

VISUAL IMPACT ASSESSMENT

I-215/University Parkway Interchange Improvement Project



San Bernardino, CA

08-SBd-215-PM 11.35/11.95

EA 0E4200

Project No. 0800000083



January 2019

VISUAL IMPACT ASSESSMENT

Interstate-215/University Parkway Interchange Improvement Project

January 2019

California Department of Transportation
District 8, San Bernardino County, Interstate 215
Post Mile 11.35/11.95

EA0E420



Prepared by

Date:

1/28/19

April Cottini
HDR, Inc.
License # 5902
Project Landscape Architect

Approved by:

Date:

2/20/19

Rose Bishop
License # 4868
Caltrans District Landscape Architect
San Bernardino
District 8

Statement of Compliance: Produced in compliance with National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) requirements, as appropriate, to meet the level of analysis and documentation that has been determined necessary for this project.

VISUAL IMPACT ASSESSMENT

Interstate-215/University Parkway Interchange Improvement Project

PURPOSE OF STUDY AND ASSESSMENT METHOD

The purpose of this visual impact assessment (VIA) is to document potential visual impacts caused by the proposed Project and propose measures to lessen any detrimental impacts that are identified. Visual impacts are demonstrated by identifying visual resources in the project area, measuring the amount of change that would occur as a result of the project, and predicting how the affected public would respond to or perceive those changes. This visual impact assessment follows the guidance outlined in the publication *Visual Impact Assessment for Highway Projects* published by the Federal Highway Administration (FHWA) in March 1981.

PROJECT DESCRIPTION

The San Bernardino County Transportation Authority (SBCTA), in cooperation with the California Department of Transportation (Caltrans) and the City of San Bernardino (City), is proposing to improve the Interstate 215 (I-215)/University Parkway Interchange in the City of San Bernardino, California (Figure 1). Caltrans is the lead agency under the California Environmental Quality Act (CEQA). Caltrans is also the lead agency under the National Environmental Policy Act (NEPA), as assigned by the FHWA, in accordance with NEPA (42 United States Code [USC] 4321 et seq.); and the Council on Environmental Quality (CEQ) Regulations implementing NEPA (40 Code of Federal Regulations [CFR] 1500–1508).

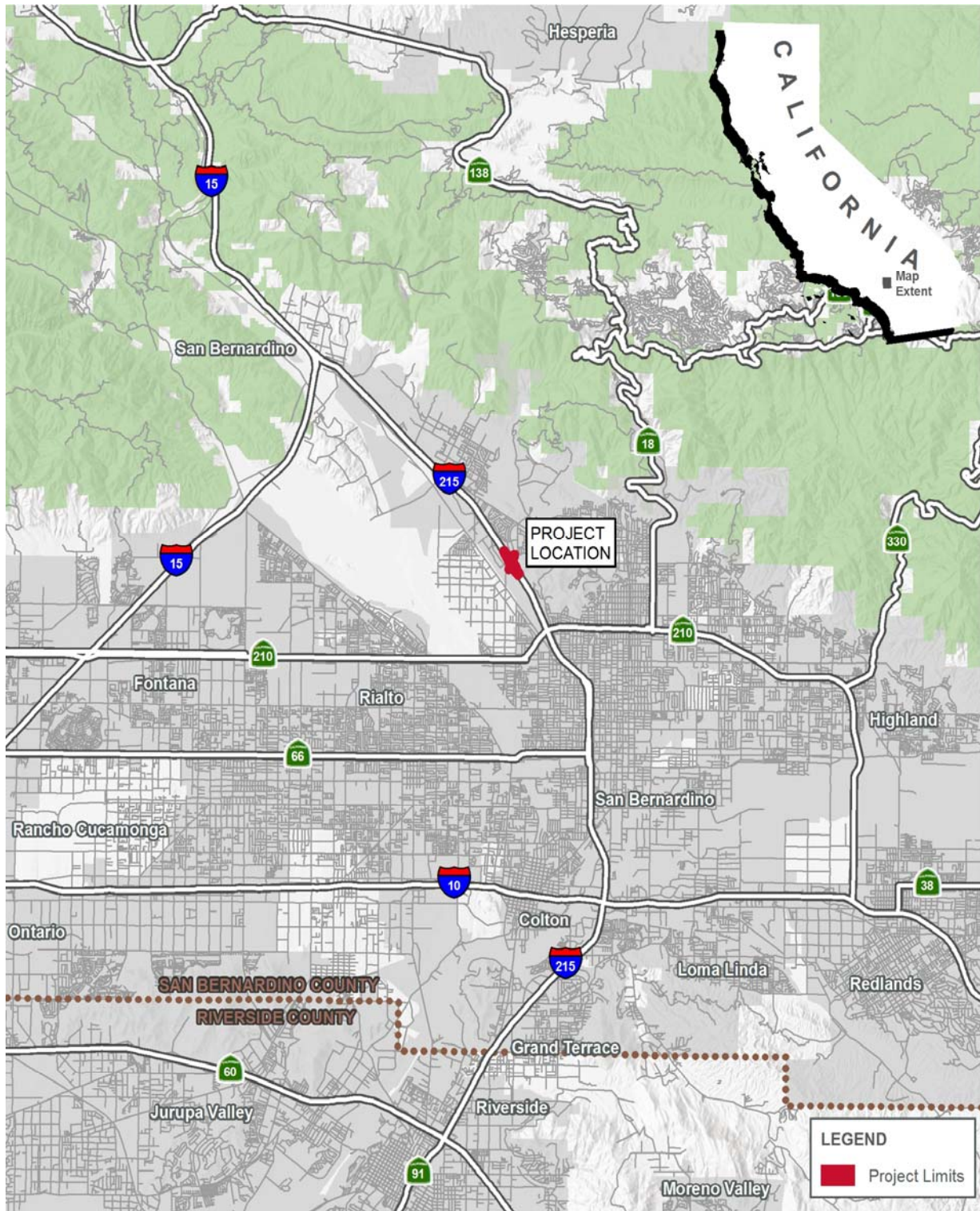
A total of two alternatives are being evaluated as part of the I-215/University Parkway Interchange Improvement Project: Project Alternative 1 (No Build) and Alternative 2 (Diverging Diamond Interchange [DDI]). The Project limits (Figure 2), are located within Caltrans and City right-of-way (ROW). The areas within and immediately adjacent to the Project limits are predominately developed and generally consist of commercial/retail land uses. The existing interchange serves as a main point of access for students, faculty, and visitors of California State University, San Bernardino (CSUSB).

Alternative 1 would maintain the facility in its current condition. No improvements would be implemented at this time and therefore, no capital cost is associated with this alternative. As traffic demand increases due to the planned growth in the area, specifically at CSUSB, traffic operational characteristics would further deteriorate. The Alternative 1 - No Build would not address or alleviate the forecasted operational and existing safety issues attributed to the severe congestion within the University Parkway Interchange and would not satisfy the purpose and need.

Alternative 2 (DDI) would provide operational improvements to traffic flow associated with the I-215/University Parkway Interchange. Alternative 2 (DDI) proposes to replace the existing University Parkway tight diamond interchange with a DDI. The existing undercrossing would remain in place. This

concept would improve all four legs of the current interchange and improve directional movement through the system. Using the DDI system, the interchange would allow more efficient left-turn and right-turn movements at all ramp terminals.

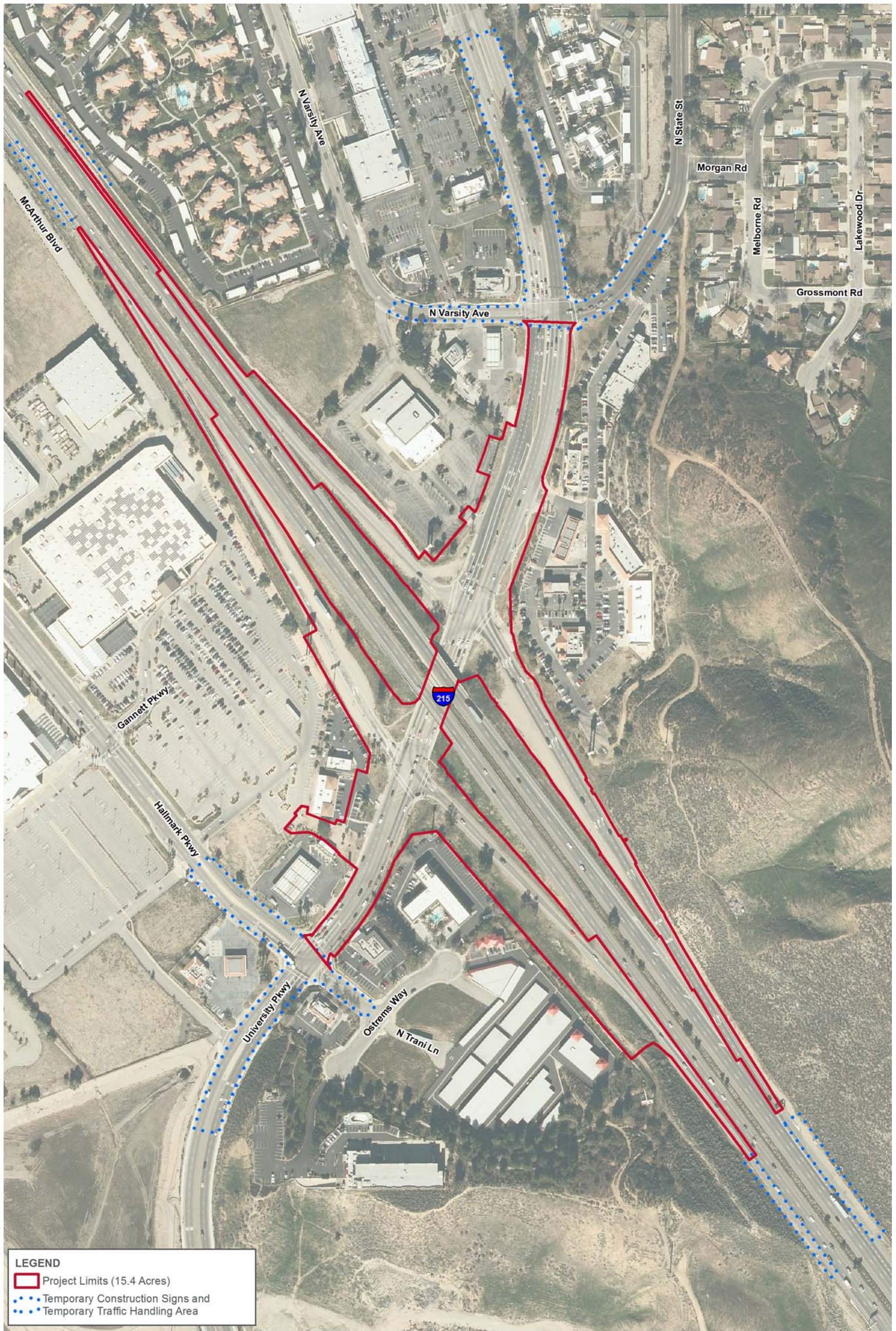
A DDI is a viable alternative for the improvements at the University Parkway and I-215 Interchange due to its ability to eliminate multiple traffic signal phases, which will reduce delay and would improve traffic flow for multiple movements within the constrained area. A DDI would alleviate congestion within the interchange in addition to relief of congestion which currently backs up to the two adjacent local intersections on each side of I-215 on University Parkway. Improvements under the proposed Project (Alternative 2) would occur within areas of previously disturbed soils located in the general vicinity of the existing I-215/University Parkway Interchange. No building structures would be disturbed as part of the proposed Project, including the existing University Parkway undercrossing and I-215 bridge structure. ROW requirements would potentially include partial acquisitions and temporary construction easements (TCE). Although no property relocations are anticipated as part of the proposed Project under Alternative 2, changes to vehicular access at two areas along University Parkway are anticipated. These access changes are described below in Table 1.



I-215: PM 11.35/11.95
EA No: 0E420

I-215 University Parkway Interchange Improvement Project

Figure 1. Regional Location and Project Vicinity



I-215: PM 11.35/11.95
EA No: 0E420

I-215 University Parkway Interchange Improvement Project

Figure 2. Project Limits

Table 1. Changes to Driveway Access

Property	Location	Changes to Access
Scottish Rite Property	4400 N Varsity Avenue	Primary driveway access for the Scottish Rite property exists off of North Varsity Avenue. A secondary driveway for the property is located off of University Parkway. This secondary driveway access would be relocated just north of the existing secondary driveway on University Parkway, as part of the proposed Project.
Retail Plaza	4004-4020 University Parkway	<p>The southern driveway for this retail plaza located off of University Parkway would be modified to improve vehicular access.</p> <p>The northern driveway, which currently serves as the main point of access for the Jack in the Box restaurant within this retail strip plaza off of University Parkway, would be removed after modifications to the southern driveway are complete.</p>

As discussed in Table 1, above, two driveways currently serve the Scottish Rite property, located at 4400 N Varsity Ave. Primary driveway access for this property exists off of North Varsity Avenue, and secondary driveway access exists off of University Parkway, just north of the I-215 northbound (NB) on-ramp. The secondary driveway access for the Scottish Rite property, would be relocated north of its current location along University Parkway. Removal of the existing secondary driveway off of University Parkway would occur after the relocated secondary driveway is complete.

A retail plaza located at 4004 – 4020 University Parkway, would also experience changes to vehicular and pedestrian access. This retail plaza currently includes a standalone Jack in the Box restaurant and a retail strip mall that currently includes the following four retail businesses: Verizon Wireless, Mimi’s Donuts and Ice Cream, Honey’s Fashion, and a dental office.

Two driveways located off of University Parkway currently serve this retail plaza. The northern driveway serving this retail plaza that is closest to the SB I-215 off-ramp would be removed as part of the proposed Project. Prior to removal of the northern driveway, the southern driveway (also located on University Parkway) would be modified to improve vehicular access to the retail plaza. Parking within the retail plaza would be modified as part of the proposed Project. However, at a minimum, the number of parking spaces removed would be replaced.

Additional improvements as part of the proposed Project include the provision of street lighting; traffic signal modifications; minor paving; minor utility relocations; signage changes; restriping, turn lanes; and bicycle, pedestrian, and median streetscape improvements. Bicycle and pedestrian access within the

Project limits would be maintained throughout construction activities. No transmission towers are located within the Project limits.

The areas where temporary construction-related signage and temporary delineation for traffic lanes are expected to occur are identified in Figure 2. Construction-related signage would require ground disturbance of approximately 2 feet below ground surface (bgs), with the disturbance area measuring 8 inches in diameter for temporary construction area sign posts. The construction staging is anticipated to occur within the existing ROW and the limits shown in Figure 2.

PROJECT LOCATION AND SETTING

The project location and setting provide the context for determining the type of changes to the existing visual environment. The proposed Project is located along I-215 at the University Parkway interchange in the City of San Bernardino in San Bernardino County, California. The Project is predominately bounded by the extent of the on and off ramps along north- and south-bound I-215 to the north and south, State Street to the east, and Hallmark Parkway to the west. The Project limits extend to the edge of ROW along I-215 and University Parkway. The Project limits are shown in Figure 2, above.

According to United States Geologic Survey (USGS), the proposed Project is located in the Mountain and Valleys Inland Deserts Region of Southern California. The landscape is characterized by elevations ranging from 500 to 11,500 feet with native vegetation including, but not limited to, mixed chaparral and southern oak forest. Precipitation in the area of the Project ranges from 10 to 40 inches. The land use within the Project corridor is primarily urban, consisting of transportation, residential and commercial land uses, including but not limited to one to three story commercial buildings, parking lots, transportation elements, undeveloped hillsides, ornamental landscaping, and the San Bernardino Mountains. The project corridor is defined as the area of land that is visible from, adjacent to, and outside the highway right-of-way, as well as the topography, vegetation, and viewing distance.

According to the Natural Resources and Conservation Element of the City's General Plan (City of San Bernardino 2005) no scenic resources exist within the Project limits. However, the San Bernardino Mountains are identified as a scenic resource within that element and are visible from the Project limits. The proposed Project is not located within a designated State Scenic Highway as identified by the California Scenic Highway Mapping System (Caltrans 2011).

The proposed Project is identified as a Gateway within the City of San Bernardino University District Specific Plan (November 2005). The University District Specific Plan identifies goals, policies, design elements and requirements that govern the area within the Project limits. The proposed Project is subject to Caltrans complete streets directive. As defined by Caltrans, a complete street is a transportation facility that is planned, designed, operated, and maintained to provide safe mobility for all users, including bicyclists, pedestrians, transit vehicles, truckers, and motorists, appropriate to the function and context of the facility. Every complete street looks different, according to its context, community preferences, the types of road users, and their needs. Thus, the proposed Project would require consistency with the following applicable design elements and complete street directives shown in Table 2, below.

Table 2. Consistency with Applicable Regional and Local Plans

Goals and Policies	Project Consistency
Federal Transportation Improvement Program¹	
<p>The Federal Transportation Improvement Program (FTIP) is a federally managed four-year program of all the proposed surface transportation projects that will receive federal funding or are subject to a federally required action over a six-year period. The FTIP is prioritized to implement the region’s overall strategy for providing mobility and improving the efficiency and safety of the transportation system, while supporting efforts to attain federal and state air quality standards for the region by reducing transportation related air pollution. FTIP includes projects related to highway improvements, transit, rail and bus facilities, high occupancy vehicle lanes, high occupancy toll lanes, signal synchronization, intersection improvements, freeway ramps, and non-motorized projects-bicycle and pedestrian.</p>	<p>Consistent. The proposed Project is listed in the Final 2017 FTIP (Project No. SBD59204). Implementation of the proposed Project would alleviate traffic collisions related to congestion by making the intersection operations more efficient for commuters; as well as, improve operational efficiency for bicycle and pedestrian access. Therefore, the proposed Project is consistent with the FTIP program.</p>
Southern California Association of Governments – 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy²	
<p>Goal 2: Maximize mobility and accessibility for all people and goods in the region.</p>	<p>Consistent. The purpose of the proposed Project is to plan for the projected regional population growth, relieve traffic congestion and related GHG emissions by providing an improved and efficient signalized intersection, and improve vehicular, bicycle, and pedestrian access. Although no existing bus stops are located within the project limits, the overall improved connectivity within the interchange for both pedestrians and bicyclists would allow transit riders to access these bus stops adjacent to the project limits more safety and efficiently. Therefore, the proposed Project is consistent with these goals.</p>
<p>Goal 3: Ensure travel safety and reliability for all people and goods in the region.</p>	
Caltrans Complete Streets	
<p>Increased transportation choices.</p>	<p>Consistent. The DDI at University Parkway would provide options to avoid traffic congestion, and increase the overall capacity of the transportation network by providing accessible and efficient operations through the interchange. These operational improvements include the following and can be seen in figure 6, Plan View.</p> <p>Increase the overall capacity by providing up to three lanes and turn lanes of efficient operations through</p>

¹ <http://ftip.scag.ca.gov/Pages/2017/approved.aspx>, accessed March 25, 2018.

² <http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf>, accessed June 25, 2018.

Goals and Policies	Project Consistency
	<p>the interchange consistent with the University Corridor Specific Plan.</p> <p>The DDI design would make the surrounding community and the local interchange more livable by improving the transportation facility and reducing congestion.</p> <p>The design eliminates several vehicular crossing conflicts and reduces the potential of crashes and the severity of crashes.</p> <p>With the implementation of these improvements to transportation options, the proposed Project is consistent with this goal.</p>
Improve return on infrastructure investments	<p>Consistent. The integration of sidewalks, bike lanes, and safe crossings into the initial design of the project would not only provide better and safer operations but spare the expense of retrofits for complete streets elements at a later date. Therefore, the proposed Project is consistent with this goal.</p>
Livable communities	<p>Consistent. The DDI design would make the surrounding community and university campus more livable by improving the transportation facility and reducing accidents and congestion. Therefore, the proposed Project is consistent with this goal.</p>
Improved safety	<p>Consistent. The design accommodates bicyclists, pedestrians, and reduces the potential of crashes and the severity of crashes. Therefore, the proposed Project is consistent with this goal.</p>
Improved air quality.	<p>Consistent. Greenhouse gas emissions would be reduced by integrating complete streets elements in the DDI design by encouraging more efficient vehicular trips and the use of non-motorized and public transit trips through the addition of the signalized intersection, and improved bicycle and pedestrian access. Although no existing bus stops are located within the project limits, the overall improved connectivity for pedestrians and bicyclists within the interchange would allow transit riders to access these bus stops adjacent to the project limits more safely and efficiently. Therefore, the proposed Project is consistent with this goal.</p>
Increase in walking and bicycling.	<p>Consistent. Active elements inherent to the DDI design will encourage walking and bicycling by providing room for these activities and transportation options. These improvements include:</p> <ul style="list-style-type: none"> • 4.5-foot wide Class II bike lane proposed on the inside lane through the interchange core to connect bicyclists to bike lanes on each side of the interchange.
Bicycle facilities.	
Pedestrian facilities.	

Goals and Policies	Project Consistency
	<ul style="list-style-type: none"> • Conformance with California MUTCD 9B- California Guide Signs for Bicycle Facilities. • Provide California MUTCD 9C-1 Intersection Pavement markings; Designated Bicycle Lane with Left Turn on a Divided Highway. • Loop detection for bikes at signalized intersections. • Use of sharrows where bike lanes and vehicle crossings occur. • Recommendation for Bikes May Use Full Lane Regulatory Sign in interchange. • Lighting to provide accommodations for pedestrians, including access to businesses and adjacent shopping centers: <ul style="list-style-type: none"> ○ Contrasting crosswalks ○ Conflict awareness; using green striping to increase visibility ○ Conflict on the driveway/parking and bike/pedestrian access at the Verizon building/Jack in the Box. • Cross walks will be as close to 90 degrees to the curb where possible. • Height of safety shape barriers and material-concrete will allow adequate sight distance for pedestrians. • Provide off-set stop limit lines where appropriate. • Stop controls at crosswalks with unsignalized intersections as appropriate. • Off-ramps at I-215 NB and I-215 SB will be signalized for pedestrians. • Recommendation for Bike & Pedestrian Warning Signs at all interchange crossings. <p>With the implementation of these improvements to bicycle and pedestrian infrastructure, the proposed Project is consistent with these goals.</p>
San Bernardino County Non-Motorized Transportation Plan	
<p>Goal 1: Increased bicycle and pedestrian access - Expand bicycle and pedestrian facilities and access within and between neighborhoods, to employment centers, shopping areas, schools, and recreational sites.</p>	<p>Consistent. As previously discussed under the Project’s consistency with Complete Streets, the proposed Project would implement a Class II bike lane in both the NB and SB directions of the interchange core which allows bicyclists to safely travel along University Parkway through the DDI. This would create a more complete bicycle network within the City by providing a continuous bike lane from CSUSB to the southwestern border of the City. The proposed Project would also include improvements to pedestrian access at this interchange. Therefore, the proposed Project is consistent with these goals.</p>
<p>Goal 4: Improved bicycle and pedestrian safety - Encourage local and statewide policies and practices that improve bicycle and pedestrian safety.</p>	

Goals and Policies	Project Consistency
City of San Bernardino General Plan - Land Use Element	
<p>Goal 2.7: Provide for the development and maintenance of public infrastructure and services to support existing and future residents, businesses, recreation, and other uses.</p>	<p>Consistent. The purpose of the proposed Project is to provide improvements to accommodate for the projected regional population growth in the study area, increases in enrollment at CSUSB, and an increase in traffic demand at the existing I-215/University Parkway interchange for the horizon year of 2040. The proposed Project would improve vehicular, bicycle, and pedestrian access through the freeway ramp intersections; therefore, the proposed Project is consistent with this goal.</p>
City of San Bernardino General Plan - Economic Development Element	
<p>Policy 4.8.2: Fund key surface transportation improvements including new interchanges along I-215 and access from the I-10 to the San Bernardino International Airport and Trade Center along Waterman, Mountain View, Tippecanoe, and Mill.</p>	<p>Consistent. The proposed Project would provide operational improvements to traffic flow associated with the I-215/University Parkway interchange. These operational improvements would improve all four legs of the current interchange, as well as directional movement through the freeway system. Therefore, the proposed Project is consistent with this policy.</p>
City of San Bernardino General Plan – Community Design Element	
<p>Policy 5.3.3: A well-integrated network of bike and pedestrian paths should connect residential areas to schools, parks, and shopping centers.</p>	<p>Consistent. As previously discussed under the Project’s consistency with Complete Streets, the proposed Project would implement 4.5-foot wide Class II bike lane in both the NB and SB directions of the interchange core which allows for bicyclists to safely travel along University Parkway through the DDI. This would create a more complete bicycle network within the City by providing a continuous bike lane from CSUSB to the southeastern border of the City. The proposed Project would also include improvements for pedestrian access at this interchange. Therefore, the proposed Project is consistent with this policy.</p>
City of San Bernardino General Plan - Circulation Element	
<p>Goal 6.1: Provide a well-maintained street system</p>	<p>Consistent. Sustained growth and development in the area has increased commuter traffic at the I-215/University Parkway interchange. This interchange serves as the primary freeway access for CSUSB and a number of surrounding businesses and area residents. This has caused inadequate interchange queuing capacity and existing geometric deficiencies which have resulted in higher than state average collision rates at both the NB exit and SB entrance ramps. Extensive commercial and industrial developments, as well as the expansion of CSUSB, which is expected to increase its student population from</p>
<p>Policy 6.1.1: Maintain and rehabilitate all components of the circulation system, including roadways, sidewalks, bicycle facilities and pedestrian facilities.</p>	
<p>Goal 6.2: Maintain efficient traffic operations on City streets.</p>	

Goals and Policies	Project Consistency
<p>Policy 6.2.1: Maintain a peak hour level of service D or better at street intersections.</p>	<p>15,000 to 25,000 in the next 10 years, have contributed to the growth in the Project area. Existing (2017) traffic conditions indicate that both the northbound and southbound ramp intersections currently operate at Level of Service (LOS) E or F during PM peak hours. The results of the traffic analysis indicate that all study intersections and freeway mainline segments are forecasted to operate at LOS D or better under the Opening Year 2020 Build conditions. Therefore, the proposed Project would not result in a deterioration in level of service within and immediately adjacent to the University Parkway interchange.</p> <p>Implementation of the DDI system would allow more efficient left-turn and right-turn movements at ramp terminals and reduce delay and improve traffic flow for multiple movements within the constrained area. The Project proposes to reconfigure the interchanges to improve traffic operations which may include additional street lighting, traffic signal modifications, minor paving, minor utility relocations, signage changes, re-striping, turn lanes, and median streetscape improvements to improve circulation and access through the freeway ramp intersection. Therefore, the proposed Project is consistent with these goals and policies.</p>
<p>Policy 6.2.5: Design roadways, monitor traffic flow, and employ traffic control measures (e.g. signalization, access control, exclusive right and left turn-turn lanes, lane striping, and signage) to ensure City streets and roads continue to function safely within our Level of Service standards.</p>	
<p>Goal 6.3: Provide a safe circulation system.</p>	<p>Consistent. As previously discussed under the Project’s consistency with Complete Streets, the proposed Project would also include 4.5-foot Class II bike lane in both the NB and SB directions of the interchange core which allows bicyclists to safely travel along University Parkway through the DDI. This would create a more complete bicycle network within the City by providing continuous bike access from CSUSB to the southeastern border of the City.</p> <p>The proposed Project would also include improvements for pedestrian access at this interchange and allow for pedestrians to traverse the interchange core of the DDI by a protected pedestrian pathway. Crossing distances would be shortened for pedestrians since pedestrians would be crossing to the protected pedestrian pathway which is located in the middle of the DDI, instead of crossing the entire width of the street at a typical street intersection. Therefore, the proposed Project is consistent with these goals and policies.</p>
<p>Policy 6.3.1: Promote the principle that streets have multiple uses and users, and protect the safety of all users.</p>	
<p>Goal 6.6: Promote a network of multi-modal transportation facilities that are safe, efficient, and connected to various points of the City and the region.</p>	<p>Consistent. As previously discussed under the Project’s consistency with Complete Streets, the proposed Project would also include 4.5-foot wide Class</p>

Goals and Policies	Project Consistency
	<p>II bike lane in both the NB and SB directions of the interchange core which allows bicyclists to safely travel along University Parkway through the DDI. This would assist in creating a more complete bicycle network within the City by providing a continuous bike lane from CSUSB to the southwestern border of the City. Therefore, the proposed Project is consistent with this policy.</p>
<p>Policy 6.6.4: Ensure accessibility to public transportation for seniors and persons with disabilities.</p>	<p>Consistent. The proposed Project would reconfigure this interchange by implementing a DDI which would improve safety and traffic flow for multiple movements. Accessibility to public transportation along University Parkway for all people utilizing public transportation facilities, include seniors and persons with disabilities, would be maintained. Therefore, the proposed Project is consistent with this policy.</p>
<p>City of San Bernardino General Plan - Public Facilities and Services Element</p>	
<p>Goal 7.4: Maintain and enhance the cultural quality of life for the City’s residents.</p>	<p>Consistent. The I-215/University Parkway interchange is considered a gateway into the City as well as the University District. Currently, along the abutment walls of the bridge are twin murals welcoming users into the City of San Bernardino and the University District. The proposed Project would not widen the existing bridge. The Project team has coordinated with CSUSB throughout the design process; as such, the Project team has learned that CSUSB will be repainting the twin murals with a new design. Repainting of the twin murals may occur prior to construction of the proposed Project. If this occurs, the Project would preserve the twin murals throughout construction to ensure the scenic resource is maintained. If repainting occurs after the construction of the proposed Project, CSUSB has agreed to repaint the murals which will then include the new concrete barrier. Therefore, the proposed Project is consistent with this goal.</p>
<p>City of San Bernardino University Specific Plan</p>	
<p>Physical Connectivity: Develop a seamless connection between the community and University through access, tailored street naming, and physical improvements such as landscaping, streetscape, signage, and public art.</p>	<p>Consistent. As previously discussed under the Project’s consistency with Complete Streets, the proposed Project would also include 4.5-foot Class II bike lane in both the NB and SB directions of the interchange core which allows bicyclists to safely travel along University Parkway through the DDI. This would assist in creating a more complete bicycle network within the City by providing a continuous bike lane from CSUSB to the southwestern border of the City.</p> <p>The proposed Project would also include improvements for pedestrian access at this interchange and allow for pedestrians to traverse the interchange</p>

Goals and Policies	Project Consistency
	<p>core of the DDI by a protected pedestrian pathway. Crossing distances would be shortened for pedestrians since pedestrians would be crossing to the protected pedestrian pathway which is located in the DDI's interchange core, instead of crossing the entire width of the street at a typical street intersection. Other improvements, such as striping, signage, and maintaining the murals on the bridge abutment walls would also be implemented in order to guide all users through the DDI safely. Although improvements to public transit within the Project limits is not proposed, physical improvements through the implementation of signage, signals, and the DDI, would help develop seamless vehicular connectivity through University Parkway, which would benefit transit traversing the project site. Therefore, the proposed Project is consistent with this goal.</p>

Source: Caltrans Complete Streets Program (October 2014); City of San Bernardino General Plan (November 2005); City of San Bernardino University District Specific Plan (November 2005); San Bernardino County Transportation Authority Non-Motorized Transportation Plan (May 2015); SCAG 2016-2040 RTP/SCS (April 2016); SCAG Final 2017 FTIP (May 2016).

The proposed Project improvements (Alternative 2) would be consistent with the University District Specific Plan guidelines for local roadways, the identified gateway intersection at I-215 and University Parkway, and Caltrans Complete Street directive.

VISUAL RESOURCES AND RESOURCE CHANGE

Visual resources of the project setting are defined and identified below by assessing *visual character* and *visual quality* in the project corridor. *Resource change* is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the project corridor before and after the construction of the proposed Project. To help evaluate the visual resources and resource change for the proposed Project, the Project limits and surrounding area, the Project has been divided into visual assessment units (VAU). VAUs are areas with their own visual character and quality, and is typically defined by the limits of a particular viewshed. For this Project, the following three VAUs and their associated key views have been identified and are showing in Figure 3, below.

- Visual Assessment Unit 1 (VAU-1): Commercial Unit North of Interstate-215:**
 This unit is located within the northeastern portion of the I-215/University Parkway interchange and is bounded by West College Avenue approximately 0.1 miles to the north, I-215 to the south, North Varsity Avenue to the west, and the Shandin Hills behind the commercial buildings to the east. This unit is primarily comprised of commercial land uses.

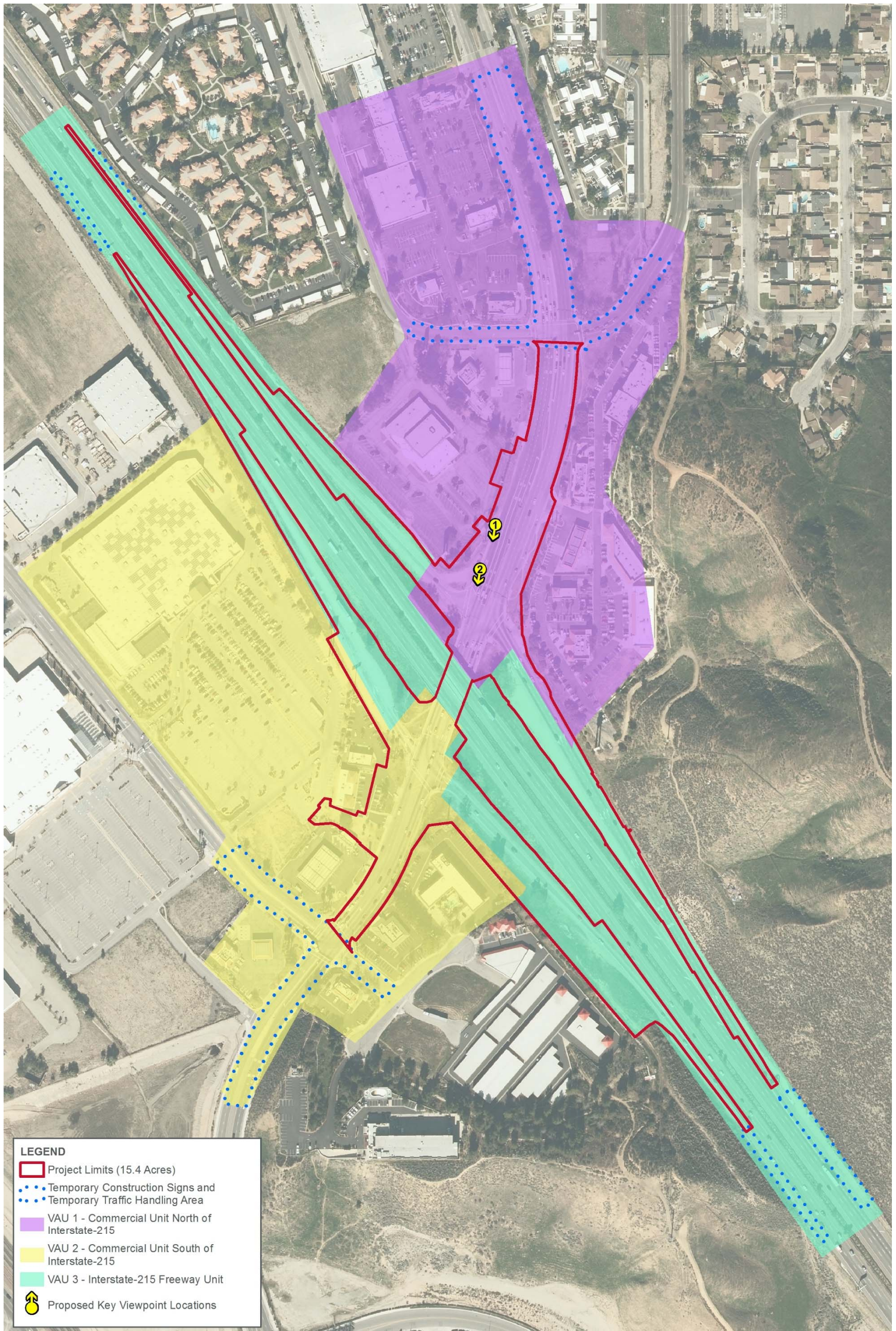
- **Visual Assessment Unit 2 (VAU-2): Commercial Unit South of Interstate-215:**

This unit is comprised of the commercial area located south of the I-215/University Parkway interchange. This unit is bounded by a commercial building and parking lot to the north, commercial buildings to the south, vacant land to the west, and I-215 to the east.

- **Visual Assessment Unit 3 (VAU-3): Interstate I-215 Freeway Unit:**

This unit encompasses the I-215 freeway on and off-ramps just beyond the Project limits. This unit is primarily located within the Caltrans right-of-way with views of the I-215 freeway and neighboring land uses.

The overall visual character of the proposed Project would be compatible with the existing visual character of the corridor. The existing visual character of the area within the Project limits is dominated by transportation and commercial uses. Existing features within the Project limits contributing to the existing visual form are local roadways, the I-215 overcrossing at University Parkway (I-215 overcrossing), and the I-215 on and off ramps. These transportation features create horizontal lines throughout the Project limits.



I-215: PM 11.35/11.95
EA No: 0E420

I-215 University Parkway Interchange Improvement Project

Figure 3. Visual Impact Assessment Units

The Shandin Hills located east of the interchange and the San Bernardino Mountains are visible from the Project limits and provide additional visual forms within the Project corridor. The existing monument located within the median of University Parkway and east of the interchange, shown in Figure 4, creates an additional vertical feature; however, the color and texture of the concrete monument blends with the colors of the surrounding transportation features. Continuity within the Project is accomplished by the gray color and smooth texture of the transportation features, including I-215 and the local roadways, by the green and coarse texture of the ornamental vegetation along the roadways, and by the views of the greens and golds and varying textures of the vegetation in the San Bernardino Mountains and the Shandin Hills.

Figure 4. Monument on University Parkway east of I-215/University Parkway Interchange



There is limited diversity of visual patterns within the Project limits due to the repetitive nature of the transportation surfaces and vegetation. However, there are existing twin murals (Figure 5) located on both abutment walls spelling “University” with a picture of a howling wolf at the end of the word “University” in bright white letters with bright blue background. The murals serve as a feature element within the gateway entrance to the University District. This feature adds a unique and very diverse element to the scene; however, the murals can only be seen when travelling on University Parkway under the I-215 overcrossing. Therefore, the diversity within the Project limits overall is low due the limited view of this unique feature. The scale of the I-215 overcrossing dominates the northeast and southwest views at the I-215/University Parkway interchange. The San Bernardino Mountains dominate the landscape features and add continuity to the viewshed.

Figure 5. I-215 University Overcrossing Abutment Wall University District Twin Murals - View 1 (Full Extent)



**Figure 5. I-215 University Overcrossing Abutment Wall University District Twin Murals – View 2
(Close-Up)**



Proposed Project changes would be compatible with the existing visual character. The proposed Project would realign the I-215 on and off ramps and connections with local roadways. These changes would be consistent with the existing visual character. The I-215 overcrossing would remain intact and create the same horizontal linear features consistent with the existing viewshed. Newly-aligned on and off ramps, the new DDI interchange and local roads also create linear features throughout the viewshed.

Project features under Alternative 2 would not further obstruct the view of the San Bernardino Mountains and east hills, as it would maintain the proportions of textures and color of roadway surfaces and vegetation. The Project under Alternative 2 would include improvements such as re-striping, turn lanes (including unobstructed turn lanes within the DDI), vegetated raised medians, and streetscape improvements. These additional improvements would also add more defined linear features within the Project limits. However, the scale of these features would not overwhelm the viewshed, but rather would be consistent with the transportation nature of the existing viewshed. The existing monument on the east side of the interchange would remain intact, consistent with the existing view and with the guidelines of the University District Specific Plan. The University District twin murals (Figure 5) would be maintained on both abutment walls; however, the murals may require modification. Due to Project design under

Alternative 2, new abutment wall concrete barriers, not to exceed 4 feet in height, may be placed adjacent to the abutment walls to protect the overcrossing structural integrity from potential collisions, and to protect the structural integrity of the abutment walls. These concrete barriers may partially cover some of the lower lettering and the howling wolf. During stakeholder coordination efforts as part of the Project, CSUSB has indicated that they plan to repaint the twin murals and they have agreed to repaint the twin murals within the space left after the addition of the concrete barriers. Repainting of the twin murals may occur prior to construction of the proposed Project. If this occurs, the Project would preserve the twin murals throughout construction to ensure the scenic resource is maintained.

Additional vegetation is also proposed, increasing continuity and diversity of textures and colors within the viewshed. Signage and additional roadway aesthetic improvements within the City's ROW, consistent with the University District Specific Plan, have also been proposed.

The visual quality of the existing corridor would not be altered by the proposed Project. Factors that can contribute to the visual quality, vividness and unity, or memorability of visual impressions and harmonious visual patterns, of the landscape of the surrounding landscapes and local businesses would remain unchanged. Because the San Bernardino Mountains, a scenic resource as identified by the San Bernardino General Plan Nature can only be viewed to the northeast, the following visual quality elements have been evaluated from both northeast and southwest views to determine an overall visual quality for the Project.

Looking northwest from University Parkway west of the interchange, the components of the existing visual quality include the adjacent commercial developments, I-215 and the I-215 overcrossing, on and off ramps, University Parkway, the University District murals located on the I-215 overcrossing abutment walls, the Shandin Hills east of the interchange, and the San Bernardino Mountains. The San Bernardino Mountains are identified in both the City's General Plan and the University District Specific Plan as a feature of visual importance. Under the proposed Project, the view of the San Bernardino Mountains would remain intact and proposed Project features would not affect this scenic resource. The San Bernardino Mountains provide a strikingly memorable natural landscape feature when looking to the northeast, providing a moderately high vividness.

Looking southwest from University Parkway east of the interchange – away from the San Bernardino Mountains – the I-215 overcrossing dominates the view creating horizontal patterns and smooth textures clashing with the natural form and rough textures of natural vegetative landscape and creating a very low vividness.

When observing the interchange from University Parkway in both directions, the I-215 overcrossing abutment wall mural is a very memorable feature of the view, creating a moderately-high vividness. Therefore, the overall vividness for the Project is considered moderate.

Features contributing to intactness of the landscape within the Project limits include I-215, local roadways, natural landscaping and plantings within Caltrans and City ROW, adjacent commercial storefronts and buildings, the Shandin Hills east of the interchange, and the San Bernardino Mountains to the northeast. While the San Bernardino Mountains to the northeast and the surrounding vegetation do add to the overall natural landscape of the view, the I-215 overcrossing cuts the view horizontally in half and creates a very intrusive feature and a high level of degradation to the view. Therefore, the intactness is moderately low. Natural landscapes and transportation features contribute to the overall low unity of the view.

Transportation features, such as the I-215 overpass, create an intrusion to the natural landscape – especially when viewed to the northeast. Therefore, the overall visual quality of the existing project viewshed is moderately low.

All changes under the proposed Project Alternative 2 would occur within Caltrans' or the City's ROW and would not alter the height of the overcrossing. Minor vertical changes of approximately 20 inches would occur to the northbound I-215 on-ramp. Therefore, changes under Alternative 2 would not adversely affect views northeast to the San Bernardino Mountains, or to the surrounding features that contribute to the visual quality of the view. Various textural elements including natural landforms and vegetation would remain visible and create the same level of unity as with the existing conditions. Consistent with the transportation corridor, the Project would realign existing transportation features within the Project limits. The features contributing to vividness, intactness, and unity would not be negatively altered or impacted as a result of the proposed Project.

Resource change (changes to visual resources as measured by changes in visual character and visual quality) would be low. At a minimum, lighting throughout the Project limits would be replaced in kind. Approximately 11 mature trees are anticipated to be removed as a result of the proposed Project under Alternative 2.

VIEWERS AND VIEWER RESPONSE

Neighbors (people with views to the road) and highway users (people with views from the road) would not be affected by the proposed Project.

Highway neighbors are people who have views *to* the roadway. They can be subdivided into different viewer groups by land use. For example, residential, commercial, industrial, retail, institutional, civic, educational, recreational, and agricultural land uses may generate highway neighbors or viewer groups with distinct reasons for being in the corridor and therefore having distinct responses to changes in visual resources. For this Project, the following highway neighbors were considered:

- Residents
- Business Operators
- Recreation Users

Highway users are people who have views from the roadways. They can be subdivided into different viewer groups in two ways—by mode of travel or by reason for travel. For example, subdividing highway users by mode of travel may yield pedestrians, bicyclists, transit riders, car drivers and passengers, and truck drivers. For this Project, the following highway users were considered:

- Commuters
- Bicyclists
- Pedestrians

Viewer response measures the change in viewer exposure and viewer sensitivity.

Viewer exposure is a measure of the viewer's ability to see a particular object. Viewer exposure has three attributes: location, quantity, and duration. Location relates to the position of the viewer in relationship to the object being viewed. The closer the viewer is to the object, the more exposure the viewer has of the object. Quantity refers to how many people see the object. The more people who can see an object or the greater frequency with which an object is seen, the more exposure viewers have to the object. Duration refers to how long a viewer is able to keep an object in view. The longer an object can be kept in view, the more exposure the viewer has to the object. High viewer exposure helps predict that viewers would have a response to a visual change.

Highway neighbors would have a moderately low response. Neighbors' exposure to views resulting from the proposed Project would be of longer duration and many would have closer views of the changes as they occur. Project elements with the greatest effect on viewer response are the reconfiguration of the interchange to a DDI, new pedestrian and bicyclist pathways, increased landscaping, including the landscaped medians on portions of University Parkway, and the addition of University District specific design elements to be determined during the Plans, Specifications, and Estimate (PS&E) phase. Temporary construction impacts would further affect, and may temporarily increase, the neighbors' viewer response.

Highway users would have a low response to the proposed Project compared to neighbors, since highway users' viewer exposure would have a limited duration of the view and their resulting viewer response would be slightly lower. Temporary construction activities and long-term operational changes would be in close view for highway users. Depending on traffic flow, duration for highway viewers would be

substantially shorter than that of neighbors. However, because the I-215 and University Parkway interchange is a major route for accessing CSUSB, hundreds of highway users would have exposure to corridor changes as they are implemented. Bicyclists and pedestrians would similarly have high exposure to the changes occurring within the Project limits. Temporary construction impacts would further affect and may temporarily increase the users' viewer response.

Viewer sensitivity is a measure of how receptive a viewer is of a particular item or scene. Viewer sensitivity also measures the viewer's recognition of a particular object. It has three attributes: activity, awareness, and local values. Activity relates to the preoccupation of viewers—are they preoccupied, thinking of something else, or are they truly engaged in observing their surroundings. The more they are actually observing their surroundings, the more sensitivity viewers would have to changes to visual resources. Awareness relates to the focus of view—the focus is wide and the view general or the focus is narrow and the view specific. The more specific the awareness, the more sensitive a viewer is to change. Local values and attitudes also affect viewer sensitivity. If the viewer group values aesthetics in general or if a specific visual resource has been protected by local, state, or national designation, it is likely that viewers would be more sensitive to visible changes. High viewer sensitivity helps predict that viewers would have a high concern for any visual change.

Both highway users and neighbors would experience moderately low viewer sensitivity to the proposed Project. Proposed Project improvements would be compatible with the existing views resulting in similar overall viewer sensitivity. A viewer traveling on I-215 or University Parkway would maintain existing views of the San Bernardino Mountains and surrounding natural landscapes. Neighbors would have a higher concern for scenic quality because these viewers have an investment in the overall quality of their property and the surrounding area. Local values would be maintained throughout the Project limits where applicable, such as the University District murals located on the I-215 overcrossing abutment walls. Temporary construction activities may result in a higher temporary viewer sensitivity.

It is anticipated that the average viewer response of all viewer groups would be moderately low.

VISUAL IMPACT

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. These impacts can be either beneficial or detrimental. Cumulative impacts and temporary impacts during construction are also considered. Because it is not feasible to analyze all the views in which the proposed Project would be seen, it is necessary to select a number of Key Viewpoint (KV) within the VAUs that would most clearly demonstrate the change in the project's visual resources. Key views also represent the viewer groups that have the highest potential to be affected by the Project, considering exposure and sensitivity.

Two Key View locations have been identified to represent the visual and aesthetic character of the area within the Project limits, as identified within Figure 3. One visual simulation has been prepared for Key Viewpoint 2 to show the projected changes as a result of the Project. Photorealistic simulations can help convey what would be changed and what would not be changed by the proposed Project. Additionally, a Bird's Eye Plan View figure (Figure 6) was included to illustrate the visual changes from an aerial perspective within the new interchange after completion of the proposed Project, and to demonstrate

how bicycles, pedestrians, and vehicles would navigate through the new DDI. Figure 6 also highlights the Complete Street elements, such pavement markings, signalized pedestrian crossings, lighting, sharrows, increased signage for pedestrians and bicycle movements within the DDI and along University Parkway, the addition of safety barriers, and increased conflict visibility between motorists and non-motorists. Figures 7 and 8 are detailed visual simulations that show the Complete Street elements included as part of the Project, as well as the proposed movements of pedestrians, bicycles, and motorists through the new interchange.



*Disclaimer: The Aesthetic features shown in the above simulation are subject to change during the design phase.

Figure 6. I-215 Diverging Diamond Interchange Plan View



*Disclaimer: The Aesthetic features shown in the above simulation are subject to change during the design phase.

Figure 7. North End of Diverging Diamond Interchange Core Looking East



*Disclaimer: The Aesthetic features shown in the above simulation are subject to change during the design phase.

Figure 8. North End of Diverging Diamond Interchange Core Looking West

Key Viewpoint 1, Visual Assessment Unit 1: Commercial Unit North of I-215

Key Viewpoint 1, Figure 9 below, focuses on the existing University Parkway with the University Parkway undercrossing in the distance. Visual character within this KV is dominated by the linear features of the roadway and sidewalks. Vegetation flanking University Parkway add contrast to the dull gray colors of the roadway and interstate, as well as provide varying textures.

The scale of University Parkway overwhelms in this view and causes the both users and neighbors to focus attention on the roadway. Surrounding vegetation brings limited contrast to the view resulting in low unity. The monument present within the center median (see Figure 4 for close up view) creates a memorable feature within a relatively standard transportation scene giving the view a moderately low vividness. Intactness of the view is considered moderately low due to the encroachment of I-215 crossing over University Parkway, as well as the dominating scale of University Parkway. Therefore, the visual quality of KV 1 is considered moderately low.

Figure 9. Key Viewpoint 1 – Existing Condition



Resource Change

Under Alternative 2, University Parkway and the I-215 on- and off-ramps would be reconfigured into a DDI design that would allow vehicle traffic crossing at the interchange and travel down the left side of the roadway, as shown in Figure 6. The reconfiguration of the interchange would allow for more free flowing traffic movements and safer pedestrian crossings. Additionally, the interchange integrates key Caltrans Complete Street elements such pavement markings, signalized pedestrian crossings, lighting, sharrows, increased signage for pedestrians and bicycle movements within the DDI and along University Parkway, the addition of safety barriers, and increased conflict visibility between motorists and non-motorists, such

as sharrows. The memorable monument would remain in place under Alternative 2 and the center median would be reconfigured and additional medians for pedestrian crossings would be added as a result of the DDI.

The proposed visual character of the proposed Project under Alternative 2 would be compatible with the existing visual character. Vividness of the view increase to moderate as the new configuration of the roadway would result in a more memorable interchange and the monument would remain in place. Unity of the view would remain unchanged as the new DDI configuration under Alternative 2 would result in the same type of visual elements typical of an interchange and not significantly increase or decrease the visual patterns from this view. Intactness would also remain the same as the new DDI interchange under Alternative 2 would result in typical visual intrusions found in an interchange including, light poles, traffic signals, and additional signage and transportation elements. Based on the changes described, the resource change of the proposed view under Alternative 2 would be considered moderately low.

Viewer Response

It is expected that both neighbors and users would have a moderately low response to the changes. Highway neighbors would have a moderately low response. Neighbors' exposure to views resulting from the proposed Project under Alternative 2 would be of longer duration and many would have closer views of the changes as they occur. Highway users would have a low response to the proposed Project under Alternative 2 compared to neighbors, since highway users' viewer exposure would have a limited view of a majority of the proposed changes. Both highway users and neighbors would experience moderately low viewer sensitivity to the proposed Project under Alternative 2. Proposed Project improvements would be compatible with the existing views resulting in similar overall viewer sensitivity. A viewer traveling on I-215 or University Parkway would maintain existing views of the San Bernardino Mountains and surrounding natural landscapes.

Key Viewpoint 2, Visual Assessment Unit 1: Commercial Unit North of I-215

Key Viewpoint 2, Figure 10 below, focuses attention on the existing University Parkway undercrossing. Visual character within this KV is dominated by the linear features of the roadway, undercrossing, traffic signals, and sidewalks. Limited vegetation is present within the view and provides limited diversity of colors and textures within the view. The twin murals on the abutment walls of the undercrossing are visible in the distance providing additional non-transportation element contributing to diversity. A visual simulation has been prepared for this Key Viewpoint and can be seen as Figure 11, below.

Similar to KV1, the scale of University Parkway overwhelms the view and causes the both users and neighbors to focus attention on the roadway and the undercrossing in the middleground. The transportation features throughout the view provide a moderately low sense of unity to the view. Intactness of the view is considered moderately low due to the view consisting primarily transportation elements with blocks of vegetation. Vividness is considered moderately low for the view with the contributing factors of the Shandin Hills in the background and the CSUSB abutment wall twin murals. These elements give the view a sense of uniqueness and allowing a more memorable view. The overall visual quality of KV 2 is considered moderate.



Figure 10. Key Viewpoint 2 – Existing Condition



Disclaimer: Aesthetic features in the above photorealistic simulation are subject to change during the design phase.

Figure 11. Key Viewpoint 2 -Photorealistic Simulation

Resource Change

Under Alternative 2, University Parkway and the I-215 on- and off-ramps would be reconfigured into a DDI design that consists of traffic crossing at the interchange and traveling down the left side of the roadway, as shown in Figure 11. New features include concrete barriers along the abutment walls, pedestrian refuges landscaped with rock mulch, signalized crosswalks, and center median sidewalk through the undercrossing with concrete barriers. Key Caltrans Complete Street elements integrated as part of the proposed DDI design would allow for connectivity within the interchange to be maintained for all modes of transportation, including motorists, bicycles which can now utilize the Class II bike lane, and pedestrians. Additional improvements include cobblestone barriers on the toe of the vegetated slopes up to the interstate, as well as additional signals for motorist, bicycle, and pedestrian movements.

The proposed visual character of the Project under Alternative 2 would be compatible with the existing visual character and quality. Vividness of the view would increase to moderate as the new configuration of the roadway would result in a more memorable interchange. Additionally the concrete barriers along the abutment walls would only temporarily cover the University District twin murals. As stated previously, CSUSB plans to repaint the murals within the new confines of the proposed Project improvements. CSUSB may also choose to wrap the murals around the abutment walls so they would extend out on to the portions of the abutment walls facing the viewer in KV 2. Unity of the view remains moderately low as the scene would continue to be interrupted by conflicting vertical and horizontal lines caused by various transportation features. Intactness of the view would also remain moderately low. Features contributing to the intactness are the roadway and vegetation. With implementation of the proposed Project under Alternative 2, vegetation would be removed allowing more views of transportation elements such as I-215. The resource change of KV 2 under Alternative 2 would be considered moderately low.

Viewer Response

It is expected that both neighbors and users would have a moderately low response to the changes. Highway neighbors would have the most exposure and sensitivity to the proposed changes. However, with the implementation of the Project, the proposed changes would benefit the community overall by providing complete street elements, enhancing the utility of the existing I-215 University Parkway Interchange. Highway users would have a low response to the proposed Project compared to neighbors due to the limited exposure and low sensitivity to the proposed changes. The DDI configuration would help ease congestion within the interchange, provide more efficient turn lane operations, and eliminate several vehicular crossing conflicts. As a result, it is anticipated that both highway users and neighbors would experience moderately low viewer response to the changes shown in KV 2.

Summary of Visual Impacts of Visual Assessment Unit 1

VAU 1 is centered on the visual character and resources relating to the core of the DDI, which consists of the northern braid of the I-215 NB on-and-off ramps and University Parkway, and the northern half of the University Parkway undercrossing under Alternative 2. Proposed Project resource changes under Alternative 2 would consist of the construction of the I-215 NB on and off- ramps at University Parkway, realignment of existing sidewalks, the addition of new sidewalks and medians throughout the northern portion of the interchange, new traffic signals, hardscaping, concrete barriers, and landscaping. The University Parkway abutment wall twin murals would remain in place until CSUSB repaints the twin murals. Improvements to the murals are not included as a part of the proposed Project; however, the

changes to the mural would have an impact to overall visual quality with VAU 1 and 2. Additionally, the proposed Project would not have any adverse impacts to the scenic resources previously mentioned, such as the Shandin Hills, San Gabriel Mountains, and the monument located within the center median of University Parkway. Views to these resources are limited to viewer's ability to look around (passenger or non-motorist) or the direction of travel. These modifications would create visual changes; however, they would not adversely affect the transportation nature of the built environment within VAU 1. The overall visual impact would be moderately low for VAU 1. The changes noted above within KV 1 and KV 2 would result in modified movements through the interchange; however, the transportation nature of the interchange in the NB would be consistent with the existing condition. Additionally, the Project would result in the relocation of the Scottish Rite driveway along University Parkway to a location further north along University Parkway. Minimal visual changes would occur as a result of the driveway removal. Additionally, vegetation removal would result under Alternative 2. Mitigation measure VIS-2, Landscape Plan, would mitigate any adverse visual changes as a result of the Project under Alternative 2.

Summary of Visual Impacts of Visual Assessment Unit 2

VAU 2 focuses on the southern portion of the I-215 University Parkway interchange. The area within VAU 2 general consists of the I-215 SB on- and off- ramps at University Parkway, the southern portion of University Parkway, including a portion of the University Parkway undercrossing. Resource changes would be similar to those discussed in VAU 1, as both halves of the DDI are fairly identical as shown in Figure 6. Similar to VAU 1, the proposed Project within VAU 2 would have no adverse impacts to scenic resources such as the Shandin Hills or San Gabriel Mountains, as there is no vertical change within the proposed Project improvements that would cause new elements to block existing views and be inconsistent with the existing setting. Similar to the findings in VAU-1, the overall visual impact would also be considered moderately low.

Summary of Visual Impacts of Visual Assessment Unit 3

VAU 3 focuses attention on the I-215 freeway and portions of the I-215 on- and off-ramps just before the on- and off-ramps meet University Parkway. This unit is primarily located within the Caltrans right-of-way with views from and of the I-215 freeway and surrounding area. The views from VAU 3 differ from those found in VAU 1 and VAU 2 primarily because of the elevation difference of the I-215 travel lanes. Neighboring views are limited to distant views of the new improvements due to the elevation, and the users are other motorists also using I-215, limiting the amount of exposure to the majority of the proposed changes under Alternative 2. Users utilizing the on- and off-ramps of both SB and NB I-215 would have higher exposure to the DDI interchange configuration. Users traveling down I-215 not utilizing the University Parkway exit would have little to no exposure of the newly configured interchange. Resource changes within VAU 3 are limited to the on- and off-ramps that would result in slight realignments to accommodate for the new turns and DDI configuration, vegetation removal, and BMP installation adjacent to I-215. Visual impacts would be considered low within VAU 3, as the resource changes within this VAU are limited to slight roadway realignment and minor vegetative changes.

Permanent Visual Impacts

No Build Alternative (Alternative 1)

Under the No Build Alternative, the proposed Project would not result in any of the construction activities associated with the Build Alternatives. No permanent impacts to the existing and future visual quality would occur. The No Build Alternative would not be consistent with the City's General Plan Land Use Element and Transportation Element, the City's University District, the SCAG 2017 FTIP for I-215 at University Parkway Interchange, or the Caltrans Complete Street directive.

Build Alternative (Alternative 2)

Long term impacts for the Project would include the construction of the DDI, aesthetic treatments, landscaping, and consistency with the Caltrans Complete Street elements. Elements contributing to the Caltrans Complete Street directive include pavement markings, signalized pedestrian crossings, lighting, sharrows, 4.5 foot wide Class II bike lane within the DDI core, increased signage for pedestrians and bicycle movements within the DDI and along University Parkway, the addition of safety barriers, and increased conflict visibility between motorists and non-motorists. These inherent design features to the DDI design would encourage walking and bicycling by providing room for pedestrian and bicycle activities and transportation options. The proposed Project would include additional lighting throughout the interchange, as a result, Minimization Measure VIS-1 would minimize potential permanent impacts related to light and glare during Project operation. Any lighting, at a minimum, would be replaced in kind. Overall visual impacts would be moderately low. The change to the visual resources and views are very minor and consistent with the existing interchange.

The San Bernardino Mountains and the Shandin Hills are major land form features within the viewshed of the Project limits and surrounding area. However, views of these scenic resources would not be altered as a result of the Project. There are no outstanding scenic vistas that would potentially be impacted by Alternative 2. Impacts to the twin murals may occur as a result of the proposed Project. Design features, identified below under Avoidance and Minimization Measures, would address impacts by repainting and recreating any portions of the murals obscured as a result of the Project. Impacts to the monument located within the median of University Parkway are not anticipated to occur as a result of the proposed Project. Construction of the proposed Project would require removal of trees and other vegetation in the ROW. Tree and vegetation removal on public lands would comply with City and Caltrans landscaping policies as provided in Measure VIS-2. Proposed best management practices (BMP), including the bioswales shown in Figure 6, Plan View, would be designed in such a way to appear as a natural landscape feature by being shaped in a non-formal, curvilinear manner to the greatest extent possible. Therefore, the proposed Project would not conflict with any local plans, policies, goals, or Municipal Code regulations in the City of San Bernardino.

Temporary Visual Impacts

No Build Alternative (Alternative 1)

Under the No Build Alternative, the proposed Project would not result in any of the construction activities associated with the Build Alternatives. No temporary impacts to the existing and future visual quality would occur.

Build Alternative (Alternative 2)

Temporary adverse visual impacts are anticipated during the construction period for Alternative 2. Temporary impacts would include the presence of construction equipment and materials, construction staging areas, temporary roadside barriers, and construction and detour signage within the area of the Project limits, as well as construction activities, such as truck hauling, excavation activity, and the removal of existing mature plantings. Project construction is anticipated to take 2 years, and would disturb a total of 15.4 acres as a result of construction, 7.3 acres of which would only be temporarily disturbed as a result of the proposed Project. As a result of construction, approximately 8 mature trees would be removed, and replacement landscaping would be provided. Tree and vegetation removal on public lands would comply with City and Caltrans landscaping policies as provided in Measure VIS-2. Additionally, impacts would be minimized through compliance with City policies and Caltrans Standard Construction Specifications, as outlined below in Measures VIS-3 and VIS-4. To encourage all modes of transportation be utilized throughout construction under Alternative 2, Minimization Measure TR-1, Transportation Management Plan (TMP), would be implemented to ensure access and safety within the interchange and at adjacent driveways reconfigured as part of the proposed Project for motorists and non-motorists. Caltrans Complete Street elements would be utilized to the extent possible throughout construction to ensure the all modes of transportation are encouraged throughout the entire duration of construction. The Project limits receives light at night from traffic, street lighting, traffic signals, freeway on- and off-ramps, and the surrounding commercial businesses. Existing lighting on the streets and along the ramps would be modified or relocated as a part of the proposed Project. Minimization Measure VIS-1 would minimize potential impacts related to light and glare, as previously discussed under Permanent Impacts for Alternative 2. With implementation of avoidance and minimization measures discussed above and VIS-5, Conceptual Plan, the proposed Project under the Alternative 2 would not conflict with any local plans, policies, goals, or Municipal Code regulations in the City of San Bernardino.

AVOIDANCE AND MINIMIZATION MEASURES

Avoidance or minimization measures have been identified and can lessen visual impacts caused by the proposed Project. Also, the inclusion of aesthetic features in the Project design can help generate public acceptance of visual changes resulting from the Project. This section describes additional avoidance and/or minimization measures that have been identified to address the specific visual impacts of the proposed Project. These measures would be designed and implemented with concurrence of the Caltrans District 8 Landscape Architect. The following measures to avoid or minimize visual impacts would be incorporated into the proposed Project:

- VIS-1** **Lighting Plan.** During Plan, Specification and Estimate (PS&E) Phase, lighting fixtures will be selected and installed to minimize glare on adjacent properties and into the night sky. Lighting will be shielded with non-glare hoods and focused within the project ROW. The lighting plan will be reviewed and approved by the City of San Bernardino’s Resident Engineer and the Caltrans District 8 Landscape Architect prior to construction to ensure compliance with these criteria.
- VIS-2** **Landscape Plan.** During final design, a highway landscape plan shall be prepared that identifies all opportunities to use areas within the State right-of-way (ROW) for full landscaping consistent with the Caltrans Highway Design Manual. This will include landscaping for graded areas with plant species consistent with adjacent vegetation, and enhancement of new project structures such as ramps and tunnels to the extent feasible. This plan will incorporate all applicable procedures and requirements detailed in the Caltrans Highway Design Manual, Section 902.1, Planting Guidelines (November 2001), and policies of the City of San Bernardino’s General Plan and Municipal Code as applicable.
- During final design, the Caltrans District 8 Landscape Architect will verify that the design minimizes removal of existing mature trees. If removal of mature trees cannot be avoided, additional landscape improvements will be incorporated into the final design for these areas. The replacement ratio of any trees removed will be determined by the Caltrans District 8 Landscape Architect.
- VIS-3** **San Bernardino General Plan Urban Design Element.** During final design, the City of San Bernardino’s Resident Engineer will verify that design elements are consistent with the vision for the City regarding aesthetic enhancements, landscaping, streetscapes, materials, colors, and signage.
- VIS-4** **University District Specific Plan.** During PS&E, the City of San Bernardino’s Resident Engineer will verify that design elements are consistent with the vision for the University District Specific Plan regarding gateways, aesthetic enhancements, landscaping, streetscapes, materials, colors, and signage.
- VIS-5** **Conceptual Plan.** During final design, a conceptual plan will be utilized and coordinated among the City of San Bernardino, San Bernardino County Transportation Authority and Caltrans District Landscape Architect to ensure consistency with the I-215 San Bernardino Master Plan guide lines, San Bernardino General Plan Urban Design Element, and the University District Specific Plan.

In addition to the visual/aesthetic measures detailed above, the following measure from the Traffic Operations Analysis Report would minimize impacts to transportation, circulation, and access during construction of the proposed Project.

- TR-1** **Transportation Management Plan (TMP).** During the Plan, Specifications, and Estimate (PS&E) Phase, a Transportation Management Plan (TMP) will be prepared for the project. Key elements to be considered in the TMP including the following:

- Public Information
- Motorist Information Strategies
- Incident Management
- Construction Strategies
- Demand Management
- Alternative Route Strategies

CONCLUSIONS

The proposed Project will not result in adverse visual changes. Moreover, the proposed elements of the Project under Alternative 2 will maintain consistent with the existing visual character and quality and will not degrade the surrounding area. The proposed Project will not create additional light and glare beyond that created by the existing infrastructure. Although temporary adverse visual impacts are anticipated during construction, the proposed Project will not create adverse permanent visual impacts within the Project limits and surrounding area. Under Alternative 2, the DDI will encourage and provide safe mobility for all motorist and non-motorist users consistent with the City of San Bernardino's General Plan, Specific Plan, and integrate key elements of Caltrans' Complete Street directive. With the implementation of the Measures V-1 through V-5, and TR-1, identified above, visual impacts caused by the proposed Project under Alternative 2 would be avoided or minimized.