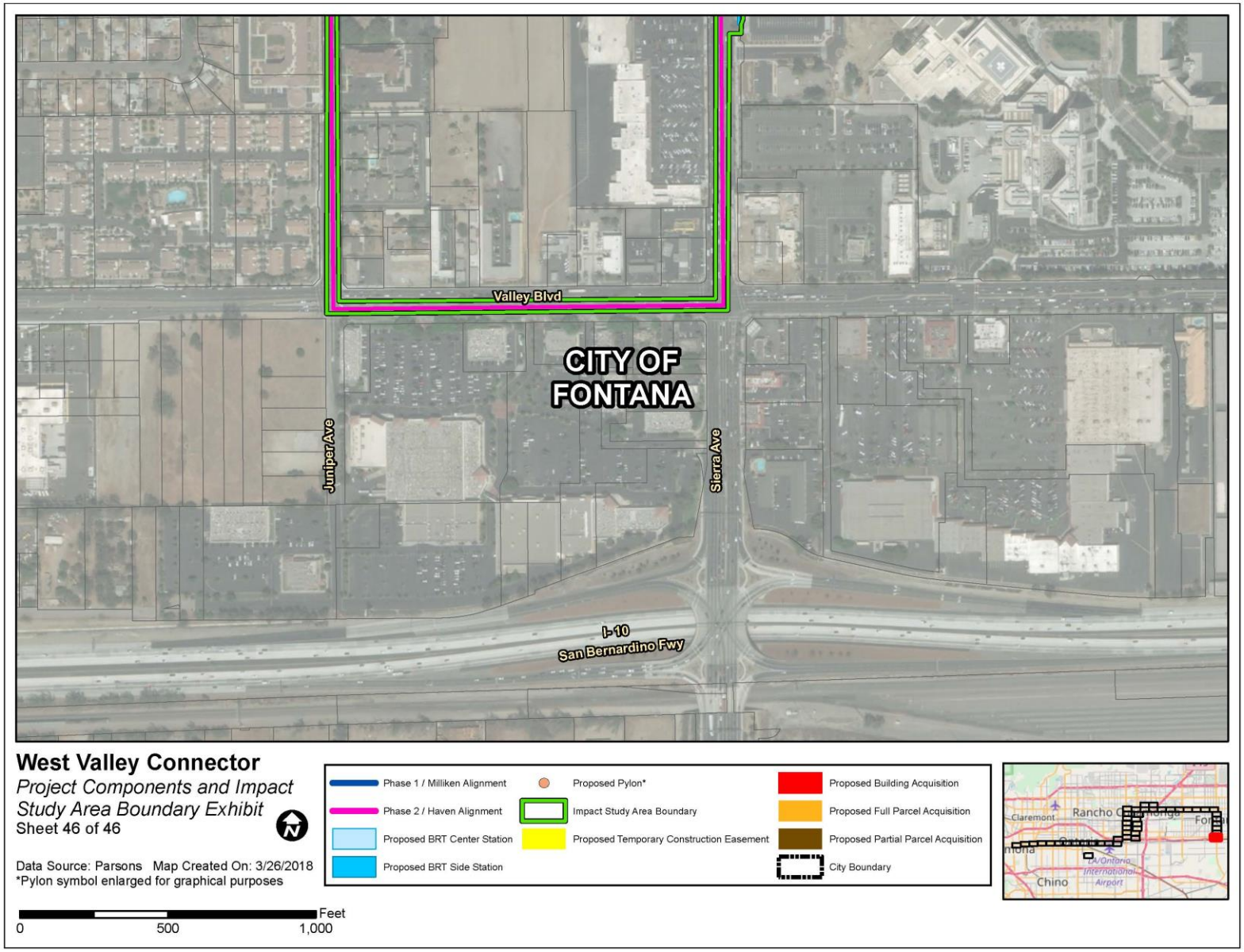

Upland Ave
Seville Ave
Spring St
Juniper Ave
CITY OF FONTANA
Mango Ave
Arrow Blvd
Arrow Blvd
Rosena Ave
Bennett Ave
Nuevo Ave
Sierra Ave
Wheeler Ave
Newport Ave
Emerald Ave
Kempster Ave
Blanchard Ave
Valencia Ave
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 41 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Chino
Feet
0
500
1,000

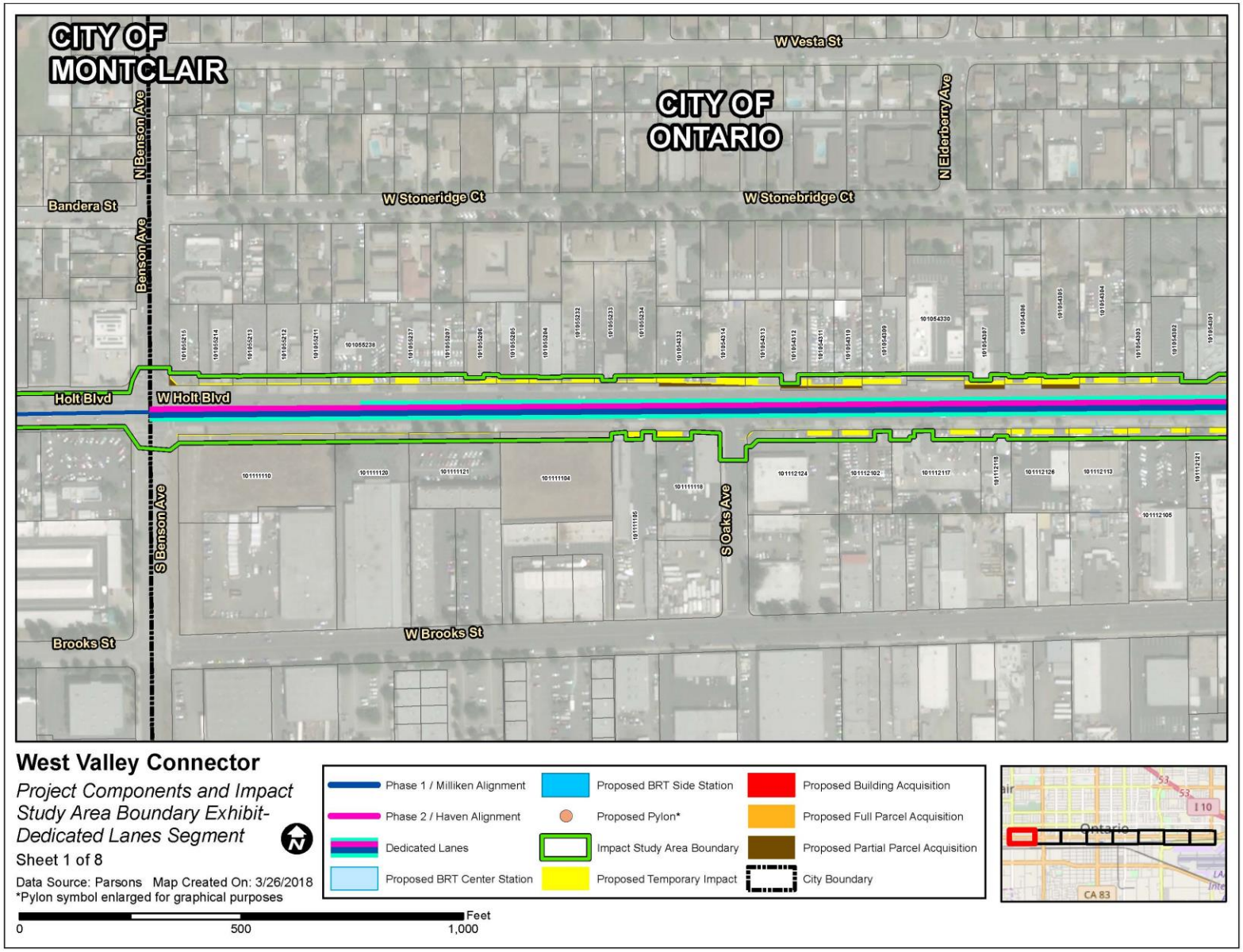

Orange Way
CITY OF FONTANA
Ceres Ave
Juniper Ave
Sierra Ave
Newport Ave
Mango Ave
Merrill Ave
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 42 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Chino
Feet
0
500
1,000

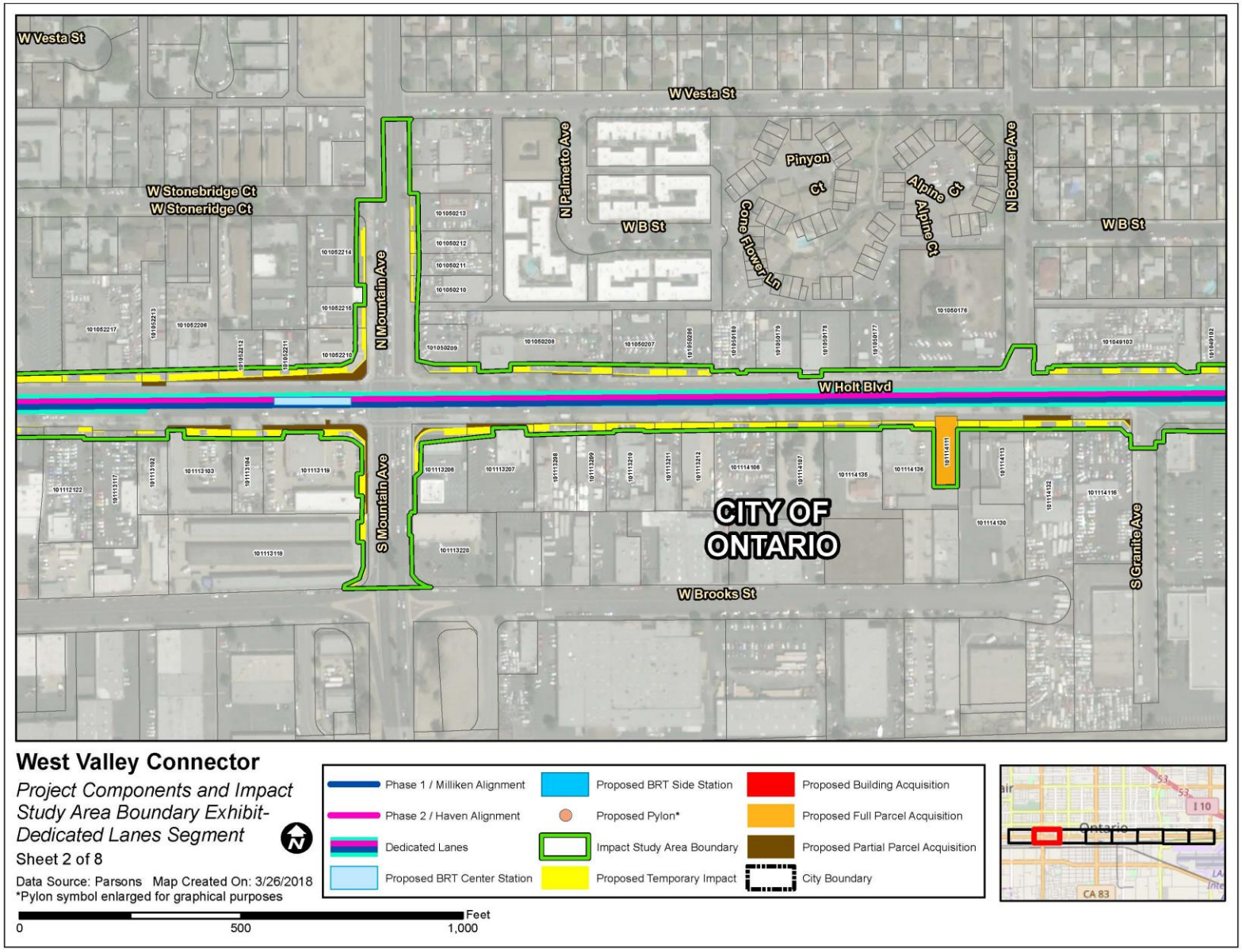

CITY OF FONTANA
Martin Ave
Athol St
Mango Ave
Pine Ave
Pepper Ave
Juniper Ave
Olive St
Sierra Ave
Randall Ave
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 43 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Chino
Feet
0
500
1,000

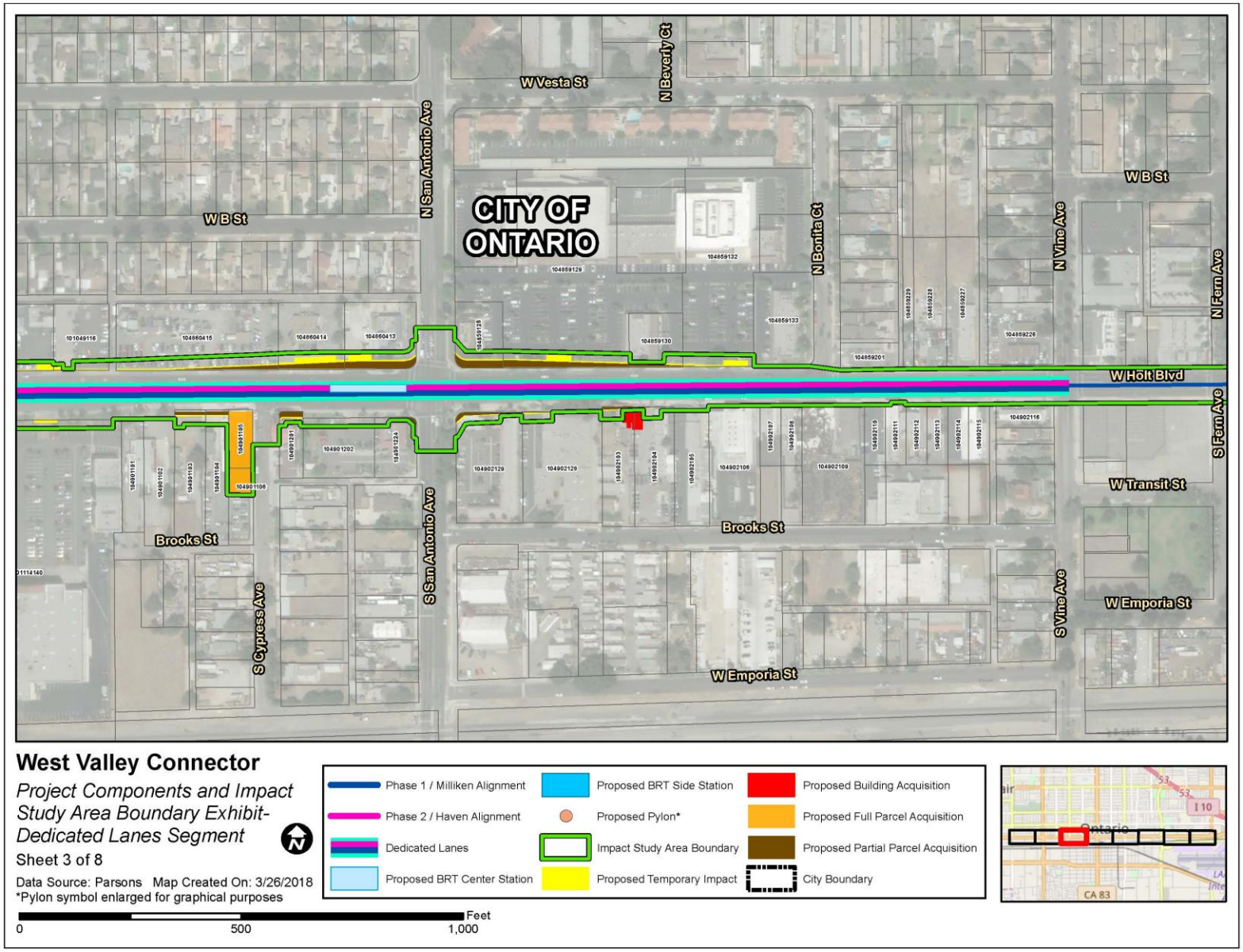

Randall Ave
Fontlee Ln
CITY OF
FONTANA
Olive St
Filbert St
Sierra Ave
Acacia Ave
Mango Ave
Kempster Ave
Blanchard Ave
Emerald Ave
Holly Dr
Juniper Ave
West Valley Connector
Project Components and Impact
Study Area Boundary Exhibit
Sheet 44 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario
International
Airport
Feet
0
500
1,000

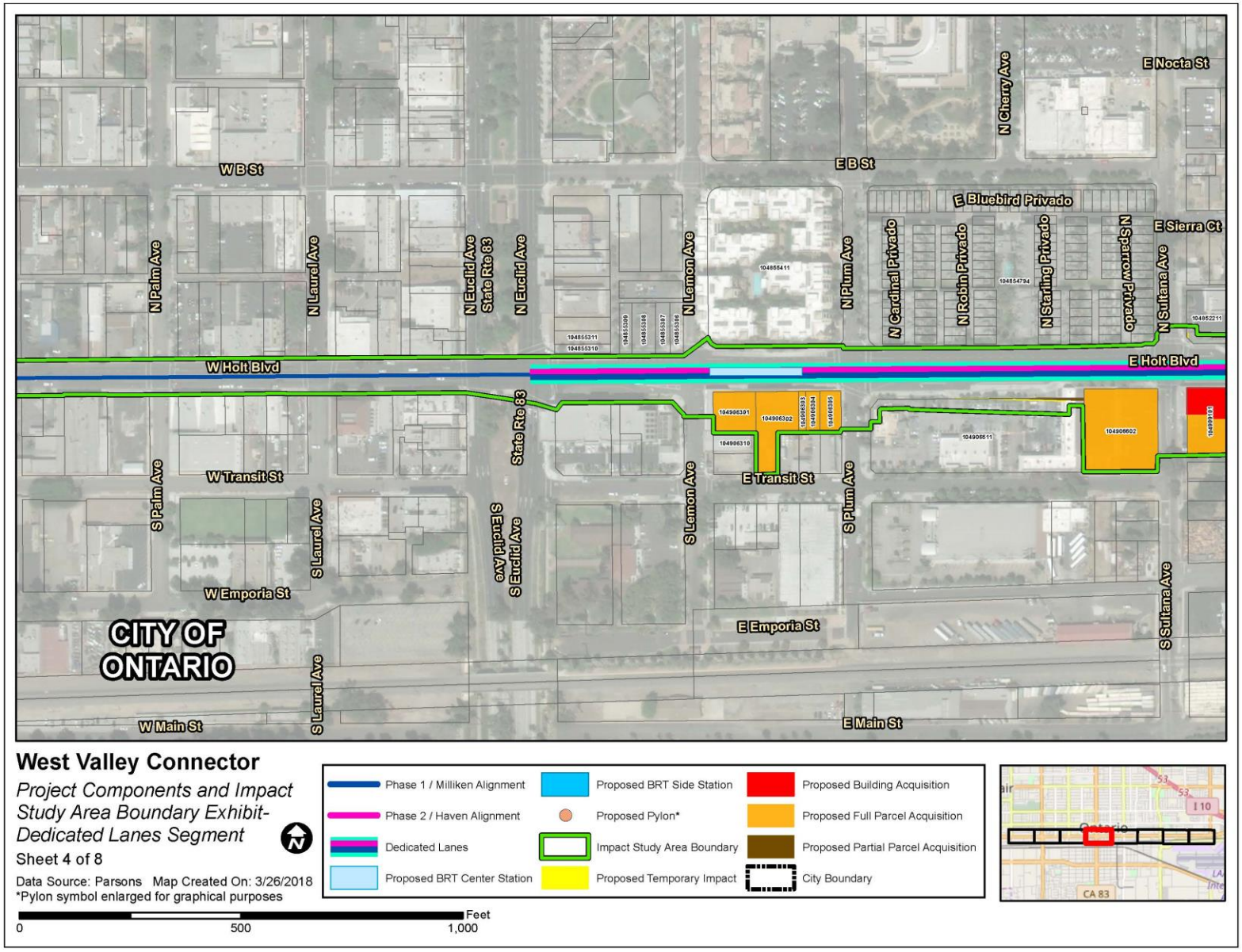

Sewell Ave
Juniper Ave
Sierra Ave
San Bernardino Ave
Mango Ave
Blanchard Ave
CITY OF FONTANA
Mango Dr
Mango Ln
Kempster Ave
Marygold Ave
Pepper Ave
Mango Ave
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit
Sheet 45 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Ontario International Airport
Feet
0
500
1,000

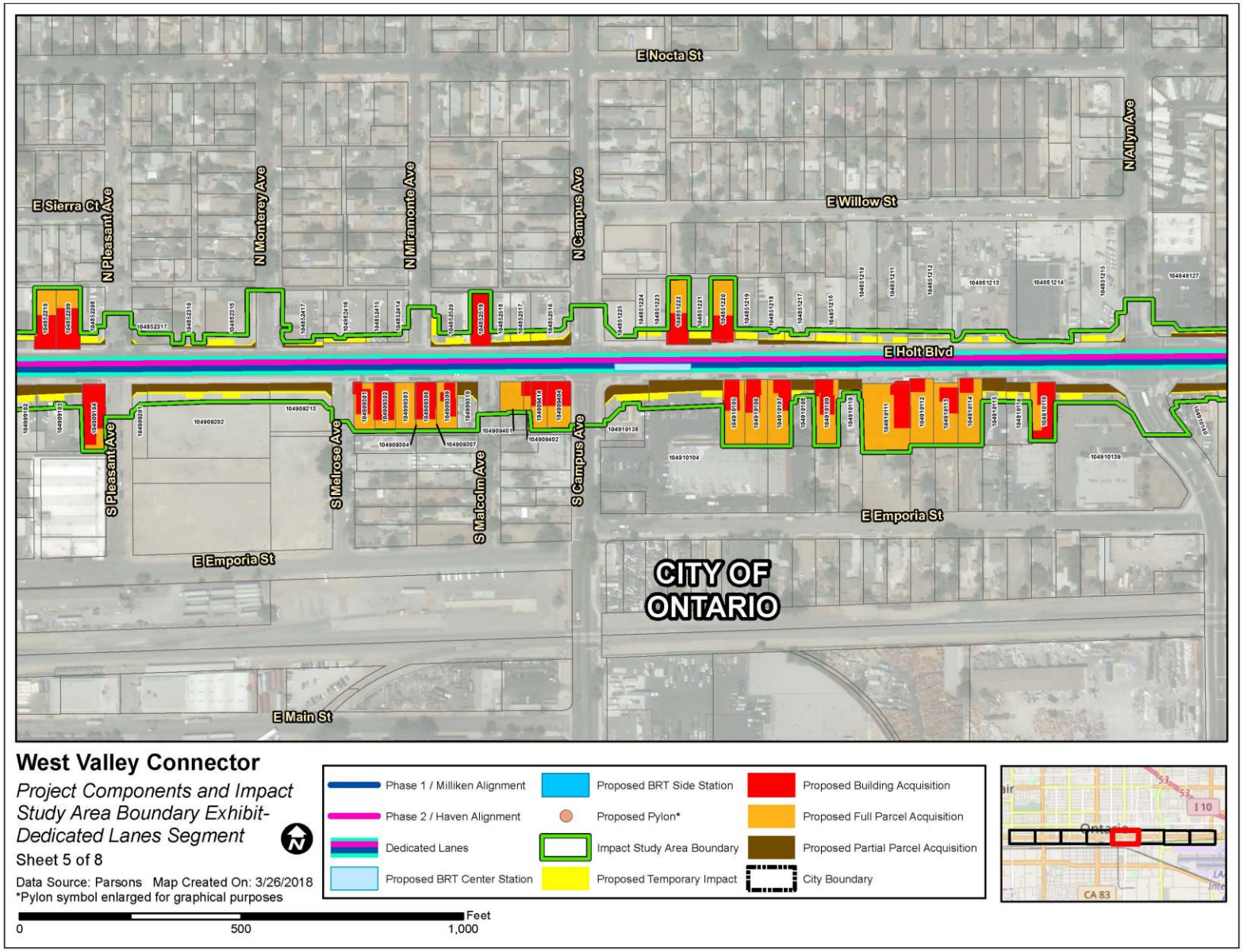

Valley Blvd
CITY OF
FONTANA
Juniper Ave
Sierra Ave
I-10
San Bernardino Fwy
West Valley Connector
Project Components and Impact
Study Area Boundary Exhibit
Sheet 46 of 46
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Construction Easement
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Claremont
Rancho
Chino
Feet
0
500
1,000

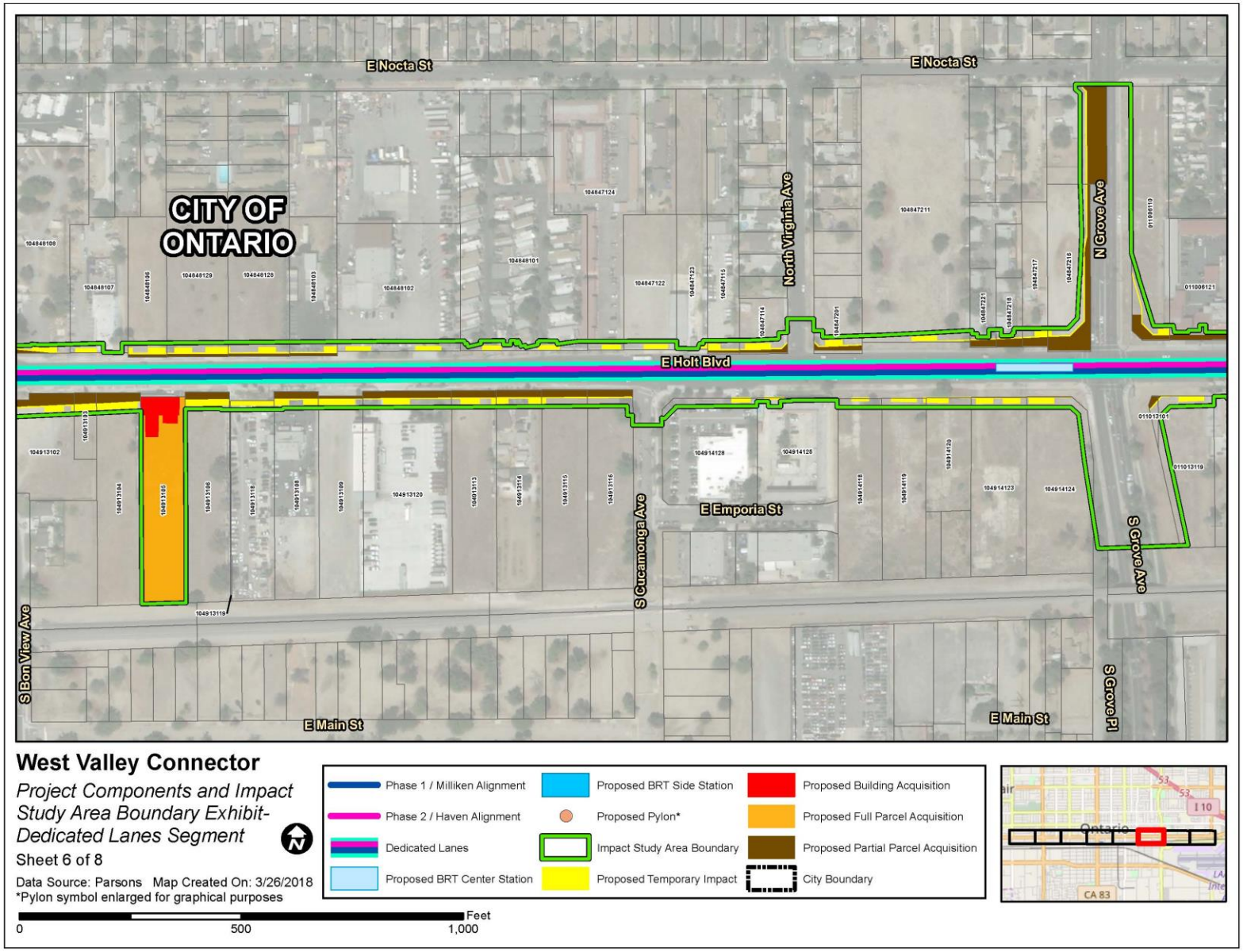

CITY OF MONTCLAIR
CITY OF ONTARIO
W Vesta St
N Benson Ave
N Elderberry Ave
Bandera St
W Stoneridge Ct
W Stonebridge Ct
Benson Ave
Holt Blvd
W Holt Blvd
S Benson Ave
S Oaks Ave
Brooks St
W Brooks St
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit- Dedicated Lanes Segment
Sheet 1 of 8
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Dedicated Lanes
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Impact
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Ontario
I 10
CA 83
Feet
0
500
1,000

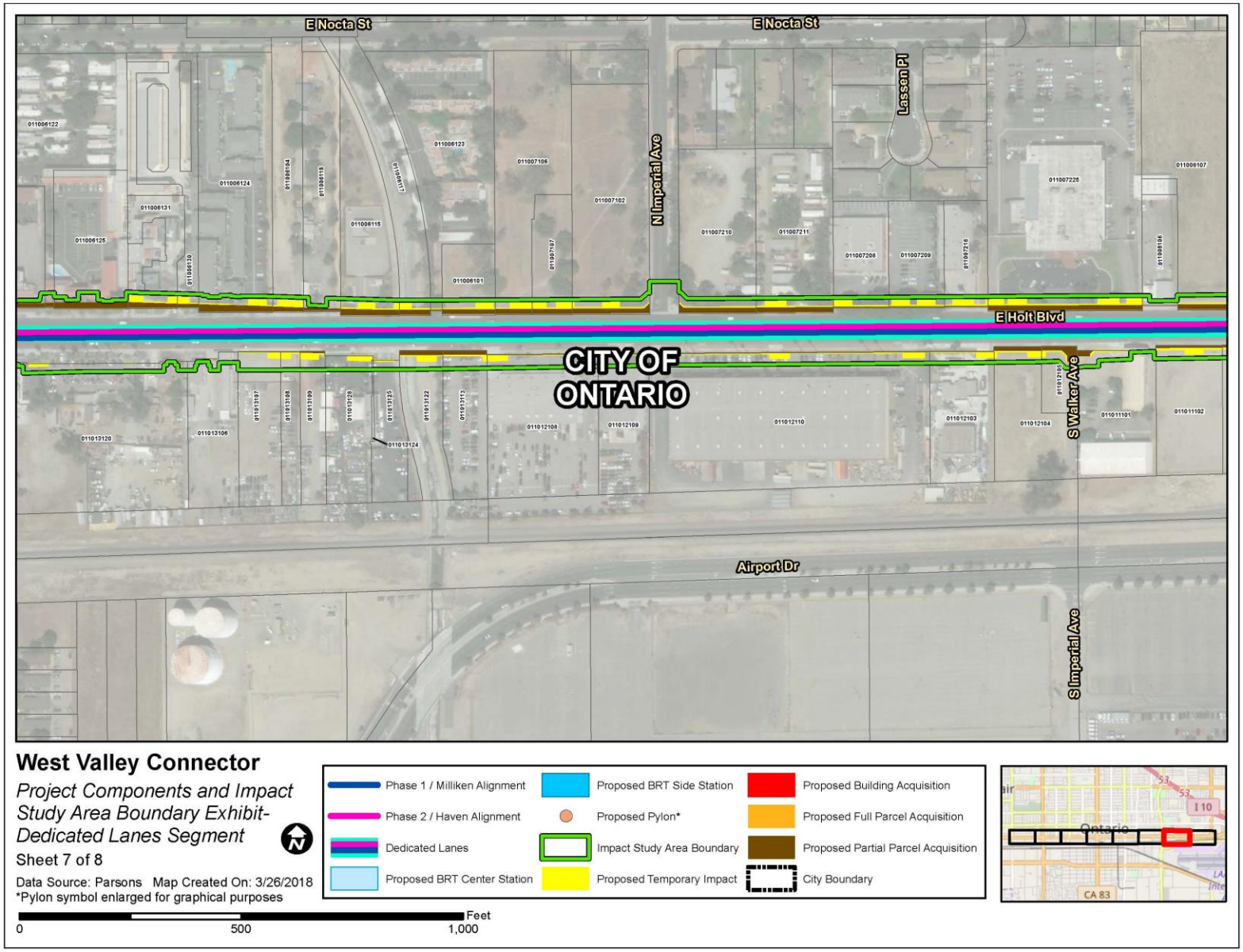

W Vesta St
W Vesta St
W Stonebridge Ct
W Stoneridge Ct
N Palmetto Ave
W B St
Pinyon Ct
Alpine Ct
Alpine Ct
Cone Flower Ln
N Boulder Ave
W B St
N Mountain Ave
W Holt Blvd
S Mountain Ave
CITY OF ONTARIO
S Granite Ave
W Brooks St
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit- Dedicated Lanes Segment
Sheet 2 of 8
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Dedicated Lanes
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Impact
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Ontario
I 10
CA 83
Feet
0
500
1,000

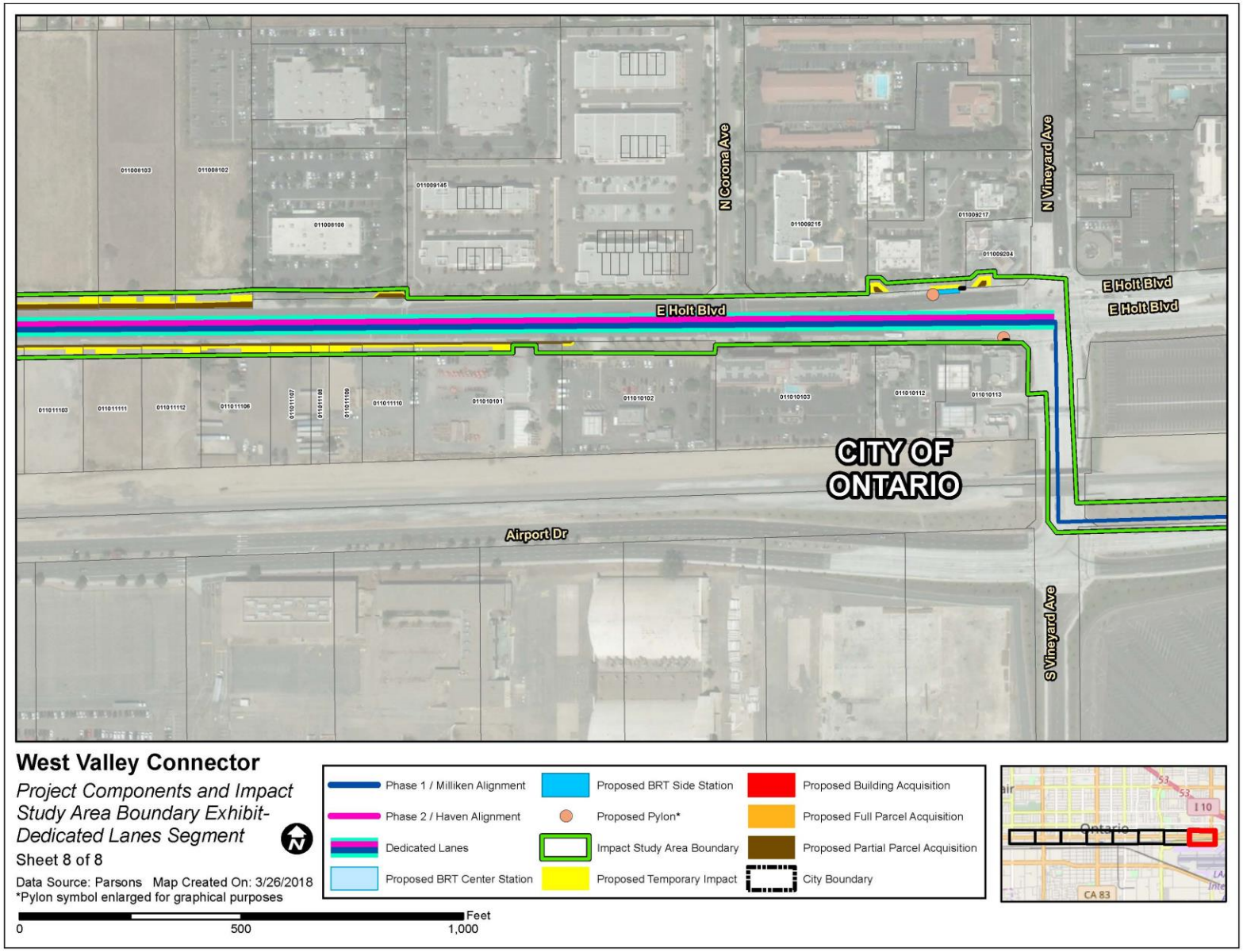

W Vesta St
N Beverly Ct
N San Antonio Ave
W B St
CITY OF ONTARIO
N Bonita Ct
N Vine Ave
N Fern Ave
W Holt Blvd
S Fern Ave
W Transit St
Brooks St
S San Antonio Ave
S Cypress Ave
S Vine Ave
W Emporia St
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit- Dedicated Lanes Segment
Sheet 3 of 8
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Dedicated Lanes
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Impact
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Feet
0
500
1,000
I 10
CA 83


E Nocta St
N Cherry Ave
W B St
E B St
E Bluebird Privado
E Sierra Ct
N Palm Ave
N Laurel Ave
N Euclid Ave
State Rte 83
N Euclid Ave
N Lemon Ave
N Plum Ave
N Cardinal Privado
N Robin Privado
N Starling Privado
N Sparrow Privado
N Sultana Ave
W Holt Blvd
E Holt Blvd
State Rte 83
W Transit St
E Transit St
S Palm Ave
S Laurel Ave
S Euclid Ave
S Euclid Ave
S Lemon Ave
S Plum Ave
W Emporia St
E Emporia St
S Sultana Ave
CITY OF ONTARIO
S Laurel Ave
W Main St
E Main St
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit- Dedicated Lanes Segment
Sheet 4 of 8
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Dedicated Lanes
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Impact
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
I 10
CA 83
0
500
1,000
Feet


E Nocta St
E Sierra Ct
N Pleasant Ave
N Monterey Ave
N Miramonte Ave
N Campus Ave
N Allyn Ave
E Willow St
E Holt Blvd
S Pleasant Ave
S Melrose Ave
S Malcolm Ave
S Campus Ave
E Emporia St
E Emporia St
CITY OF
ONTARIO
E Main St
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit- Dedicated Lanes Segment
Sheet 5 of 8
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Dedicated Lanes
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Impact
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
I 10
CA 83
0
500
1,000
Feet


E Nocta St
E Nocta St
CITY OF ONTARIO
North Virginia Ave
N Grove Ave
E Holt Blvd
E Emporia St
S Cucamonga Ave
S Grove Ave
S Bon View Ave
E Main St
E Main St
S Grove Pl
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit- Dedicated Lanes Segment
Sheet 6 of 8
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Dedicated Lanes
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Impact
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Ontario
I 10
CA 83
0
500
1,000
Feet


E Nocta St
E Nocta St
Lassen Pl
N Imperial Ave
E Holt Blvd
CITY OF
ONTARIO
S Walker Ave
Airport Dr
S Imperial Ave
West Valley Connector
Project Components and Impact Study Area Boundary Exhibit- Dedicated Lanes Segment
Sheet 7 of 8
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Dedicated Lanes
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Impact
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Ontario
I 10
CA 83
0
500
1,000
Feet


N Corona Ave
N Vineyard Ave
E Holt Blvd
E Holt Blvd
E Holt Blvd
CITY OF
ONTARIO
Airport Dr
S Vineyard Ave
West Valley Connector
Project Components and Impact
Study Area Boundary Exhibit-
Dedicated Lanes Segment
Sheet 8 of 8
Data Source: Parsons Map Created On: 3/26/2018
*Pylon symbol enlarged for graphical purposes
Phase 1 / Milliken Alignment
Phase 2 / Haven Alignment
Dedicated Lanes
Proposed BRT Center Station
Proposed BRT Side Station
Proposed Pylon*
Impact Study Area Boundary
Proposed Temporary Impact
Proposed Building Acquisition
Proposed Full Parcel Acquisition
Proposed Partial Parcel Acquisition
City Boundary
Feet
0
500
1,000
I 10
Ontario
CA 83

APPENDIX G
KEY CORRESPONDENCE

U.S. Department
of Transportation
**Federal Transit
Administration**

REGION IX
Arizona, California,
Hawaii, Nevada, Guam
American Samoa,
Northern Mariana Islands

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DEC 22 2016

Ms. Julianne Polanco
State Historic Preservation Officer
Office of State Historic Preservation
California Department of Parks and Recreation
1725 23rd Street, Suite 100
Sacramento, CA 95816
Attention: Kathleen Forrest, State Historian

Re: Subject: Section 106 Consultation for the West Valley Connector Bus Rapid Transit Project

Dear Ms. Polanco:

The Federal Transportation Agency (FTA), in coordination with Omnitrans, is initiating consultation with the California State Historic Preservation Officer (SHPO) under Section 106 of the National Historic Preservation Act, as amended (36 C.F.R. 800), for the West Valley Connector Bus Rapid Transit (BRT) Project (the Project), in Los Angeles and San Bernardino County. The Project will be a federal undertaking because the FTA will be providing financial assistance. This letter requests concurrence on the definition of the Area of Potential Effect (APE) pursuant to 36 CFR § 800.4.

Overview of the Proposed Project

The Project is a proposed 33.5-mile-long transit improvement project that would connect the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. The proposed transit route would begin at the Pomona Metrolink Transit Center station and terminate near the Kaiser Permanente Medical Center at Sierra Avenue and Marygold Avenue. The proposed project includes a combination of side- and center-running BRT stations with 3.5 miles of dedicated bus-only lanes and mixed-flow lanes. The proposed project includes up to 60 station platforms at 33 locations/major intersections and associated improvements, spaced 0.5 to 1 mile apart to facilitate higher operating speeds. Transit Signal Priority (TSP) applications and queue jump lanes would also be used at selected intersections to further facilitate faster and more reliable bus operations.

This project is shifting between the lead agencies of Omnitrans and San Bernardino Associated Governments (SANBAG), a local regional transportation planning agency. With SANBAG as the lead agency of this Small Starts project, Omnitrans will still be the operator for this BRT system.

Area of Potential Effects

The proposed APE for architectural resources, including built resources, historic and cultural landscapes, as well as all areas that could be directly or indirectly affected by the proposed project.

Direct effects include physical changes to architectural resources. Indirect effects include visual effects or effects caused by noise or vibration.

The proposed APE for archaeological resources is limited to areas that could be affected by the maximum extent of project-related ground disturbance, including the areas associated with excavation, backfill and grading, construction, temporary access ways and encroachments, construction staging areas, grading, and utility trenching. In most areas, the depth of ground disturbance is expected to be roughly 6 inches.

Project design is still being finalized for the proposed 3.5 miles dedicated lanes segment along Holt Boulevard between Benson Avenue and Vine Avenue, and between Euclid Avenue and Vineyard Avenue, in the City of Ontario. The dedicated lanes segment would require road widening to accommodate the five center-running stations and dedicated bus-only lanes, which would involve excavation and trenching. A conservative approach in the delineation of the APE was taken in which all current design options were included.

The Holt Boulevard widening is 3.5 mile in length and involves disturbances within the existing pavement, sidewalk, gutter, and developed parcels to accommodate the center running stations and BRT dedicated lane. As the topography is consistently flat throughout this segment of the project, excavation would be shallow (less than 6 inches) in most areas. The maximum excavation depth for this road widening segment along Holt Boulevard would be 2.5 feet and involve trenching in the areas near the 5 new center running stations for utility relocations and installing conduit for new electrical/communication services.

In accordance with 36 CFR Part 800.4(a)(2), information about known and potential historic properties within the APE will be reviewed. Investigations will be prepared by consultants who meet the Secretary of the Interior's Professional Qualifications Standards in archaeology, history, and architectural history. The project would be constructed by 2035, and identification efforts will be focused on properties constructed before 1985.

In accordance with 36 CFR Part 800.4(a)(3), local historic groups and other stakeholders that may have an interest in the project will be contacted to gather information on historic resources within the APE. FTA will also contact and consult any identified Native American groups.

Findings

In accordance with 36 CFR § 800.4, the FTA is requesting your concurrence with the APE Enclosed you will find the Project Vicinity, Project Location, and APE maps for the project. If you have any questions, please contact Candice Hughes, FTA Environmental Protection Specialist at (213) 629-8613 and candice.hughes@dot.gov.

Sincerely,

Leslie T. Rogers
Regional Administrator

Attachments:

A: Project Location
B: Project Vicinity
C: APE Map

STATE OF CALIFORNIA – THE RESOURCES AGENCY EDMUND G. BROWN, JR., *Governor*

OFFICE OF HISTORIC PRESERVATION
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January 23, 2017

In reply refer to: FTA_2016_1227_001

Leslie Rogers
Regional Administrator
Federal Transit Administration
90 Seventh Street
Suite 15-300
San Francisco, CA 94103-6701

Re: West Valley Connector Bus Rapid Transit Project, Area of Potential Effect (APE), Counties of Los Angeles and San Bernardino, California

Dear Mr. Rogers:

Thank you for the letter received December 27, 2016, initiating consultation for the above-referenced undertaking in order to comply with Section 106 of the National Historic Preservation Act of 1966 (NHPA) and its implementing regulation at 36 CFR Part 800. The Federal Transit Administration (FTA) included the project location, project vicinity, and APE maps with the consultation letter.

The undertaking proposes ta 33.5-mile-long transit improvement project that would connect the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. The route would begin at the Pomona Metrolink Transit Center station in Pomona, California, and terminate near the Kaiser Permanente Medical Center at Sierra Avenue and Marygold Avenue in Fontana, California. The undertaking includes a combination of side- and center-running bus rapid transit (BRT) stations with 3.5 miles of dedicated bus-only lanes and mixed flow lanes, and up to 60 station platforms at 33 locations and associated improvements.

As described in the consultation letter, the narrative description of the APE is as follows:

- The 3.5-mile area along Holt Boulevard between Benson Avenue and Vine Avenue, and between Euclid Avenue and Vineyard Avenue, in the City of Ontario

FTA has requested comments on the delineation of the APE. After reviewing the documentation, I offer the following comments:

- Please provide a complete narrative description of the APE. The description provided in the consultation package appears to be incomplete.
- Please provide the maximum vertical extent of the APE. For undertakings that include a long linear APE such as this, it is helpful when the estimated vertical extents for each of the project components that require ground disturbance are described. This information can easily be depicted in a table.

FTA_2016_1227_001

- Please also clarify the methodology for delineating the architectural APE. The maps provided show some adjacent parcels included, while many are not. It is unclear why this distinction is made in the various locations.
- Provide a general list of activities required to construct the undertaking. This allows the consulting parties to understand the scope of the project and assists in determining whether the APE adequately considers potential indirect effects.

Thank you for considering historic properties in your planning process, and I look forward to continuing this consultation with you. If you have any questions, please contact Kathleen Forrest of my staff at (916) 445-7022 or e-mail at kathleen.forrest@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

State of California • Natural Resources Agency
Edmund G. Brown Jr., *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Lisa Ann L. Mangat, *Director*

Julianne Polanco, State Historic Preservation Officer
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November 14, 2017

In reply refer to: FTA_2016_1227_001

Mr. Leslie Rogers
Regional Administrator
Federal Transit Administration
90 Seventh Street
Suite 15-300
San Francisco, CA 94103-6701

Re: West Valley Connector Bus Rapid Transit Project, Area of Potential Effect (APE), Counties of Los Angeles and San Bernardino, California

Dear Mr. Rogers:

Thank you for the letter received October 27, 2017, continuing consultation with the State Historic Preservation Officer (SHPO) for the above-referenced undertaking in order to comply with Section 106 of the National Historic Preservation Act of 1966 (NHPA) and its implementing regulation at 36 CFR § 800. The Federal Transit Administration (FTA) included the project location, project vicinity, and Area of Potential Effect (APE) maps with the consultation letter.

The undertaking proposes ta 35-mile-long transit improvement project that would connect the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. The route would begin at the Pomona Metrolink Transit Center station in Pomona, California, and terminate near the Kaiser Permanente Medical Center at Sierra Avenue and Marygold Avenue in Fontana, California. The undertaking includes a combination of side- and center-running bus rapid transit (BRT) stations with 3.5 miles of dedicated bus-only lanes and mixed flow lanes, and up to 60 station platforms at 33 locations and associated improvements.

As described in the consultation package, the APE begins on the north side of Pomona Metrolink Transit Center, and travels north on Main Street, east on Monterey Avenue, north on Garey Avencue, and east onwards along Holt Boulevard through Pomona, Montclair, and Ontario. At Ontario International Airport the APE travels north on Archibald Avenue, east on G Street, continues on inland Empire Boulevard, and north on Haven Avenue through Rancho Cucamonga. The APE includes the parallel alignment of Milliken Avenue as part of the proposed Milliken Alignment. At Foothill Boulevard in Rancho Cucamonga, the APE travels east through Victoria Gardens until

Mr. Leslie Rogers
November 14, 2017
Page 2 of 2

FTA_2016_1227_001

Sierra Avenue, where the alignment travels south through Fontana to Valley Boulevard, where it turns west. It continues north on Juniper Avenue and east on Marygold Avenue until reaching Sierra Avenue. The APE encompasses the right-of-way and parcels along the proposed side and center stations of the alignment, temporary construction easements, proposed staging areas, and parcels proposed for full or partial acquisition. The vertical APE has been identified between 2.5 and 15 feet, depending on the activity.

FTA has requested comments on the delineation of the APE and the methodology to streamline the identification and evaluation of historic properties. After reviewing the documentation, I offer the following comments:

- I agree that the APE is sufficient for the undertaking, per 36 CFR § 800.4(a)(1). Please note that while the methodology for surveying the APE may differ in parts, there is one APE for the undertaking as a whole.
- A methodology to streamline identification and evaluation was not included in the consultation package. If FTA would like to discuss an alternative identification strategy, please provide a methodology for review.

I look forward to continuing this consultation with you. If you have any questions, please contact Kathleen Forrest of my staff at (916) 445-7022 or Kathleen.Forrest@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

State of California • Natural Resources Agency
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Edmund G. Brown Jr., *Governor*
Lisa Ann L. Mangat, *Director*

March 29, 2018

In reply refer to: FTA_2016_1227_001

Mr. Leslie Rogers
Regional Administrator
Federal Transit Administration
90 Seventh Street
Suite 15-300
San Francisco, CA 94103-6701

Re: West Valley Connector Bus Rapid Transit Project, Expansion of Area of Potential Effect (APE), Counties of Los Angeles and San Bernardino, California

Dear Mr. Rogers:

The State Historic Preservation Officer (SHPO) received your letter on March 5, 2018, continuing consultation on the above-referenced project to comply with Section 106 of the National Historic Preservation Act of 1966 (as amended), and its implementing regulations at 36 CFR § 800. The Federal Transit Administration (FTA) included maps of the the project location, project vicinity, project Operation and Maintenance (O&M) facility sites, and Area of Potential Effect (APE) maps with the consultation letter.

The undertaking proposes ta 35-mile-long transit improvement project that would connect the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. The route would begin at the Pomona Metrolink Transit Center station in Pomona, California, and terminate near the Kaiser Permanente Medical Center at Sierra Avenue and Marygold Avenue in Fontana, California. The undertaking includes a combination of side- and center-running bus rapid transit (BRT) stations with 3.5 miles of dedicated bus-only lanes and mixed flow lanes, and up to 60 station platforms at 33 locations and associated improvements.

FTA previously consulted on the APE and the Office of Historic Preservation (OHP) issued comments on November 14, 2017. Since that time the APE has been expanded to include potential locations for the proposed O&M facility. The three sites are:

- 1516 S. Cucamonga Avenue, Ontario (APN 1050-131-03-0000)
- 1440 S. Cucamonga Avenue, Ontario (APN 1050-141-07-0000)
- 1333 S. Bon View Avenue, Ontario (APN 1049-421-01-0000)

Mr. Leslie Rogers
March 29, 2018
Page 2 of 2

FTA_2016_1227_001

The APE includes all surrounding parcels that may contain built environment resources and may experience indirect effects from construction and operation of the new facility. All project activities related to the construction of the O&M facility, including construction staging and equipment storage areas, are anticipated to be included within the selected O&M site. The vertical APE would extend to a maximum depth of 12 feet below grade. No additional modifications were made to the APE.

FTA has requested comments on the modification of the APE. After reviewing the documentation, I offer the following comments:

- I agree that the APE is sufficient for the undertaking, per 36 CFR § 800.4(a)(1). Please note that while the methodology for surveying the APE may differ in parts, there is one APE for the undertaking as a whole.

I look forward to continuing this consultation with FTA. If you have any questions, please contact Kathleen Forrest of my staff at (916) 445-7022 or Kathleen.Forrest@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

U.S. Department
of Transportation
**Federal Transit
Administration**

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MAY 15 2018

Julianne Polanco
State Historic Preservation Officer
Office of Historic Preservation
California State Department of Parks and Recreation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Subject: Section 106 Consultation on Historic Property Survey Report for the Proposed West Valley Connector – Counties of San Bernardino and Los Angeles, California

OHP File: FTA_2016_1227_001

Attention: Ms. Kathleen Forrest, State Historian

Dear Ms. Polanco:

The Federal Transit Administration (FTA), in coordination with the San Bernardino County Transportation Authority (SBCTA), is continuing consultation with the California State Historic Preservation Officer (SHPO) for the West Valley Connector Bus Rapid Transit (BRT) Project (Project) in the Counties of San Bernardino and Los Angeles pursuant to our responsibilities for compliance with Section 106 of the National Historic Preservation Act (NHPA), as amended (36 CFR Part 800), FTA is the Lead Agency under the National Environmental Policy Act (NEPA) and SBCTA is the Lead Agency under the California Environmental Quality Act (CEQA)[1].

Consultation on the Undertaking was initiated on December 22, 2016, with a letter providing additional information on the Area of Potential Effects (APE) sent to you on October 26, 2017, and for which concurrence was received from the SHPO on November 14, 2017. On March 1, 2018, FTA consulted with the SHPO concerning a revision to the APE to include potential operations and maintenance (O&M) facility sites for which concurrence was received on March 29, 2018. This letter requests concurrence on the determinations of eligibility of properties for the National Register of Historic Places (NRHP). Enclosed with this transmittal letter are the

[1] Note that Omintrans was originally a CEQA Lead Agency when the Notice of Preparation was issued in March 2016. In January 2017, SBCTA entered into a cooperative agreement with Omintrans designating SBCTA as the Lead Agency for the WVC project.

Historic Property Survey Report (HPSR), Archaeological Survey Report (ASR), and the Historic Resources Evaluation Report (HRER). The HPSR summarizes consulting party and public participation, and identification efforts of historic properties located within the Project's APE.

Project Description

The West Valley Connector Project is a 35-mile-long BRT corridor that would connect the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana in Los Angeles and San Bernardino counties. The Project alignment runs along Holt Avenue/Boulevard, Haven Avenue, Milliken Avenue, Foothill Boulevard, and Sierra Avenue. Phase I of the Project would construct the "Milliken Alignment", from the Pomona Metrolink Transit Center Station to Victoria Gardens in Rancho Cucamonga. Construction of Phase I is scheduled to begin in early 2020 with completion in early 2023. Phase II of the Project would construct the "Haven Alignment", which would go from Ontario International Airport and terminate at the Kaiser Permanente Medical Center in Fontana. Phase II/Haven Alignment is intended to be constructed immediately following the completion of Phase I, depending on the availability of funding. A more detailed description of the proposed Undertaking is included in the accompanying HPSR.

Under consideration for the project implementation are three alternatives: a No-Build Alternative, and two Build Alternatives, A and B, as follows:

Alternative A – Full BRT with no Dedicated Bus-only Lanes

Alternative A would include the 35-mile-long BRT corridor, which is comprised of the Phase I/ Milliken Alignment, Phase II/Haven Alignment, and 60 side-running stations at up to 33 locations/major intersections. The BRT buses would operate entirely in the mixed-flow lanes. The right-of-way (ROW) limits and travel lane width vary in other segments of the corridor. Implementation of Alternative A would not require permanent or temporary ROW acquisition.

Alternative B – Full BRT with 3.5 miles of Dedicated Bus-only Lanes in Ontario

Alternative B would include the full 35-mile-long BRT corridor, which is comprised of the Phase I/Milliken Alignment, Phase II/ Haven Alignment, 3.5 miles of dedicated bus-only lanes, and five center-running stations and 50 side-running stations at up to 33 locations/ major intersections. The dedicated lanes segment would include two mixed-flow lanes and one transit lane in each direction and five center-running stations. To accommodate the dedicated lanes, roadway widening and additional utilities, such as electrical and fiber-optic lines, would require permanent and temporary ROW acquisition. In addition, some areas of the project corridor would require reconfiguration, relocation, or extension of adjacent driveways, curbs, medians, sidewalks, parking lots, and local bus stops.

Delineation of the Area of Potential Effects

For this Undertaking, the proposed APE was established in accordance with 36 CFR § 800.4(a)(1). FTA consulted with your office in December 2016 and October 2017, then again concerning a revision to the Undertaking's APE to account for construction of an O&M facility, for which concurrence was received in March 2018.

The proposed APE was determined to encompass the ROW and parcels along the proposed side and center stations of the above-mentioned alignment for purposes of the built-environment resources study, and cover only the ROW within the proposed side and center stations, as well as areas for temporary construction easements (TCEs), proposed staging areas, and parcels proposed for full or partial acquisition for the archaeological resources study.

The archaeological portion of the APE is defined as the area of direct impacts that could occur as a result of project construction and includes existing and proposed ROW, TCEs, proposed staging areas, and parcels proposed for full or partial acquisition. The architectural portion of the APE includes the archaeological APE, plus properties that may be subject to indirect impacts (i.e., impacts from visual, noise, vibration, or changes to setting). Potential indirect impact areas are established as the legal parcel adjacent to where potential direct impacts would occur. If any part of a parcel would be temporarily or permanently impacted, then the whole parcel was included as part of the Architectural APE footprint.

Study Methodology and Results

FTA has made a reasonable and good faith effort to identify historic properties within the APE, with the work conducted by cultural resources professionals who meet the professional standards established by the Secretary of the Interior. Background research was conducted to identify historic and archaeological resources previously recorded and located in the study area. This included visiting local historical archives and libraries, checking city historic preservation elements and landmark lists, and reviewing state and federal historic resources inventories. Background research also included a literature and records search to identify known built-environment, prehistoric, and historic archaeological resources within 0.25 mile of the Project APE at the South Coast Central Coastal Information Center (SCCIC) at California State University, Fullerton on April 16 and 17, May 7, September 12, 2016, with supplemental records searches conducted on October 12, 2017 and February 21, 2018. A review of SCCIC's records indicate 91 previously recorded cultural resources within the records search radius, 21 of which are located within the West Valley Connector APE. A total of 70 cultural resources were previously documented outside the APE but within a 0.25-mile radius of the APE. Resources outside of the APE are primarily comprised of historic built environment resources. Out of the 21 previously recorded resources located within the APE, only 2 are considered archaeological resources, one of which no longer exists (P-36-007144) and another (P-36-002910) is the NRHP-

listed National Old Trails Highway/Route 66 (now Foothill Boulevard in the cities of Fontana and Rancho Cucamonga).

During the archaeological investigations conducted as part of the Project, 13 archaeological resources were identified within the APE, including the 2 previously-recorded resources as mentioned above, and 11 newly identified historic archaeological sites. One of the previously recorded resources (P-36-007144) and all 11 newly identified sites (Lots 1 through 11) identified and recorded during the field surveys have been evaluated and been determined by FTA as ineligible for inclusion in the NRHP. Detailed information regarding these 11 new archaeological resources, and one no longer extant (P-36-007144), is provided in the ASR, attached to the HPSR as Appendix B.

During the architectural history background investigations conducted as part of the Project, it was determined 19 previously recorded built-environment resources are in the APE, five of which are listed in or considered eligible for the NRHP (P-19-189200, Southern Pacific Railroad [SPRR] Depot, Pomona; Lincoln Park Historic District, Pomona; P-36-015397, Malaga Underpass Bridge, Fontana; P-36-015982, Euclid Avenue/State Route [SR] 83, Ontario and Upland; and P-36-002910, National Old Trails Road/Route 66, Rancho Cucamonga and Fontana). The Project's cultural team conducted a field review of the previously identified 5 NRHP-listed or eligible resources and confirmed each continues to possess sufficient integrity to meet the established criteria as historic properties.

Of the 496 parcels in the West Valley Connector APE containing built-environment resources, 159 were built in or before 1968 and had not been previously evaluated for the NRHP; therefore, they were evaluated as part of the survey conducted for this Undertaking. Holt Avenue/Boulevard (a segment of former U.S. Route 99) was also evaluated for its eligibility for listing in the NRHP. These resources were photographed in the field and have been recorded on DPR 523 Primary Record and Building, Structure and Object Record forms, which can be found in Appendix B of the HRER, attached to the HPSR as Appendix C.

There are 12 additional properties (all commercial) constructed within the 5-year span, 1969-1973, within the APE, as identified in Table 1. These properties fall within the 45-year time-frame survey window for completion of Phase I (2022) and Phase II (2023) construction. These 12 properties appear to possess no potential to meet NRHP criteria though they were not formally evaluated as part of the historic and architectural survey; building dates were determined by County Assessor's data and historical research, including a review of historic aerial photographs, and supported by field reviews. The table below also appears as Table 6.1 in the HPSR and as Table 4.3 in the HRER.

Table 1

Built-Environment Resources constructed between 1969-1973 within APE

Property#	Address/Location	Parcel Number	City	Year Built	Property Function
1	399 N. Garey Avenue	8336-022-008	Pomona	1971	Ceramics Museum
2	4889 Holt Boulevard	1012-101-07-0000	Montclair	1972	Retail Clothing Store
3	5064 Holt Boulevard	1010-643-32-0000	Montclair	1972	Car Wash
4	5200 Holt Boulevard	1010-611-31-0000	Montclair	1971	Car Sales Lot
5	5391 Holt Boulevard	1011-051-05-0000	Montclair	1972	Car Sales Lot
6	5650 Holt Boulevard	1010-581-48-0000	Montclair	1970	Motel
7	1542 W. Holt Boulevard	1010-552-14-0000	Ontario	1970	Bar and Grill
8	1363 W. Holt Boulevard	1011-111-18-0000	Ontario	1973	Retail Trailer Supplies
9	934 W. Holt Boulevard	1010-501-77-0000	Ontario	1973	Car Sales Lot
10	803 E. Holt Boulevard	1011-141-16-0000	Ontario	1971	Car Sales Lot
11	1336 E. Holt Boulevard	0110-131-28-0000	Ontario	1970	Custom Built Cars
12	1366 E. Holt Boulevard	0110-121-08-0000	Ontario	1970	Rental Cars

Determinations of Eligibility

The vast number of extant built-environment properties constructed in 1968 or before are predominantly commercial or retail in nature, are not functionally related to one another by a common historic theme, and are likewise not sufficiently unified by periods of significance or architectural styles. Of the newly-identified 159 built-environment resources within the APE that were surveyed and formally evaluated, 4 were determined to be eligible for inclusion in the NRHP, as listed in Table 2.

Table 2
Built-Environment Resources within APE Determined Eligible for Listing in NRHP

Property #	Historic Property Name	Address/Location	Parcel Number	Eligibility Criteria	Period of Significance
1	Vince's Spaghetti	1206 W. Holt Boulevard, Ontario	1010-543-01-0000 1010-543-02-0000	A; C	1945-1967
2	A.C. Moorhead House	961 W. Holt Boulevard, Ontario	1011-141-07-0000	A; C	1893-1950
3	The Grinder Haven	724 W. Holt Boulevard, Ontario	1048-604-14-0000	C	1958
4	Jacob Lerch House	541 E. Holt Boulevard, Ontario	1048-523-17-0000	C	1901

The FTA has formally evaluated the following 155 built-environment properties for the West Valley Connector Project, listed in Table 3, and has determined that they do not appear to be eligible for listing in the NRHP either individually or as part of a historic district because of a lack of significance or integrity.

Table 3
Built-Environment Resources within APE Determined Ineligible for Listing in NRHP

No.#	Address/Location	Parcel Number	City	OHP Status Codes
1	550 N. Garey Avenue	8336-016-028	Pomona	6Z
2	485, 499 N. Garey Avenue	8336-022-015	Pomona	6Z
3	445 N. Garey Avenue	8336-022-007	Pomona	6Z
4	415-425 N. Garey Avenue	8336-022-008	Pomona	6Z
5	130 E. Holt Avenue	8336-021-005	Pomona	6Z
6	173 E. Center Street	8336-021-022	Pomona	6Z
7	416-442 N. Garey Avenue	8336-021-027	Pomona	6Z
8	155 W. Commercial Street	8336-032-011	Pomona	6Z
9	167 W. Commercial Street	8336-032-010	Pomona	6Z
10	295 N. Garey Avenue	8336-032-014	Pomona	6Z
11	472-478 E. Holt Avenue	8337-025-002	Pomona	6Z
12	468 E. Holt Avenue	8337-025-003	Pomona	6Z
13	450-454 E. Holt Avenue	8337-025-004	Pomona	6Z
14	440 E. Holt Avenue	8337-025-015	Pomona	6Z
15	519 E. Holt Avenue	8337-016-010	Pomona	6Z
16	520 E. Holt Avenue	8337-021-002	Pomona	6Z
17	540 E. Holt Avenue	8337-020-011	Pomona	6Z

No.#	Address/Location	Parcel Number	City	OHP Status Codes
18	1545-1575 E. Holt Avenue	8323-025-025	Pomona	6Z
19	1538 W. Holt Boulevard	1010-552-13-0000	Ontario	6Z
20	1528 W. Holt Boulevard	1010-552-12-0000	Ontario	6Z
21	1520 W. Holt Boulevard	1010-552-11-0000	Ontario	6Z
22	1512 W. Holt Boulevard	1010-552-38-0000	Ontario	6Z
23	1502 W. Holt Boulevard	1010-552-37-0000	Ontario	6Z
24	1442 W. Holt Boulevard	1010-552-06-0000	Ontario	6Z
25	1426 W. Holt Boulevard	1010-552-05-0000	Ontario	6Z
26	1364 W. Holt Boulevard	1010-543-32-0000	Ontario	6Z
27	1340 W. Holt Boulevard	1010-543-12-0000	Ontario	6Z
28	1263 W. Holt Boulevard	1011-121-18-0000	Ontario	6Z
29	1260 W. Holt Boulevard	1010-543-07-0000	Ontario	6Z
30	1240 W. Holt Boulevard	1010-543-04-0000	Ontario	6Z
31	1150 W. Holt Boulevard	1010 -522-13-0000	Ontario	6Z
32	1136-1142 W. Holt Boulevard	1010-522-06-0000	Ontario	6Z
33	1108 W. Holt Boulevard	1010-522-11-0000	Ontario	6Z
34	1050 W. Holt Boulevard	1010-502-08-0000	Ontario	6Z
35	1020 W. Holt Boulevard	1010-502-07-0000	Ontario	6Z
36	1021 W. Holt Boulevard	1011-132-10-0000	Ontario	6Z
37	1034 W. Holt Boulevard	1010-502-06-0000	Ontario	6Z
38	1013 W. Holt Boulevard	1011-132-11-0000	Ontario	6Z
39	964 W. Holt Boulevard	1010-501-80-0000	Ontario	6Z
40	967 W. Holt Boulevard	1011-141-06-0000	Ontario	6Z
41	960 W. Holt Boulevard	1010-501-79-0000	Ontario	6Z
42	940 W. Holt Boulevard	1010-501-78-0000	Ontario	6Z
43	943 W. Holt Boulevard	1011-141-35-0000	Ontario	6Z
44	900 W. Holt Boulevard	1010-501-76-0000	Ontario	6Z
45	909 W. Holt Boulevard	1011-141-13-0000	Ontario	6Z
46	830 W. Holt Boulevard	1010-491-03-0000	Ontario	6Z
47	863 W. Holt Boulevard	1011-141-32-0000	Ontario	6Z
48	755 W. Holt Boulevard	1049-011-03-0000	Ontario	6Z
49	745 W. Holt Boulevard	1049-011-04-0000	Ontario	5S1
50	739 W. Holt Boulevard	1049-011-05-0000	Ontario	6Z
51	729 W. Holt Boulevard	1049-012-01-0000	Ontario	6Z
52	627 W. Holt Boulevard	1049-021-03-0000	Ontario	6Z
53	625 W. Holt Boulevard	1049-021-04-0000	Ontario	6Z
54	212-214 E. Holt Boulevard	1049-063-02-0000	Ontario	5S1

No.#	Address/Location	Parcel Number	City	OHP Status Codes
55	220-222 E. Holt Boulevard	1049-063-03-0000 1049-063-04-0000	Ontario	5S1
56	230 E. Holt Boulevard	1049-063-05-0000	Ontario	6Z
57	444 E. Holt Boulevard	1049-066-02-0000	Ontario	5S1
58	500 E. Holt Boulevard	1049-091-01-0000	Ontario	6Z
59	517 E. Holt Boulevard	1048-522-10-0000	Ontario	6Z
60	522 E. Holt Boulevard	1049-091-03-0000	Ontario	6Z
61	523 E. Holt Boulevard	1048-522-09-0000	Ontario	6Z
62	527 E. Holt Boulevard	1048-522-08-0000	Ontario	6Z
63	526 E. Holt Boulevard	1049-091-04-0000	Ontario	6Z
64	545 E. Holt Boulevard	1048-523-16-0000	Ontario	5S1
65	111 N. Monterey Avenue	1048-523-15-0000	Ontario	6Z
66	601 E. Holt Boulevard	1048-524-17-0000	Ontario	6Z
67	616 E. Holt Boulevard	1049-093-01-0000	Ontario	5S1
68	636 E. Holt Boulevard	1049-093-06-0000	Ontario	6Z
69	640-642 E. Holt Boulevard	1049-093-09-0000	Ontario	6Z
70	635 E. Holt Boulevard	1048-525-20-0000	Ontario	6Z
71	639 E. Holt Boulevard	1048-525-19-0000	Ontario	5S1
72	654 E. Holt Boulevard	1049-094-02-0000	Ontario	6Z
73	660 E. Holt Boulevard	1049-094-14-0000	Ontario	6Z
74	668 E. Holt Boulevard	1049-094-04-0000	Ontario	6Z
75	720 E. Holt Boulevard	1049-101-04-0000	Ontario	6Z
76	717 E. Holt Boulevard	1048-512-22-0000	Ontario	6Z
77	727 E. Holt Boulevard	1048-512-20-0000	Ontario	6Z
78	741 E. Holt Boulevard	1048-512-18-0000	Ontario	5S1
79	745 E. Holt Boulevard	1048-512-17-0000	Ontario	5S1
80	728 E. Holt Boulevard	1049-101-05-0000	Ontario	6Z
81	736 E. Holt Boulevard	1049-101-06-0000	Ontario	6Z
82	744 E. Holt Boulevard	1049-101-07-0000	Ontario	6Z
83	748 E. Holt Boulevard	1049-101-08-0000	Ontario	5S1
84	752-754 E. Holt Boulevard	1049-101-09-0000	Ontario	5S1
85	755 E. Holt Boulevard	1048-512-16-0000	Ontario	6Z
86	765 E. Holt Boulevard	1048-512-11-0000	Ontario	6Z
87	800 E. Holt Boulevard	1049-101-12-0000	Ontario	6Z
88	810 E. Holt Boulevard	1049-101-13-0000	Ontario	6Z
89	814 E. Holt Boulevard	1049-101-14-0000	Ontario	6Z
90	813-817 E. Holt Boulevard	1048-512-13-0000	Ontario	5S1

No.#	Address/Location	Parcel Number	City	OHP Status Codes
91	824-828 E. Holt Boulevard	1049-101-18-0000 1049-101-16-0000	Ontario	6Z
92	831 E. Holt Boulevard	1048-512-14-0000	Ontario	6Z
93	932 E. Holt Boulevard	1049-131-05-0000	Ontario	6Z
94	958 E. Holt Boulevard	1049-131-08-0000	Ontario	6Z
95	1015 E. Holt Boulevard	1048-481-03-0000	Ontario	6Z
96	1031 E. Holt Boulevard	1048-481-02-0000	Ontario	6Z
97	1042 E. Holt Boulevard	1049-131-14-0000	Ontario	6Z
98	103 Virginia Avenue	1048-471-13-0000	Ontario	6Z
99	1133 E. Holt Boulevard	1048-472-21-0000	Ontario	6Z
100	1217 E. Holt Boulevard	0110-061-21-0000	Ontario	6Z
101	1329 E. Holt Boulevard	0110-061-18-0000	Ontario	6Z
102	1228-1264 E. Holt Boulevard	0110-131-20-0000	Ontario	6Z
103	1512 E. Holt Boulevard	0110-121-03-0000	Ontario	6Z
104	1614 E. Holt Boulevard	0110-111-01-0000	Ontario	6Z
105	1670 E. Holt Boulevard	0110-111-06-0000	Ontario	6Z
106	1744 E. Holt Boulevard	0110-101-01-0000	Ontario	6Z
107	9260 Sierra Avenue	0193-161-09-0000	Fontana	6Z
108	9333 Sierra Avenue	0194-091-36-0000	Fontana	6Z
109	122 N. Mountain Avenue	1010-502-10-0000	Fontana	6Z
110	1182 E. Nocta Street	1048-472-15-0000	Fontana	6Z
111	541 E. Emporia Street	1049-091-05-0000	Ontario	5S1
112	518 Sierra Court	1048-522-04-0000	Ontario	6Z
113	524 Sierra Court	1048-522-05-0000	Ontario	6Z
114	108 S. Malcolm Avenue	1049-093-11-0000	Ontario	6Z
115	113 S. Malcolm Avenue	1049-094-11-0000	Ontario	6Z
116	114 S. Campus Avenue	1049-094-05-0000	Ontario	6Z
117	753 E. Emporia Street	1049-101-36-0000	Ontario	6Z
118	757 E. Emporia Street	1049-101-35-0000	Ontario	6Z
119	767 E. Emporia Street	1049-101-34-0000	Ontario	6Z
120	763 E. Emporia Street	1049-101-33-0000	Ontario	6Z
121	765 E. Emporia Street	1049-101-32-0000	Ontario	6Z
122	817E. Emporia Street	1049-101-30-0000	Ontario	6Z
123	111 S. Lemon Avenue	1049-063-10-0000	Ontario	6Z
124	730 E. Willow Street	1048-512-04-0000	Ontario	6Z
125	13641 Foothill Boulevard	0229-091-17-0000	Fontana	6Z
126	635 W. Holt Boulevard	1049-021-03-0000	Ontario	5S1

No.#	Address/Location	Parcel Number	City	OHP Status Codes
127	1101 E. Holt Boulevard	1048-471-23-0000	Ontario	5S1
128	1300 E. Holt Boulevard	0110-131-06-0000	Ontario	5S1
129	1111 E. Holt Boulevard	1048-471-15-0000	Ontario	6Z
130	1175 E. Holt Boulevard	1048-472-18-0000	Ontario	6Z
131	1179 E. Holt Boulevard	1048-472-17-0000	Ontario	6Z
132	204 E. Holt Boulevard	1049-063-01-0000	Ontario	5S1
133	659 E. Holt Boulevard	1048-525-17-0000	Ontario	6Z
134	1248 W. Holt Boulevard	1010-543-05-0000	Ontario	6Z
135	1328 W. Holt Boulevard	1010-543-10-0000	Ontario	6Z
136	1424 W. Holt Boulevard	1010-552-04-0000	Ontario	6Z
137	1414 W. Holt Boulevard	1010-552-33-0000	Ontario	6Z
138	1051 W. Holt Boulevard	1011-132-07-0000	Ontario	6Z
139	925-927 W. Holt Boulevard	1011-141-11-0000	Ontario	6Z
140	756 E. Holt Boulevard	1049-101-10-0000	Ontario	6Z
141	766 E. Holt Boulevard	1049-101-11-0000	Ontario	6Z
142	1619 E. Holt Boulevard	0110-081-06-0000	Ontario	6Z
143	1156 W. Holt Boulevard	1010-522-17-0000	Ontario	6Z
144	1515 W. Holt Boulevard	1011-111-20-0000	Ontario	6Z
145	1265 W. Holt Boulevard	1011-121-17-0000	Ontario	6Z
146	609 E. Holt Boulevard	1048-524-16-0000	Ontario	6Z
147	1067 E. Holt Boulevard	1048-481-01-0000	Ontario	6Z
148	1409 W. Holt Boulevard	1011-111-05-0000	Ontario	6Z
149	1230 E. Nocta Street	0110-061-22-0000	Ontario	6Z
150	Holt Avenue/Holt Boulevard	N/A	Pomona Montclair Ontario	6Z
151	1225 W. Holt Boulevard	1011-121-05-0000	Ontario	6Z
152	862 Woodlawn Street	1099-462-07-0000	Ontario	6Z
153	1304 S. Bon View Avenue	1049-462-09-0000	Ontario	6Z
154	1301-1315-1325 S. Bon View Avenue	1050-131-05-0000	Ontario	6Z
155	1333 S. Bon View Avenue	1049-421-01-0000 1049-421-02-0000	Ontario	6Z

Request for Concurrence on NRHP Eligibility Determinations

Pursuant to 36 CFR § 800.4, the FTA respectfully requests your concurrence in the determination that the no longer extant P-36-007144 and all 11 newly identified archaeological sites (Lots 1 through 11) are ineligible for inclusion in the NRHP. FTA also requests your concurrence with the determination that the 4 built environment resources listed in Table 2 are eligible for inclusion in the NRHP, and the 155 built environment resources listed in Table 3 are ineligible for listing in the NRHP.

Status of Native American Consultation

Three searches of the Sacred Lands File, conducted by the Native American Heritage Commission (NAHC) in March 2016, October 2017, and February 2018 were negative for Native American cultural resources. In March 2016, the NAHC identified 11 individuals or contacts representing 10 Native American groups to be contacted about the project. In October 2017, that list had been expanded to 25 individuals or contacts representing 19 Native American groups, and the NAHC provided the same list when contacted again in February 2018.

In compliance with the Assembly Bill (AB) 52, on May 13, 2016, Parsons sent a notification letter regarding the proposed project on behalf of Omnitrans (former CEQA Lead Agency for the WVC Project) to the 11 original Native American contacts identified by the NAHC in March 2016. As a result, two Native American groups, the Gabrielino Band of Mission Indians– Kizh Nation and the San Manuel Band of Mission Indians (SMBMI), requested consultation under AB 52.

Following the proposed project modifications to divide the proposed corridor alignment in two phases in late 2017 and to incorporate the potential O&M Facility sites into the WVC Project environmental document in early 2018, the NAHC was contacted to request a SLF search for additional project footprints in October 2017 and February 2018, respectively. To continue the AB 52 outreach effort, on April 11, 2018, SBCTA (current CEQA lead agency) sent a notification letter regarding the proposed project to all 14 new contacts representing 9 new Native American groups provided by the NAHC in October 2017 and February 2018. In addition, on April 11, 2018, SBCTA sent a continuing consultation letter to the two Native American groups who formerly requested consultation to provide a project update and solicit comments under AB 52. On April 25, 2018, SBCTA also sent follow-up letters to the 9 original Native American groups who had been contacted in 2016 but had not responded to that contact. The follow-up letters provided an update on the project and a new invitation to consult under AB 52.

FTA has also initiated Native America and Tribal consultation under Section 106 of the NHPA and its implementing regulations, 36 CFR § 800.2 (c)(4) and 36 CFR § 800.2 (c)(5). On August

10, 2016, FTA sent an invitation letter to all original 11 Native American contacts provided by the NAHC in March 2016. As a result, two Native American groups, the Gabrieleno Band of Mission Indians – Kizh Nation and the SMBMI, requested consultation under Section 106 of the NHPA. The SMBMI also requested that mitigation measures be incorporated into the project permits and/or plans. FTA is in the process of sending an invitation letter to the 14 new contacts representing 9 new Native American groups identified by the NAHC in February 2018. In addition, SBCTA is continuing its consultation with Gabrieleno Band of Mission Indians – Kizh Nation and SMBMI by sending the updated information about the project and by making a telephone contact with the groups' representatives. The Tribes have been invited to contact FTA directly if they have any questions or concerns.

Assessment of Effects (36 CFR § 800.5)

As the FTA and SBCTA are considering two Build Alternatives (A and B) for the West Valley Connector Project, as well as a No Build Alternative, the FTA will continue consultation with your Office concerning Project effects once we have concurrence on the adequacy of our identification and evaluation efforts. At that time, we will submit a finding of effects, pursuant to 36 CFR § 800.5.

In conclusion, FTA requests concurrence with the determination as presented in the HPSR that four newly-identified properties are eligible for the NRHP, and apart from five previously-listed or determined NRHP-eligible properties, the remaining resources in the APE are not eligible for listing in the NRHP either individually or as part of a potential historic district.

If you have any questions or concerns, please contact Candice Hughes, Environmental Protection Specialist at (213) 629-8613, or by email at candice.hughes@dot.gov.

Sincerely,

Edward Carranza Jr.
Acting Regional Administrator

cc: Ted Matley, FTA
Andres Ramirez, SBCTA
Anna Jaiswal, Omnitrans

Attachments: West Valley Connector, Historic Property Survey Report, April 2018
West Valley Connector; Archaeological Survey Report, April 2018
West Valley Connector, Historic Resources Evaluation Report, April 2018

State of California • Natural Resources Agency
Edmund G. Brown Jr., *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Lisa Ann L. Mangat, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

June 14, 2018

In reply refer to: FTA_2016_1227_001

Mr. Edward Carranza, Jr.
Acting Regional Administrator
Federal Transit Administration
90 Seventh Street
Suite 15-300
San Francisco, CA 94103-6701

Re: West Valley Connector Bus Rapid Transit Project, Identification Efforts, Counties of Los Angeles and San Bernardino, California

Dear Mr. Carranza:

The State Historic Preservation Officer (SHPO) received your letter on May 16, 2018, continuing consultation on the above-referenced project to comply with Section 106 of the National Historic Preservation Act of 1966 (as amended), and its implementing regulations at 36 CFR § 800. The Federal Transit Administration (FTA) included the following documents with the consultation letter:

- *Historic Property Survey Report, West Valley Connector Project*, prepared for the San Bernardino County Transportation Authority (SBCTA) and Omnitrans in April, 2018
- *Historic Resources Evaluation Report, West Valley Connector Project* (HRER), prepared by Parsons for the SBCTA and Omnitrans in April, 2018
- *Archaeological Survey Report, West Valley Connector Project* (ASR), prepared by Parsons and PaleoSolutions for the SBCTA and Omnitrans in April, 2018

The undertaking proposes a 35-mile-long Bus Rapid Transit (BRT) corridor that would connect the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. The route would begin at the Pomona Metrolink Transit Center station in Pomona, California, and terminate near the Kaiser Permanente Medical Center at Sierra Avenue and Marygold Avenue in Fontana, California. The undertaking includes a combination of side- and center-running bus rapid transit (BRT) stations, 3.5 miles of dedicated bus-only lanes, mixed flow lanes, and up to 60 station platforms at 33 locations and associated improvements. FTA previously consulted on the Area of Potential Effect (APE) and the Office of Historic Preservation (OHP) issued comments on November 14,

2017. The APE was expanded to include an Operations and Maintenance Facility, and OHP commented on this expansion on March 29, 2018.

Identification efforts included a records search, archival research, Sacred Lands File request, Native American consultation, and survey of the APE. Twenty-one resources were previously recorded within the APE, including two archaeological resources. One of the previously recorded archaeological resources, P-36-007144, no longer exists. The other, P-36-002910, is the National Old Trails Highway/Route 66 (now Foothill Boulevard in the cities of Fontana and Rancho Cucamonga) and is listed on the National Register of Historic Places (NRHP). Nineteen built environment resources were previously identified within the APE, five of which are listed in or considered eligible for the NRHP (P-19-189200, Southern Pacific Railroad [SPRR] Depot, Pomona; Lincoln Park Historic District, Pomona; P-36-015397, Malaga Underpass Bridge, Fontana; P-36-015982, Euclid Avenue/State Route [SR] 83, Ontario and Upland; and P-36-002910, National Old Trails Road/Route 66, Rancho Cucamonga and Fontana).

Survey of the APE identified 11 new archaeological sites within the APE, as well as 171 built environment parcels that were constructed prior to 1973. These resources were recorded and evaluated for NRHP eligibility. Four built environment properties were recommended as eligible for listing in the NRHP; the remaining parcels were recommended as ineligible. All 11 archaeological resources were also recommended as ineligible.

FTA has requested concurrence on the determinations that the no longer extant P-36-007144 and the 11 newly identified archaeological sites (Lots 1 through 11) are ineligible for inclusion in the NRHP, four built environment resources are eligible for inclusion in the NRHP, and the remaining 155 built environment resources are ineligible for listing in the NRHP. After reviewing the documentation, I offer the following comments:

- Please explain the potential scope of work for Lots 1-11, and whether there is ground-disturbing activity planned for those areas. If the scope of work does include ground disturbing activity, the following information is required:
    - Based on the level of documentation provided, it does not appear that FTA has applied the National Register criteria (36 CFR § 63) to the archaeological resources identified on Lots 1 through 11. It also does not appear that appropriate identification efforts, such as archival research and consultation of Sanborn maps have been conducted by FTA to establish the historic use and association of these archaeological resources. At a minimum, this level of identification is necessary when evaluating historic-era archaeological resources according to National Register criteria.
    - While the buildings located on Lots 1 through 11 are no longer extant, please explain the likelihood of encountering subsurface archaeological deposits within these areas during ground disturbing construction activities. For this analysis, please also consider the vertical depth of

previous ground disturbance, depth of fill, and the vertical APE for the current undertaking. It is also recommended that as-built drawings, if available, are examined as part of this analysis.

- While the residential site at P-36-007144/CA-SBR-7144H is no longer extent, please provide documentation as to how it was determined that "construction activities associated with development of that facility [Kaiser Permanent Mental Health Office] destroyed or significantly disturbed any intact deposits."

- Please provide information regarding the depth of artificial fill throughout the APE as discussed in Section 6.3 of the Archaeological Survey Report (ASR).
- Please provide information as to why the depths of previous disturbance discussed in Section 6.3 of the ASR are "unknown at this time."
- Confirm whether the completed DPR 523 forms for the archaeological resources located on Lots 1 through 11 have been submitted to the appropriate Information Center for state designation.
- As discussed on page 72 of the ASR, the implementation of a Cultural Resources Monitoring and Mitigation Plan (CRMMP) should not be used instead of FTA completing the steps necessary to identify history properties (archaeological) within the APE for the purposes of Section 106.
- Based on the above comments, I cannot concur at this time FTA's determinations of eligibility because it is not clear that identification efforts are complete, per 36 CFR § 800.4. Please submit the information above to continue consultation.

I look forward to continuing this consultation with FTA. If you have any questions, please contact Kathleen Forrest of my staff at (916) 445-7022 or Kathleen.Forrest@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

Cc: Sharyn LaCombe, FTA

State of California • Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
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Edmund G. Brown Jr., *Governor*
Lisa Ann L. Mangat, *Director*

August 7, 2018

In reply refer to: FTA_2016_1227_001

Mr. Edward Carranza, Jr.
Acting Regional Administrator
Federal Transit Administration
90 Seventh Street
Suite 15-300
San Francisco, CA 94103-6701

Re: West Valley Connector Bus Rapid Transit Project, Identification Efforts, Counties of Los Angeles and San Bernardino, California

Dear Mr. Carranza:

The State Historic Preservation Officer (SHPO) received your letter on July 19, 2018, continuing consultation on the above-referenced project to comply with Section 106 of the National Historic Preservation Act of 1966 (as amended), and its implementing regulations at 36 CFR § 800. The Federal Transit Administration (FTA) included the following documents with the consultation letter:

- *Historic Property Survey Report, West Valley Connector Project*, prepared for the San Bernardino County Transportation Authority (SBCTA) and Omnitrans in July, 2018
- *Historic Resources Evaluation Report, West Valley Connector Project* (HRER), prepared by Parsons for the SBCTA and Omnitrans in July, 2018
- *Archaeological Survey Report, West Valley Connector Project* (ASR), prepared by Parsons and PaleoSolutions for the SBCTA and Omnitrans in July, 2018

The undertaking proposes a 35-mile-long Bus Rapid Transit (BRT) corridor that would connect the cities of Pomona, Montclair, Ontario, Rancho Cucamonga, and Fontana. The route would begin at the Pomona Metrolink Transit Center station in Pomona, California, and terminate near the Kaiser Permanente Medical Center at Sierra Avenue and Marygold Avenue in Fontana, California. The undertaking includes a combination of side- and center-running bus rapid transit (BRT) stations, 3.5 miles of dedicated bus-only lanes, mixed flow lanes, and up to 60 station platforms at 33 locations and associated improvements.

FTA previously consulted on the Area of Potential Effect (APE) and the Office of Historic Preservation (OHP) issued comments on November 14, 2017. The APE was expanded to include an Operations and Maintenance Facility, and OHP commented on this expansion on March 29, 2018. FTA also consulted on the identification efforts and OHP issued comments on those efforts on June 14, 2018. The current consultation addresses those comments.

Identification efforts included a records search, archival research, Sacred Lands File request, Native American consultation, and survey of the APE. Twenty-one resources were previously recorded within the APE, including two archaeological resources. One of the previously recorded archaeological resources, P-36-007144, no longer exists. The other, P-36-002910, is the National Old Trails Highway/Route 66 (now Foothill Boulevard in the cities of Fontana and Rancho Cucamonga) and is listed on the National Register of Historic Places (NRHP). Nineteen built environment resources were previously identified within the APE, five of which are listed in or considered eligible for the NRHP (P-19-189200, Southern Pacific Railroad [SPRR] Depot, Pomona; Lincoln Park Historic District, Pomona; P-36-015397, Malaga Underpass Bridge, Fontana; P-36-015982, Euclid Avenue/State Route [SR] 83, Ontario and Upland; and P-36-002910, National Old Trails Road/Route 66, Rancho Cucamonga and Fontana).

Survey of the APE identified 11 new archaeological sites within the APE, as well as 159 built environment parcels that were constructed prior to 1968. These resources were recorded and evaluated for NRHP eligibility. Four built environment properties were recommended as eligible for listing in the NRHP. Those properties include:

Built-Environment Resources within APE Determined Eligible for Listing in NRHP

Property #	Historic Property Name	Address/Location	Parcel Number	Eligibility Criteria	Period of Significance
1	Vince's Spaghetti	1206 W. Holt Boulevard, Ontario	1010-543-01-0000 1010-543-02-0000	A; C	1945-1967
2	A.C. Moorhead House	961 W. Holt Boulevard, Ontario	1011-141-07-0000	A; C	1893-1950
3	The Grinder Haven	724 W. Holt Boulevard, Ontario	1048-604-14-0000	C	1958
4	Jacob Lerch House	541 E. Holt Boulevard, Ontario	1048-523-17-0000	C	1901

The remaining 155 parcels were recommended as ineligible and are included in the table attached to this letter.

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All 11 newly identified historical archaeological resources (Lots 1 through 11), as well as the no longer extant P-36-007144 were also recommended as ineligible. Lots 1 through 11 include:

Archaeological Resources within APE Determined Ineligible for Listing in NRHP

Lot #	Address/Location	Parcel Number
1	570, 590, and 610 E. Holt Boulevard, Ontario	1049-092-01-0000, 1049-092-02-0000, 1049-092-13-0000
2	914 and 918 E. Holt Boulevard, Ontario	1049-131-03-0000, 1049-131-04-0000
3	957 E. Holt Boulevard, Ontario	1048-481-06-0000, 1048-481-29-0000, 1048-481-28-0000
4	1044 and 1050 E. Holt Boulevard, Ontario	1049-131-15-0000, 1049-131-16-0000
5	1373, 1381, and 1387 E. Holt Boulevard, Ontario	0110-061-01-0000, 0110-071-06-0000, 0110-071-07-0000, 0110-071-02-0000
6	120 S. Walker Ave, 1486 E. Holt Boulevard, Ontario	0110-121-04-0000, 0110-121-05-0000
7	1660 E. Holt Boulevard, Ontario	0110-111-11-0000, 0110-111-12-0000
8	1202-1212 E. Holt Boulevard, Ontario	0110-121-19-0000, 0110-31-01-0000
9	1625 and 1667 E. Holt Boulevard, Ontario	0110-081-10-0000, 0110-081-03-0000
10	1207 E. Holt Boulevard, Ontario	0110-061-10-0000
11	1170, 1176, 1194 E. Holt Boulevard	1049-141-20-0000, 1049-141-23-0000, 1049-141-24-0000

FTA has requested concurrence on the determinations that the no longer extant P-36-007144 and the 11 newly identified archaeological sites (Lots 1 through 11) are ineligible for inclusion in the NRHP, four built environment resources are eligible for inclusion in the NRHP, and the remaining 155 built environment resources are ineligible for listing in the NRHP. After reviewing the documentation, I offer the following comments:

- I agree that the no longer extant P-36-007144 is not eligible for listing in the NRHP, per 36 § CFR 800.4(c)(2).

- I agree that Lots 1 through 11, as listed in the Archaeological Resources table above, are not eligible for listing in the NRHP, per 36 § CFR 800.4(c)(2).
- I agree that the four built environment properties listed in Built Environment Resources table above are eligible for listing in the NRHP, per 36 § CFR 800.4(c)(2).
- I agree that the 155 resources listed in the attached table are not eligible for listing in the NRHP, per 36 § CFR 800.4(c)(2).
- In the future, it is not necessary to prepare separate HASR/HPSR documents for the built environment. A single report is sufficient.

I look forward to continuing this consultation with FTA. If you have any questions, please contact Kathleen Forrest of my staff at (916) 445-7022 or Kathleen.Forrest@parks.ca.gov.

Sincerely,

Julianne Polanco
State Historic Preservation Officer

Cc: Sharyn LaCombe, FTA

Built-Environment Resources within APE Determined Ineligible for Listing in NRHP

No.#	Address/Location	Parcel Number	City	OHP Status Codes
1	550 N. Garey Avenue	8336-016-028	Pomona	6Z
2	485, 499 N. Garey Avenue	8336-022-015	Pomona	6Z
3	445 N. Garey Avenue	8336-022-007	Pomona	6Z
4	415-425 N. Garey Avenue	8336-022-008	Pomona	6Z
5	130 E. Holt Avenue	8336-021-005	Pomona	6Z
6	173 E. Center Street	8336-021-022	Pomona	6Z
7	416-442 N. Garey Avenue	8336-021-027	Pomona	6Z
8	155 W. Commercial Street	8336-032-011	Pomona	6Z
9	167 W. Commercial Street	8336-032-010	Pomona	6Z
10	295 N. Garey Avenue	8336-032-014	Pomona	6Z
11	472-478 E. Holt Avenue	8337-025-002	Pomona	6Z
12	468 E. Holt Avenue	8337-025-003	Pomona	6Z
13	450-454 E. Holt Avenue	8337-025-004	Pomona	6Z
14	440 E. Holt Avenue	8337-025-015	Pomona	6Z
15	519 E. Holt Avenue	8337-016-010	Pomona	6Z
16	520 E. Holt Avenue	8337-021-002	Pomona	6Z
17	540 E. Holt Avenue	8337-020-011	Pomona	6Z
18	1545-1575 E. Holt Avenue	8323-025-025	Pomona	6Z
19	1538 W. Holt Boulevard	1010-552-13-0000	Ontario	6Z
20	1528 W. Holt Boulevard	1010-552-12-0000	Ontario	6Z
21	1520 W. Holt Boulevard	1010-552-11-0000	Ontario	6Z
22	1512 W. Holt Boulevard	1010-552-38-0000	Ontario	6Z
23	1502 W. Holt Boulevard	1010-552-37-0000	Ontario	6Z
24	1442 W. Holt Boulevard	1010-552-06-0000	Ontario	6Z
25	1426 W. Holt Boulevard	1010-552-05-0000	Ontario	6Z
26	1364 W. Holt Boulevard	1010-543-32-0000	Ontario	6Z
27	1340 W. Holt Boulevard	1010-543-12-0000	Ontario	6Z
28	1263 W. Holt Boulevard	1011-121-18-0000	Ontario	6Z
29	1260 W. Holt Boulevard	1010-543-07-0000	Ontario	6Z
30	1240 W. Holt Boulevard	1010-543-04-0000	Ontario	6Z
31	1150 W. Holt Boulevard	1010 -522-13-0000	Ontario	6Z
32	1136-1142 W. Holt Boulevard	1010-522-06-0000	Ontario	6Z

No.#	Address/Location	Parcel Number	City	OHP Status Codes
33	1108 W. Holt Boulevard	1010-522-11-0000	Ontario	6Z
34	1050 W. Holt Boulevard	1010-502-08-0000	Ontario	6Z
35	1020 W. Holt Boulevard	1010-502-07-0000	Ontario	6Z
36	1021 W. Holt Boulevard	1011-132-10-0000	Ontario	6Z
37	1034 W. Holt Boulevard	1010-502-06-0000	Ontario	6Z
38	1013 W. Holt Boulevard	1011-132-11-0000	Ontario	6Z
39	964 W. Holt Boulevard	1010-501-80-0000	Ontario	6Z
40	967 W. Holt Boulevard	1011-141-06-0000	Ontario	6Z
41	960 W. Holt Boulevard	1010-501-79-0000	Ontario	6Z
42	940 W. Holt Boulevard	1010-501-78-0000	Ontario	6Z
43	943 W. Holt Boulevard	1011-141-35-0000	Ontario	6Z
44	900 W. Holt Boulevard	1010-501-76-0000	Ontario	6Z
45	909 W. Holt Boulevard	1011-141-13-0000	Ontario	6Z
46	830 W. Holt Boulevard	1010-491-03-0000	Ontario	6Z
47	863 W. Holt Boulevard	1011-141-32-0000	Ontario	6Z
48	755 W. Holt Boulevard	1049-011-03-0000	Ontario	6Z
49	745 W. Holt Boulevard	1049-011-04-0000	Ontario	5S1
50	739 W. Holt Boulevard	1049-011-05-0000	Ontario	6Z
51	729 W. Holt Boulevard	1049-012-01-0000	Ontario	6Z
52	627 W. Holt Boulevard	1049-021-03-0000	Ontario	6Z
53	625 W. Holt Boulevard	1049-021-04-0000	Ontario	6Z
54	212-214 E. Holt Boulevard	1049-063-02-0000	Ontario	5S1
55	220-222 E. Holt Boulevard	1049-063-03-0000 1049-063-04-0000	Ontario	5S1
56	230 E. Holt Boulevard	1049-063-05-0000	Ontario	6Z
57	444 E. Holt Boulevard	1049-066-02-0000	Ontario	5S1
58	500 E. Holt Boulevard	1049-091-01-0000	Ontario	6Z
59	517 E. Holt Boulevard	1048-522-10-0000	Ontario	6Z
60	522 E. Holt Boulevard	1049-091-03-0000	Ontario	6Z
61	523 E. Holt Boulevard	1048-522-09-0000	Ontario	6Z
62	527 E. Holt Boulevard	1048-522-08-0000	Ontario	6Z
63	526 E. Holt Boulevard	1049-091-04-0000	Ontario	6Z
64	545 E. Holt Boulevard	1048-523-16-0000	Ontario	5S1
65	111 N. Monterey Avenue	1048-523-15-0000	Ontario	6Z

No.#	Address/Location	Parcel Number	City	OHP Status Codes
66	601 E. Holt Boulevard	1048-524-17-0000	Ontario	6Z
67	616 E. Holt Boulevard	1049-093-01-0000	Ontario	5S1
68	636 E. Holt Boulevard	1049-093-06-0000	Ontario	6Z
69	640-642 E. Holt Boulevard	1049-093-09-0000	Ontario	6Z
70	635 E. Holt Boulevard	1048-525-20-0000	Ontario	6Z
71	639 E. Holt Boulevard	1048-525-19-0000	Ontario	5S1
72	654 E. Holt Boulevard	1049-094-02-0000	Ontario	6Z
73	660 E. Holt Boulevard	1049-094-14-0000	Ontario	6Z
74	668 E. Holt Boulevard	1049-094-04-0000	Ontario	6Z
75	720 E. Holt Boulevard	1049-101-04-0000	Ontario	6Z
76	717 E. Holt Boulevard	1048-512-22-0000	Ontario	6Z
77	727 E. Holt Boulevard	1048-512-20-0000	Ontario	6Z
78	741 E. Holt Boulevard	1048-512-18-0000	Ontario	5S1
79	745 E. Holt Boulevard	1048-512-17-0000	Ontario	5S1
80	728 E. Holt Boulevard	1049-101-05-0000	Ontario	6Z
81	736 E. Holt Boulevard	1049-101-06-0000	Ontario	6Z
82	744 E. Holt Boulevard	1049-101-07-0000	Ontario	6Z
83	748 E. Holt Boulevard	1049-101-08-0000	Ontario	5S1
84	752-754 E. Holt Boulevard	1049-101-09-0000	Ontario	5S1
85	755 E. Holt Boulevard	1048-512-16-0000	Ontario	6Z
86	765 E. Holt Boulevard	1048-512-11-0000	Ontario	6Z
87	800 E. Holt Boulevard	1049-101-12-0000	Ontario	6Z
88	810 E. Holt Boulevard	1049-101-13-0000	Ontario	6Z
89	814 E. Holt Boulevard	1049-101-14-0000	Ontario	6Z
90	813-817 E. Holt Boulevard	1048-512-13-0000	Ontario	5S1
91	824-828 E. Holt Boulevard	1049-101-18-0000 1049-101-16-0000	Ontario	6Z
92	831 E. Holt Boulevard	1048-512-14-0000	Ontario	6Z
93	932 E. Holt Boulevard	1049-131-05-0000	Ontario	6Z
94	958 E. Holt Boulevard	1049-131-08-0000	Ontario	6Z
95	1015 E. Holt Boulevard	1048-481-03-0000	Ontario	6Z
96	1031 E. Holt Boulevard	1048-481-02-0000	Ontario	6Z
97	1042 E. Holt Boulevard	1049-131-14-0000	Ontario	6Z
98	103 Virginia Avenue	1048-471-13-0000	Ontario	6Z

No.#	Address/Location	Parcel Number	City	OHP Status Codes
99	1133 E. Holt Boulevard	1048-472-21-0000	Ontario	6Z
100	1217 E. Holt Boulevard	0110-061-21-0000	Ontario	6Z
101	1329 E. Holt Boulevard	0110-061-18-0000	Ontario	6Z
102	1228-1264 E. Holt Boulevard	0110-131-20-0000	Ontario	6Z
103	1512 E. Holt Boulevard	0110-121-03-0000	Ontario	6Z
104	1614 E. Holt Boulevard	0110-111-01-0000	Ontario	6Z
105	1670 E. Holt Boulevard	0110-111-06-0000	Ontario	6Z
106	1744 E. Holt Boulevard	0110-101-01-0000	Ontario	6Z
107	9260 Sierra Avenue	0193-161-09-0000	Fontana	6Z
108	9333 Sierra Avenue	0194-091-36-0000	Fontana	6Z
109	122 N. Mountain Avenue	1010-502-10-0000	Fontana	6Z
110	1182 E. Nocta Street	1048-472-15-0000	Fontana	6Z
111	541 E. Emporia Street	1049-091-05-0000	Ontario	5S1
112	518 Sierra Court	1048-522-04-0000	Ontario	6Z
113	524 Sierra Court	1048-522-05-0000	Ontario	6Z
114	108 S. Malcolm Avenue	1049-093-11-0000	Ontario	6Z
115	113 S. Malcolm Avenue	1049-094-11-0000	Ontario	6Z
116	114 S. Campus Avenue	1049-094-05-0000	Ontario	6Z
117	753 E. Emporia Street	1049-101-36-0000	Ontario	6Z
118	757 E. Emporia Street	1049-101-35-0000	Ontario	6Z
119	767 E. Emporia Street	1049-101-34-0000	Ontario	6Z
120	763 E. Emporia Street	1049-101-33-0000	Ontario	6Z
121	765 E. Emporia Street	1049-101-32-0000	Ontario	6Z
122	817E. Emporia Street	1049-101-30-0000	Ontario	6Z
123	111 S. Lemon Avenue	1049-063-10-0000	Ontario	6Z
124	730 E. Willow Street	1048-512-04-0000	Ontario	6Z
125	13641 Foothill Boulevard	0229-091-17-0000	Fontana	6Z
126	635 W. Holt Boulevard	1049-021-03-0000	Ontario	5S1
127	1101 E. Holt Boulevard	1048-471-23-0000	Ontario	5S1
128	1300 E. Holt Boulevard	0110-131-06-0000	Ontario	5S1
129	1111 E. Holt Boulevard	1048-471-15-0000	Ontario	6Z
130	1175 E. Holt Boulevard	1048-472-18-0000	Ontario	6Z
131	1179 E. Holt Boulevard	1048-472-17-0000	Ontario	6Z

No.#	Address/Location	Parcel Number	City	OHP Status Codes
132	204 E. Holt Boulevard	1049-063-01-0000	Ontario	5S1
133	659 E. Holt Boulevard	1048-525-17-0000	Ontario	6Z
134	1248 W. Holt Boulevard	1010-543-05-0000	Ontario	6Z
135	1328 W. Holt Boulevard	1010-543-10-0000	Ontario	6Z
136	1424 W. Holt Boulevard	1010-552-04-0000	Ontario	6Z
137	1414 W. Holt Boulevard	1010-552-33-0000	Ontario	6Z
138	1051 W. Holt Boulevard	1011-132-07-0000	Ontario	6Z
139	925-927 W. Holt Boulevard	1011-141-11-0000	Ontario	6Z
140	756 E. Holt Boulevard	1049-101-10-0000	Ontario	6Z
141	766 E. Holt Boulevard	1049-101-11-0000	Ontario	6Z
142	1619 E. Holt Boulevard	0110-081-06-0000	Ontario	6Z
143	1156 W. Holt Boulevard	1010-522-17-0000	Ontario	6Z
144	1515 W. Holt Boulevard	1011-111-20-0000	Ontario	6Z
145	1265 W. Holt Boulevard	1011-121-17-0000	Ontario	6Z
146	609 E. Holt Boulevard	1048-524-16-0000	Ontario	6Z
147	1067 E. Holt Boulevard	1048-481-01-0000	Ontario	6Z
148	1409 W. Holt Boulevard	1011-111-05-0000	Ontario	6Z
149	1230 E. Nocta Street	0110-061-22-0000	Ontario	6Z
150	Holt Avenue/Holt Boulevard	N/A	Pomona Montclair Ontario	6Z
151	1225 W. Holt Boulevard	1011-121-05-0000	Ontario	6Z
152	862 Woodlawn Street	1099-462-07-0000	Ontario	6Z
153	1304 S. Bon View Avenue	1049-462-09-0000	Ontario	6Z
154	1301-1315-1325 S. Bon View Avenue	1050-131-05-0000	Ontario	6Z
155	1333 S. Bon View Avenue	1049-421-01-0000 1049-421-02-0000	Ontario	6Z