Traffic Impact Study

Gas Station with Convenience Market, Fast Food Restaurants, and Truck Fueling Facility at Northeast Corner of State Highway 65 and Cedar Avenue, Tulare County, California

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Project No. 21-922



Submitted by:

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I. INTRODUCTION

This traffic impact study was prepared to determine traffic impact and potential mitigation for a proposed highway commercial development in Tulare County, sited at the northeast corner of State Highway 65 and Cedar Street, roughly one quarter mile west of the city of Lindsay. The study has been required by the California Department of Transportation.

A. Project Description

The Project site comprises 6.28 acres and proposes a 5,439 square foot convenience market, two fast food restaurants, one with drive through service, 16 automobile fueling positions and a sixposition truck fueling facility.

The site is relatively flat and is currently vacant, but in the past was under cultivation as row crops.

The Project is bounded by State Highway 65 along its southern frontage and Cedar Avenue along its western boundary. Ingress and egress from the Project is proposed from both State Highway 65 and Cedar Avenue.

The Project is intended to attract truckers and the traveling public from State Route 65. The site is laid out to facilitate circulation through fueling stations and eliminate queuing. The access drive from SR 65 is 47-feet wide with 50 foot radii curb returns. In addition, a 200-foot deceleration lane is proposed for westbound traffic (technically northbound) entering the site. This configuration will rapidly remove vehicles from the SR 65 traveled way and eliminate any hindrances for trucks turning into the site. In addition, and per Caltrans' recommendation, a raised median porkchop is proposed for the SR 65 project entrance. The "porkchop" will prohibit any movement other than westbound (northbound) "right in and egress "right out". The "porkchop" will also prohibit eastbound (technically southbound) left turns into the site.

The six truck fueling positions have been aligned 240-feet directly north of the SR 65 entrance drive. This will provide sufficient decision time for truckers to select a vacant fuel bay and will provide storage if needed. The combining benefits of a wide drive approach, large return radii, deceleration lane and on-site circulation will result in rapid processing of trucks through the fueling facility.

Similarly, a westbound (northbound) deceleration and right turn lane is proposed for Cedar Avenue, as well as an eastbound (southbound) dedicated left turn lane.

Finally, the turning wheel paths of large trucks have been superimposed on the site plan to demonstrate ease of circulation.

Additional traffic mitigation is discussed later in this report.

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Figure 1, included in Appendix A, shows the project location within Tulare County and its proximity to the City of Lindsay.

An Architectural Site Plan, included in Appendix A, provides the Project's site layout.

B. Existing and Surrounding Land Use

Surrounding land is entirely under cultivation; however, a residential neighborhood in the City of Lindsay exists about one quarter mile east of the Project.

Roughly one quarter mile to the west on the north frontage of SR 65, exists a Chevron gas station with three retail stores.

Figure 1 is a recent aerial photo showing the Project site and the surrounding area.

II. EXISTING LOCAL STREET NETWORK

The following is a description of streets in the vicinity of the site, which may be impacted to some extent by the Project.

State Route 65: Pursuant to the Surface Transportation Act of 1982 State Route 65 is a designated route for large trucks. State Route 65 commences in Bakersfield and runs northward roughly 94 miles through the cities and communities of Oildale, Ducor, Terra Bella, Strathsmore, Lindsay, and terminates at its intersection with State Route 198 just north of Exeter and about 8 miles east of Visalia. State Route 65 transitions back and forth between a two-lane rural highway and a four lane expressway. In the vicinity of the Project, SR 65 is a two lane undivided road with dedicated left and right turn lanes at major intersections.

Caltrans and the County of Tulare have plans to re-align and reconstruct State Route 65, which will include the construction of a roundabout, located at the intersection of State Route 65 and Cedar Avenue. Construction is tentatively planned to commence in 2034.

Cedar Avenue: Cedar Avenue is as two lane County Road running between State Route 65 at its south end and terminating one mile north at its intersection with Avenue 240. Cedar Avenue is not a thoroughfare and provides access to agricultural property and less than ten residences. Cedar Avenue was surfaced in the past with asphalt concrete, but the pavement is old and in disrepair and missing in many locations. Along the Project's frontage, Cedar is planned to be improved to accommodate the anticipated Project traffic. The existing pavement structural section should be evaluated for adequacy under future truck loads.

As part of the SR 65 realignment project, Caltrans intend to realign Cedar north of it intersection (with SR 65) to tie into Oak Avenue.

As previously mentioned above, Caltrans and the County of Tulare have plans to re-align and reconstruct State Route 65. As a part of the roundabout project, Cedar Ave will be realigned to the East to connect with Oak Ave. It is recommended that the intersection of State Route 65 and Cedar Avenue be re-evaluated in the future.

North Spruce Avenue: North Spruce is a Tulare County road which commences a mile south of SR 65 and runs north 9 miles paralleling SR 65 to its terminus at its intersection with State Route 198. North Spruce Road is a two-lane paved Tulare County Road with paved shoulders and is in a good state of repair. Traffic counts indicate that this is a well-used roadway.

North Spruce Avenue is signalized at its intersection with State Route 65. A signal dedicated lane is provided for each movement from State Route 65; however, only a signal shared lane is provided for the north and south legs of this intersection.

West Tulare Avenue: West Tulare Avenue is a two lane, paved east-west road running through residential neighborhoods in the northern part of Lindsay. The west Terminus of West Tulare is its intersection with SR 65. West Tulare Avenue becomes East Tulare Avenue in the City of Lindsay and has a paved shoulder, curb, gutter and sidewalk over most of its length. Between SR 65 and 650 feet to the east, West Tulare Avenue has only paved shoulders. As part of the planned realignment of SR 65, West Tulare Avenue will be realigned to tie into Oak Avenue and its intersection with SR 65 will be removed.

III. METHOD OF ANALYSIS & TRAFFIC ESTIMATES

A. General

Additional detailed descriptions of methods and "findings" are provided in the appropriate sections herein. However, as a preface to the following sections, a brief step-by-step description used for analysis in this report, as follows:

- 1. Existing conditions of the Project and surrounding area are surveyed, including traffic counts, laneage, and intersection control. Traffic counts were performed during periods of peak volume.
- 2. Using growth rates project from historical traffic data in the vicinity of the Project, existing traffic is extrapolated to future year volumes. In this case, future traffic was estimated for Year 2025 and Year 2045. Year 2025 is the anticipated "opening" day, i.e., when the development is open for business.

It is possible that opening day could be sooner than 2025. In that scenario, the theoretical traffic developed for 2025 would be larger than previous years, and the results considered conservative.

- 3. Project-generated traffic, based on the proposed land use, is estimated and distributed onto the street network. Project-generated traffic is added to both present day and future year scenarios described in the following step.
- 4. Intersections, and street segments with any significant impact from Project-generated traffic are analyzed for "Level of Service" (LOS) for the various scenarios: A) Existing conditions with No Project; B) Existing Conditions plus Project Traffic; C) Year 2025 (Assumed as "Opening Day") with No Project; D) Year 2025 plus Project traffic; E) Year 2045 with No Project; F) Year 2035 plus Project Traffic; and G) Year 2032 plus Cumulative Project traffic and proposed mitigation improvements. H) Year 2045 plus Project Traffic; and I) Year 2042 plus Cumulative Project traffic and proposed mitigation improvements.
- 5. Mitigation or capacity/level of service improvements are determined for any of the above scenarios which result in an unacceptable "Level of Service" (LOS). Usually, an unacceptable LOS is anything less than "C". Given special circumstances, occasionally an agency will lower the "mitigation threshold" to a LOS of "D".
- 6. Resultant LOS's are calculated to determine the effectiveness of the proposed mitigation. If improvements to the facility are funded by the RTIF program, they are evaluated for adequacy under future traffic conditions. The Project's obligation for funding of any needed mitigation improvements is determined. Project-funded mitigation improvements are usually improvements that would not necessarily be needed if there was no project. In these cases, the Project's obligation, in very simplified terms, is the cost of a particular mitigation improvement multiplied by the ratio of Project-generated traffic to total estimated future year traffic volume.
- 7. Vehicle Miles Traveled: The total daily Vehicle Miles Traveled (VMT) is calculated for the Project. This methodology is explained later in this report, but VMT, is theoretically, the vehicle miles caused by the Project.

Again, in the following sections methodology, findings, and mitigation are discussed in further detail.

B. Traffic Counts

Traffic counts were performed over the existing street network to determine existing intersection volumes, and traffic flow patterns. As discussed in the following section, future year traffic volumes are estimated by applying annual growth rates derived from historical growth rates.

Traffic counts were performed in February of 2023 during the morning and evening peak periods during weekdays, excluding Mondays, Fridays, holidays, and days preceding or following holidays. Weekdays before or after holidays or weekends are not representative of normal traffic patterns and thus are not counted or considered appropriate for analysis.

Specifically, traffic counts were performed during the morning peak period between 6:30 A.M. and 8:30 A.M. as well as the evening peak period between 4:00 P.M. and 6:00 P.M. Usually, the peak period for various intersections and streets are close but do not occur at identical times. In this study, conservatively, the highest one-hour volumes for each intersection or street segment within their individual peak periods were used for analysis in this report.

Figures 2 & 3, included in Appendix "A" of this study, show the peak hour volumes during the morning and evening peak periods, respectively, for all facilities counted. These figures also show the actual turning movements at all counted intersections.

C. Future Year Traffic Volumes

As mentioned, future traffic for the Years 2025, 2035, and 2045 were estimated by applying growth rates to existing volumes. Growth rates were extrapolated from Caltrans traffic data from years 2016 and 2018. The latest year of published traffic volumes by Caltrans is 2020. However, year 2020 data was not used since it would result in a negative growth rate, which would not be accepted by Caltrans.

Table 1 herein provides a weighted average of SR 65 between Years 2016 and 2018, yielding an average annual growth rate of 1.9 percent. This growth was applied to present day volumes and compounded annually to arrive at Year 2025, Year 2035, and Year 2045 volumes.

Figures 2 and 3, included in Appendix A, shows the morning and evening "Year 2023", or presentday peak hour volumes and turning movements used for analysis in this Study. Figures 6A and 6B show the Year 2025 morning and evening peak hour volumes and turning movements. Figures 8A and 8B, also in Appendix A, show the Year 2035 morning and evening peak hour volumes and turning movements. Figures 10A and 10B, also in Appendix A, show the Year 2045 morning and evening peak hour volumes and turning movements.

Project generated traffic was not added to any of the previously mentioned figures.

Table 1: Projected Average Annual Growth Rates

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
ltem No.	Road Segment	From	То	Year 2016 Annual Average Daily Traffic	Year 2018 Annual Average Daily Traffic	Annual Average Growth Rate (%)	Factor: Year 2023 to Year 2025	Factor: Year 2023 to Year 2035	Factor: Year 2023 to Year 2045
1.	State Route 65	Hermosa Street	Oak Avenue	21,600	21,800	0.5%	1.0093	1.0569	1.1067
2.	State Route 65	Oak Avenue	Spruce Avenue	22,250	22,250	0.0%	1.0000	1.0000	1.0000
3.	State Route 65	Spruce Avenue	State Route 137	17,500	18,550	3.0%	1.0600	1.4185	1.8983
4.	State Route 137	Road 140	Road 168	10,300	11,100	3.8%	1.0777	1.5664	2.2769
5.	State Route 137	Road 168	State Route 65	10,500	11,550	4.9%	1.1000	1.7716	2.8531
					Weighted Average:	1.9%	1.0387	1.2562	1.5192

Notes:

1) Annual Average Daily Traffic (AADT) per Caltrans Traffic Census Program

Due to Covid-19's effect on traffic volumes, "Pre-Covid" Traffic Census data was selected for analysis. Analysis of 2018-2020 results in negative growth for the region. 2)

D. Project Generated Traffic

Project generated vehicular trips were estimated using the <u>Institute of Transportation Engineers</u> <u>Trip Generation Manual, 11th Edition</u>, hereinafter referred to as the ITE Manual. The ITE Manual provides mathematical correlations between various land uses and trip generation, i.e., the ITE Manual provides average trip rates for many land use types. Some ITE land uses also include fitted curves for trip generation rates. As discussed in Section I, and as shown on the site plan in Appendix "A", the Project includes fueling for automobiles, a convenience market, truck fueling and fast food restaurants, one with drive through service.

The following Table 2 provides an ITE Code appropriate for each land use, provides the land use description, the independent variable, and a trip generation rate associated with each independent variable. In this case, the independent variable used for each land use is "gross leasable floor area", and "fueling positions". Table 2 also provides trip rates and total trip generation for the 24-hour average day, and the A.M. and P.M. peak hour, and the directional split for each scenario. Table 2 indicates an unadjusted total for all land uses as 8,712 average daily trips, and 765 and 655 peak hour trips for the morning and evening peak hours respectively.

The challenge in accurately estimating trips is avoiding over-estimations. However, given agency restrictions on trip adjustment factors, this is only partially obtainable. A true Project-generated primary trip is one that departs from an origin, travels to the Project, and then returns to its origin; or vise-versa. In other words, the sole purpose of the trip was to visit the project site and then return to the origin, or vice versa.

Theoretically, any visit to the site for fuel counts as two trips: the arrival and the departure. This same theory applies to any other land uses such as fast food. If a motorist stops for gas and gets fast food at the same commercial center, they have theoretically created 4 trips. In this case, without adjustment factors, 4 trips would be added to the public roadway, when in fact only two were appropriate.

Similarly, if someone stopped for fast food as part of the work to home commute, is it appropriate to state that the commercial facility caused two trips to be added to the public roadway? In this scenario, the work to home commute is the primary trip, and the only trip on the roadway. In this case the commercial center did not add traffic to the public road, and two trips should not be allocated to the project.

In another scenario, a trucker exits from a freeway to get gas and food, then returns to the freeway to continue onto their primary destination. In this case, it would be improper to add 4 project trips to the freeway. However, it is appropriate to add two trips to the freeway ramps and the cross-street since those facilities are impacted by the stop for food and gas.

To account for the above scenarios, adjustment factors have been developed which are intended to apply to basic trip generation calculation to yield realistic values.

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In the following, trip types and said trip adjustment factors are discussed.

"Pass-bys": Briefly, "Pass-By" trips are intermediate trips or stops taken as part of the primary trip. As an example, stopping at a highway commercial center for fuel or fast-food while commuting between home and work, (without diverted from the primary travel route), is considered a "pass-by" trip, i.e., in a proper traffic analysis, the stop at the commercial center, not being the purpose of the primary trip, should not be considered as project-generated trips to be added to the surrounding street network. Without a reduction for "pass-by" all intermediate stops during a primary trip would be improperly included in the summation of traffic volume contributed by the Project.

As discussed further in the section below, driveway surveys of similar facilities, performed by LAV//Pinnacle Engineering, have yielded pass-by rates of close to 100 percent. For analysis of Level of Service for this Project, a "pass-by" reduction of 20 percent was selected.

"Diverted-Link trips" are similar to "pass-bys" except these trips make a slight detour to reach an interim destination, then return to the original route to continue onto their primary destination. As an example, a diverted link trip would be exiting the freeway to reach the Project site, then returning to the freeway to continue the primary trip. Although "Diverted-Link" trips are not additive to freeway traffic, they nevertheless impact the freeway ramps and the crossstreet to reach said interim destination. However, given the Project fronts State Highway 65, (the source of the majority of trips), there are no "side routes" necessary to reach the Project site, and thus "diverted-link trips" were considered unlikely and not factored into final trip generation calculations, i.e., no deductions were taken for "diverted link trips."

Captured Trips: Another traffic phenomenon, *"Capture"*, can be described as trips that are made internally within the limits of a mix use project. "Internally" means these trips do not return to the public street network between trips within the same site. Similar to the previous example provided, captured trips would include stopping for gas and fast food at different establishments within the same commercial center. Without an adjustment for "capture", four trips attributable to the Project, would be added to the public street network, when only two trips were appropriate: the arrival and the departure from the commercial center. Capture adjustments are intended to eliminate double and trip counting of project-generated trips.

Capture is appropriately applied to all types of trips, including primary, diverted link and passbys.

Caltrans permits a reduction of 5% for "Capture".

Driveway Surveys: To accurately estimate "Pass-Bys", "Diverted Link" and "Captured" trips, driveway surveys were performed at a similar highway commercial establishment, located at the Southeast corner of Highway 65 and Avenue 128. Two surveys were performed during weekday

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peak and non-peak hours. Non-peak hours were included since the results for "Pass-By" and "Diverted Link" would likely be conservative given a lesser make-up of commuters. At the time of this study, the Chevron Station (and C-Store) ¼ mile west of the Project at the intersection of North Spruce Street and State Highway 65 was under construction, invalidating it as a suitable location for a driveway survey.

In both surveys, 100 percent of survey respondents indicated that their stop at said commercial center was not the primary purpose of their trip. All respondents indicated that they were traveling to other destinations. As stated, employee arrivals and departures are primary trips; the driveway surveys were random and no respondents indicated they were employees.

Numerous surveys for establishments similar to the Project have been performed by the author of this report. These surveys were performed in both urban and rural areas. All yield similar results: nearly 100 percent of trips were either "pass-bys", "diverted link" trips, or a combination thereof. The surveys have been included in Appendix "C" herein.

Caltrans' Guide for the Preparation of Traffic Impact Studies sets a limit for "pass-by" and "capture" to 15 percent and five percent respectively. However, a larger reduction can be applied on the condition that the increased reduction is justified. Given the results of the surveys discussed above, a "pass-bys" reduction of 20 percent was considered conservative, and therefore appropriate for traffic analysis. After a discussion with Caltrans, the 20 reduction was approved for use in the study. Said correspondence has been included in Appendix "C" herein.

Table 2 shows said trip reduction taken for both "pass-bys" and "capture" at 20 percent and 5 percent respectively. Given these limited deductions, it is apparent that Project-generated trips allocated to the surrounding street network is certainly very conservative. Distribution and assignment of Project-generated trips are discussed in the following section.

Table 2: Trip Generation for Commercial Development at the Northeast Corner of Ave 232 & Cedar Ave, Lindsay

	Commercial - Land Us	ses			24 Hou	ır Trips		Α	.M. Pea	k Hour 1	Trips	P.N	Л. Peak	ips	
ltem No.	Proposed Land Use	ITE Code	Indep	oendent Variable	Trip Rate	Veh Trips (vpd)		Trip Rate	Veh Trips (vph)	Split In	Split Out	Trip Rate	Veh Trips (vph)	Split In	Split Out
1	Gasoline/Service Station w/Convenience Market (GFA 5.5-10k)	945	16	Gasoline Fueling Positions	345.75	5,532		31.60	506	253	253	26.90	430	215	215
2	Heavy Truck Fueling	950	6	Gasoline Fueling Positions	224.00	1,344		13.97	84	41	43	15.42	93	49	44
3	Fast-Food Restaurant w/ Drive-Through Window	934	2.0	Gross Leasable Floor Area (1k S.F.)	467.48	935		44.61	89	46	43	33.03	66	34	32
4	Fast-Food Restaurant w/o Drive-Through Window	933	2.0	Gross Leasable Floor Area (1k S.F.)	450.49	901		43.18	86	50	36	33.21	66	33	33
				Tot	al Trips:	8,712			765	390	375		655	332	323
20% Reduction for "Pass-by" - All Land Uses:									(153)	(78)	(75)		(131)	(66)	(65)
5% Reduction for "Capture" - All Land Uses:									(38)	(20)	(19)		(33)	(17)	(16)
		6,534			574	293	281		491	249	243				

E. Trip Distribution and Assignment

There are no known additional roadways, roadway realignments, or road closures anticipated in the near future that would significantly change existing traffic patterns. Therefore, Projectgenerated trips were distributed on the existing street network assuming they would follow existing traffic patterns well into the future. Existing traffic patterns, again, were determined from traffic counts, traffic observations, and driveway surveys of the adjacent development.

Project-generated trip distribution have been shown in Figure 4.

F. Trip Assimilation

Based on information provided by the Tulare County Council of Government, the average work commute travel time for Tulare County is 20 minutes. At an average speed of 33 miles per hour, this yields an average work-commute trip of 11 miles. Assuming a 50/50 split of work-commute trips less than and greater than 11 miles, an average trip assimilation rate of 8.33 percent per mile is derived. This rate of assimilation is likely conservative and over the years has been accepted by various reviewing agencies. The trip distribution shown in Figure 4 has been adjusted accordingly.

IV. IMPACT OF PROJECT TRAFFIC

A. Level of Service (LOS)

Operational analysis of streets and intersections were performed using methods outlined in the *Transportation Research Board, National Research Council <u>Highway Capacity Manual</u>, HCM, 2016.*

Level of Service (LOS) is the generally accepted gauge for describing the quality of operation of either a road segment or street intersection. Other attributes of operational quality associated with each Level of Service are v/c - volume to capacity ratio, vehicle delay through an intersection, and reserve capacity of an intersection approach. For each type of street segment or intersection analysis, the Level of Service criteria varies slightly. Levels of Service for every type of roadway or intersection are described thoroughly in the <u>Highway Capacity Manual</u>, however, the brief descriptions have been provided in the following:

Level of Service	Stopped Delay per Vehicle (sec.)
А	< 5.0
В	5.1 to 15.0
С	15.1 to 25.0
D	25.1 to 40.0
E	40.1 to 60.0
F	> 60.0

 Table 3: Level of Service for Signalized Intersections

 Table 4: Level of Service for Un-Signalized Intersections

Level of Service	Reserve Capacity (DCPH)	Expected Delay to Minor Street Traffic
А	≥ 400	Little or no delay
В	300-399	Short traffic delay
С	200-299	Average traffic delay
D	100-199	Long traffic delay
E	0-99	Very long traffic delay
F	Note 1	See Note 1

Note 1: When demand volume exceeds the capacity of the lane, extreme delays will be encountered. This condition usually warrants improvement to the intersection.

Level of Service	Description
А	Free flow conditions, unimpeded ability to maneuver and pass, very little delay, no platoons, highest average travel speeds.
В	Mostly free flow conditions: presence of other vehicles begins to be noticeable. Passing is required to maintain speeds, slightly less average travel speeds than Level of Service "A".
С	Traffic density clearly affects the ability to pass and maneuver within the stream. Speeds are reduced to about 50 mph on highways and to about 50% of the average on urban arterials.
D	Unstable flow. Speeds are reduced from 40% to 60% of normal. Passing demand is high although mostly impossible on 2-Lane Highways. Traffic disruptions usually cause extensive queues.
E	Very unstable flow at or near capacity. Passing and maneuvering is virtually impossible. Extensive platooning on highways and queuing on arterials. Speeds range from 20 mph or less on arterials and 2-Lane Highways, and up to 50 mph on Multi-Lane Highways.
F	Forced or breakdown flow. Demand exceeds capacity. Vehicles experience short spurts of movement followed by stoppages. Intersection congestion, long queues and delays are common.

Table 5: Level of Service for Highways and Arterials

B. Traffic Impact Analysis

As discussed in Section III herein, Project-generated traffic was distributed onto the existing street network based on existing patterns. In accordance with agency criteria, any street segment or intersection, currently operating at or above a "C" Level of Service, must be analyzed if it receives 50 or more Project-generated peak hour trips. If the facility currently operates at a "D", "E" or "F", the analysis threshold drops to 40, 20 and 10 trips, respectively.

Level of Service calculations are based on methods outlined in the <u>Highway Capacity Manual</u>, <u>2016</u>. Computer software from "McTrans Highway Capacity" package was used to facilitate extensive calculations.

In accordance with Caltrans' requirement, various traffic scenarios were analyzed to include present day traffic, and the addition of Project-generated traffic to existing (Year 2023), Project "Opening day" (Year 2025), and future traffic (Years 2035 & 2045). The following lists the various specific scenarios that were analyzed and provides a reference to the appropriate figures.

Existing Year 2023 A.M. Peak Hour without Project-Generated Trips – (No Project Scenario). These volumes are actual traffic counts, as discussed in Section III, and are shown in Figure 2 herein.

Existing Year 2023 P.M Peak Hour– without Project-Generated Trips (No Project Scenario). These volumes are actual traffic counts, as discussed in Section III, and are shown in Figure 3 herein.

Year 2023 A.M. Peak Hour Volumes with the addition Project-Generated Trips. These volumes can be referenced in Figure 5A of this report.

Year 2023 P.M. Peak Hour Volumes with the addition of Project-Generated Trips. These volumes can be referenced in Figure 5B of this report.

Year 2025 "Opening Day" A.M Peak Hour without Project-Generated Trips – (No Project Scenario). Derivation of these volumes is discussed in Section III and is shown in Figure 6Aof this report.

Year 2025 "Opening Day" P.M Peak Hour without Project-Generated Trips. – (No Project Scenario). Derivation of these volumes is discussed in Section III and is shown in Figure 6B of this report.

Year 2025 "Opening Day" A.M. Peak Hour Volumes with the addition of Project-Generated Trips. These volumes can be referenced in Figure 7A of this report.

Year 2025 "Opening Day" P.M Peak Hour Volumes with the addition of Project-Generated Trips. These volumes can be referenced in Figure 7B of this report.

Year 2035 A.M Peak Hour without Project-Generated Trips – (No Project Scenario). Derivation of these volumes is discussed in Section III and is shown in Figure 8Aof this report.

Year 2035 P.M Peak Hour without Project-Generated Trips. – (No Project Scenario). Derivation of these volumes is discussed in Section III and is shown in Figure 8B of this report.

Year 2035 A.M. Peak Hour Volumes with the addition of Project-Generated Trips. These volumes can be referenced in Figure 9A of this report.

Year 2035 P.M Peak Hour Volumes with the addition of Project-Generated Trips. These volumes can be referenced in Figure 9B of this report.

Year 2045 A.M. Peak Hour Volumes without the addition Project-Generated Trips ("No Project" Scenario). Derivation of these volumes is discussed in Section III of this report and can be referenced in Figure 10A herein.

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Year 2045 P.M. Peak Hour Volumes without the addition of Project-Generated Trips ("No **Project" Scenario**). Derivation of these volumes is discussed in Section III of this report and can be referenced in Figure 10B herein.

Year 2045 A.M. Peak Hour Volumes with the addition of Project-Generated Trips. These volumes can be referenced in Figure 11A of this report.

Year 2045 P.M. Peak Hour Volumes with the addition of Project-Generated Trips. These volumes can be referenced in Figure 11B of this report.

Year 2045 A.M. Peak Hour Volumes with the addition of Project-Generated Trips - Evaluated under proposed mitigation improvements. In addition to the above scenarios, any facility needing mitigation was analyzed to determine the resultant Level of Service once proposed improvements were in-place.

Year 2045 P.M. Peak Hour Volumes with the addition of Project-Generated Trips – Evaluated under proposed mitigation improvements. In addition to the above scenarios, any facility needing mitigation was analyzed to determine the resultant Level of Service once proposed improvements were in-place. The criteria to warrant mitigation is discussed in Section V of this report.

Summaries of the Level of Service calculations for the various scenarios described have been included in the following tables:

- Table 6 shows the results of the intersection Level of Service calculations for all listed scenarios.
- Table 7 show the results of Level of Service calculations for various street segments for all listed scenarios.

The above list tables show scenarios with poor Levels of Service (below "C"), and resultant LOS with mitigation improvements. A detailed discussion of mitigation has been provided in Section VI of this report.

TABLE 6: Intersection Level of Service (LOS) - Peak Hour

	Legend:	S = Signalized	1W = On	e Way S	Stop Cor	ntrol		4W =	All Way	Stop				R = Roun	dabout					
																		Comp	Intersection Delay	Peak Hour
				Northbound				Southbound				Eastbound				Westbound			(sec/veh)	Met
No.	Intersection	Time Period	Control	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	Left	Thru	Right			(Yes/No)
No.		Year 2023 A.M. Existing	1W	-	-	-		-	-	-		С	-	-	-	-	-	С	15.4	No
		Year 2023 A.M. with Project	1W	-	-	-		-	F	-		D	-	-	-	-	-	F	2109.2	Yes
		Year 2025 A.M. without Project	1W	-	-	-		-	-	-		С	-	-	-	-	-	C	16.0	No
		Year 2025 A.M. with Project	1W	-	-	-		-	F	-		D	-	-	-	-	-	F	2482.5	Yes
		Year 2035 A.M. without Project	1W	-	-	-		-	-	-		С	-	-	-	-	-	С	20.4	No
		Year 2035 A.M. with Project	1W	-	-	-		-	F	-		F	-	-	-	-	-	F	8080.8	Yes
		Year 2045 A.M. without Project	1W	-	-	-		-	-	-		D	-	-	-	-	-	D	27.9	No
		Year 2045 A.M. with Project	1W	-	-	-		-	F	-		F	-	-	-	-	-	F	9954.1	Yes
		Year 2045 A.M. with Project Mitigated	S	-	-	-		-	E	D		F	А	-	-	-	-	С	32.5	N/A
1)	Hwy 65 & Cedar Ave						_				_									
		Year 2023 P.M. Existing	1W	-	-	-		-	-	-		В	-	-	-	-	-	В	11.4	No
		Year 2023 P.M. with Project	1W	-	-	-		-	F	-		В	-	-	-	-	-	F	517.7	Yes
		Year 2025 P.M. without Project	1W	-	-	-		-	-	-		В	-	-	-	-	-	В	11.7	No
		Year 2025 P.M. with Project	1W	-	-	-		-	F	-		С	-	-	-	-	-	F	583.1	Yes
		Year 2035 P.M. without Project	1W	-	-	-		-	-	-		В	-	-	-	-	-	В	13.4	No
		Year 2035 P.M. with Project	1W	-	-	-		-	F	-		С	-	-	-	-	-	F	1080.5	Yes
		Year 2045 P.M. without Project	1W	-	-	-		-	-	-		С	-	-	-	-	-	С	16.0	No
		Year 2045 P.M. with Project	1W	-	-	-		-	F	-		D	-	-	-	-	-	F	2166.9	Yes
		Year 2045 P.M. with Project Mitigated	S	-	-	-		-	Е	D		В	А	-	-	-	-	В	10.2	N/A
					1		_				_									
		Year 2023 A.M. Existing	1W	-	-	-	L	F	-	D		D	-	-	-	-	-	D	34.7	Yes
		Year 2023 A.M. with Project	1W	-	-	-		F	-	F		F	-	-	-	-	-	F	91.2	Yes
		Year 2025 A.M. without Project	1W	-	-	-		F	-	E		D	-	-	-	-	-	E	43.5	Yes
		Year 2025 A.M. with Project	1W	-	-	-		F	-	F		F	-	-	-	-	-	F	138.5	Yes
2)	Tulare Rd	Year 2035 A.M. without Project	1W	-	-	-		F	-	F		F	-	-	-	-	-	F	438.0	Yes
		Year 2035 A.M. with Project	1W	-	-	-		F	-	F		F	-	-	-	-	-	F	688.1	Yes
		Year 2045 A.M. without Project	1W	-	-	-		F	-	F		F	-	-	-	-	-	F	1365.1	Yes
		Year 2045 A.M. with Project	1W	-	-	-		F	-	F		F	-	-	-	-	-	F	2692.4	Yes
		Year 2045 A.M. with Project Mitigated	S	-	-	-		-	D	E		F	А	-	-	А	А	В	14.8	N/A

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	Legend: S = Signalized 1W = Or			e Way S	Stop Cor	ntrol	4W =	All Way	Stop				R = Rou	nda	bout					
																			Intersection	Peak Hour
				N	lorthbou	und	S	outhbou	ind			Eastbour	nd		v	Vestbou	nd	Comp	(sec/veh)	Warrant Met
No.	Intersection	Time Period	Control	Left	Thru	Right	Left	Thru	Right		Left	Thru	Right	Ī	Left	Thru	Right	105		(Yes/No)
		Year 2023 P.M. Existing	1W	-	-	-	F	-	F	1	F	-	-	Ī	-	-	-	F	86.0	Yes
		Year 2023 P.M. with Project	1W	-	-	-	F	-	F	1	F	-	-	Ī	-	-	-	F	248.7	Yes
		Year 2025 P.M. without Project	1W	-	-	-	E	-	F		E	-	-	Ī	-	-	-	F	126.8	Yes
		Year 2025 P.M. with Project	1W	-	-	-	F	-	F	1	F	-	-	ſ	-	-	-	F	489.4	Yes
2)	Hwy 65 & W Tulare Bd	Year 2035 P.M. without Project	1W	-	-	-	F	-	F		F	-	-	ſ	-	-	-	F	1109.1	Yes
	ruidre nu	Year 2035 P.M. with Project	1W	-	-	-	F	-	F	1	F	-	-	Ī	-	-	-	F	4363.8	Yes
		Year 2045 P.M. without Project	1W	-	-	-	F	-	F	1	F	-	-	ſ	-	-	-	F	8617.4	Yes
		Year 2045 P.M. with Project	1W	-	-	-	F	-	F		F	-	-	ſ	-	-	-	F	32771.1	Yes
		Year 2045 P.M. with Project Mitigated	S	-	-	-	-	D	F	1	F	А	-	Ī	-	Α	А	В	14.4	N/A
			1			1								-						
		Year 2023 A.M. Existing	S	E	В	В	E	В	В		D	D	-	_	D	D	D	С	28.5	N/A
		Year 2023 A.M. with Project	S	E	С	В	E	В	В	ļ	D	D	-	_	D	D	D	С	28.7	N/A
		Year 2025 A.M. without Project	S	Е	С	В	E	В	В		D	D	-	_	D	С	D	С	29.0	N/A
		Year 2025 A.M. with Project	S	E	С	В	E	В	В	ļ	D	D	-		D	С	D	С	29.3	N/A
		Year 2035 A.M. without Project	S	E	С	C	E	В	В	ļ	D	D	-		D	С	С	С	33.2	N/A
		Year 2035 A.M. with Project	S	E	С	C	E	С	В	ļ	D	D	-		D	С	С	С	34.3	N/A
		Year 2045 A.M. without Project	S	E	F	C	E	D	С		D	D	-		D	С	С	Е	62.0	N/A
		Year 2045 A.M. with Project	S	Е	F	С	E	С	В	ļ	D	Е	-		F	С	С	Е	62.3	N/A
3)	Hermosa St									_				_						
		Year 2023 P.M. Existing	S	E	В	В	E	В	В	ļ	D	D	-		Е	D	D	С	26.7	N/A
		Year 2023 P.M. with Project	S	Е	В	В	E	В	В		D	D	-		Е	D	D	С	26.8	N/A
		Year 2025 P.M. without Project	S	Е	В	В	E	В	В		D	D	-		D	D	D	С	27.2	N/A
		Year 2025 P.M. with Project	S	Е	В	В	E	В	В		D	D	-		D	D	D	С	27.3	N/A
		Year 2035 P.M. without Project	S	E	С	С	E	С	В		D	D	-		D	С	D	С	30.6	N/A
		Year 2035 P.M. with Project	S	Е	С	С	E	С	В		D	D	-		D	С	D	С	31.3	N/A
		Year 2045 P.M. without Project	S	Е	D	С	E	С	В		D	D	-		D	С	С	D	36.9	N/A
		Year 2045 P.M. with Project	S	E	D	С	E	С	В		D	D	-		D	С	С	D	39.4	N/A

	Legend:	S = Signalized	1W = On	e Way S	Stop Cor	ntrol	4	1W = /	All Way	Stop				R = Roun	ndabout					
																			Intersection	Peak Hour
				N	lorthbou	und		Sc	outhbou	ind		E	astbour	d		Westbou	nd	Comp	(sec/veh)	Warrant Met
No.	Intersection	Time Period	Control	Left	Thru	Right	L	Left	Thru	Right	Γ	Left	Thru	Right	Left	Thru	Right	103	(, - ,	(Yes/No)
		Year 2023 A.M. Existing	1W	А	-	-		А	-	-	Γ	Е	-	В	E	-	В	А	9.8	No
		Year 2023 A.M. with Project	1W	Α	-	-		А	-	-	Γ	F	-	В	F	-	В	В	10.4	No
		Year 2025 A.M. without Project	1W	Α	-	-		А	-	-	Γ	Е	-	В	E	-	В	В	10.0	No
		Year 2025 A.M. with Project	1W	А	-	-		В	-	-	Γ	F	-	В	F	-	В	В	10.6	No
		Year 2035 A.M. without Project	1W	А	-	-		В	-	-	Γ	F	-	В	F	-	В	В	11.2	No
		Year 2035 A.M. with Project	1W	В	-	-		В	-	-	Γ	F	-	В	F	-	В	В	12.4	No
		Year 2045 A.M. without Project	1W	В	-	-		В	-	-	Γ	F	-	В	F	-	В	В	14.0	No
		Year 2045 A.M. with Project	1W	В	-	-		В	-	-	Γ	F	-	В	F	-	В	С	17.0	No
4)	Hwy 65 & W Lindmore St									· · · ·	-							•		
	Lindhore St	Year 2023 P.M. Existing	1W	А	-	-		В	-	-	Γ	F	-	В	E	-	В	В	11.4	No
		Year 2023 P.M. with Project	1W	В	-	-		В	-	-	Γ	F	-	В	F	-	В	В	12.7	No
		Year 2025 P.M. without Project	1W	Α	-	-		В	-	-	Γ	F	-	В	F	-	В	В	12.1	No
		Year 2025 P.M. with Project	1W	В	-	-		В	-	-	Γ	F	-	В	F	-	В	В	13.6	No
		Year 2035 P.M. without Project	1W	В	-	-		В	-	-	Γ	F	-	В	F	-	В	В	19.1	No
		Year 2035 P.M. with Project	1W	В	-	-		В	-	-	Γ	F	-	В	F	-	В	В	24.3	No
		Year 2045 P.M. without Project	1W	В	-	-		В	-	-	Γ	F	-	В	F	-	C	F	60.7	No
		Year 2045 P.M. with Project	1W	С	-	-		С	-	-	Γ	F	-	С	F	-	С	F	85.6	No
											-									
		Year 2023 A.M. Existing	1W	Α	-	-		А	-	-		С	-	А	В	-	В	В	8.6	No
		Year 2023 A.M. with Project	1W	Α	-	-		А	-	-		С	-	А	С	-	В	В	8.9	No
		Year 2025 A.M. without Project	1W	А	-	-		А	-	-		С	-	А	В	-	В	В	8.6	No
E)	Hwy 65 &	Year 2025 A.M. with Project	1W	А	-	-		А	-	-		С	-	А	С	-	В	В	9.0	No
5)	Marigold St	Year 2035 A.M. without Project	1W	А	-	-		А	-	-		С	-	А	С	-	В	В	9.1	No
		Year 2035 A.M. with Project	1W	А	-	-		Α	-	-		С	-	В	С	-	В	В	9.5	No
		Year 2045 A.M. without Project	1W	А	-	-		А	-	-		D	-	В	С	-	В	В	9.6	No
		Year 2045 A.M. with Project	1W	А	-	-		В	-	-		D	-	В	С	-	В	В	10.1	No

	Legend:	S = Signalized	1W = On	e Way s	Stop Cor	ntrol		4W =	All Way	Stop			R = Roun	ndabou	:		_		
																		Intersection Delay	Peak Hour
				N	lorthbou	ind		Sc	outhbou	nd		Eastbour	nd		Westbo	und	LOS	(sec/veh)	Warrant Met
No.	Intersection	Time Period	Control	Left	Thru	Right		Left	Thru	Right	Left	Thru	Right	Le	t Thru	Right			(Yes/No)
		Year 2023 P.M. Existing	1W	В	-	-		В	-	-	-	-	В	E	-	В	В	11.2	No
		Year 2023 P.M. with Project	1W	В	-	-		В	-	-	-	-	В	E	-	В	В	11.8	No
		Year 2025 P.M. without Project	1W	В	-	-		В	-	-	-	-	В	E	-	В	В	11.4	No
۲)	Hwy 65 &	Year 2025 P.M. with Project	1W	В	-	-		В	-	-	-	-	В	F	-	В	В	12.1	No
5)	Marigold St	Year 2035 P.M. without Project	1W	В	-	-		В	-	-	-	-	С	F	-	В	В	13.7	No
		Year 2035 P.M. with Project	1W	В	-	-		В	-	-	-	-	С	F	-	В	В	15.0	No
		Year 2045 P.M. without Project	1W	С	-	-		В	-	-	-	-	С	F	-	С	D	26.3	No
		Year 2045 P.M. with Project	1W	С	-	-		В	-	-	-	-	С	F	-	С	D	34.4	No
	1		·									T			T	T			
		Year 2023 A.M. Existing	1W	Α	-	-		Α	-	-	-	-	В	C	-	В	В	9.2	No
		Year 2023 A.M. with Project	1W	Α	-	-		Α	-	-	-	-	В	C	-	В	В	9.6	No
		Year 2025 A.M. without Project	1W	А	-	-		Α	-	-	-	-	В	C	-	В	В	9.3	No
		Year 2025 A.M. with Project	1W	А	-	-		А	-	-	-	-	В	C	-	В	В	9.7	No
		Year 2035 A.M. without Project	1W	А	-	-		В	-	-	-	-	В	C	-	В	В	10.0	No
		Year 2035 A.M. with Project	1W	Α	-	-		В	-	-	-	-	В	D	-	В	В	10.4	No
		Year 2045 A.M. without Project	1W	А	-	-		В	-	-	-	-	В	D	-	В	В	11.0	No
		Year 2045 A.M. with Project	1W	В	-	-		В	-	-	-	-	В	E	-	В	В	11.6	No
6)	Hwy 65 & Ave 208						_												
	200	Year 2023 P.M. Existing	1W	А	-	-		В	-	-	F	-	В	D	-	В	В	10.7	No
		Year 2023 P.M. with Project	1W	В	-	-		В	-	-	F	-	В	D	-	В	В	11.2	No
		Year 2025 P.M. without Project	1W	В	-	-		В	-	-	F	-	В	D	-	В	В	10.9	No
		Year 2025 P.M. with Project	1W	В	-	-		В	-	-	F	-	В	E	-	В	В	11.4	No
		Year 2035 P.M. without Project	1W	В	-	-		В	-	-	F	-	В	E	-	В	В	12.6	No
		Year 2035 P.M. with Project	1W	В	-	-		В	-	-	F	-	В	F	-	В	В	13.2	No
		Year 2045 P.M. without Project	1W	В	-	-		В	-	-	F	-	С	F	-	С	С	16.5	No
		Year 2045 P.M. with Project	1W	В	-	-		С	-	-	F	-	С	F	-	С	С	19.9	No

	Legend:	S = Signalized	1W = On	e Way S	Stop Cor	trol		4W =	All Way	Stop				R = Rour	ndal	out					
																				Intersection	Peak Hour
				N	orthbou	ınd		Sc	outhbou	nd		E	Eastbour	d		V	/estbou	nd	Comp	(sec/veh)	Warrant Met
No.	Intersection	Time Period	Control	Left	Thru	Right	ſ	Left	Thru	Right		Left	Thru	Right	Γ	Left	Thru	Right	105	(,	(Yes/No)
		Year 2023 A.M. Existing	S	-	Е	-	ſ	-	D	-		Е	В	-	Γ	F	В	В	С	24.0	N/A
		Year 2023 A.M. with Project	S	-	Е	-	ſ	-	D	-		Е	С	-	Γ	Е	С	С	С	28.4	N/A
		Year 2025 A.M. without Project	S	-	E	-	Γ	-	D	-		E	В	-		F	В	С	С	25.1	N/A
		Year 2025 A.M. with Project	S	-	E	-		-	D	-		E	С	-		E	С	С	С	30.1	N/A
		Year 2035 A.M. without Project	S	-	E	-		-	D	-		Е	С	-		F	С	D	D	35.7	N/A
		Year 2035 A.M. with Project	S	-	E	-		-	F	-		E	D	-		E	D	D	D	52.0	N/A
		Year 2045 A.M. without Project	S	-	E	-		-	F	-		Е	D	-		E	D	Е	E	69.2	N/A
		Year 2045 A.M. with Project	S	-	E	-		-	F	-		E	D	-		E	F	F	F	95.4	N/A
		Year 2045 A.M. with Project Mitigated	S	-	E	-		D	D	-		С	В	-		В	С	F	С	34.0	N/A
7)	Hwy 65 & N Spruce Ave						_								_						
	opracertic	Year 2023 P.M. Existing	S	-	E	-		-	D	-	Į	E	С	В		E	С	В	С	25.5	N/A
		Year 2023 P.M. with Project	S	-	E	-		-	D	-	Į	E	С	В		E	С	С	С	30.1	N/A
		Year 2025 P.M. without Project	S	-	Е	-		-	D	-		Е	С	В		E	С	В	С	26.9	N/A
		Year 2025 P.M. with Project	S	-	E	-		-	D	-		Е	С	В		E	С	С	С	32.3	N/A
		Year 2035 P.M. without Project	S	-	E	-		-	D	-		Е	D	В		E	D	С	D	45.0	N/A
		Year 2035 P.M. with Project	S	-	E	-		-	F	-		Е	F	С		E	Е	В	E	61.0	N/A
		Year 2045 P.M. without Project	S	-	E	-		-	F	-		Е	F	В		E	F	С	F	88.0	N/A
		Year 2045 P.M. with Project	S	-	E	-		-	F	-		Е	F	В		E	F	С	F	113.6	N/A
		Year 2045 P.M. with Project Mitigated	S	-	E	-		D	D	-		С	В	В		В	С	D	С	33.2	N/A
	I		1	1	1		-		1				1		_						
		Year 2023 A.M. Existing	S	D	D	-	Ļ	D	D	-		E	В	В	L	E	С	В	С	32.1	N/A
		Year 2023 A.M. with Project	S	D	D	-	L	D	D	-		E	С	В		E	С	В	С	32.4	N/A
		Year 2025 A.M. without Project	S	D	D	-	L	D	D	-		E	С	В		E	С	В	С	32.7	N/A
8)	Hwy 65 &	Year 2025 A.M. with Project	S	D	D	-		D	D	-	ļ	Е	С	В		E	С	В	C	33.0	N/A
0,	Hwy 137	Year 2035 A.M. without Project	S	D	D	-		D	D	-		E	С	В		E	С	С	D	37.4	N/A
		Year 2035 A.M. with Project	S	D	D	-		D	D	-		E	С	В		E	D	С	D	38.9	N/A
		Year 2045 A.M. without Project	S	D	F	-		D	D	-		E	D	С		E	E	С	E	56.5	N/A
		Year 2045 A.M. with Project	S	D	F	-		D	D	-		E	Е	С		Е	F	С	E	64.4	N/A

	Legend:	S = Signalized	1W = On	e Way	Stop Cor	ntrol		4W =	All Way	Stop			R = Roun	ndabout					
								_										Intersection Delay	Peak Hour
				N	lorthbou	und		So	outhbou	nd	E	astbour	nd		Westbou	nd	LOS	(sec/veh)	Warrant Met
No.	Intersection	Time Period	Control	Left	Thru	Right		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right			(Yes/No)
		Year 2023 P.M. Existing	S	D	Е	-		D	D	-	Е	В	В	E	В	В	С	31.6	N/A
		Year 2023 P.M. with Project	S	D	Е	-		D	D	-	Е	В	В	E	С	В	С	31.8	N/A
		Year 2025 P.M. without Project	S	D	Е	-	1	D	D	-	Е	В	В	E	В	В	С	32.0	N/A
0)	Hwy 65 & Hwy	Year 2025 P.M. with Project	S	D	E	-	1	D	D	-	Е	В	В	E	С	В	С	32.4	N/A
8)	137	Year 2035 P.M. without Project	S	D	D	-		D	D	-	Е	С	В	E	С	В	D	35.6	N/A
		Year 2035 P.M. with Project	S	D	D	-		D	D	-	E	С	В	E	С	С	D	36.8	N/A
		Year 2045 P.M. without Project	S	D	E	-		D	D	-	E	D	С	E	E	С	D	48.0	N/A
	,	Year 2045 P.M. with Project	S	D	F	-	1	D	D	-	Е	D	С	E	E	С	D	53.3	N/A
	1																		
		Year 2023 A.M. Existing	1W	-	С	-		-	С	-	-	А	-	-	А	-	А	4.1	No
		Year 2023 A.M. with Project	1W	-	С	-		-	С	-	-	А	-	-	А	-	А	4.2	No
		Year 2025 A.M. without Project	1W	-	С	-		-	С	-	-	А	-	-	А	-	А	4.1	No
		Year 2025 A.M. with Project	1W	-	С	-		-	С	-	-	А	-	-	А	-	А	4.3	No
		Year 2035 A.M. without Project	1W	-	С	-		-	С	-	-	В	-	-	А	-	А	4.4	No
		Year 2035 A.M. with Project	1W	-	С	-		-	С	-	-	В	-	-	А	-	А	4.7	No
		Year 2045 A.M. without Project	1W	-	С	-		-	С	-	-	В	-	-	А	-	В	5.0	No
		Year 2045 A.M. with Project	1W	-	С	-		-	С	-	-	В	-	-	А	-	В	5.3	No
9)	Hwy 137 & Road 188						•												
	1000 100	Year 2023 P.M. Existing	1W	-	С	-		-	С	-	-	А	-	-	А	-	А	4.3	No
		Year 2023 P.M. with Project	1W	-	С	-	1	-	С	-	-	В	-	-	А	-	А	4.5	No
		Year 2025 P.M. without Project	1W	-	С	-	1	-	С	-	-	А	-	-	А	-	А	4.4	No
		Year 2025 P.M. with Project	1W	-	С	-	1	-	С	-	-	В	-	-	А	-	А	4.6	No
		Year 2035 P.M. without Project	1W	-	С	-		-	D	-	-	В	-	-	А	-	В	5.0	No
		Year 2035 P.M. with Project	1W	-	D	-		-	D	-	-	В	-	-	А	-	В	5.3	No
		Year 2045 P.M. without Project	1W	-	D	-		-	E	-	-	В	-	-	Α	-	В	6.1	No
		Year 2045 P.M. with Project	1W	-	Е	-	1	-	F	-	-	В	-	-	А	-	В	6.7	No

	Legend: S = Signalized 1				Stop Cor	ntrol		4W = .	All Way	Stop				R = Rour	ndabou					
																			Intersection Delay	Peak Hour
				N	lorthbou	und		So	outhbou	ınd		E	astbour	nd		Westbo	und	LOS	(sec/veh)	Warrant Met
No.	Intersection	Time Period	Control	Left	Thru	Right		Left	Thru	Right		Left	Thru	Right	Le	t Thru	Right			(Yes/No)
		Year 2023 A.M. Existing	1W	-	В	-		-	В	-		-	А	-	-	А	-	А	3.5	No
		Year 2023 A.M. with Project	1W	-	В	-		-	В	-		-	А	-	-	А	-	А	3.6	No
		Year 2025 A.M. without Project	1W	-	В	-		-	В	-		-	А	-	-	А	-	Α	3.5	No
		Year 2025 A.M. with Project	1W	-	В	-		-	В	-		-	А	-	-	А	-	А	3.6	No
		Year 2035 A.M. without Project	1W	-	В	-		-	В	-		-	А	-	-	А	-	А	3.6	No
		Year 2035 A.M. with Project	1W	-	В	-		-	В	-	ĺ	-	А	-	-	А	-	Α	3.7	No
		Year 2045 A.M. without Project	1W	-	В	-		-	В	-	ĺ	-	А	-	-	А	-	Α	3.7	No
		Year 2045 A.M. with Project	1W	-	В	-		-	В	-		-	А	-	-	Α	-	Α	3.8	No
10)	Hwy 137 & Boad 180															-	-			
	1000 100	Year 2023 P.M. Existing	1W	-	В	-		-	В	-		-	А	-	-	А	-	А	3.6	No
		Year 2023 P.M. with Project	1W	-	В	-		-	В	-		-	А	-	-	А	-	А	3.7	No
		Year 2025 P.M. without Project	1W	-	В	-		-	В	-		-	А	-	-	А	-	А	3.6	No
		Year 2025 P.M. with Project	1W	-	В	-		-	В	-		-	А	-	-	А	-	А	3.7	No
		Year 2035 P.M. without Project	1W	-	В	-		-	В	-		-	А	-	-	А	-	А	3.7	No
		Year 2035 P.M. with Project	1W	-	В	-		-	В	-		-	А	-	-	А	-	А	3.8	No
		Year 2045 P.M. without Project	1W	-	В	-		-	В	-		-	А	-	-	Α	-	Α	3.8	No
		Year 2045 P.M. with Project	1W	-	В	-		-	В	-		-	А	-	-	А	-	А	3.9	No
							. –		1		-							•		
		Year 2023 A.M. Existing	1W	-	Α	-		-	Α	-		-	В	-	-	С	-	Α	4.2	No
		Year 2023 A.M. with Project	1W	-	Α	-		-	Α	-		-	В	-	-	С	-	А	4.4	No
		Year 2025 A.M. without Project	1W	-	Α	-		-	Α	-		-	В	-	-	С	-	А	4.3	No
11)	N Spruce Ave &	Year 2025 A.M. with Project	1W	-	Α	-		-	А	-		-	В	-	-	С	-	А	4.5	No
11)	Acacia Ave	Year 2035 A.M. without Project	1W	-	Α	-		-	Α	-		-	В	-	-	С	-	А	4.7	No
		Year 2035 A.M. with Project	1W	-	Α	-		-	А	-		-	С	-	-	D	-	Α	4.9	No
		Year 2045 A.M. without Project	1W	-	А	-		-	А	-		-	С	-	-	D	-	В	5.3	No
		Year 2045 A.M. with Project	1W	-	А	-		-	Α	-		-	С	-	-	E	-	В	5.7	No

	Legend:	S = Signalized	1W = On	e Way S	Stop Co	ntrol	4W =	All Way	Stop				R = Rou	nda	bout					
																			Intersection	Peak Hour
				N	lorthbo	und	S	outhbou	nd			Eastbour	nd		V	Vestbou	nd	Comp	(sec/veh)	Warrant Met
No.	Intersection	Time Period	Control	Left	Thru	Right	Left	Thru	Right	1	Left	Thru	Right	ĺ	Left	Thru	Right	103	(,	(Yes/No)
		Year 2023 P.M. Existing	1W	-	А	-	-	А	-	ĺ	-	В	-		-	С	-	А	4.1	No
		Year 2023 P.M. with Project	1W	-	А	-	-	А	-		-	В	-	ĺ	-	С	-	А	4.2	No
		Year 2025 P.M. without Project	1W	-	А	-	-	А	-	1	-	В	-		-	С	-	А	4.1	No
11)	N Spruce Ave	Year 2025 P.M. with Project	1W	-	А	-	-	А	-		-	В	-	ĺ	-	С	-	А	4.2	No
11)	& Acacia Ave	Year 2035 P.M. without Project	1W	-	А	-	-	А	-		-	В	-	ĺ	-	С	-	А	4.4	No
		Year 2035 P.M. with Project	1W	-	А	-	-	А	-	1	-	В	-	ĺ	-	D	-	А	4.6	No
		Year 2045 P.M. without Project	1W	-	А	-	-	А	-	1	-	В	-	ĺ	-	D	-	А	4.9	No
		Year 2045 P.M. with Project	1W	-	А	-	-	А	-		-	С	-	ĺ	-	E	-	В	5.1	No
		Year 2023 A.M. Existing	4W	F	-	-	F	-	-	ļ	С	-	-		С	-	-	F	56.9	No
		Year 2023 A.M. with Project	4W	F	-	-	F	-	-		С	-	-		С	-	-	F	76.8	No
		Year 2025 A.M. without Project	4W	F	-	-	F	-	-		С	-	-		С	-	-	F	67.1	Yes
		Year 2025 A.M. with Project	4W	F	-	-	F	-	-		С	-	-		С	-	-	F	92.1	Yes
		Year 2035 A.M. without Project	4W	F	-	-	F	-	-		Е	-	-		D	-	-	F	165.7	Yes
		Year 2035 A.M. with Project	4W	F	-	-	F	-	-		E	-	-		D	-	-	F	200.9	Yes
		Year 2045 A.M. without Project	4W	F	-	-	F	-	-		E	-	-		D	-	-	F	1196.2	Yes
		Year 2045 A.M. with Project	4W	F	-	-	F	-	-		F	-	-		F	-	-	F	1371.0	Yes
	N Spruce Ave	Year 2045 A.M. with Project Mitigated	S	В	С	-	В	С	В		D	D	D		D	D	D	С	33.7	N/A
12)	& Sycamore									-				-						
	Ave	Year 2023 P.M. Existing	4W	D	-	-	С	-	-	1	В	-	-		В	-	-	С	21.9	No
		Year 2023 P.M. with Project	4W	D	-	-	С	-	-	ĺ	В	-	-		В	-	-	С	23.5	No
		Year 2025 P.M. without Project	4W	Е	-	-	С	-	-	ĺ	В	-	-		В	-	-	D	26.9	No
		Year 2025 P.M. with Project	4W	F	-	-	С	-	-	ĺ	В	-	-	ĺ	В	-	-	D	34.0	No
		Year 2035 P.M. without Project	4W	F	-	-	D	-	-		С	-	-	ĺ	В	-	-	F	166.5	Yes
		Year 2035 P.M. with Project	4W	F	-	-	E	-	-	1	С	-	-	ĺ	В	-	-	F	208.5	Yes
		Year 2045 P.M. without Project	4W	F	-	-	F	-	-		D	-	-		С	-	-	F	515.3	Yes
		Year 2045 P.M. with Project	4W	F	-	-	F	-	-		D	-	-		С	-	-	F	582.5	Yes
		Year 2045 P.M. with Project Mitigated	S	Α	В	-	В	В	А		-	Е	D		-	Е	D	С	25.7	N/A

TABLE 7a: Street Segment Level of Service for AM Peak Hour

				Year 2023 Existing A.M. Volumes (Figure 2)	Year 2023 A.M. Plus Project Traffic (Figure 5A)	Year 2025 A.M. Without Project Traffic (Figure 6A)	Year 2025 A.M. Plus Project Traffic (Figure 7A)	Year 2035 A.M. Without Project Traffic (Figure 8A)	Year 2035 A.M. Plus Project Traffic (Figure 9A)	Year 2045 A.M. Without Project Traffic (Figure 8A)	Year 2045 A.M. Plus Project Traffic (Figure 9A)
ltem	Street Segment	Limits	Existing # of Laneage	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)
1	Hwy 65	Cedar Ave/ Tulare Rd	2	E	E	E	E	E	E	F	F
2	Hwy 65	Tulare Rd/ Hermosa St	4	A	А	А	A	A	А	A	А
3	Hwy 65	Hermosa St/ Lindmore St	4	A	А	А	А	A	А	A	А
4	Hwy 65	Lindmore St/ Marigold St	4	A	A	А	А	A	A	А	А
5	Hwy 65	Marigold St/ Ave 208	4	A	A	A	А	A	А	A	A

TABLE 7a: Street Segment Level of Service for AM Peak Hour (cont.)

				Year 2023 Existing A.M. Volumes (Figure 2)	Year 2023 A.M. Plus Project Traffic (Figure 5A)	Year 2025 A.M. Without Project Traffic (Figure 6A)	Year 2025 A.M. Plus Project Traffic (Figure 7A)	Year 2035 A.M. Without Project Traffic (Figure 8A)	Year 2035 A.M. Plus Project Traffic (Figure 9A)	Year 2045 A.M. Without Project Traffic (Figure 8A)	Year 2045 A.M. Plus Project Traffic (Figure 9A)
ltem	Street Segment	Limits	Existing # of Laneage	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)
6	Hwy 65	Cedar Ave/ N Spruce Ave	2	E	E	E	E	E	E	F	F
7	Hwy 65	N Spruce Ave/ Hwy 137	2	D	D	D	D	E	E	E	E
8	Hwy 137	Hwy 65/ Road 188	2	D	D	D	D	D	D	D	D
9	Hwy 137	Road 188/ Road 180	2	С	С	с	С	С	С	С	С
10	N Spruce Ave	Hwy 65/ Acacia Ave	2	D	D	D	D	D	D	E	E
11	N Spruce Ave	Acacia Ave/ Sycamore Ave	2	D	D	D	D	D	D	D	D

TABLE 7b: Street Segment Level of Service for PM Peak Hour

				Year 2023 Existing P.M. Volumes (Figure 2)	Year 2023 P.M. Plus Project Traffic (Figure 5B)	Year 2025 P.M. Without Project Traffic (Figure 6B)	Year 2025 P.M. Plus Project Traffic (Figure 7B)	Year 2035 P.M. Without Project Traffic (Figure 8B)	Year 2035 P.M. Plus Project Traffic (Figure 9B)	Year 2045 P.M. Without Project Traffic (Figure 8B)	Year 2045 P.M. Plus Project Traffic (Figure 9B)
ltem	Street Segment	Limits	Existing # of Laneage	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)
1	Hwy 65	Cedar Ave/ Tulare Rd	2	E	E	E	E	F	F	F	F
2	Hwy 65	Tulare Rd/ Hermosa St	4	A	A	A	А	A	А	A	А
3	Hwy 65	Hermosa St/ Lindmore St	4	A	A	A	А	А	А	A	А
4	Hwy 65	Lindmore St/ Marigold St	4	A	A	A	А	A	А	А	А
5	Hwy 65	Marigold St/ Ave 208	4	A	A	A	А	A	А	A	A

TABLE 7b: Street Segment Level of Service for PM Peak Hour (cont.)

				Year 2023 Existing P.M. Volumes (Figure 2)	Year 2023 P.M. Plus Project Traffic (Figure 5B)	Year 2025 P.M. Without Project Traffic (Figure 6B)	Year 2025 P.M. Plus Project Traffic (Figure 7B)	Year 2035 P.M. Without Project Traffic (Figure 8B)	Year 2035 P.M. Plus Project Traffic (Figure 9B)	Year 2045 P.M. Without Project Traffic (Figure 8B)	Year 2045 P.M. Plus Project Traffic (Figure 9B)
ltem	Street Segment	Limits	Existing # of Laneage	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)	Level of Service (LOS)
6	Hwy 65	Cedar Ave/ N Spruce Ave	2	E	E	E	E	E	E	F	F
7	Hwy 65	N Spruce Ave/ Hwy 137	2	D	D	D	D	E	E	E	E
8	Hwy 137	Hwy 65/ Road 188	2	D	D	D	D	D	D	D	D
9	Hwy 137	Road 188/ Road 180	2	С	С	с	С	с	С	С	С
10	N Spruce Ave	Hwy 65/ Acacia Ave	2	D	D	D	D	D	D	D	D
11	N Spruce Ave	Acacia Ave/ Sycamore Ave	2	D	D	D	D	D	D	D	D

C. Traffic Signal Warrant Analysis

Non-signalized intersections within a Project's vicinity are typically analyzed for satisfaction of the Peak Hour Volume Warrant as described in Section 9 of the <u>Caltrans Traffic Manual</u> and the <u>Manual of Uniform Traffic Control Devices</u>. A brief explanation of the intersection warrant analysis is provided as follows:

The Manual of Uniform Traffic Control Devices (MUTCD) prescribes "tests" which are conducted to determine the need for installation of a traffic signal. These "tests" are referred to as "warrants". The MUTCD list minimum signal "warrants", which have been adopted by the California Department of Transportation and most California agencies, including the City of Lindsay and the County of Tulare. These "warrants" consist of evaluation of various criteria that have been determined as critical for the installation of a signal. The warrant criterion has been derived empirically.

In actual practice, justification for signal installation is usually based on satisfaction of a number of warrants as well as poor Levels of Service for multiple movements. In keeping within the scope of this traffic study, non-signalized intersections were evaluated for signalization, including expansion of the intersection, based solely on satisfaction of said Peak Hour Signal Warrant and a poor level of service.

As shown in Table 8 herein, the intersection of State Route 65 and Cedar Avenue, by the Year 2025, with the addition of Project-generated traffic, satisfies the Peak Hour Warrant. In addition, the intersection of State Route 65 and W. Tulare Road satisfies the Peak Hour Warrant under existing traffic volumes, without the addition of Project-generated traffic.

Table 8: Peak Hour Warrant Analysis¹

		Year 2023	8 Volumes	Year 2025	Volumes	Year 2035	i Volumes	Year 2045	Volumes
		Existing Volumes (Figures 2 & 3)	Existing Volumes Plus Project (Figure 5)	Opening Day Volumes (Figure 6)	Opening Day Volumes Plus Project (Figure 7)	Future Volumes (Figures 8)	Future Volumes Plus Project (Figures 9)	Future Volumes (Figures 10)	Future Volumes Plus Project (Figures 11)
No.	Existing Non- Signalized Intersection	Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied
1)	Hwy 65 & Cedar Ave AM	No	Yes	No	Yes	No	Yes	No	Yes
1)	Hwy 65 & Cedar Ave PM	No	Yes	No	Yes	No	Yes	No	Yes
2)	Hwy 65 & W Tulare Rd AM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2)	Hwy 65 & W Tulare Rd PM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
21	Hwy 65 & W Lindmore St AM	No	No	No	No	No	No	No	No
3)	Hwy 65 & W Lindmore St PM	No	No	No	No	No	No	No	No

1) Table shown as summary only. Peak Warrant calculations included in Appendix "C" herein.

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Table 8: Peak Hour Warrant Analysis (cont.)¹

		Year 2023 Volumes			Year 2025 Volumes			Year 2035 Volumes			Year 2045 Volumes		
		Existing Volumes (Figures 2 & 3)	Existing Volumes Plus Project (Figure 5)		Opening Day Volumes (Figure 6)	Opening Day Volumes Plus Project (Figure 7)		Future Volumes (Figures 8)	Future Volumes Plus Project (Figures 9)		Future Volumes (Figures 10)	Future Volumes Plus Project (Figures 11)	
No.	Existing Non- Signalized Intersection	Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied		Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied		Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied		Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied	
4)	Hwy 65 & Marigold St AM	No	No		No	No		No	No		No	No	
	Hwy 65 & Marigold St PM	No	No		No	No		No	No		No	No	
						1							
5)	Hwy 65 & Ave 208 AM	No	No		No	No		No	No		No	No	
	Hwy 65 & Ave 208 PM	No	No		No	No		No	No		No	No	
6)	Hwy 137 & Road 188 AM	No	No		No	No		No	No		No	No	
	Hwy 137 & Road 188 PM	No	No		No	No		No	No		No	No	

1) Table shown as summary only. Peak Warrant calculations included in Appendix "C" herein.

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Table 8: Peak Hour Warrant Analysis (cont.)¹

	Year 202		8 Volumes	Year 2025 Volumes			Year 2035 Volumes			Year 2045 Volumes		
		Existing Volumes (Figures 2 & 3)	Existing Volumes Plus Project (Figure 5)	Opening Day Volumes (Figure 6)	Opening Day Volumes Plus Project (Figure 7)		Future Volumes (Figures 8)	Future Volumes Plus Project (Figures 9)		Future Volumes (Figures 10)	Future Volumes Plus Project (Figures 11)	
No.	Existing Non- Signalized Intersection	Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied	-	Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied		Peak Hour Warrant Satisfied	Peak Hour Warrant Satisfied	
7)	Hwy 137 & Road 180 AM	No	No	No	No		No	No		No	No	
	Hwy 137 & Road 180 PM	No	No	No	No		No	No		No	No	
8)	N Spruce Ave & Acacia Ave AM	No	No	No	No		No	No		No	No	
	N Spruce Ave & Acacia Ave PM	No	No	No	No		No	No		No	No	
9)	N Spruce Ave & Sycamore Ave AM	No	No	Yes	Yes		Yes	Yes		Yes	Yes	
	N Spruce Ave & Sycamore Ave PM	No	No	No	No		Yes	Yes		Yes	Yes	

1) Table shown as summary only. Peak Warrant calculations included in Appendix "C" herein.

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V. PROJECT VEHICLE MILES TRAVELED

A. Background

The California Legislature, through Senate Bill 746, Senate Bill 32, and Executive Order, have required the California Environmental Quality Act (CEQA) to consider the effects of a project on the surrounding transportation system, with Vehicle Miles Traveled (VMT) as an appropriate measure of impact. The specific goal is reduction of greenhouse gas emission by reducing reliance on individual vehicles, improving mass transit, and reduction in trip length via denser infill development.

Senate Bill 32 requires the State of California to reduce greenhouse gas emission to 40 percent below 1990 levels by Year 2030; and Executive Order requires reduction of greenhouse gas emission to 90 percent below 1990 levels by Year 2050.

The calculation of VMT of any project, simply put, is the number of project-generated trips multiplied by the travel length of each trip. Obviously, there is no completely precise method for determining VMT for any project prior to development and occupancy; however, the best available data must be used for estimating both project-generated trips and trip length.

B. Project Generated Trips for VMT Calculation

The phenomena of "Capture", "Pass-by" and "Diverted Link" trips have been previously discussed. However, trip reductions taken for these phenomena for the purpose of Level of Service (LOS) analysis are typically limited by agency standards. This ensures a conservative analysis of Level of Service (LOS) impact. For determination of VMT, this analysis has defaulted to rates obtained from driveway surveys. As indicated earlier, multiple field surveys of the adjacent highway commercial development as well as other similar facilities virtually all Project-generated trips are "pass-bys" trips do not contribute to VMT. Since all vehicles must eventually stop for fuel, it can be argued that any other fueling destination would not be a lesser distance traveled than the Project.

VI. TRAFFIC MITIGATION

A. Project's Obligation to Fund Mitigation

Mitigation is normally considered necessary if a particular intersection or street segment, under any existing or future scenario, (with or without the addition of Project-generated traffic), is anticipated to function at a less than Level of Service (LOS) "C". Generally, the objective of traffic mitigation is to restore the Level of Service to a "C" or better. However, the Project, only has an obligation to fund mitigation if the addition of its trip generation caused the Level of Service (LOS) of a facility to fall below "C"; or degrade a pre-Project LOS that is already less than "C" further.
In other words, if a facility presently functions at a LOS of "D", and Project-generated traffic does not degrade the LOS further to an "E", then the project has no obligation to fund mitigation. However, in this same scenario, if Project trips degraded the LOS from a "D" to an "E", then the project would be obligated to mitigate to the pre-project LOS of "D".

B. Project's Pro-Rata Share of Mitigation

In a scenario where degradation of a facility's LOS to less than "C" is attributable to Projectgenerated traffic, the Project pro-rata share of mitigation necessary to restore a "C" LOS. If a facility's pre-project LOS was a "D" or worse, mitigation is only required to restore the LOS to the pre-project condition. Again, if the LOS degradation is not attributable to the Project, the developer has no obligation to fund mitigation.

For mitigation improvements inside the Caltrans right of way, the equation is the ratio of Project traffic to the difference of future traffic and current existing traffic. Again, the total Year 2042 traffic includes Project or cumulative project trips. The equation is as follows:

Caltrans Pro – rata Share = <u>
Project Traffic</u> <u>
Total Future Traffic – Current Existing Traffic</u>

Table 9: Project Pro-Rata Share

			2045 A.N	1. Peak Hour			2045 P.N	I. Peak Hour		Weighted
Location	Mitigation	Total Traffic Year 2022	Total Traffic Year 2042	Project Generated Traffic	Project Pro-Rata Share	Total Traffic Year 2022	Total Traffic Year 2042	Project Generated Traffic	Project Pro-Rata Share	Average - Project Pro- Rata Share
Highway 65 and Cedar Ave	Install Traffic Signal	1,959	2,760	419	52%	1,601	2,242	363	57%	54%
Highway 65 and N Spruce Ave	Widened for Additional Lanes	2,418	3,528	286	26%	2,474	3,639	234	20%	23%

Notes:

1. Pro-rata Share for mitigation in Caltrans' right of way calculated using the Caltrans pro-rata share formula: (Project Traffic/(Future Traffic-Present Traffic))

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C. Proposed Mitigation

As discussed in detail earlier in this report, a poor operational Level of Service for multiple movements, and satisfaction of the Peak Hour Warrant were considered justification for installation of a traffic signal or upgrading an existing signalized intersection (to full expansion in accordance with all local standards).

In any present day or future year scenario, degradation of the LOS of a street segment to less than "C", whether or not attributable to Project-traffic, was considered justification for mitigation. However, as discussed, the Project may or may not be obligated to fund such mitigation.

It should be noted that in the analysis of an intersection, every through and turning movement is evaluated for its own Level of Service (LOS). However, the average estimated delay of all vehicles passing through the intersection is used to determine a composite, or average LOS. The composite level of service is used to determine if mitigation is required. In the following, the need for mitigation is discussed for every intersection and street segment within the scope of this study.

- I. Intersections: As shown in Table 6, there are four intersections that are anticipated to degrade or currently function at an unsatisfactory LOS. In the following, each intersection within the scope of this study is discussed including the need for mitigation and Project obligation for funding such:
 - A. **State Route 65 and W. Tulare Avenue:** Under present day traffic volumes, this intersection has been shown to operate at a Level of Service (LOS) of "D". Again, the poor LOS is without the addition of Project-generation traffic.

Recommended Mitigation: Signalization of this intersection would theoretically improve its LOS to an "A"; however, this intersection is less than a quarter mile from the intersection of Cedar Avenue. As discussed in the next item, a signal is also warranted at Cedar Avenue and SR 65. However, since mitigation was warranted under existing traffic volumes without the addition of Project-generated traffic, the Project should have no obligation to fund mitigation. Again, as mentioned in Section II herein, W. Tulare will be realigned to tie into Oak Avenue and its intersection with SR 65 will be removed.

B. Intersection of State Route 65 and Cedar Avenue: Under existing conditions, with a "no Project scenario", this intersection currently function at an LOS of "C". The addition of Project-generated traffic further degrades the LOS to less than "C".

Recommended Mitigation: Installation of a traffic signal at this intersection will improve the LOS to a "C" and better through the year 2045. Given the addition of Projectgenerated traffic degrades the LOS under present day and future volumes, this signal

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should be installed by "Opening Day". As mentioned previously, roundabout project, Cedar Ave will be realigned as a part of the roundabout construction project and realignment of State Route 65. It is recommended that the intersection be re-evaluated in the future in order to determine new intersection control methods are appropriate for the new layout.

C. Intersection of State Route 65 and North Spruce Avenue: For Year 2035 analysis, with a "no Project scenario", this intersection currently function at an LOS of "C". The addition of Project-generated traffic further degrades the LOS of "D".

Recommended Mitigation: Widening this intersection to include more lanes will improve the LOS to a "C" through the year 2045. For the western and eastern segments, the intersection should be widened to include three lanes in each direction, including dedicated left turn lane. For the northern segment, it should be widened to three lanes, with two lanes as dedicated left turn lanes. The southern segment can remain unchanged. Again, the addition of Project-generated traffic degrades the LOS under Year 2035 conditions only. Under present day and opening day conditions, the LOS does not degrade with the addition of the project.

D. North Spruce Avenue and Sycamore Avenue: Under present day traffic volumes, this intersection has been shown to operate at a Level of Service (LOS) of "F". The poor LOS is without the addition of Project-generation traffic.

Recommended Mitigation: Signalization of this intersection would theoretically improve its LOS to an "C"; Since mitigation was warranted under existing traffic volumes, and without the addition of Project-generated traffic, the Project should have no obligation to fund mitigation.

II. Street Segments: Street segment LOS for all analyzed traffic scenarios are shown in Table 7a and 7b. The addition of Project-generated traffic under any present day or future scenario did not degrade the level of service; therefore, no mitigation is warranted.

VII. CONCLUSIONS & RECOMMENDATIONS

The study has shown that with the addition of Project-generated traffic, a traffic signal is warranted at the intersection of Cedar Avenue and State Route 65. This signal is warranted by "opening day" of the Project and will result in a satisfactory LOS for this intersection through the year 2045.

It is noted that this study has been prepared in a conservative manner. Some of the conservative methodology is summarized in the following:

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- Although the latest surveys for State Highway 65 indicate a decreasing trend in traffic volume, a positive growth factor of 1.9% was used to extrapolate future traffic scenarios.
- "Pass-by" rates used to determine final trip count were far less than that yielded by numerous surveys of similar highway commercial developments. Although pass-by trips will affect driveway and intersection LOS, they should not be added to the volume of surrounding streets, to include State Route 65. Since the trip reduction for "pass-bys" was only 20 percent, the analysis of State 65 should certainly be considered conservative.

Finally, the calculations and "findings" of this report have shown that with implementation of recommended mitigation the impact of the Project and adjacent development will be "less-than-significant".

Additionally, as mentioned previously, Caltrans and the County of Tulare have plans to re-align and reconstruct State Route 65, which will include the construction of a roundabout, located at the intersection of State Route 65 and Cedar Avenue, tentatively planned to commence in 2034. As a part of the roundabout project, Cedar Ave will be realigned to the East to connect with Oak Ave. It is recommended that the intersection of State Route 65 and Cedar Avenue be re-evaluated in the future to determine if the intersection's traffic control improvements are adequate.

Appendix "A" Exhibits and Figures





FIGURE 1

PROJECT LOCATION AND EXISTING STREET NETWORK

LEGEND:

EXISTING FREEWAY
EXISTING ARTERIAL STREET
EXISTING COLLECTOR STREET
EXISTING STOP SIGN
EXISTING TRAFFIC SIGNAL
TWO LANE UNDIVIDED
TWO LANE DIVIDED
FOUR LANE DIVIDED
SIX LANE DIVIDED
INTERSECTION STUDIED





FIGURE 2

YEAR 2023 EXISTING A.M. PEAK HOUR VOLUMES AND TURNING MOVEMENTS

LEGEND:

-

 EXISTING	FREEWAY	
 EXISTING	ARTERIAL S	TREET
 EXISTING	COLLECTOR	STREET











DATE: MARCH 2023









FIGURE 4B P.M. PROJECT GENERATED TRAFFIC

LEGEND:

_

 EXISTING	FREEWAY	
 EXISTING	ARTERIAL S	STREET
 EXISTING	COLLECTOR	STREET



INTERSECTION TURNING MOVEMENTS







FIGURE 5A

YEAR 2023 A.M. PEAK HOUR VOLUMES AND TURNING MOVEMENTS PLUS PROJECT GENERATED TRAFFIC

LEGEND:

EXISTING FREEWAY EXISTING ARTERIAL STREET EXISTING COLLECTOR STREET



INTERSECTION TURNING MOVEMENTS





FIGURE 5B

YEAR 2023 P.M. PEAK HOUR VOLUMES AND TURNING MOVEMENTS PLUS PROJECT GENERATED TRAFFIC

LEGEND:

EXISTING FREEWAY
EXISTING ARTERIAL STREET
EXISTING COLLECTOR STREET



INTERSECTION TURNING MOVEMENTS













FIGURE 7A

YEAR 2025 A.M. PEAK HOUR VOLUMES AND TURNING MOVEMENTS PLUS PROJECT GENERATED TRAFFIC

LEGEND:

EXISTING FREEWAY
EXISTING ARTERIAL STREET
EXISTING COLLECTOR STREET



INTERSECTION TURNING MOVEMENTS





FIGURE 7B

YEAR 2025 P.M. PEAK HOUR VOLUMES AND TURNING MOVEMENTS PLUS PROJECT GENERATED TRAFFIC

LEGEND:

EXISTING FREEWAY
EXISTING ARTERIAL STREET
EXISTING COLLECTOR STREET



INTERSECTION TURNING MOVEMENTS













FIGURE 9A

YEAR 2035 A.M. PEAK HOUR VOLUMES AND TURNING MOVEMENTS PLUS PROJECT GENERATED TRAFFIC

LEGEND:

EXISTING FREEWAY
EXISTING ARTERIAL STREET
EXISTING COLLECTOR STREET



INTERSECTION TURNING MOVEMENTS





FIGURE 9B

YEAR 2035 P.M. PEAK HOUR VOLUMES AND TURNING MOVEMENTS PLUS PROJECT GENERATED TRAFFIC

LEGEND:

EXISTING FREEWAY
EXISTING ARTERIAL STREET
EXISTING COLLECTOR STREET



INTERSECTION TURNING MOVEMENTS













FIGURE 11A

YEAR 2045 A.M. PEAK HOUR VOLUMES AND TURNING MOVEMENTS PLUS PROJECT GENERATED TRAFFIC

LEGEND:

EXISTING FREEWAY
EXISTING ARTERIAL STREET
EXISTING COLLECTOR STREET



INTERSECTION TURNING MOVEMENTS





FIGURE 11B

YEAR 2045 P.M. PEAK HOUR VOLUMES AND TURNING MOVEMENTS PLUS PROJECT GENERATED TRAFFIC

LEGEND:

EXISTING FREEWAY
EXISTING ARTERIAL STREET
EXISTING COLLECTOR STREET



INTERSECTION TURNING MOVEMENTS



Appendix "B" LOS Calculations Intersections

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	gold St			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty	,			
Date Performed	3/28/	/23	5				East/	West Str	eet		Ave 2	208				
Analysis Year	2023						North	n/South	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	ır				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store		,			. ,						
Lanes			-													
								1								
					Majo	r Street: Nor	th-South									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	oound			West	bound			North	bound			South	bound	_
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	0	16		20	0	16	0	8	612	24	0	20	476	12
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	١o			Ν	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0		18		23		18		9				23		
Capacity, c (veh/h)				710		281		631		971				837		
v/c Ratio				0.03		0.08		0.03		0.01				0.03		
95% Queue Length, Q ₉₅ (veh)				0.1		0.3		0.1		0.0				0.1		
Control Delay (s/veh)				10.2		18.9		10.9		8.7				9.4		
Level of Service (LOS)				В		С		В		А				A		
Approach Delay (s/veh)						15	5.3			0	.1			0	.4	
Approach LOS						(С									

	HCS7 Two-Way Stop-Control Report															
General Information							Site	Infor	natio	n					_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	gold St			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ity				
Date Performed	3/28/	23					East/	West Str	eet		Ave 2	208				
Analysis Year	2023						North	n/South	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r + proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Majo	r Street: Nor	th-South									
Vehicle Volumes and Adju	istme	nts														
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	0	16		20	0	18	0	8	689	24	0	23	541	14
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8		-	8	8		
Proportion Time Blocked																
Percent Grade (%)			0		<u> </u>		0				1.					
Right Turn Channelized		r	10	16	Orthi	N	10			יו	10		1	N	10	
				Len	Uniy								1			
Critical and Follow-up He	adwa	ys									1		1			
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1		<u> </u>		4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26		<u> </u>		4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0		18		23		20		9				26		
Capacity, c (veh/h)				671		245		591		908				774		
v/c Ratio				0.03		0.09		0.03		0.01				0.03		
95% Queue Length, Q ₉₅ (veh)				0.1		0.3		0.1		0.0				0.1		
Control Delay (s/veh)				10.5		21.2		11.3		9.0				9.8		
Level of Service (LOS)				В		C		В		A				A		
Approach Delay (s/veh)	16.5 0.1 0.4															
Approach LOS						(C									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	l Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	matio	n	_	_	_	_	_	_
Analyst	BMB						Inters	section			Hwy	65/Mario	gold St			
Agency/Co.	LAV (Consultir	ng				Jurisc	diction			Coun	ty	,			
Date Performed	3/28/	/23	5				East/	West Str	eet		Ave 2	208				
Analysis Year	2025						North	n/South :	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	ır				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	vsis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes			-													
					_			1								
					Majo	r Street: Nor	th-South									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	bound			West	bound			North	bound			South	bound	_
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	0	17		21	0	17	0	8	636	25	0	21	495	12
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	10			Ν	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0		19		24		19		9				24		
Capacity, c (veh/h)				698		269		618		953				816		
v/c Ratio	<u> </u>			0.03		0.09		0.03	<u> </u>	0.01			<u> </u>	0.03		
95% Queue Length, Q₀₅ (veh)				0.1		0.3		0.1		0.0				0.1		
Control Delay (s/veh)				10.3		19.7		11.0		8.8				9.5		
Level of Service (LOS)				В		C		В		A				A		
Approach Delay (s/veh)				-		11	5.8	-		0	.1			0	.4	
Approach LOS						(C							-		

	HCS7 Two-Way Stop-Control Report															
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	old St			
Agency/Co.	LAV	Consultir	na				Jurisc	liction			Coun	tv	<u> </u>			
Date Performed	3/28/	/23	.9				East/	West Str	eet		Ave 2	208				
Analysis Year	2025	-					North	/South	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	ır + proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes			-													
								1								
					Majo	r Street: Nor	th-South									
Vehicle Volumes and Adjustments																
Approach		Eastb	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	0	17		21	0	19	0	8	713	25	0	24	560	14
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		١	10			Ν	10			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice	I.												
Flow Rate, v (veh/h)		0		19		24		22		9				27		
Capacity, c (veh/h)				660		235		579		891				754		
v/c Ratio				0.03		0.10		0.04		0.01				0.04		
95% Queue Length, Q ₉₅ (veh)				0.1		0.3		0.1		0.0				0.1		
Control Delay (s/veh)				10.6		22.1		11.5		9.1				10.0		
Level of Service (LOS)				В		С		В		А				A		
Approach Delay (s/veh)						17	7.0			C).1			0	.4	
Approach LOS						(c									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	section			Hwy	65/Mario	old St			
Agency/Co.	LAV (Consultir	ng				Jurisc	diction			Coun	ty	,			
Date Performed	3/28/	/23	5				East/	West Str	eet		Ave 2	208				
Analysis Year	2035						North	n/South	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	ır				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
								1								
					_											
					Majo	r Street: Nor	th-South									
Vehicle Volumes and Adjustments																
Approach		Eastb	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	0	20		25	0	20	0	10	771	30	0	25	600	15
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	10			Ν	10			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0		23		28		23		11				28		
Capacity, c (veh/h)				638		211		550		855				708		
v/c Ratio				0.04		0.13		0.04		0.01				0.04		
95% Queue Length, Q ₉₅ (veh)				0.1		0.5		0.1		0.0				0.1		
Control Delay (s/veh)				10.9		24.7		11.8		9.3				10.3		
Level of Service (LOS)				В		C		В		A				В		
Approach Delay (s/veh)						- 19	9.0			0	.1	-		0	.4	A
Approach LOS						(С									

HCS7 Two-Way Stop-Control Report																
General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	old St			
Agency/Co.	LAV	Consultir	ומ				Jurisc	liction			Coun	tv	<u> </u>			
Date Performed	3/28/	/23	.9				East/	West Str	eet		Ave 2	208				
Analysis Year	2035						North	n/South	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	ır + proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
]								
					_			1								
					Majo	r Street: Nor	th-South									
Vehicle Volumes and Adjustments																
Approach		Eastk	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	0	20		25	0	22	0	10	848	30	0	28	665	17
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		١	١o			Ν	10			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0		23		28		25		11				32		
Capacity, c (veh/h)				603		184		515		799				654		
v/c Ratio				0.04		0.15		0.05		0.01				0.05		
95% Queue Length, Q ₉₅ (veh)				0.1		0.5		0.2		0.0				0.2		
Control Delay (s/veh)				11.2		28.1		12.4		9.6				10.8		
Level of Service (LOS)				В		D		В		A				В		
Approach Delay (s/veh)						20).7			0).1			0	.4	
Approach LOS						(C									

	HCS7 Two-Way Stop-Control Report															
General Information							Site	Inforr	natio	n						
Analyst	BMB						Inters	section			Hwy	65/Mario	gold St			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	<u> </u>				East/	West Str	eet		Ave 2	208				
Analysis Year	2045						North	n/South :	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
															_	
					Majo	r Street: Nor	th-South	·								
Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	0	24		30	0	24	0	12	930	36	0	30	724	18
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	10			Ν	10			Ν	10			N	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0		27		34		27		14				34		
Capacity, c (veh/h)				573		159		479		751				598		
v/c Ratio				0.05		0.21		0.06		0.02				0.06		
95% Queue Length, Q ₉₅ (veh)				0.1		0.8		0.2		0.1				0.2		
Control Delay (s/veh)				11.6		33.8		13.0		9.9				11.4		
Level of Service (LOS)				В		D		В		A				В		
Approach Delay (s/veh)			-			24	4.6			0).1	-		0	.4	
Approach LOS						(С									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort							
General Information							Site Information										
Analyst	ВМВ						Intersection				Hwy 65/Marigold St						
Agency/Co.	LAV Consulting						Jurisdiction				County						
Date Performed	3/28/23						East/West Street				Ave 208						
Analysis Year	2045						North/South Street				Hwy 65						
Time Analyzed	AM Peak Hour + project						Peak Hour Factor				0.88						
Intersection Orientation	North-South						Analysis Time Period (hrs) 1.					.00					
Project Description	TIS for Lindsay Gas Station C-Store																
Lanes																	
]									
					Maio	r Street: Nor	th-South										
Vehicle Volumes and Adju	ıstme	nts															
Approach	Eastbound					West	bound			North	bound			Southbound			
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R	
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6	
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1	
Configuration		LT		R		LT		R		L	Т	R		L	Т	R	
Volume (veh/h)		0	0	24		30	0	26	0	12	1007	36	0	44	789	20	
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8			
Proportion Time Blocked																	
Percent Grade (%)	0				0												
Right Turn Channelized	No				No					Ν	10		No				
Median Type Storage				Left	Only								1				
Critical and Follow-up He	adwa	ys															
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1			
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26			
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2			
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28			
Delay, Queue Length, and	l Leve	l of S	ervice	I													
Flow Rate, v (veh/h)		0		27		34		30		14				50			
Capacity, c (veh/h)				542		136		448		702				552			
v/c Ratio				0.05		0.25		0.07		0.02				0.09			
95% Queue Length, Q ₉₅ (veh)				0.2		1.0		0.2		0.1				0.3			
Control Delay (s/veh)				12.0		40.3		13.6		10.2				12.2			
Level of Service (LOS)				В		E		В		В				В			
Approach Delay (s/veh)						27.9				0.1				0.6			
Approach LOS						D											

HCSTM TWSC Version 7.9.5 Hwy 65 and Ave 208 2045 AM+Proj.xtw
		Н	ICS7	Two	-Way	' Sto	p-Co	ntrol	l Rep	ort						
General Information							Site	Inform	matio	n						_
Analyst	BMB						Inters	section			Hwy	65/Ceda	ir Ave			
Agency/Co.	LAV (Consultir	ng				Juriso	liction			Coun	ity				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2023						North	n/South	Street		Ceda	r Ave				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maji	or Street: Ea	ast-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		0	660				880	0						0		0
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	l Leve	l of S	ervice		<u>.</u>				-			-		<u>.</u>		
Flow Rate, v (veh/h)		0													0	
Capacity, c (veh/h)		346														
v/c Ratio		0.00														
95% Queue Length, Q ₉₅ (veh)		0.0														
Control Delay (s/veh)		15.4														
Level of Service (LOS)		С														
Approach Delay (s/veh)		0	.0													
Approach LOS																

		H	IC <u>S</u> 7	Two	-Way	' Sto	p- <u>Co</u>	ntrol	Rep	ort_						
General Information	_	_	_	_	_	_	Site	Inform	natio	n	_	_	_	_	_	
Analyst	BMB						Inters	ection		•	Hwv	65/Ceda	r Ave			
Agency/Co.	LAV	Consultir	חמ				Jurisc	liction			Coun	itv	7.00			
Date Performed	3/28/	/23	.9				East/	West Str	eet		Hwv	65				
Analysis Year	2023						North	n/South	Street		Ceda	r Ave				
Time Analyzed	AM P	eak Hou	ır + Proie	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	v Gas St	ation C-S	Store					(
lanes			,													
					_											
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adiu	ıstme	nts														
Approach	1	Eastbound Westbound Northbound Southbound														
Movement		Eastbound Westbound Northbound Southbourd												т	R	
Priority	111	1	2	3			5	6	0	7	8	R Q	0	10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration	Ŭ		T	Ŭ	Ŭ	Ŭ		TR		Ū	0	Ŭ			IR	0
Volume (veh/h)		139	660			-	954	0				-		134		72
Percent Heavy Vehicles (%)		8	000				554							8		8
Proportion Time Blocked		0										<u> </u>				
Percent Grade (%)														<u> </u>	<u>ר</u>	
Pight Turn Channelized																
Median Type Storage				Undi	wided											
				Unu	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				<u> </u>								7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		158													234	
Capacity, c (veh/h)		305													36	
v/c Ratio		0.52													6.54	
95% Queue Length, Q ₉₅ (veh)		3.1													102.6	
Control Delay (s/veh)		29.4													10189. 6	
Level of Service (LOS)		D													F	
Approach Delay (s/veh)		5	5.1					1						101	89.6	
Approach LOS															F	
P																

		Н	ICS7	Two	-Way	' Sto	p-Co	ntrol	l Rep	ort						
General Information							Site	Inform	matio	n						_
Analyst	BMB						Inters	section			Hwy	65/Ceda	ir Ave			
Agency/Co.	LAV (Consultir	ng				Juriso	liction			Coun	ity				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2025						North	n/South	Street		Ceda	r Ave				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maji	or Street: Ea	ast-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		0	686				914	0						0		0
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)		0													0	
Capacity, c (veh/h)		326														
v/c Ratio		0.00														
95% Queue Length, Q ₉₅ (veh)		0.0														
Control Delay (s/veh)		16.0														
Level of Service (LOS)		С														
Approach Delay (s/veh)		C	.0							1						
Approach LOS																

		H	ICS7	Two-	-Way	' Stoj	o-Co	ntrol	Rep	ort						
General Information							Site	Infor	natio	n						
Analyst	BMB						Inters	ection			Hwy	65/Ceda	r Ave			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ity				
Date Performed	3/28/	/23	5				East/	West Str	eet		Hwy	65				
Analysis Year	2025						North	n/South	Street		Ceda	r Ave				
Time Analyzed	AM P	eak Hou	ır + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store						1					
Lanes																
					_											
					Maj	or Street: Ea	ist-West									
Vehicle Volumes and Adju	justments Eastbound Westbound Northbound Southbound															
Approach	<u> </u>	Eastbound Westbound Northbound Southbound														
Movement	U	Eastbound Westbound Northbound South												Т	R	
Priority	10	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		139	686				988	0						134		72
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay Queue Length and	l l eve		ervice													<u> </u>
Flow Rate, v (veh/h)		158								1		<u> </u>			234	
Capacity, c (veh/h)		287													30	
v/c Ratio		0.55													7.69	
95% Queue Length, Q ₉₅ (veh)		3.5													105.2	
Control Delay (s/veh)		32.6													12294.	
															0	
Level of Service (LOS)		D													F	
Approach Delay (s/veh)		5	5.5											122	94.0	
Approach LOS															F	

		Н	ICS7	Two	-Way	' Sto	p-Co	ntrol	l Rep	ort						
General Information						_	Site	Infor	matio	n						_
Analyst	BMB						Inters	ection			Hwy	65/Ceda	ir Ave			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ity				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2035						North	n/South	Street		Ceda	r Ave				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maji	or Street: Ea	ast-West									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		0	832				1109	0						0		0
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice	i i												
Flow Rate, v (veh/h)		0													0	
Capacity, c (veh/h)		233														
v/c Ratio		0.00														
95% Queue Length, Q ₉₅ (veh)		0.0														
Control Delay (s/veh)		20.4														
Level of Service (LOS)		С														
Approach Delay (s/veh)		C	0.0	-		_		-						-		
Approach LOS																

		H	ICS7	Two	-Way	' Sto	p-Co	ntrol	Rep	ort						
General Information							Site	Infor	natio	n						
Analyst	BMB						Inters	ection			Hwy	65/Ceda	r Ave			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	5				East/	West Str	eet		Hwy	65				
Analysis Year	2035						North	n/South	Street		Ceda	r Ave				
Time Analyzed	AM P	eak Hou	ır + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
Vehicle Volumes and Adju	ustme	nts			Мај	or Street: Ea	ast-West									
Approach		Eastbound Westbound Northbound Southbound													bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		139	832				1183	0						134		72
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		158													234	
Capacity, c (veh/h)		205													9	
v/c Ratio		0.77													26.00	
95% Queue Length, Q ₉₅ (veh)		7.6													115.6	
Control Delay (s/veh)		74.6													45818. 8	
Level of Service (LOS)		F													F	
Approach Delay (s/veh)		1	0.7											458	18.8	
Approach LOS															F	
P.P																

		Н	ICS7	Two	-Way	' Sto	p-Co	ntrol	l Rep	ort						
General Information							Site	Inform	matio	n						_
Analyst	BMB						Inters	section			Hwy	65/Ceda	ir Ave			
Agency/Co.	LAV (Consultir	ng				Juriso	liction			Coun	ity				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2045						North	n/South	Street		Ceda	r Ave				
Time Analyzed	AM P	eak Hou	ır				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	ast-West									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		0	1003				1338	0						0		0
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0													0	
Capacity, c (veh/h)		157														
v/c Ratio		0.00														
95% Queue Length, Q ₉₅ (veh)		0.0														
Control Delay (s/veh)		27.9														
Level of Service (LOS)		D														
Approach Delay (s/veh)		C	0.0							1						
Approach LOS					1											

		Н	ICS7	Two-	-Way	' Stoj	o-Co	ntrol	Rep	ort						
General Information							Site	Infor	natio	n						_
Analyst	BMB						Inters	ection			Hwy	65/Ceda	r Ave			
Agency/Co.	LAV (Consultir	na				Jurisc	liction			Coun	ity				
Date Performed	3/28/	/23					East/	Nest Str	eet		Hwy	65				
Analysis Year	2045						North	/South	Street		Ceda	r Ave				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-'	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					_											
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		139	1003				1412	0						134		72
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)														(0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		158													234	
Capacity, c (veh/h)		138														
v/c Ratio		1.14														
95% Queue Length, Q ₉₅ (veh)		21.2														
Control Delay (s/veh)		427.7														
Level of Service (LOS)		F														
Approach Delay (s/veh)		57	2.1			-					-	-		-		
Approach LOS																

General Inform	nation									Inte	ersecti	ion Info	ormatio	on	k	at at at .	þa l <u>a</u>
Agency		LAV Consulting								Du	ration,	h	0.250)		44	
Analvst		вмв		Analys	is Da	te	Mar 28	3. 2023		Are	a Type	;	Othe	-	_* _*		₹.
Jurisdiction		County		Time F	Period	ł	AM Pe Proi	ak Hou	r +	PH	F		0.88		1 1 1	W H E	
Urban Street		Hwy 65		Analys	is Yea	ar	2045			Ana	alysis F	Period	1> 7:	00			7 7
Intersection		Hwy 65/Cedar Ave		File Na	ame		Hwy 6	5 and C	edar	Ave	2045	AM+Pro	j-Mitig	ated.xu	S S	* 1 * * *	7 4
Project Descript	tion														1		
Demand Inform	nation				EB	3			W	/B			NB			SB	
Approach Move	ment			L	Т		R	L	1	Г	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			139	100)3			14	12	0				134	0	72
											14					-1-	
Signal Informa	tion					1	215								_		
Cycle, s	120.0	Reference Phase	2		⊨¥ .									_	4 📋	2	стя
Offset, s	0	Reference Point	End	Green	100	3	11 7	0.0	0	0	0.0	0.0	_	1	K	3	4
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.0	.0	4.0	0.0	0.0	0	0.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0		0.0	0.0	0.0	0	0.0	0.0		5	6	7	8
				•													
Timer Results				EBL	-	E	BT	WBI	-	W	'BT	NBL		NBT	SBI	-	SBT
Assigned Phase	e						2			6	6						4
Case Number						6	6.0			8	.0						11.0
Phase Duration	, s				10)4.3			104	4.3						15.7	
Change Period,	(Y+R	c), S			4	1.0			4.	.0						4.0	
Max Allow Head	dway (A	MAH), s), s IAH), s).0			0.	.0						3.0
Queue Clearan	ce Time	e (g s), s															11.5
Green Extensio	n Time	(ge),s				C).0			0.	.0						0.2
Phase Call Prot	oability																1.00
Max Out Probal	bility																0.00
	,																
Movement Gro	up Res	sults			EB	3			WE	3			NB			SB	
Approach Move	ement			L	Т		R	L	Т		R	L	Т	R	L	Т	R
Assigned Move	ment			5	2				6		16				7	4	14
Adjusted Flow F	Rate(<i>v</i>), veh/h		151	1090	0			0							146	78
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	n	344	1900	0			0							1810	1610
Queue Service	Time (g	gs), s		17.4	26.5	5			0.0)						9.5	5.5
Cycle Queue C	learance	e Time (<i>g c</i>), s		100.3	26.5	5			0.0)						9.5	5.5
Green Ratio (g	/C)			0.84	0.84	4										0.10	0.10
Capacity (c), v	eh/h			110	1588	8										177	157
Volume-to-Capa	acity Ra	itio(X)		1.375	0.68	7			0.00	00						0.825	0.498
Back of Queue	(Q), ft/	(In (95 th percentile))	441.2	213	3			0							192.9	98.2
Back of Queue	(Q), ve	eh/In (95 th percenti	le)	17.6	8.5				0.0)						7.7	3.9
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	2			0.0	0						0.00	0.00
Uniform Delay (d 1), s	/veh		56.0	3.8											53.1	51.4
Incremental Del	lay (d 2), s/veh		215.6	2.4				0.0)						3.7	0.9
Initial Queue De	elay (d	з), s/veh		0.0	0.0				0.0)						0.0	0.0
Control Delay (al Queue Delay (d ȝ), s/ven htrol Delay (d), s/veh				6.2											56.8	52.3
Level of Service	of Service (LOS)				Α	1										Е	D
Approach Delay	proach Delay, s/veh / LOS				;		D	24.3		(2	0.0			55.2	2	E
Intersection Del	ntersection Delay, s/ven / LOS						32	.5							С		
	Cloth Delay, S/Vert / LOS										أعيروا						
Multimodal Re	sults			EB	3			WE	3			NB			SB		
Pedestrian LOS	Score	/ LOS	1.30			A	1.82	2	E	3	1.74		В	1.96	3	В	
Bicycle LOS Sc	ore / LC)S		2.54			С	3.02	2	(с 🛛				0.86	3	А

General Informa	tion								Inte	ersect	ion Infe	ormatio	on	×	424	<u>h</u>
Agency		LAV Consulting							Dur	ration,	h	0.250			44	
Analyst		BMB		Analys	sis Date	e Mar 2	8, 2023		Are	a Type	е	Other		4		۲. ا
Jurisdiction		County		Time F	Period	AM			PH	F		0.88		*	W	↓ ↓
Urban Street		Hwy 65		Analys	sis Yea	r 2023			Ana	alysis l	Period	1> 7:(00			r T
Intersection		Hwy 65/Hwy 137		File Na	ame	Hwy 6	5 and ⊦	lwy 1	37 2	2023 A	M.xus				54	×
Project Description	on														*	1 1
							16				14					
Demand Informa	ation				EB			V	VВ			NB			SB	
Approach Movem	nent			L	Т	R	<u> </u>		т	R	L	Т	R	L	Т	R
Demand (<i>v</i>), veł	h/h			38	436	90	20	4	56	147	104	173	12	174	242	34
				1	1	-				1				_		
Signal Information	on		-		La .		3	42	К				7	4		sta
Cycle, s 1	120.0	Reference Phase	2			R	3		517				1	2	3	
Offset, s	0	Reference Point	End	Green	3.1	1.4	62.6	15	5.1	21.8	0.0					Ţ
Uncoordinated	NO	Simult. Gap E/W	On	Yellow	4.0	0.0	4.0	4.	0	4.0	0.0	¥		\rightarrow		Φ
Force Mode F	-ixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.	0	0.0	0.0		5		7	8
Timer Regulto			_	ГРІ		ГРТ			10/		NDI			<u>SDI</u>		CDT
Assigned Dhose					-	ED I			00		INDL	-		301		<u>о</u>
Case Number				20	_	2.0	20		2	2			4	<u> </u>		0
Bhase Duration	<u></u>			2.0		5.0 68.0	2.0	-	3. 66	.0			10.0	<u> </u>	-	25.9
Change Duration, s			0.5		4.0	1.1	-	4	0.0			4.0	<u> </u>		23.0	
Max Allow Hoady		(), S	4.0		4.0	4.0	-	4.	.0			4.0	<u> </u>		4.0	
	vay (/	$(a_{\lambda}) \in \mathcal{A}$	4.7		0.0	3.1	\rightarrow	0.	.0			1/ 6			20.0	
Green Extension	Time	$(g_s), s$		4.7		0.0	0.0	-	0	0			0.5			0.0
Phase Call Proba	ability	(ge), s		0.1	;	0.0	0.0	,	0.	.0			1.00			1.00
Max Out Probabil	lity			0.00	,		0.02	-		_			0.00			0.00
Max Out 1 Tobabli	nty			0.00	/		0.00	,					0.00			0.00
Movement Grou	p Res	ults			EB			W	В			NB			SB	
Approach Movem	nent			L	Т	R	L	Т		R	L	Т	R	L	Т	R
Assigned Movem	nent			1	6	16	5	2		12	7	4	14	3	8	18
Adjusted Flow Ra	ate (v), veh/h		41	474	98	22	49	6	160	113	201		189	300	
Adjusted Saturati	ion Flo	w Rate (<i>s</i>), veh/h/l	n	1810	1900	1610	1810	190	0 1	1610	1810	1878		1810	1859	
Queue Service Ti	ime (g	g s), S		2.7	18.6	3.6	1.4	20.	2	6.3	7.0	12.6		11.5	18.9	
Cycle Queue Clea	arance	e Time (<i>g c</i>), s		2.7	18.6	3.6	1.4	20.	2	6.3	7.0	12.6		11.5	18.9	
Green Ratio (g/C	C)			0.04	0.53	0.53	0.03	0.5	2 (0.52	0.13	0.13		0.18	0.18	
Capacity (<i>c</i>), vel	h/h			68	1014	859	47	992	2	841	227	236		329	338	
Volume-to-Capac	city Ra	tio(X)		0.610	0.467	0.114	0.466	0.50	0 00	0.190	0.498	0.853		0.575	0.888	
Back of Queue (Q), ft/	In (95 th percentile)		57.9	325	61.1	30.6	351	.2 1	107.5	143.1	253.3		222	346.1	
Back of Queue (Q), ve	eh/ln (95 th percent	le)	2.3	13.0	2.4	1.2	14.	0	4.3	5.7	10.1		8.9	13.8	
Queue Storage R	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.0	0 (0.00	0.00	0.00		0.00	0.00	
Uniform Delay (a	d 1), s/	/veh		56.9	17.4	13.9	57.6	18.	5	15.2	48.9	51.4		44.9	47.9	
Incremental Delay	y (d 2), s/veh		3.3	1.5	0.3	2.7	1.8	3	0.5	0.6	3.4		0.6	3.2	
Initial Queue Dela	ay (<i>d</i>	₃), s/veh		0.0	0.0	0.0	0.0	0.0)	0.0	0.0	0.0		0.0	0.0	
Control Delay (d	ntrol Delay (<i>d</i>), s/veh				18.9	14.2	60.3	20.	3 '	15.7	49.6	54.8		45.5	51.1	
Level of Service (vel of Service (LOS)				В	В	E	C		В	D	D		D	D	
Approach Delay,	Approach Delay, s/veh / LOS					С	20.5	5	C	0	52.9)	D	48.9		D
Intersection Delay	ntersection Delay, s/veh / LOS					32	2.1							С		
	in a dal Dagarita								_							
Multimodal Resu	ults	11.00		EB	P		W	В –			NB	-		SB	_	
Pedestrian LOS S	Score	LOS	1.90)	В	1.90		E	5	2.14		В	2.16)	в	
BICYCIE LOS Scor	re / LC	5		1.50		A	1.60)	E	5	1.01		A	1.29		A

									1					**		
General Inform	nation								Inter	rsect	ion Info	ormatic	on	2	444	b≜ l <u>⊾</u>
Agency		LAV Consulting							Dura	ation,	h	0.250			* 4	R
Analyst		BMB		Analys	sis Dat	e Mar 2	8, 2023		Area	а Туре	e	Other		×		
Jurisdiction		County		Time F	Period	AM			PHF	:		0.88			W	4 ↓ ↓
Urban Street		Hwy 65		Analys	sis Yea	r 2023	+ Projec	ct	Anal	lysis F	Period	1> 7:0	00			*
Intersection		Hwy 65/Hwy 137		File Na	ame	Hwy 6	5 and ⊦	lwy 1	37 20)23 Al	M+Proj	.xus			7 10	
Project Descrip	tion													1	414Y	7 4
		*														
Demand Inform	nation				EB			۷	VB			NB			SB	
Approach Move	ement			L	Т	R	<u> </u>		Т	R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			38	491	90	23	5	08	164	107	173	13	196	242	34
								.						_		
Signal morma		Deference Dhase	2					۲Ľ	12					$ \rightarrow $		5 1 2
Cycle, s	120.0	Reference Priase	Z End				5		S17				1	2	3	4
Unsee, s	U		Enu	Green	3.4	1.1	62.5	15	5.2	21.8	0.0					
	Tixed	Simult Cap N/S	On	Yellow	4.0	0.0	4.0	4.	0	4.0	0.0	¥		₹.	_	<u>т</u>
Force Mode	Fixed	Simult. Gap N/S	On	Rea	0.0	0.0	0.0	0.	0	0.0	0.0		5		1	8
Timor Results			_	EBI		FBT	WB			RT	NBI		NBT	SBI		SBT
Assigned Phase	۵		_	1		6	5	-	2				4		-	8
Case Number	<u> </u>			2.0		3.0	2.0		3.0	2			10.0			10.0
Phase Duration	. S		_	8.5		67.6	7.4		66.5	5			19.2			25.8
Change Period,	, (Y+R	c), S	4.0		4.0	4.0		4.0)			4.0			4.0	
Max Allow Head	dway (/	<i>MAH</i>), s		3.1		0.0	3.1		0.0)			3.1			3.1
Queue Clearan	Allow Headway (<i>MAH</i>), s e Clearance Time (<i>g</i> s), s						3.6						14.7			20.9
Green Extensio	n Time	(ge), s		0.1		0.0	0.0		0.0	C			0.5			1.0
Phase Call Pro	bability			0.75	5		0.57	7					1.00			1.00
Max Out Proba	bility			0.00)		0.00)					0.00			0.00
	_			_					_							
Movement Gro	oup Res	sults			EB			VV T	В	_		NB	D	<u> </u>	SB	
Approach Move	ement			L		R				R 10	L 7	1	R		1	R 10
Assigned Move		·) · · · - l- //-		1	6	16	5			12	1	4	14	3	8	18
Adjusted Flow F), ven/n		41	534	98	25	55		1/8	110	202		213	300	
Adjusted Satura			n	1810	1900	1610	1810	190		610 7 0	1810	18/6		1810	1859	
Queue Service	Time ((gs), s a Tima (a) a		2.1	22.0	3.0	1.0	23.	5 7	1.Z	7.2	12.7		13.1	18.9	
Cycle Queue C		e filme (<i>g</i> c), s		2.1	22.0	0.53	1.0	23.	$\frac{5}{2}$	1.Z	1.Z	12.7		0.18	10.9	
Capacity (c) y	/C)			68	1007	854	51	0.0	0 8	230	220	237		320	338	
Volume-to-Can	acity Ra	atio(X)		0.610	0.530	0.115	0.489	0.5	58 0 3	213	0 509	0.853		0.647	0.887	
Back of Queue	(Q) ft	/In (95 th percentile)		57.9	375.5	61.7	35.1	399	2 12	21.9	147.4	254.4		247.4	346	
Back of Queue	(Q), v	eh/ln (95 th percenti	le)	2.3	15.0	2.5	1.4	16	0 4	1.9	5.9	10.2		9.9	13.8	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.0	0 0.	.00	0.00	0.00		0.00	0.00	
Uniform Delay ((d1).s	/veh	,	56.9	18.4	14.1	57.4	19.	4 1	5.5	48.9	51.3		45.5	47.9	
Incremental De	lav (<i>d</i> 2), s/veh		3.3	2.0	0.3	2.7	2.3	3 0	0.6	0.7	3.4		0.8	3.1	
Initial Queue De	elav (d	3), s/veh		0.0	0.0	0.0	0.0	0.0) ()	0.0	0.0	0.0		0.0	0.0	
Control Delay (itial Queue Delay (d ₃), s/veh					14.4	60.1	21	7 16	6.1	49.6	54.7		46.3	51.0	
Level of Service	evel of Service (LOS)					B	E	C		B	D	D		D	D	
Approach Delay	Approach Delay, s/veh / LOS					C	21.6	3	С		52.8		D	49.1		D
Intersection Del				32	2.4							С				
										أعري						
Multimodal Re	Itimodal Results							W	В			NB			SB	
Pedestrian LOS	Score	/LOS		1.90)	В	1.90)	В		2.14		В	2.16		В
Bicycle LOS Sc	ore / LC	DS		1.60)	В	1.73	3	В		1.01		А	1.33		A

General Inform	nation								Intersec	tion Inf	ormatio	on	<i>k</i>	ad _a L _a ada ↓ .	
Agency		LAV Consulting							Duration	, h	0.250			44	
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area Typ	be	Other		4		× 4
Jurisdiction		County		Time F	Period	AM			PHF		0.88		*	W E	↓ ↓
Urban Street		Hwy 65		Analys	is Year	2025			Analysis	Period	1> 7:0	00	4		¥ ¥
Intersection		Hwy 65/Hwy 137		File Na	ame	Hwy 6	5 and H	lwy 1	37 2025 /	AM.xus				5 10	×
Project Descrip	tion			л				-						*	7 4
							14								
Demand Inform	nation				EB			W	В		NB			SB	
Approach Move	ement			L	Т	R	L	T	- R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			39	453	94	21	47	4 153	108	180	12	181	251	35
0													_		
Signal Informa	tion											7	4		sta
Cycle, s	120.0	Reference Phase	2									1	2	3	
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.0	0.0	0.0					Ţ
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0.0	0.0			\rightarrow	•	Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0) 0.0	0.0		5	Y 6	7	8
Time on Desculte			_		1	CDT								_	ODT
Assigned Dhese				EBL	-	EBI	VVB			NB	-		SBI	-	SBI
Assigned Phase	9			1		0	5		2	<u> </u>		4	<u> </u>		8
Case Number	<u> </u>			2.0	_	3.U	2.0	-	3.0		_	10.0	<u> </u>	_	10.0
Change Duration	, s (V D		0.0		4.0	1.2		05.4	<u> </u>		19.0	<u> </u>		20.5	
Max Allow Hoor		c), S		4.0		4.0	4.0	-	4.0			4.0	<u> </u>		4.0
	nge Period, ($Y+R_c$), s Allow Headway (MAH), s ue Clearance Time (g_s), s					0.0	0.0	\rightarrow	0.0	<u> </u>		0.0	<u> </u>		0.0
Groop Extonsio	ax Allow Headway (MAH), s neue Clearance Time (g_s), s een Extension Time (g_s) s					0.0	0.0	-	0.0			0.0		_	0.0
Phase Call Prot	hability	(<i>g</i> e), s		0.0		0.0	0.0		0.0	<u> </u>		0.0			0.0
Max Out Proba	bility			0.00	,	0.00	0.00))	0.00	-		0.00		_	0.00
	onity			0.00		0.00	0.00	,	0.00			0.00			0.00
Movement Gro	oup Res	sults			EB			WE	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F	Rate (v), veh/h		0	0	0	0	0	0	0	0		0	0	
Adjusted Satura	ation Flo	ow Rate (s), veh/h/l	n	0	0	0	0	0	0	0	0		0	0	
Queue Service	Time (g	g s), s		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Cycle Queue C	learanc	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Green Ratio (g	/C)			0.04	0.52	0.52	0.03	0.5	1 0.51	0.13	0.13		0.19	0.19	
Capacity (c), v	/eh/h			68	993	842	48	972	2 824	235	244		340	349	
Volume-to-Capa	acity Ra	atio (X)		0.619	0.496	0.121	0.473	0.53	0 0.202	0.501	0.857		0.579	0.891	
Back of Queue	(Q), ft	/In (95 th percentile))	59.5	347.8	65.9	32.1	375.	7 115.7	148.1	260.7		228.4	356.1	
Back of Queue	(Q), ve	eh/In (95 th percent	ile)	2.4	13.9	2.6	1.3	15.0) 4.6	5.9	10.4		9.1	14.2	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	
Uniform Delay ((d1), s	/veh		56.9	18.4	14.6	57.6	19.6	6 16.0	48.6	51.1		44.4	47.5	
Incremental De	lay (<i>d</i> 2	2), s/veh		3.4	1.8	0.3	2.7	2.1	0.6	0.6	3.4		0.6	3.2	
Initial Queue De	elay (<i>d</i>	з), s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (Control Delay (<i>d</i>), s/veh				20.2	14.9	60.2	21.7	7 16.5	49.2	54.5		45.0	50.7	
Level of Service	evel of Service (LOS)				С	В	E	С	В	D	D		D	D	
Approach Delay		22.0		С	21.7	7	С	52.6	3	D	48.5	5	D		
Intersection Del				32	2.7						С				
Multimodal Re	ultimodal Results							WE	3		NB			SB	
Pedestrian LOS	Score	/LOS		1.90		В	1.90)	В	2.14	1	В	2.16	3	В
Bicycle LOS Sc	ore / LC	DS		1.54	-	В	1.65	5	В	1.03	3	Α	1.33	3	A

General Information Intersection Information Agency LAV Consulting Duration, h 0.250		+ + 1
Agency LAV Consulting Duration, h 0.250	+ 1	
		×
Analysis Date Mar 28, 2023 Area Type Other	پر او	<u>≮</u> _5
Jurisdiction County Time Period AM PHF 0.88	→ w∰t	↓ ↓ ↓
Urban StreetHwy 65Analysis Year2025Analysis Period1> 7:00		۲ ۲
Intersection Hwy 65/Hwy 137 File Name Hwy 65 and Hwy 137 2025 AM+Proj.xus	1 1	•
Project Description	ካ ላ ተቀ	Y 14 17
Demand Information EB WB NB	SE	3
Approach Movement L T R L T R L T R L	LT	R
Demand (v), veh/h 39 508 94 24 526 170 108 180 13 20	03 25	1 35
Signal Information	1	
Cycle s 120.0 Reference Phase 2	-	52
Offset s 0 Reference Point End	2 3	3 4
Uncoordinated No. Simult Cap E/W On V/III 0.0 0.0 0.0 0.0 0.0 0.0		
Force Mode Fixed Simult Gap N/S On Red 0.0 0.0 0.0 0.0 0.0 0.0 0.0	6 7	7 8
	•	
Timer Results EBL EBT WBL WBT NBL NBT S	SBL	SBT
Assigned Phase 1 6 5 2 4		8
Case Number 2.0 3.0 2.0 3.0 10.0		10.0
Phase Duration, s 8.5 66.3 7.5 65.3 19.6		26.6
Change Period, (Y+R c), s 4.0 4.0 4.0 4.0 4.0 4.0		4.0
Max Allow Headway (<i>MAH</i>), s 0.0 0.0 0.0 0.0 0.0 0.0		0.0
Queue Clearance Time (g s), s 0.0 0.0 0.0 0.0 0.0 0.0		0.0
Green Extension Time (g e), s 0.0 0.0 0.0 0.0 0.0 0.0		0.0
Phase Call Probability 0.00 0.00 0.00 0.00 0.00		0.00
Max Out Probability 0.00 0.00 0.00 0.00 0.00		0.00
Movement Group Results EB WB NB	SB	}
Approach Movement L T R L T R L T R L	. T	R
Assigned Movement 1 6 16 5 2 12 7 4 14 3	8 8	18
Adjusted Flow Rate (v), veh/h 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0) 0	
Adjusted Saturation Flow Rate (s), veh/h/ln 0 0 0 0 0 0 0 0 0 0 0 0	0 0	
Queue Service Time (g s), s 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0<	0 0.0	
Cycle Queue Clearance Time (g c), s 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0.0	
Green Ratio (g/C) 0.04 0.52 0.52 0.03 0.51 0.51 0.13 0.13 0.1	19 0.19	9
Capacity (c), veh/h 68 987 836 53 970 822 236 245 34	40 349)
Volume-to-Capacity Ratio (X) 0.619 0.560 0.122 0.496 0.589 0.225 0.498 0.858 0.64	49 0.89	0 、
Back of Queue (Q), Ivin (95 th percentile) 59.5 400.8 60.5 30.6 420.8 130.5 147.9 201.8 253	3.5 350)
Back of Queue (Q), ven/in (95 th percentile) 2.4 16.0 2.7 1.5 17.1 5.2 5.9 10.5 10.	1114.2	2
$\begin{array}{c} \text{Uniform Dolay}(d_{4}) \text{ s/veb} \\ \text{Uniform Dolay}(d_{4}) \text{ s/veb} \\ \end{array} = \begin{array}{c} 56.0 & 10.5 & 14.8 & 57.4 & 20.6 & 16.2 & 48.5 & 51.1 \\ \text{Uniform Dolay}(d_{4}) \text{ s/veb} \\ \end{array}$	1 47 6	5
Uniform Delay (d 1), s/ven 30.9 19.5 14.6 57.4 20.0 10.2 40.3 51.1 45.	0 21	,
Incremental Delay (d 2), s/ven 5.4 2.5 0.3 2.7 2.6 0.0 0.0 5.4 0.0 Initial Quoue Delay (d 2), s/ven 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 3.1	
Centrel Delay (d) s/ven 60.2 21.9 15.1 60.1 22.2 16.0 40.1 54.5 45	0 0.0	
Control Delay (0), s/ven 00.2 21.0 13.1 00.1 23.2 10.9 49.1 54.5 45. Level of Service (LOS) E C B E C B D D D		5
Approach Delay, s/yeb / LOS 23.2 C 22.9 C 52.6 D 4	18.6	
Intersection Delay, s/veh / LOS 23.2 0 22.3 0 32.0 D 4	10.0	U
Multimodal Posulte	SB	3
Pedestrian LOS Score / LOS 1.90 B 1.90 B 2.14 B 2	2.16	В

General Inform	ation								Inte	tersect	ion Inf	ormatic	on	2	***	⊨ L <u>⊾</u>
Agency		LAV Consulting							Du	iration,	h	0.250			*4 L	
Analyst		BMB		Analys	sis Dat	e Mar 2	8, 2023		Are	еа Тур	е	Other		4		
Jurisdiction		County		Time F	Period	AM			PH	IF		0.88			W + E	↓ ↓ ↓
Urban Street		Hwy 65		Analys	sis Yea	ar 2035			Ana	alysis	Period	1> 7:(00			¥ *
Intersection		Hwy 65/Hwy 137		File Na	ame	Hwy 6	5 and H	lwy 1	37 2	2035 A	M.xus				5 10	×
Project Descript	ion														* 1 * *	*
		•												1		
Demand Inform	nation				EB			V	VB		<u> </u>	NB			SB	1
Approach Move	ment			L	Т	R	L		Т	R		Т	R	L	Т	R
Demand (v), ve	eh/h			48	549	9 113	25	5	75	185	131	218	15	219	305	43
Signal Informa	tion												1	-		
Signal Informa		Deference Dhees	2										~	\rightarrow		sta
Cycle, s	120.0	Reference Phase	ے ا										1	2	3	4
Offset, s	0	Reference Point	Ena	Green	0.0	0.0	0.0	0.	0	0.0	0.0					
Uncoordinated	INO Tixod	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.	0	0.0	0.0			➡ .	_	Φ
Force Mode	Fixed	Simult. Gap N/S	On	Rea	0.0	0.0	0.0	0.	0	0.0	0.0		5	Y 6	7	8
Timer Poculto				EDI		ERT	\//D		10/	/BT	ND		NRT	CDI		SBT
Assigned Phase	<u>```</u>				-	6	5			2 2	INDL	-		36	-	<u>ع</u>
Case Number	-			2.0	+	3.0	2.0	\rightarrow	3	2			10.0			10.0
Phase Duration	<u>د</u>			8.9		59.0	2.0	-	57	7.6		-	22.5	-	_	30.9
Change Period.	,	c). S		4.0		4.0	4.0	\rightarrow	4	1.0			4.0			4.0
Max Allow Head	` lway (<i>l</i>	<i>MAH</i>), s	0.0		0.0	0.0		0).0			0.0			0.0	
Queue Clearand	ieue Clearance Time (g s), s					0.0	0.0		0).0			0.0			0.0
Green Extensio	n Time	(g e), s		0.0		0.0	0.0		0).0			0.0			0.0
Phase Call Prob	bability			0.00)	0.00	0.00)	0.	.00			0.00			0.00
Max Out Probab	oility			0.00)	0.00	0.00)	0.	.00			0.00			0.00
Manager of Ores					50				D	_		ND		_	0.0	
Movement Gro	up Res	Suits			EB	Р			в	в	1	NB	D		5B 	Р
Approach Nove	ment				I 6	16		1	+	К 12	L 7	1	К 14		0	<u>К</u> 10
Adjusted Flow		v) veb/b			0	10	0	2		0	7	4	14	3	0	10
Adjusted Flow F), ven/n	In	0	0	0	0		+	0	0	0		0	0	
					0	0.0	0		2	0		0		0		
		g_{s} , s		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Green Ratio (a		e nine (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0	5	0.0	0.0	0.0		0.0	0.0	
Capacity (c) y	eh/h			75	871	738	54	84	9	720	279	289		406	417	
Volume-to-Capa	acity Ra	atio (X)		0.699	0.68	5 0.166	0.504	0.73	36 (0.279	0.511	0.876		0.586	0.906	
Back of Queue	(Q), ft	/In (95 th percentile)	73.8	505	93.8	38.1	55	2 1	167.1	176.5	303.4		260.1	416.1	
Back of Queue	(Q), v	eh/In (95 th percent	, ile)	3.0	20.2	3.8	1.5	22.	1	6.7	7.1	12.1		10.4	16.6	
Queue Storage	Ratio (RQ) (95 th percen	, tile)	0.00	0.00	0.00	0.00	0.0	0	0.00	0.00	0.00		0.00	0.00	
Uniform Delay (d 1), s	/veh	,	56.8	25.7	19.0	57.3	27.	3	21.0	46.6	49.6		41.5	45.3	
Incremental Del	ay (d 2	2), s/veh		4.4	4.4	0.5	2.7	5.6	3	1.0	0.5	3.3		0.5	3.1	
Initial Queue De	elay (d	3), s/veh		0.0	0.0	0.0	0.0	0.0	5	0.0	0.0	0.0		0.0	0.0	
Control Delay (d), s/v	eh	61.2	30.0	19.5	60.0	33.	0	21.9	47.2	53.0		42.1	48.4		
Level of Service	I of Service (LOS)					В	E	С		С	D	D		D	D	
Approach Delay	ach Delay, s/veh / LOS					С	31.2	2	(С	50.9)	D	46.0)	D
Intersection Del	ay, s/ve	eh / LOS				3	7.4							D		
Multimodal Res	sults				EB			W	В			NB	_		SB	_
Pedestrian LOS	Score	/LOS		1.91		В	1.91	1	E	В	2.13	5	В	2.16	j	В
Bicycle LOS Sc	ore / LC	JS		1.76	j	В	1.90	ו נ	E	В	1.14		A	1.50)	В

General Inform	nation								Interse	ction Inf	ormatio	on	×	***	× 1,
Agency		LAV Consulting							Duratior	ı, h	0.250			4 5	
Analyst		BMB		Analys	is Dat	e Mar 2	8, 2023		Area Ty	pe	Other		4		× ×
Jurisdiction		County		Time F	Period	AM			PHF		0.88		*	W = E	↓ ↓
Urban Street		Hwy 65		Analys	is Yea	r 2035	+ Projec	t	Analysis	Period	1> 7:0	00			* *
Intersection		Hwy 65/Hwy 137		File Na	ame	Hwy 6	5 and H	lwy 1	37 2035	AM+Proj	.xus			5 10	
Project Descrip	tion			R										41491	• (*
							1			1					
Demand Inform	nation				EB			W	'B		NB			SB	
Approach Move	ement			L	Т	R	L		R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			48	604	113	28	62	27 202	131	218	16	241	305	43
	4!												_		
Signal Informa			0									7	\mathbf{A}		st a
Cycle, s	120.0	Reference Phase	2									1	2	3	
Offset, s	0		Ena	Green	0.0	0.0	0.0	0.0	0.0	0.0					
	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0.0	0.0			\rightarrow	_ 	Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0) 0.0	0.0		5	Y 6	7	8
Timor Booulto			_	EDI		EDT	\\/D			ND			<u>SDI</u>	1	SPT
Assigned Phase	2				·	6	5		2		-		30	-	8 8
Case Number	5			2.0		3.0	2.0	\rightarrow	2			10.0			10.0
Phase Duration	6			2.0		58.6	2.0	-	57.5			22.6			31.0
Change Period	, 3 (V+R)			4.0		4.0	4.0	\rightarrow	4.0			4.0		-	4.0
Max Allow Hear	way (A	ΜΔΗ) s	4.0		0.0	4.0	-	0.0			0.0	<u> </u>		0.0	
Queue Clearan	low Headway (<i>MAH</i>), s Clearance Time (<i>g</i> s), s					0.0	0.0	-	0.0	<u> </u>		0.0			0.0
Green Extensio	ueue Clearance Time (g_s), s					0.0	0.0	-	0.0	-		0.0			0.0
Phase Call Pro	bability	(9, 9, 5		0.0)	0.00	0.0)	0.00	<u> </u>		0.00			0.00
Max Out Proba	bility			0.00		0.00	0.00)	0.00			0.00			0.00
	Sincy			0.00	·	0.00	0.00		0.00			0.00			0.00
Movement Gro	oup Res	ults			EB			WE	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F	Rate(<i>v</i>), veh/h		0	0	0	0	0	0	0	0		0	0	
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0	0	0	0		0	0	
Queue Service	Time (g	g s), s		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Cycle Queue C	learance	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Green Ratio (g	/C)			0.04	0.46	0.46	0.03	0.4	5 0.45	0.15	0.15		0.22	0.22	
Capacity (c), v	/eh/h			75	865	733	58	847	718	280	290		407	418	
Volume-to-Capa	acity Ra	tio(X)		0.699	0.759	0.168	0.528	0.80	4 0.306	0.509	0.877		0.644	0.905	
Back of Queue	(Q), ft/	In (95 th percentile))	73.8	581.7	94.5	42.6	630) 185.5	176.3	304.5		284.7	415.9	
Back of Queue	(Q), ve	eh/In (95 th percenti	ile)	3.0	23.3	3.8	1.7	25.2	2 7.4	7.1	12.2		11.4	16.6	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	
Uniform Delay ((d 1), si	/veh		56.8	27.2	19.3	57.2	28.7	7 21.3	46.5	49.6		42.2	45.3	
Incremental De	lay (<i>d</i> 2), s/veh		4.4	6.2	0.5	2.8	8.0	1.1	0.5	3.3		0.6	3.1	
Initial Queue De	elay(d	3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		
Control Delay (d), s/ve	eh		61.2	33.4	19.8	60.0	36.7	7 22.4	47.1	52.9		42.8	48.3	
Level of Service	evel of Service (LOS)					В	E	D	С	D	D		D	D	
Approach Delay		33.1		С	34.1		С	50.8	3	D	46.1		D		
Intersection De	ntersection Delay, s/veh / LOS					38	3.9						D		
Multimedal D	oulta							10/5	,					00	
Dedeetrice LOC	Suits	/1.08		1.04	EB	D	1.04	VVE		0.40	INB	D	0.40	50	D
Riovela LOS Co				1.91		D	1.9	· · ·	D	2.13) 1		2.10	,	D
BICYCIE LOS SC	ore / LC			1.80		D	2.02	-	D	1.14	+	A	1.54		D

											-					
General Inform	nation								Inte	ersect	ion Info	ormatic	on	2	****	× 1 <u>4</u>
Agency		LAV Consulting							Dur	ration,	h	0.250			44	
Analyst		BMB		Analys	is Dat	e Mar 2	8, 2023		Area	ea Type	e	Other		4		4
Jurisdiction		County		Time F	Period	AM			PHF	F		0.88			W = E	↓ ↓ ↓
Urban Street		Hwy 65		Analys	is Yea	r 2045			Ana	alysis l	Period	1> 7:(00			¥ *
Intersection		Hwy 65/Hwy 137		File Na	ame	Hwy 6	5 and H	lwy 1	37 20	2045 A	M.xus				5 1	×
Project Descrip	tion			л											1 1 4 Y	× (*
							v				1/					
Demand Inform	nation				EB			N	/B			NB			SB	
Approach Move	ement			L	Т	R	L		г	R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			58	663	137	30	69	93	223	158	263	18	264	368	52
<u> </u>														_		
Signal Informa	tion			c									,	A		r†a
Cycle, s	120.0	Reference Phase	2										1	2	3	\mathbf{Y}_{4}
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.	0	0.0	0.0					I
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.	0	0.0	0.0			↔	•	Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0	0.0	0.0		5	Y 6	7	8
Timer Desult				EDI		ГРТ			14/5	DT	ND		NDT	0.01		CDT
Accident Accident				EBL		EBI	VVB		200	ВІ	INBL			SBL		<u>SB1</u>
Assigned Phase				20		2.0	5	-	2	2			4			0
Case Number	<u> </u>			2.0	-	52.0	2.0	-	5.	.0			10.0	<u> </u>		10.0
Change Duration	, S (V+D			9.5		33.9	0.0	-	52	0			22.0			4.0
Max Allow Hoor		c), S		4.0		4.0	4.0	-	4.	.0			4.0	<u> </u>		4.0
	w Headway (<i>MAH</i>), s Xearance Time (<i>g</i> s), s				+	0.0	0.0	\rightarrow	0.0	.0			0.0	<u> </u>		0.0
Croop Extensio	ueue Clearance Time (g_s), s					0.0	0.0	-	0.	.0			0.0	<u> </u>		0.0
Bhase Call Pro	hability	(<i>g</i> e), s		0.0		0.0	0.0		0.0	.0			0.0	<u> </u>		0.0
Max Out Proba	bility			0.00		0.00	0.00))	0.0	00			0.00	<u> </u>		0.00
	onity			0.00	,	0.00	0.00	,	0.0	00			0.00			0.00
Movement Gro	oup Res	sults			EB			W	3			NB			SB	
Approach Move	ment			L	Т	R	L	Т		R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2		12	7	4	14	3	8	18
Adjusted Flow F	Rate (v), veh/h		0	0	0	0	0		0	0	0		0	0	
Adjusted Satura	ation Flo	w Rate (s), veh/h/l	n	0	0	0	0	0		0	0	0		0	0	
Queue Service	Time (g	g s), S		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Cycle Queue C	learanc	e Time (g c), s		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Green Ratio (g	/C)			0.05	0.42	0.42	0.03	0.4	0 0	0.40	0.15	0.15		0.27	0.27	
Capacity (c), v	eh/h			83	791	670	60	767	76	650	271	282		484	497	
Volume-to-Capa	acity Ra	itio(X)		0.764	0.911	0.222	0.544	0.98	32 0).373	0.633	1.084		0.593	0.919	
Back of Queue	(Q), ft/	/In (95 th percentile))	90	760.2	2 127.2	45.7	887	.3 2	219.5	218.7	537.3		294.2	482.9	
Back of Queue	(Q), ve	eh/In (95 th percent	ile)	3.6	30.4	5.1	1.8	35.	5	8.8	8.7	21.5		11.8	19.3	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.0	0 0	0.00	0.00	0.00		0.00	0.00	
Uniform Delay ((d1), s	/veh		56.6	32.9	22.5	57.1	35.	3 2	25.1	47.9	51.0		38.3	42.7	
Incremental De	lay (<i>d</i> 2), s/veh		5.4	16.5	0.8	2.8	28.	4	1.6	3.6	77.8		0.4	3.0	
Initial Queue De	elay (<i>d</i>	з), s/veh		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Control Delay (Delay (<i>d</i>), s/veh					23.3	60.0	63.	7 2	26.8	51.5	128.8		38.7	45.7	
Level of Service	vel of Service (LOS)					С	E	E		С	D	F		D	D	
Approach Delay		46.2	2	D	54.9	9	D	D	101.0)	F	43.0		D		
Intersection De	lay, s/ve	eh / LOS				50	6.5							E		
Multimodal Re	sults				EB			W	3			NB			SB	
Pedestrian LOS	Score	/ LOS		1.92	2	В	1.92	2	В	3	2.13		В	2.16		В
Bicycle LOS Sc	ore / LC	DS		2.03	3	В	2.18	3	В	3	1.27		А	1.71		В

General Inforn	nation								Intersec	tion Inf	ormatic	on	*		× l <u>x</u>
Agency		LAV Consulting							Duration	, h	0.250			** %	ĸ
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area Typ	e	Other		××		<u>↓</u>
Jurisdiction		County		Time F	Period	AM			PHF		0.88		*	W = E	+ ↓ ↓
Urban Street		Hwy 65		Analys	sis Year	2045	+ Projec	:t	Analysis	Period	1> 7:0)0			Ť
Intersection		Hwy 65/Hwy 137		File Na	ame	Hwy 6	5 and ⊢	lwy 1	37 2045 A	M+Proj	.xus			7 10	
Project Descrip	tion												1	****	* (*
									_				1		
Demand Inform	nation				EB		<u> </u>	W	B	<u> </u>	NB			SB	
Approach Move	ement			L	T	R	L	T	R	L	T	R	L	T	R
Demand (<i>v</i>), v	eh/h			58	718	137	33	74	5 240	158	263	19	286	368	52
Signal Informa	tion												ĸ		
Cycle s	120.0	Reference Phase	2									▶			N
Offset, s	0	Reference Point	End									1	2	3	4
Uncoordinated	No	Simult, Gap E/W	On	Green	0.0	0.0	0.0	0.0	0.0	0.0	_				\mathbf{A}
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0.0	0.0		5	5 6	7	8
Timer Results				EBI	-	EBT	WB	L	WBT	NBI	-	NBT	SBI	-	SBT
Assigned Phase	e			1		6	5		2			4			8
Case Number				2.0		3.0	2.0		3.0			10.0			10.0
Phase Duration	, S			9.5		54.7	8.2		53.4			21.0			36.1
Change Period	, (Y+ R a	e), s		4.0		4.0	4.0		4.0			4.0			4.0
Max Allow Hea	dway(A	<i>I</i> AH), s	0.0		0.0	0.0		0.0			0.0			0.0	
Queue Clearan	ce Time	(g s), s	0.0		0.0	0.0		0.0			0.0			0.0	
Green Extensio	n Extension Time ($g \in J$, s					0.0	0.0		0.0			0.0			0.0
Phase Call Pro	bability			0.00)	0.00	0.00)	0.00			0.00			0.00
Max Out Proba	bility			0.00)	0.00	0.00)	0.00			0.00			0.00
Movement Gro	un Res	ults			FB			W/F	2		NB			SB	
Approach Move	ment				Т	R	1	Т	R	1	Т	R	1	Т	R
Assigned Move	ment			1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow	Rate (v), veh/h	_	0	0	0	0	0	0	0	0		0	0	
Adjusted Satura	ation Flo	w Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0	0	0	0		0	0	
Queue Service	Time (g	g s), S		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Cycle Queue C	learance	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Green Ratio (g	/C)			0.05	0.42	0.42	0.03	0.41	0.41	0.14	0.14		0.27	0.27	
Capacity (c), v	/eh/h			82	803	680	63	783	663	256	266		484	497	
Volume-to-Cap	acity Ra	tio (<i>X</i>)		0.765	0.972	0.219	0.568	1.03	5 0.393	0.670	1.153		0.642	0.918	
Back of Queue	(Q), ft/	In (95 th percentile)		90	890.9	125.4	50.2	1028 2	3. 232.1	224.2	584.8		318.2	488.9	
Back of Queue	(Q), ve	eh/In (95 th percenti	le)	3.6	35.6	5.0	2.0	41.1	9.3	9.0	23.4		12.7	19.6	
Queue Storage	Ratio (RQ) (95 th percent	ile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	
Uniform Delay	(d 1), s/	/veh		56.6	34.0	22.0	57.0	35.3	3 24.8	48.8	51.5		38.9	42.7	
Incremental De	lay (<i>d</i> 2), s/veh		5.4	25.7	0.7	3.0	41.5	5 1.7	5.4	102.8		0.5	4.6	
Initial Queue D	elay(d	₃), s/veh		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (d), s/ve	eh		62.0	59.6	22.8	60.0	76.8	3 26.5	54.2	154.3		39.4	47.3	
Level of Service	e (LOS)			E	E	С	Е	F	С	D	F		D	D	
Approach Dela	y, s/veh	/LOS		54.3	3	D	64.4		E	118.4	4	F	44.1		D
Intersection De	lay, s/ve	h / LOS				64	1.4						E		
Multimer del D	evult -				FD				,		ND			0.0	
Dedestriar L CC	SUITS	/1.08		4.00	EB	D	4.00	VVE	P	0.40	NB	D	0.40	SB	D
Peuestrian LOS	score	100		1.92	-	D	1.92	-	B	2.13)		2.10) -	D
Dicycle LOS SC	JUIE / LC			2.13	,	D	2.3		D	1.20	,	А	1.75	,	D

		Н	CS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	section			Hwy	65/Mario	aold St			
Agency/Co.	LAV	Consultir	q				Jurisc	liction			Coun	ity	5			
Date Performed	3/28/	23	5				East/	West Str	eet		Mario	gold St				
Analysis Year	2023						North	n/South :	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	vsis Time	Period (hrs)	1.00					
Project Description	TIS fo	r Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
Major Street: North-South																
Major Street: North-South																
Vehicle Volumes and Adju	Adjustments															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		8	8	0		8	0	8	0	0	460	20	0	0	344	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	lo			Ν	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice						<u> </u>	<u>.</u>		<u> </u>		<u>.</u>		
Flow Rate, v (veh/h)		18		0		9		9		0				0		
Capacity, c (veh/h)		369		795		393		719		1122				979		
v/c Ratio		0.05		0.00		0.02		0.01		0.00				0.00		
95% Queue Length, Q ₉₅ (veh)		0.2		0.0		0.1		0.0		0.0				0.0		
Control Delay (s/veh)		15.3		9.5		14.4		10.1		8.2				8.7		
Level of Service (LOS)		C		A		В		В		A				A		
Approach Delay (s/veh)		1!	5.3			- 12	2.2			0	0.0	-		0	.0	
Approach LOS		(С			I	В									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	
Analyst	ВМВ						Inters	section			Hwy	65/Mario	aold St			
Agency/Co.	LAV (Consultir	na				Jurisc	diction			Coun	ty	_			
Date Performed	3/28/	/23					East/	West Stre	eet		Mario	yold St				
Analysis Year	2023						North	n/South :	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	vsis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
								1								
Major Street: North-South																
Vehicle Volumes and Adju	ljustments															
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		9	8	0		8	0	10	0	0	548	20	0	0	422	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	10			Ν	10			Ν	lo			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		19		0		9		11		0				0		
Capacity, c (veh/h)		301		743		335		667		1038				896		
v/c Ratio		0.06		0.00		0.03		0.02		0.00				0.00		
95% Queue Length, Q ₉₅ (veh)		0.2		0.0		0.1		0.1		0.0				0.0		
Control Delay (s/veh)		17.8		9.8		16.1		10.5		8.5				9.0		
Level of Service (LOS)		C		A		C		В		A				A		
Approach Delay (s/veh)		1	7.8			13	3.0			0	0.0			0	.0	
Approach LOS			с				В									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	section			Hwy	65/Mario	aold St			
Agency/Co.	LAV (Consultir	na				Jurisc	diction			Coun	ity	,			
Date Performed	3/28/	/23	<u> </u>				East/	West Str	eet		Mario	gold St				
Analysis Year	2025						North	n/South :	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
]								
Major Street: North-South																
Major Street: North-South																
Vehicle Volumes and Adju	djustments															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		8	8	0		8	0	8	0	0	478	21	0	0	357	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	10			Ν	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice		<u> </u>							-		<u> </u>		
Flow Rate, v (veh/h)		18		0		9		9		0				0		
Capacity, c (veh/h)		353		786		381		708		1108				961		
v/c Ratio		0.05		0.00		0.02		0.01		0.00				0.00		
95% Queue Length, Q ₉₅ (veh)		0.2		0.0		0.1		0.0		0.0				0.0		
Control Delay (s/veh)		15.8		9.6		14.7		10.1		8.2				8.7		
Level of Service (LOS)		C		A		В		В		A				A		
Approach Delay (s/veh)		1!	5.8			- 12	2.4			0	0.0	-		0	.0	
Approach LOS			С				В									

		Н	CS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	gold St			
Agency/Co.	LAV (Consultir	q				Jurisc	liction			Coun	ty	,			
Date Performed	3/28/	23					East/	West Str	eet		Mario	yold St				
Analysis Year	2025						North	n/South :	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
Major Street: North-South																
Major Street: North-South																
Vehicle Volumes and Adju	Jjustments															
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		9	8	0		8	0	10	0	0	566	21	0	0	435	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	10			Ν	10			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice	I.												
Flow Rate, v (veh/h)		19		0		9		11		0				0		
Capacity, c (veh/h)		288		735		324		657		1025				879		
v/c Ratio		0.07		0.00		0.03		0.02		0.00				0.00		
95% Queue Length, Q ₉₅ (veh)		0.2		0.0		0.1		0.1		0.0				0.0		
Control Delay (s/veh)		18.4		9.9		16.4		10.6		8.5				9.1		
Level of Service (LOS)		С		A		С		В		A				A		
Approach Delay (s/veh)		18	3.4			13	3.2			0	.0			0	.0	
Approach LOS			с				 B									

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		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	section			Hwy	65/Mario	aold St			
Agency/Co.	LAV (Consultir	na				Jurisc	diction			Coun	ity	_			
Date Performed	3/28/	/23					East/	West Str	eet		Mario	yold St				
Analysis Year	2035						North	n/South :	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
]								
Major Street: North-South																
Major Street: North-South																
Vehicle Volumes and Adju	djustments															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		10	10	0		10	0	10	0	0	580	25	0	0	433	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	10			N	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice							<u> </u>		-		<u> </u>		
Flow Rate, v (veh/h)		23		0		11		11		0				0		
Capacity, c (veh/h)		274		736		316		649		1027				863		
v/c Ratio		0.08		0.00		0.04		0.02		0.00				0.00		
95% Queue Length, Q ₉₅ (veh)		0.3		0.0		0.1		0.1		0.0				0.0		
Control Delay (s/veh)		19.4		9.9		16.8		10.6		8.5				9.2		
Level of Service (LOS)		C		A		C		В		A				A		
Approach Delay (s/veh)		- 19	9.4			13	3.7			0	0.0	-		0	.0	
Approach LOS			С			I	В									

		Н	ICS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	aold St			
Agency/Co.	LAV (Consultir	na				Jurisc	liction			Coun	ty	,			
Date Performed	3/28/	23	<u> </u>				East/	West Str	eet		Mario	gold St				
Analysis Year	2035						North	n/South :	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
]								
Major Street: North-South																
Major Street: North-South																
Vehicle Volumes and Adju	justments															
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		11	10	0		10	0	12	0	0	668	25	0	0	511	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	10			Ν	10			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice	l.												
Flow Rate, v (veh/h)		24		0		11		14		0				0		
Capacity, c (veh/h)		221		689		270		601		949				790		
v/c Ratio		0.11		0.00		0.04		0.02		0.00				0.00		
95% Queue Length, Q_{95} (veh)		0.4		0.0		0.1		0.1		0.0				0.0		
Control Delay (s/veh)		23.3		10.2		18.9		11.1		8.8				9.6		
Level of Service (LOS)		C		В		С		В		А				A		
Approach Delay (s/veh)		23	3.3			14	4.7			C	0.0			0	.0	
Approach LOS			С				В									

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		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	aold St			
Agency/Co.	LAV (Consultir	na				Jurisc	liction			Coun	ty	,			
Date Performed	3/28/	/23	<u> </u>				East/	West Stre	eet		Mario	gold St				
Analysis Year	2045						North	n/South S	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
]								
				_												
Major Street: North-South																
Major Street: North-South Vehicle Volumes and Adjustments																
Vehicle Volumes and Adju	ljustments															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		12	12	0		12	0	12	0	0	699	30	0	0	523	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	10			N	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		27		0		14		14		0				0		
Capacity, c (veh/h)		201		682		255		586		938				761		
v/c Ratio		0.14		0.00		0.05		0.02		0.00				0.00		
95% Queue Length, Q ₉₅ (veh)		0.5		0.0		0.2		0.1		0.0				0.0		
Control Delay (s/veh)		25.7		10.3		19.9		11.3		8.8				9.7		
Level of Service (LOS)		D		В		C		В		A				A		
Approach Delay (s/veh)		2	5.7			15	5.6	-		0	0.0	-		0	.0	-
Approach LOS			D			(С									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	gold St			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ity	,			
Date Performed	3/28/	/23					East/	West Str	eet		Mario	gold St				
Analysis Year	2045						North	n/South	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	ır + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
Major Street: North-South																
Major Street: North-South																
Vehicle Volumes and Adju	justments															
Approach		Eastb	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		13	12	0		12	0	14	0	0	787	30	0	0	601	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		١	10			Ν	10			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		28		0		14		16		0				0		
Capacity, c (veh/h)		161		637		217		543		867				696		
v/c Ratio		0.18		0.00		0.06		0.03		0.00				0.00		
95% Queue Length, Q ₉₅ (veh)		0.6		0.0		0.2		0.1		0.0				0.0		
Control Delay (s/veh)		32.1		10.6		22.7		11.8		9.2				10.2		
Level of Service (LOS)		D		В		С		В		А				В		
Approach Delay (s/veh)		3	2.1			16	5.9			C	0.0			0	.0	
Approach LOS			D			(c									

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General Inform	nation								Inte	ersecti	on Info	ormatio	on	*	1 4 44 4 1 1 	× l <u>*</u>
Agency		LAV Consulting							Dur	ration,	h	0.250		-	-tr	K
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area	еа Туре	;	Other		×		
Jurisdiction		County		Time F	Period	AM			PHF	F		0.88			W = E	↓ ↓ ↓
Urban Street		Hwy 65		Analys	sis Year	2023			Ana	alysis F	Period	1> 7:	00	*		* /
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	I Spri	uce A	Ave 20	23 AM.	xus			**	
Project Descrip	tion														41491	× (*
		•		-							v					
Demand Inform	nation				EB			N	/B			NB			SB	
Approach Move	ement			L	Т	R	L		Г	R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			15	607	0	1	59	98	515	3	7	1	368	8	9
	4!													_		
Signal Informa	tion		0										x	4		sta
Cycle, s	120.0	Reference Phase	2										1	2	3	4
Offset, s	0		End	Green	0.0	0.0	0.0	0.0	0	0.0	0.0					
	INO	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0	0.0	0.0			\leftrightarrow		Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0	0.0	0.0		5	M 6	1	8
Timor Pequite				EDI		EBT			\\/	BT	ND		NPT	C DI		SBT
Assigned Phase					-	6	5		200	2	INDL			301	-	
Caso Number				2.0		3.0	20	\rightarrow	2	<u>^</u>			4 12.0			0 12.0
Case Number				2.0		3.0 75.9	2.0	\rightarrow	72	.0			6.0	<u> </u>		12.0
Change Duration	(V+D	-) c		0.5		10.0	4.2	\rightarrow	13	0			4.0			4.0
	eadway (<i>MAH</i>), s					4.0	4.0	\rightarrow	4.	.0			4.0			4.0
	w Headway (<i>MAH</i>), s learance Time (<i>g</i> s), s					0.0	0.0	\rightarrow	0.	.0			0.0			0.0
Green Extensio	e Clearance Time (g_s) , s					0.0	0.0		0.	0			0.0			0.0
Phase Call Pro	hability	(ge), s		0.0		0.0	0.0		0.0	.0			0.0	<u> </u>		0.0
Max Out Proba	bility			0.00	,	0.00	0.00	, ,	0.0	00			0.00			0.00
	onity			0.00	,	0.00	0.00	,	0.0	00			0.00			0.00
Movement Gro	oup Res	ults			EB			WE	3			NB			SB	
Approach Move	ement			L	Т	R	L	Т		R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2		12	7	4	14	3	8	18
Adjusted Flow F	Rate(<i>v</i>), veh/h		0	0	0	0	0		0		0			0	
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0		0		0			0	
Queue Service	Time (g	g s), S		0.0	0.0	0.0	0.0	0.0)	0.0		0.0			0.0	
Cycle Queue C	learanc	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0)	0.0		0.0			0.0	
Green Ratio (g	/C)			0.02	0.60	0.60	0.00	0.5	8 C	0.58		0.02			0.25	
Capacity (<i>c</i>), v	/eh/h			38	1137	964	3	110	1 9	933		30			451	
Volume-to-Capa	acity Ra	tio(X)		0.429	0.580	0.000	0.335	0.59	0 0	0.600		0.394			0.928	
Back of Queue	(Q), ft/	In (95 th percentile))	23.2	412.7	0	2.3	426	.3 3	882.8		17.2			454	
Back of Queue	(Q), ve	eh/In (95 th percenti	ile)	0.9	16.5	0.0	0.1	17.	1 1	15.3		0.7			18.2	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.0	0 0	0.00		0.00			0.00	
Uniform Delay ((d 1), s	/veh		58.0	14.8	0.0	59.8	16.	1 1	16.3		58.4			44.0	
Incremental De	incremental Delay ($d z$), s/veh			2.8	2.2	0.0	20.9	2.3	3 2	2.8		3.1			3.7	
Initial Queue De	nitial Queue Delay (d ȝ), s/veh			0.0	0.0	0.0	0.0	0.0		0.0		0.0			0.0	
Control Delay (Control Delay (<i>d</i>), s/veh				17.0	0.0	80.7	18.	5 1	19.1		61.5			47.6	
Level of Service	evel of Service (LOS)				В		F	В		В		Е			D	
Approach Delay, s/veh / LOS				18.0)	В	18.8	3	В	3	61.5		Е	47.6	6	D
Intersection De				24	1.0							С				
Multimodal Re	ultimodal Results				EB			WE	3			NB			SB	
Pedestrian LOS	Score	/LOS	1.66	3	В	1.67	7	В	3	2.13		В	2.16	3	В	
Bicycle LOS Sc	LOS Score / LOS					В	2.49)	В	3	0.51		А	1.18	3	A

r.									1							
General Inform	nation								Inter	rsecti	on Info	ormatio	on			b≤ <u> </u> ⊾
Agency		LAV Consulting							Dura	ation, I	h	0.250		_	Ŧ	R.
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area	а Туре	;	Other		×		<u>≮</u> _}
Jurisdiction		County		Time F	Period	AM			PHF	-		0.88			W 🗍 E	↓ ↓ ↓
Urban Street		Hwy 65		Analys	sis Year	2023	+ Projec	t	Anal	lysis F	Period	1> 7:	00	r 4		*
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	I Spr	uce Av	ve 202	23 AM+	Proj.xı	JS		***	
Project Descrip	tion														14144	<u>۲</u>
				1			1				1					
Demand Inform	nation				EB			N	/B			NB			SB	
Approach Move	ement			L	Т	R	L		Г	R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			15	692	0	2	6	77	582	3	7	2	421	8	9
Signal Informa	tion													K		
	120.0	Reference Phase	2										▶			512
Offset s	0	Reference Point	End										1	2	3	4
Unseerdingtod	No		On	Green	0.0	0.0	0.0	0.	0	0.0	0.0					
	INO Tixed	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0	0.0	0.0			\mathbf{x}	- 1	ця
Force wode	Fixed	Simult. Gap N/S	On	Rea	0.0	0.0	0.0	0.	0	0.0	0.0		5		7	8
Timer Results				FBI		EBT	WB		WB	RT I	NBI		NBT	SB		SBT
Assigned Phase	.			1		6	5		2			-	4			8
Case Number				2.0		3.0	2.0	+	3.0	0						12.0
Phase Duration	. S		_	6.5		71.7	4.4		69.0	.6			6.1	<u> </u>		37.8
Change Period	(Y+R	c), S		4.0		4.0	4.0		4.0	0			4.0			4.0
Max Allow Head	dway (<i>N</i>	ИАН), s		0.0		0.0	0.0		0.0	0			0.0	<u> </u>		0.0
Queue Clearan	ue Clearance Time (g_s), s					0.0	0.0		0.0	0			0.0			0.0
Green Extensio	eue Clearance Time (g s), s een Extension Time (g e), s					0.0	0.0		0.0	0			0.0			0.0
Phase Call Prol	bability			0.00)	0.00	0.00)	0.0	0			0.00			0.00
Max Out Proba	bility			0.00) (0.00	0.00)	0.0	0			0.00			0.00
	_								_							
Movement Gro	oup Res	sults			EB	-			3	_		NB		<u> </u>	SB	
Approach Move	ement			L		R		1		R 40	L 7	1	R			R
Assigned wove	ment	<u> </u>		1	6	16	5	2		12	/	4	14	3	8	18
Adjusted Flow H), ven/n		0	0	0	0	0	_	0		0	<u> </u>		0	
Adjusted Satura		w Rate (s), veh/h/l	n	0	0	0	0	0		0		0			0	
Queue Service	Time (g	g s), S T: ())		0.0	0.0	0.0	0.0	0.0		0.0		0.0			0.0	
Cycle Queue C		e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0		J.U		0.0			0.0	
Green Ralio (g	$\frac{1}{(b)}$			20	0.50	0.50	0.00	103		280		0.0Z			500	
Volume to Cap	en/n	tio (X)		0 4 2 0	0 702	900	0 343	0.70		710		32 0.406	<u> </u>		0.035	
Back of Queue	(O) ft/	(In (95 th percentile)		23.2	545 1	0.000	3.9	552	3 40	96.1		18.7		<u> </u>	502.7	
Back of Queue	(Q), W	eh/In (95 th percenti	le)	0.9	21.8	0.0	0.0	22	1 1	9.8		0.7		-	20.1	
Queue Storage	Ratio (RQ) (95 th percent	ile)	0.00	0.00	0.00	0.00	0.0	0 0	0.00		0.00			0.00	
Uniform Delay ((d 1), s	/veh		58.0	18.9	0.0	59.7	20.	2 2	20.3	_	58.3		_	42.0	
Incremental De	Uniform Delay (<i>d</i> 1), s/veh				3.9	0.0	11.5	4.1	5	5.0		3.0		<u> </u>	3.6	
Incremental Delay (d ₂), s/ven Initial Queue Delay (d ₃), s/veh				0.0	0.0	0.0	0.0	0.0) (0.0		0.0		-	0.0	
Control Delay (d), s/veh				60.9	22.8	0.0	71.1	24.	3 2	5.4		61.3		<u> </u>	45.7	
Level of Service		E	C		E	C		С		E			D			
Approach Delay		23.6	;	С	24.9)	С		61.3	;	E	45.	7	D		
Intersection De				28	3.4							С				
Multimodal Re			EB			W	3			NB			SB			
Pedestrian LOS	destrian LOS Score / LOS					В	1.67	'	В		2.13	3	В	2.1	3	В
Bicycle LOS Sc	cycle LOS Score / LOS					В	2.75	;	С		0.51		Α	1.2	7	А

													**		
General Inform	nation								Intersect	tion Inf	ormatio	on	*	↓ <u>«</u> ¢» ↓ ↓ . ↓	ka la
Agency		LAV Consulting							Duration,	h	0.250)		w‡w	R
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area Typ	е	Other	•	×		
Jurisdiction		County		Time F	Period	AM			PHF		0.88		*	W E	↓ ↓ ↓
Urban Street		Hwy 65		Analys	sis Year	2025			Analysis	Period	1> 7:(00	*		*
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	I Spru	ce Ave 20)25 AM.	xus				
Project Descrip	tion													4144	7 4
		•		-											
Demand Inform	nation				EB			W	В		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			16	631	0	1	62	1 535	3	7	1	382	8	9
	41a.m												_		
Signal morma	120.0	Deference Dhace	2	c									$ \rightarrow $		5 1 2
	120.0	Reference Priase	Z End									1	2	3	4
Unseed stad	U		Enu	Green	0.0	0.0	0.0	0.0	0.0	0.0					
Coree Made	Tixed	Simult Cap N/S	On	Yellow Rod	0.0	0.0	0.0	0.0	0.0	0.0			\mathbf{e}	-	<u>т</u>
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0.0	0.0		5	M 6	[8
Timor Results			_	EBI		FBT	WB		WBT	NBI		NBT	SBI		SBT
Assigned Phase	e.			1	-	6	5	-	2		-	4		-	8
Case Number				2.0		3.0	2.0	-	3.0	<u> </u>		12.0			12.0
Phase Duration	. S		_	6.6		74.8	4.2		72.4			6.0			35.0
Change Period,	, (Y+R)	c), S		4.0		4.0	4.0	-	4.0			4.0			4.0
Max Allow Head	Now Headway (MAH), s			0.0		0.0	0.0		0.0			0.0			0.0
Queue Clearan	ue Clearance Time (g_s), s			0.0		0.0	0.0		0.0			0.0			0.0
Green Extensio	eue Clearance Time (g s), s en Extension Time (g e), s			0.0		0.0	0.0		0.0			0.0			0.0
Phase Call Prol	bability			0.00)	0.00	0.00)	0.00			0.00			0.00
Max Out Proba	bility			0.00)	0.00	0.00)	0.00			0.00			0.00
Movement Gra		ulte			ER			\ \ /P			NR			S D	
Approach Move	ment	Suits			ED T	R			R			R		т	R
Assigned Move	ment			1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F	Rate (v) veh/h		0	0	0	0	0	0	,	-	14		0	10
Adjusted Satura	ation Flo	y, ven/n w Rate (s) veh/h/l	n	0	0	0	0	0	0		0			0	
	Time ((π_{s}) s		0.0	0.0	0.0	0.0	0.0	0.0		0.0		<u> </u>	0.0	
	learance	e Time (a_c) s		0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Green Ratio (g	/C)	5 mile (g c), 5		0.02	0.59	0.59	0.00	0.57	0.57		0.02			0.26	
Capacity (c), v	/eh/h			40	1121	950	3	1083	3 918		30			466	
Volume-to-Capa	acity Ra	itio(X)		0.437	0.612	0.000	0.335	0.62	3 0.634		0.394			0.930	
Back of Queue	(Q), ft/	(In (95 th percentile))	24.7	444.9	0	2.3	460.2	2 413.2		17.2			467.4	
Back of Queue	(Q), ve	eh/In (95 th percenti	ile)	1.0	17.8	0.0	0.1	18.4	16.5		0.7			18.7	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	
Uniform Delay ((d 1), si	/veh		57.9	15.8	0.0	59.8	17.2	. 17.4		58.4			43.4	
Incremental De	ncremental Delay (<i>d z</i>), s/veh			2.8	2.5	0.0	20.9	2.7	3.3		3.1			3.7	
Initial Queue De	nitial Queue Delay (d ȝ), s/veh			0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Control Delay (Control Delay (<i>d</i>), s/veh			60.7	18.3	0.0	80.7	19.9	20.7		61.5			47.1	
Level of Service (LOS)				E	В		F	В	С		E			D	
Approach Delay, s/veh / LOS				19.3	3	В	20.3	3	С	61.5	5	E	47.1		D
Intersection De				25	5.1						С				
Multimodel De		EP						ND			CD				
Pedestrian LOS	ultimodal Results					B	1.67	7	R	2 1 2		B	2 16	30	B
Bicycle LOS Sc	ore / I C)S		1.00	, ,	B	2.56	3	C	0.51	,	A	1 20	,)	A
				1.00		0	2.00	·	5	0.01			1.20		~

r															
General Inform	nation								Intersec	tion Inf	ormati	on			b≤ <u> </u> ⊾
Agency		LAV Consulting							Duration	, h	0.250)		Ŧ	R.
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area Ty	be	Othe	r	×		<mark>≮_</mark> }_
Jurisdiction		County		Time F	Period	AM			PHF		0.88		*	W 🗍 E	↓ ↓ ↓
Urban Street		Hwy 65		Analys	is Year	2025	+ Projec	t	Analysis	Period	1> 7:	00	× 1 × 1		*
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	l Spru	ice Ave 2	025 AM	+Proj.x	us		***	
Project Descrip	tion													14141	7
							1/								
Demand Inform	nation				EB			W	В		NB			SB	
Approach Move	ement			L	Т	R	L	Т	. R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			16	716	0	2	70	0 602	3	7	2	435	8	9
Signal Informa	tion												F		
	120.0	Reference Dhase	2									▶			512
Offect o	0	Reference Pridse	Z End									1	2	3	4
Unsee, s	U		Enu	Green	0.0	0.0	0.0	0.0	0.0	0.0					L
	INO Tixoa al	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0.0	0.0	Þ		\leftrightarrow	_	<u>ф</u> и
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0.0	0.0		5	Y 6	7	8
Timer Results			_	EBI		EBT	WB	1	WBT	NB	1	NBT	SB		SBT
Assigned Phase	<u>.</u>			1		6	5		2			4			8
Case Number	5			2.0		3.0	2.0		3.0			12.0			12.0
Phase Duration	. S			6.6	-	70.6	4.4		68.4			6.1			38.8
Change Period.	(Y+R)	c). S		4.0		4.0	4.0		4.0			4.0	<u> </u>		4.0
Max Allow Head	Allow Headway (<i>MAH</i>), s					0.0	0.0		0.0			0.0			0.0
Queue Clearan	eue Clearance Time (g s), s					0.0	0.0		0.0			0.0			0.0
Green Extensio	eue Clearance Time ($g s$), s een Extension Time ($g e$), s					0.0	0.0		0.0			0.0			0.0
Phase Call Prol	bability			0.00) (0.00	0.00)	0.00			0.00			0.00
Max Out Proba	bility			0.00) (0.00	0.00)	0.00			0.00			0.00
Movement Gro	oup Res	sults			EB			WE	3		NB			SB	
Approach Move	ement			L	I	R			R			R	L		R
Assigned Move	ment	· · · ·		1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F	Rate (v), veh/h		0	0	0	0	0	0		0		<u> </u>	0	
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0	0		0		<u> </u>	0	
Queue Service	Time (g	g s), S		0.0	0.0	0.0	0.0	0.0	0.0		0.0		<u> </u>	0.0	
Cycle Queue C	learance	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0	0.0		0.0		<u> </u>	0.0	
Green Ratio (g	/C)			0.02	0.56	0.56	0.00	0.54	0.54		0.02	<u> </u>	<u> </u>	0.29	
Capacity (c), v	reh/h			40	1055	894	6	102) 864		32		<u> </u>	524	
Volume-to-Capa	acity Ra	itio (X)		0.437	0.738	0.000	0.343	0.74	6 0.757		0.406			0.937	
Back of Queue	(Q), W	h (95 in percentile)		24.7	201.1	0	3.9	595.	5 535.4		18.7			20.6	
	Ratio (PO(95 th percent)	ile)	0.00	23.5	0.0	0.2	23.0	21.4		0.7			20.0	
Uniform Delay				57.0	20.1	0.00	50.7	21 6	5 21 7		58.3			41.5	
Incremental De	$\left[\frac{u}{u} \right], \frac{u}{d}$			28	20.1	0.0	11 /	5.0	61		3.0			3.6	
Incremental Delay (d_2), s/veh				2.0	4.0	0.0	0.0	0.0	0.1		0.0			0.0	
Initial Queue Delay (d ȝ), s/veh				60.7	24.7	0.0	71 1	26.0	0.0		61.4			45.2	
Level of Service (LOS)				50.7 F	24.1 C.	0.0	F	20.4 C	C		F		-		
Approach Delay		25.5		С	27 1		C C	61	4	E	45 3	2	D		
Intersection Del		20.0		30).1	-	Ŭ	01.		_	C		_		
				5.				П			-				
Multimodal Re			EB			WE	3		NB			SB			
Pedestrian LOS	edestrian LOS Score / LOS				·	В	1.67	7	В	2.1	3	В	2.16	3	В
Bicycle LOS Sc	ycle LOS Score / LOS)	В	2.83	3	С	0.5	1	А	1.30)	A

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HCS[™] Streets Version 7.9.5

General Inform	nation								Inters	ectio	on Info	ormatic	on	×		× L _k
Agency		LAV Consulting							Duratio	on, h		0.250			-1-	R
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area T	ype		Other				×_ №
Jurisdiction		County		Time F	Period	AM			PHF			0.88		*	W SE	
Urban Street		Hwy 65		Analys	is Year	2035			Analys	is Pe	eriod	1> 7:0	00			¥ *
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	l Spri	ice Ave	203	5 AM.:	xus			nţ.	
Project Descrip	tion			л											*	* (*
										v						
Demand Inform	nation				EB			W	'B			NB			SB	
Approach Move	ement			L	Т	R	L	1	F	र	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			19	765	0	1	75	53 64	19	4	9	1	464	10	11
<u> </u>														_		
Signal Informa	tion												x	4		st a
Cycle, s	120.0	Reference Phase	2										1	2	3	
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.0) 0.	0	0.0					I
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0) ().	0	0.0			↔	1	Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0) 0.	0	0.0		5	Y 6	7	8
Timer Desults			_		_	EDT				_		_				ODT
Assigned Deep				EBL 1	-	EBI	VVB		2 VVB1	┿	INBL	·		561	-	<u>ові</u>
Caso Number	5			2.0		3.0	20	-	2	+			4 12 0	<u> </u>		12.0
Phase Duration	s			2.0		5.0 68.2	2.0	-	65.4	+		_	6.4			12.0
Change Period	, 3 (Y+R)	-) s		4.0		4.0	4.0	-	4.0	╈			4.0			4.0
Max Allow Head	low Headway (<i>MAH</i>), s			0.0		0.0	0.0		0.0				0.0			0.0
Queue Clearan	Allow Headway (<i>MAH</i>), s ue Clearance Time (<i>g</i> s), s			0.0		0.0	0.0	-	0.0				0.0			0.0
Green Extensio	eue Clearance Time (g s), s en Extension Time (g e), s			0.0		0.0	0.0		0.0				0.0			0.0
Phase Call Prol	bability			0.00)	0.00	0.00)	0.00				0.00			0.00
Max Out Proba	bility			0.00)	0.00	0.00)	0.00	Т			0.00			0.00
Movement Gro	oup Res	ults			EB			WE	3			NB			SB	
Approach Move	ement			L	T	R	L	Т	R	_	L	T	R	L	Т	R
Assigned Move	ment			1	6	16	5	2	12		7	4	14	3	8	18
Adjusted Flow F	Rate (v), veh/h		0	0	0	0	0	0			0			0	
Adjusted Satura	ation Flo	w Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0	0			0			0	
Queue Service	Time (g	g s), S		0.0	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Cycle Queue C	learance	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0	0.0			0.0			0.0	
Green Ratio (g	/C)			0.02	0.53	0.53	0.00	0.5	1 0.5	1		0.02			0.31	
Capacity (c), v	reh/h			45	1016	861	3	972	2 824	1		37			560	
Volume-to-Capa	acity Ra	tio(X)	<u> </u>	0.459	0.818	0.000	0.337	0.84	2 0.85	6	_	0.413		<u> </u>	0.941	
Back of Queue	(Q), W	in (95 in percentile)) ilo)	29.2	095.4	0	2.3	721.	3 000.	.5 2		21.7		<u> </u>	044.9	
	(Q), Ve	PO(95 th percent)	tilo)	0.00	27.0	0.0	0.1	20.3		2		0.9		<u> </u>	21.0	
Uniform Delay				57.7	23.1	0.00	59.8	25	1 25	5		58.1			40.3	
Incremental De	av (d 2) s/veh		27	73	0.0	21.2	20.	1 20.	1		27			3.6	
Initial Queue De	ncremental Delay (<i>d</i> ₂), s/veh			0.0	0.0	0.0	0.0	0.0				0.0			0.0	
Control Delay (nitial Queue Delay (d ₃), s/veh			60.4	30.4	0.0	81.0	33 0	36 (3		60.9			43.9	
Level of Service	Level of Service (LOS)			F	с.	0.0	F	C	D	-		F		<u> </u>		
Approach Delay, s/veh / LOS				31.1		С	35.2	2	D		60.9		E	43.9)	D
Intersection Delay, s/veh / LOS						35	5.7							D		
Multimodal Re	lultimodal Results				EB			WE	3			NB			SB	
Pedestrian LOS	estrian LOS Score / LOS			1.67		В	1.68	3	В		2.12		В	2.16	3	В
Bicycle LOS Sc	lestrian LOS Score / LOS ycle LOS Score / LOS					В	3.00)	С		0.51		А	1.36	3	Α

r.															
General Inform	nation								Intersec	tion Inf	ormati	on	_		te la
Agency		LAV Consulting							Duration	, h	0.250)		Ŧ	R.
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area Typ	e	Othe	r	×		~
Jurisdiction		County		Time F	Period	AM			PHF		0.88			₩ĴE	+ + -
Urban Street		Hwy 65		Analys	is Year	2035	+ Projec	t	Analysis	Period	1> 7:	00	<u>ل</u> لم		Ť
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	l Spru	ice Ave 2	035 AM	+Proj.x	us		***	
Project Descrip	tion													1 4 1 4 4	7 1
Demand Inform	nation				EB			W	В		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			19	850	0	2	83	2 716	4	9	2	517	10	11
Signal Informa	tion														
	120.0	Reference Dhase	2									7			sta
Offect o	0	Reference Pridse	Z End									1	2	3	4
Unsee, s	U		Enu	Green	0.0	0.0	0.0	0.0	0.0	0.0	_				L
	INO Tixoa al	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0.0	0.0	•		\rightarrow	_	хфя Г
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0.0	0.0		5	Y 6	7	8
Timer Results			_	EBI		EBT	WB	1	WBT	NB	1	NBT	SB	1	SBT
Assigned Phase	<u>.</u>			1		6	5		2			4			8
Case Number	5			2.0		3.0	2.0		3.0			12.0			12.0
Phase Duration	. S			7.0		69.6	4.4		67.1			6.5			39.4
Change Period.	, (Y+R)	c). S		4.0		4.0	4.0		4.0			4.0			4.0
Max Allow Head	dway (<i>N</i>	,, ИАН), s		0.0		0.0	0.0		0.0			0.0			0.0
Queue Clearan	eue Clearance Time (g s), s					0.0	0.0		0.0			0.0			0.0
Green Extensio	een Extension Time ($g e$), s					0.0	0.0		0.0			0.0			0.0
Phase Call Prol	bability			0.00) (0.00	0.00)	0.00			0.00	1		0.00
Max Out Proba	bility			0.00) (0.00	0.00)	0.00			0.00			0.00
Movement Gro	oup Res	sults			EB			WE	3		NB			SB	
Approach Move	ement			L	T	R		T	R	L	T	R	L	Т	R
Assigned Move	ment	· · · ·		1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F	Rate (v), veh/h		0	0	0	0	0	0		0			0	
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0	0		0			0	
Queue Service	Time (g	g s), S		0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Cycle Queue C	learance	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Green Ratio (g	/C)			0.02	0.55	0.55	0.00	0.53	3 0.53		0.02			0.30	
Capacity (c), v	reh/h			45	1040	881	6	999	847		38			533	
Volume-to-Capa	acity Ra	itio (X)		0.458	0.888	0.000	0.343	0.90	5 0.919	<u> </u>	0.424			1.098	
Back of Queue	(Q), W	h (95 in percentile)		29.2	824.4	0	3.9	845.	9 771.9		23.2		<u> </u>	897.3	
	Q), Ve	PO(95 th percent)		0.00	0.00	0.0	0.2	0.00	0 00		0.9			0.00	
Uniform Delay				57.7	23.0	0.00	50.7	25.7	7 26 1		58.0			42.3	
Incremental De	$\left[\frac{u}{u} \right], \frac{u}{d}$			27	11.2	0.0	11 5	13 1	16.6		27			68.5	
Initial Oueue De	Incremental Delay (d_2), s/veh			2.7	0.0	0.0	0.0	0.0			2.7			00.5	
Initial Queue Delay (d ȝ), s/veh				60.4	35.2	0.0	71 1	38.8	127		60.8			110.8	
Level of Service (LOS)				60.4	D	0.0	71.1 F	л П	, <u>42.</u> 7		50.0 F			F	
Approach Delay		35.7		D	40 6		D	60 8	3	E	110	8	F		
Intersection Del	_	00.1		- 52	2.0		-	00.0	-	_	D	-			
				52							-				
Multimodal Re	Iultimodal Results							WE	3		NB			SB	
Pedestrian LOS	edestrian LOS Score / LOS					В	1.68	3	В	2.1	2	В	2.16	3	В
Bicycle LOS Sc	vycle LOS Score / LOS					В	3.27	7	С	0.5	1	А	1.4	5	А

General Inforn	nation								Inters	secti	on Info	ormatio	on		↓ ↓ ↓	× l <u>*</u>
Agency		LAV Consulting							Durati	ion, ł	า	0.250			*†*	K
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area ⁻	Туре		Other		×≯		₹5_
Jurisdiction		County		Time F	Period	AM			PHF			0.88			W	↓ ↓ ↓
Urban Street		Hwy 65		Analys	sis Year	2045			Analy	vsis P	eriod	1> 7:0)0			*
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	l Spru	ice Ave	e 204	15 AM.	xus			***	
Project Descrip	tion														1 4 1 4 1 1	× (*
Demand Inform	nation				EB	1 -		W	B	_		NB			SB	
Approach Move	ement			L	Т	R	L			R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	/eh/h			23	923	0	2	90	9 7	783	5	11	2	559	12	14
Signal Informa	ation													K		
	120.0	Reference Phase	2													512
Offset s	0	Reference Point	End										1	2	3	4
Uncoordinated	No	Simult Gap E/W	On	Green	0.0	0.0	0.0	0.0) 0).0	0.0	_				\mathbf{k}
Force Mode	Fixed	Simult Gap N/S	On	Red	0.0	0.0	0.0	0.0) 0) ()	0.0		5		7	8
			•		010	0.0	010	0.0			1010			-		
Timer Results				EBL	-	EBT	WB	L	WBT	г	NBL	-	NBT	SB	L	SBT
Assigned Phase	е			1		6	5		2				4			8
Case Number				2.0		3.0	2.0		3.0				12.0			12.0
Phase Duration	1, S			7.4		68.9	4.4		65.9				6.9			39.8
Change Period	, (Y+R a	c), S		4.0		4.0	4.0		4.0				4.0			4.0
Max Allow Head	dway (A	/АН), s		0.0		0.0	0.0		0.0				0.0			0.0
Queue Clearan	ce Time	(g s), s		0.0		0.0	0.0		0.0				0.0			0.0
Green Extensio	ie Clearance Time (g s), s n Extension Time (g e), s					0.0	0.0		0.0				0.0			0.0
Phase Call Pro	bability			0.00) (0.00	0.00)	0.00				0.00			0.00
Max Out Proba	bility			0.00) (0.00	0.00)	0.00				0.00			0.00
	P	14			50			14/5	`						0.0	
Movement Gro	bup Res	Suits			EB	D			5			NB			SB	
Approach Move	ement			L		R 40			R			1	R			R 10
Assigned Move	emeni Dete () () yoh/h			0	10	5	2	12	2	/	4	14	3	8	18
Adjusted Flow I	Rale (V), ven/n w Rata (a) veh/h/l	n	0	0	0	0	0	0	, -		0		<u> </u>	0	
			n	0	0.0	0	0			,		0.0				
	learance	$a = Time(a_c) s$		0.0	0.0	0.0	0.0	0.0	0.0	0		0.0			0.0	
Green Ratio (o	$\frac{1}{C}$			0.03	0.54	0.54	0.00	0.52	2 0.5	52		0.02			0.30	
Capacity (c)	/eh/h			51	1055	894	6	100	- 0.0 3 85	54		44			513	
Volume-to-Cap	acity Ra	tio (X)		0.489	0.951	0.000	0.343	0.98	1 0.9	97		0.444			1.239	
Back of Queue	(Q), ft/	(In (95 th percentile)		35.1	981.7	0	3.9	1047	7. 967	7.9		27.6			1120.5	
	(-),							9								
Back of Queue	(Q), ve	eh/In (95 th percenti	le)	1.4	39.3	0.0	0.2	41.9	38.	.7		1.1			44.8	
Queue Storage	Ratio (RQ) (95 th percent	ile)	0.00	0.00	0.00	0.00	0.00	0.0	00		0.00			0.00	
Uniform Delay	Jniform Delay ($d \uparrow$), s/veh					0.0	59.7	27.6	3 28	.1		57.8			43.0	
Incremental De		2.7	18.2	0.0	11.5	24.1	I 30.	.0		2.6			109.6			
Initial Queue D		0.0	0.0	0.0	0.0	0.0	0.0	0		0.0			0.0			
Control Delay (60.1	43.4	0.0	71.1	51.6	5 8.	.1		60.4			152.6			
Level of Service		E	D		Е	D	E			E			F			
Approach Dela		43.8	3	D	54.6	3	D		60.4		Е	152.	6	F		
Intersection De				69	9.2							E				
												N IE			05	
Multimodal Re	Aultimodal Results					D	4.00	VVE	5	-	0.10	NB	D		SB	
Pedestrian LOS	Score	/ LUS		1.67		В	1.68	5	В	\rightarrow	2.12		В	2.16		В
BICYCIE LOS SC	core / LC	5		2.18	5	В	3.53	5	D		0.52		A	1.54	ł	В

-																
General Inform	nation								Inter	rsecti	on Info	ormatio	on			× L <u>x</u>
Agency		LAV Consulting							Dura	ation, I	h	0.250			-+-	R_
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area	а Туре	•	Other		×		~_2
Jurisdiction		County		Time F	Period	AM			PHF			0.88		*	W E B	
Urban Street		Hwy 65		Analys	sis Year	2045	+ Projec	t	Analy	ysis F	Period	1> 7:0	00	<u>لا</u>		7 7
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	I Spru	ice Av	ve 204	45 AM+	-Proj.xι	IS		**	
Project Descrip	tion														1 4 1 4 1 1	* (*
Demand Inform	nation				EB			W	Έ			NB			SB	
Approach Move	ement			L	Т	R	L	1	-	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			23	1008	0	3	98	38 8	850	5	11	2	612	12	14
Signal Informa	tion			-										A		
Cycle, s	120.0	Reference Phase	2										1	2	3	\mathbf{Y}_{4}
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.0		0.0	0.0	_		-		
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0) (0.0	0.0			→		Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0) (0.0	0.0		5	Y 6	7	8
Timer Results			_	EBI		FBT	WB		W/B	T	NBI	_	NBT	SB		SBT
Assigned Phase	Э			1	-	6	5	-	2			-	4		-	8
Case Number				2.0		3.0	2.0		3.0)			12.0			12.0
Phase Duration	, S			7.4		71.5	4.6		68.7	7			6.9			37.0
Change Period	(Y+R a	e), s		4.0		4.0	4.0		4.0)			4.0			4.0
Max Allow Head	dway (A	//////////////////////////////////////		0.0		0.0	0.0		0.0)			0.0			0.0
Queue Clearan	ce Time	(gs), s		0.0		0.0	0.0		0.0)			0.0			0.0
Green Extensio	n Time	(ge), s	0.0		0.0	0.0		0.0)			0.0			0.0	
Phase Call Pro	bability	· · · ·		0.00)	0.00	0.00)	0.00	0			0.00	1		0.00
Max Out Proba	bility			0.00)	0.00	0.00)	0.00	0			0.00			0.00
Movement Gro	un Pos	ulte			ER			\//E	2	-		NB			SB	_
Approach Move	mont	uitə		1	Т	P	1		, 	P	1	т	P	1	Т	P
Assigned Move	ment			1	6	16	5	2	1	12	7	4	14	3	8	18
Adjusted Flow F	Rate (v) veh/h		0	0	0	0	0		0	-	0		- ·	0	10
Adjusted Satura	ation Flo	w Rate (s), veh/h/l	n	0	0	0	0	0		0		0			0	
Queue Service	Time (c	7 s). S		0.0	0.0	0.0	0.0	0.0	0	0.0		0.0		-	0.0	
Cycle Queue C	learance	e Time (<i>g</i> c), s		0.0	0.0	0.0	0.0	0.0	0	0.0		0.0			0.0	
Green Ratio (g	/C)			0.03	0.56	0.56	0.01	0.54	4 0.	.54		0.02			0.28	
Capacity (c), v	/eh/h			51	1097	930	9	105	3 89	92		44			470	
Volume-to-Cap	acity Ra	tio(X)		0.489	0.999	0.000	0.350	1.02	0 1.0	035		0.444			1.476	
Back of Queue	(Q), ft/	In (95 th percentile))	35.1	1164.4	0	5.4	1203 6	3. 11	00. 8		27.6			1594.4	
Back of Queue	(Q), ve	h/ln (95 th percenti	ile)	1.4	46.6	0.0	0.2	48.	1 44	4.0		1.1			63.8	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.00	0.	.00		0.00			0.00	
Uniform Delay	(d 1), s/	veh		57.4	25.3	0.0	59.5	26.7	7 26	6.7		57.8			44.4	
Incremental De	cremental Delay (<i>d</i> ₂), s/veh					0.0	8.1	32.8	3 39	9.6		2.6			215.7	
Initial Queue De	nitial Queue Delay ($d $ 3), s/veh					0.0	0.0	0.0	0	0.0		0.0			0.0	
Control Delay (60.1	52.2	0.0	67.6	59.6	66	6.3		60.4			260.1			
Level of Service		E	D		E	F	F	F		E			F			
Approach Delay		52.4	ł	D	62.7	/	E		60.4		Е	260.	1	F		
Intersection De				95	5.4							F				
Multimodal Re	Multimodal Results							W/F	3			NB			SB	
Pedestrian LOS	edestrian LOS Score / LOS					В	1.67	,	В		2.13		В	2.16	3	В
Bicycle LOS Sc	ore / LC	S	2.34	1	В	3.79	,	D		0.52	2	А	1.63	3	В	

General Inform	nation								Int	tersect	ion Inf	ormatio	on	<u></u>	****	× L
Agency		LAV Consulting							Du	uration,	h	0.250			444	
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Are	еа Туре	e	Other		4		× ×
Jurisdiction		County		Time F	Period	AM			PH	HF		0.88			W = B	÷
Urban Street		Hwy 65		Analys	sis Year	2045 Mitiga	+ Projec ted	:t -	An	nalysis l	Period	1> 7:	00	7		*
Intersection		Hwv 65/N Spruce A	ve	File Na	ame	Hwv 6	5 and N	I Spri	uce	Ave 20	45 AM·	⊦Proi-N	litiaate		্ৰশ বানবহন্দা	* (*
Proiect Descrip	tion	···· , · ····		1								· · · · 	<u>-</u>			
Demand Inform	nation				EB			W	/B			NB			SB	
Approach Move	ment			L	Т	R	L		Т	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			23	1008	0	3	98	88	850	5	11	2	612	12	14
															<u> </u>	
Signal Informa	tion													Ð_		
Cycle, s	120.0	Reference Phase	2											2	3	Y
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.0	0	0.0	0.0			-		
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0	0.0	0.0			<u> </u>	l l	Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0	0.0	0.0		5	Y 6	7	8
Timer Results				EBI	-	EBT	WB		N	VBT	NBI	-	NBT	SBL		SBT
Assigned Phase	9			1		6	5	\rightarrow		2			4		\rightarrow	8
Case Number				1.1		4.0	1.1	\rightarrow	4	4.0			12.0			10.0
Phase Duration	, S			7.4		79.0	4.6	\rightarrow	7	6.3			6.9			29.5
Change Period,	eriod, (Y+ <i>R c</i>), s Headway (<i>MAH</i>), s			4.0		4.0	4.0	\rightarrow	4	4.0			4.0			4.0
Max Allow Head	llow Headway (MAH), s c Clearance Time (q_s), s			0.0		0.0	0.0	\rightarrow	C	0.0			0.0			0.0
Queue Clearan	eue Clearance Time (g_s), s			0.0		0.0	0.0	\rightarrow	C	0.0			0.0			0.0
Green Extensio	eue Clearance Time ($g s$), s een Extension Time ($g e$), s			0.0		0.0	0.0		0	0.0			0.0			0.0
Phase Call Pro	bability			0.00)	0.00	0.00)	0	0.00			0.00			0.00
Max Out Proba	bility			0.00)	0.00	0.00)	0	0.00			0.00			0.00
Movement Gro	up Res	ults			EB			WE	В			NB			SB	
Approach Move	ment			L	Т	R	L	Т	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2		12	7	4	14	3	8	18
Adjusted Flow F	Rate (v), veh/h		0	0	0	0	0		0		0	<u> </u>	0	0	
Adjusted Satura	ation Flo	w Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0		0		0		0	0	
Queue Service	Time (g	g s), S		0.0	0.0	0.0	0.0	0.0)	0.0		0.0		0.0	0.0	
Cycle Queue C	learance	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0)	0.0		0.0		0.0	0.0	
Green Ratio (g	/C)			0.64	0.63		0.61	0.6	0	0.60		0.02		0.21	0.21	
Capacity (<i>c</i>), v	eh/h			113	2378		315	114	5	982		44		745	367	
Volume-to-Capa	acity Ra	itio(X)		0.219	0.456	0.000	0.010	0.86	33	1.007		0.443		0.883	0.076	
Back of Queue	(Q), ft/	In (95 th percentile)		19.6	293.7	0	1.5	789	.8	1075. 6		27.3		364.7	29.7	
Back of Queue	(Q), ve	eh/In (95 th percenti	le)	0.8	11.7	0.0	0.1	31.	6	43.0		1.1		14.6	1.2	
Queue Storage	Ratio (RQ) (95 th percent	íle)	0.00	0.00	0.00	0.00	0.0	0	0.00		0.00		0.00	0.00	
Uniform Delay (d 1), s	/veh	,	30.2	11.8		10.4	19.	7	23.8		57.8		45.8	37.9	
Incremental De	ncremental Delay (<i>d</i> ₂), s/veh			0.4	0.6	0.0	0.0	8.7	7	30.3		2.6		1.4	0.0	
nitial Queue Delay (<i>d</i> 3), s/veh				0.0	0.0	0.0	0.0	0.0)	0.0		0.0		0.0	0.0	
Control Delay (<i>d</i>), s/veh				30.6	12.4		10.4	28.4	4	54.2		60.4		47.3	37.9	
Level of Service (LOS)				С	В		В	С		F		E		D	D	
Approach Delay, s/veh / LOS				12.8	3	В	41.2	2		D	60.4	-	E	46.9	,	D
Intersection Delay, s/veh / LOS						34	1.0							С		
Multimodal Re	Iultimodal Results				EB			WE	В			NB			SB	
Pedestrian LOS	ian LOS Score / LOS			1.66	3	В	2.08	3		В	2.30		В	2.32	2	В
Bicycle LOS Sc	in LOS Score / LOS OS Score / LOS)	Α	2.12	2		В	0.52	2	А	1.62	2	В

General Inform	nation								Intersec	tion Inf	ormatio	on	_	-4 -/3 +/> ↓ ↓	× La
Agency		LAV Consulting							Duration	, h	0.250)		* * * *	R
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area Ty	be	Other	-			<mark>≿</mark>
Jurisdiction		County		Time F	Period	AM P	eak Hou	ır	PHF		0.88			W = E	+ ↓ ↓
Urban Street		Hwy 65		Analys	is Year	2023			Analysis	Period	1> 7:	00	4		ţ.
Intersection		Hwy 65/W Hermosa	St	File Na	ame	Hwy 6	5 and V	V Her	mosa St	2023 AN	1.xus			nttr	
Project Descrip	tion												ň	* 1 * * * 1	× ۲
				_											
Demand Inform	nation				EB			W	′B		NB	- I		SB	
Approach Move	ement			L	Т	R	L		r R	L	Т	R	L	Т	R
Demand (v), v	eh/h			28	112	79	214	8	4 100	36	706	109	108	670	23
Signal Informa	tion														
	120.0	Reference Phase	2								ļ		12		~
Offset s	0	Reference Point	End									1	2	3	
Uncoordinated	No	Simult Con E/W	On	Green	0.0	0.0	0.0	0.0	0.0	0.0	_			_	A-
Earco Modo	Fixed	Simult. Gap E/W	On	Pod	0.0	0.0	0.0	0.0	$\frac{0.0}{0.0}$	0.0	_	/ ^ا لا			•
Force Mode	Fixed	Simult. Gap N/S	OII	Reu	0.0	0.0	0.0	0.0	5 0.0	0.0		5	0	1	0
Timer Results	_		_	FBI		FBT	WB		WBT	NB		NBT	SBI		SBT
Assigned Phase	e		_	7		4	3	-	8	5		2	1		6
Case Number	-		_	1.1		4.0	2.0	+	3.0	2.0		3.0	2.0		3.0
Phase Duration	, S		_	7.8		20.4	21.5	5	34.1	8.4		64.5	13.6	; (69.7
Change Period,	, (Y+R)	c), S		4.0		4.0	4.0		4.0	4.0		4.0	4.0		4.0
Max Allow Head	dway(/	<i>MAH</i>), s	0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Queue Clearan	ce Time	(g s), s	0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Green Extensio	n Time	me (<i>g</i> s), s ne (<i>g</i> e), s				0.0	0.0		0.0	0.0		0.0	0.0		0.0
Phase Call Prol	Extension Time (g e), s Call Probability			0.00)	0.00	0.00)	0.00	0.00)	0.00	0.00) (0.00
Max Out Proba	bility			0.00)	0.00	0.00)	0.00	0.00)	0.00	0.00) (0.00
	_						_		-				_		
Movement Gro	oup Res	sults			EB	-		WE	3		NB			SB	-
Approach Move	ement				l	R	L		R			R	L	I	R
Assigned Move	ment	<u> </u>		/	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow I	Rate (v), veh/h		0	0		0	0	0	0	0	0	0	0	0
Adjusted Satura	ation Flo	w Rate (s), veh/h/ln		0	0		0	0	0	0	0	0	0	0	0
Queue Service	Time (g	g s), S		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	learanc	e lime (g c), s		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	/C)			0.17	0.14		0.15	0.2	5 0.25	0.04	0.50	0.50	0.08	0.55	0.55
Capacity (c), v	/en/n			299	242	<u> </u>	263	476	403	66	1823	811	145	1982	882
Volume-to-Capa		IO(X)		0.102	0.858		0.883	0.19	0.269	0.593	0.421	0.146	0.808	0.367	0.028
Back of Queue	(Q), W	in (95 in percentile)	-)	33.2	252.2		211.4	90.	9 110.6	53.Z	259.7	75.8	157.7	223.2	13.3
Duck of Queue	(Q), Ve	PO(05 th percentile)	*) ~)	1.3	10.1		0.00	3.0	0 4.4	2.1	0.00	3.0	0.3	0.9	0.5
Uniform Doloy		kg) (95 in percentin	e)	42.2	50.6		0.00 50.2	25	0.00 1 26 1	56.0	10.00	15.0	54.2	15.4	12.5
Incremental De	Delay (<i>d</i> 1), s/veh			42.2	2.4		2.0	0.1	+ 30.1	2.1	0.7	15.9	34.5	15.4	12.5
Incremental De	nental Delay (d ₂), s/veh			0.1	3.4		3.9	0.1	0.1	3.1	0.7	0.4	4.0	0.5	0.1
	nitial Queue Delay (d ȝ), s/veh			0.0	54.1		54.1	25	5 26 2	60.1	10.5	16.2	0.0 59.2	15.0	12.5
Control Delay (d), s/veh				42.Z	04.1 D		04.1	35.		00.1 E	19.5	10.3 D	50.3	15.9 D	12.5 D
Level of Service (LOS) Approach Delay, s/yeh / LOS				52.5			15.7			 	2	C	□ □ 21 5		C
Approach Delay, s/veh / LOS				52.5		20	40.7		D	20.0		U	21.0		0
	ntersection Delay, s/ven / LOS					20							U		
Multimodal Re	sults	\$			EB			WE	3		NB			SB	
Pedestrian LOS	S Score	/LOS		2.46	;	В	2.45	5	В	2.10)	В	1.90		В
Bicycle LOS Sc	ore / LC)S	0.88	;	А	1.20)	A	1.25	5	А	1.21		Α	

General Inform	nation								Intersec	tion Inf	ormati	on			يد ايد	
Agency		LAV Consulting							Duration	, h	0.250)		* + + 4	R_	
Analyst		BMB		Analys	is Dat	e Mar 2	8, 2023		Area Typ	e	Othe	-			×	
Jurisdiction		County		Time F	Period	AM P Proje	eak Hou ct	ır +	PHF		0.88		* ***	W ∯ E	1 ↑ * † *	
Urban Street		Hwy 65		Analys	is Yea	r 2023			Analysis	Period	1> 7:	00		5 + + 2	×-	
Intersection		Hwy 65/W Hermosa	a St	File Na	ame	Hwy 6	5 and V	V He	rmosa St 2	2023 AN	I+Proj.>	kus		41471	× (*	
Project Descrip	tion					8							1			
		^ 					11						ļ.			
Demand Inform	nation				EB			V	/B		NB			SB		
Approach Move	ement			L	Т	R	L		T R	L	Т	R	L	Т	R	
Demand (v), v	eh/h			33	112	79	214	8	84 116	36	815	109	122	759	26	
Oires al la farma	4!											- 1				
Signal Informa		Deference Dhase	2								ļ		12		~	
Cycle, s	120.0	Reference Phase	Z									1	2	3	★ 4	
Ulisel, s	U	Simult Cap 5/M	End	Green	0.0	0.0	0.0	0.	0.0	0.0	_			_	5	
	Tixed	Simult Cap N/S	On	Yellow Red	0.0	0.0	0.0	0.	0 0.0	0.0	_	רא∣ ∫			•	
Force Mode	Fixed	Simult. Gap N/S	Un	Rea	0.0	0.0	0.0	0.	0 0.0	0.0		5	6	1	8	
Timer Results			_	FBI		FBT	WB	1	WBT	NBI		NBT	SBI		SBT	
Assigned Phase	e			7	-	4	3	-	8	5	-	2	1		6	
Case Number				1.1	-	4.0	2.0	-	3.0	2.0		3.0	2.0		3.0	
Phase Duration	I S			82		20.5	21 5	5	33.7	8.4		63.4	14 7	,	69 7	
Change Period	(Y+R)	c) s		4.0	-	4.0	4.0		4.0	4.0		4 0	4.0		4.0	
Max Allow Head	dwav(A	иАН). s	0.0		0.0	0.0	-	0.0	0.0		0.0	0.0		0.0		
Queue Clearan	ce Time	(q s). S	0.0		0.0	0.0	-	0.0	0.0		0.0	0.0		0.0		
Green Extensio	n Time	(ge),s	0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0		
Phase Call Pro	bability			0.00		0.00	0.00)	0.00	0.00)	0.00	0.00)	0.00	
Max Out Proba	bility			0.00		0.00	0.00)	0.00	0.00	, _	0.00	0.00) (0.00	
Movement Gro	oup Res	ults			EB			W	В		NB			SB		
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R	
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16	
Adjusted Flow I	Rate (v), veh/h		0	0	<u> </u>	0	0	0	0	0	0	0	0	0	
Adjusted Satura	ation Flo	w Rate (<i>s</i>), veh/h/l	n	0	0		0	0	0	0	0	0	0	0	0	
Queue Service	Time(g	g s), S		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Cycle Queue C	learance	e Tîme (<i>g c</i>), s		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Green Ratio (g	/C)			0.17	0.14		0.15	0.2	5 0.25	0.04	0.49	0.49	0.09	0.55	0.55	
Capacity (c), v	/eh/h			305	243		263	47	1 399	66	1790	797	162	1981	882	
Volume-to-Capa	acity Ra			0.118	0.856		0.883	0.19	94 0.316	0.593	0.495	0.149	0.821	0.416	0.032	
Back of Queue	$(Q), \pi/$	in (95 th percentile)		39.1	252.1		277.4	91.	3 130.4	53.2	308.7	21	7 1	253.4	15.1	
Dack of Queue	(Q), Ve	PO(05 th percent)	ie)	0.00	10.1		0.00	3.1	0 0.00	2.1	12.3	3.1	7.1	10.1	0.0	
Queue Storage			lie)	42.0	50.6		50.3	25	7 36.8	56.0	20.3	16.5	0.00 52.7	15.0	12.5	
Incremental De	(u r), s			42.0	3.4		30.3	0.	1 0.2	3.1	20.5	0.4	30	15.9	0.1	
	ay (u 2	y (d ₂), s/veh			0.0		0.0	0.	0.2	5.1	0.0	0.4	<u> </u>	0.0	0.1	
Control Delay (42.0	54 0		54 1	35	7 37 0	60.1	21.3	16.0	57.6	16.6	12.6			
Control Delay (d), s/ven				-τ2.0 Π	ט. ו -ט ח		D	- 33. П		F	21.3 C	R	57.0 F	R	R	
Approach Delay, s/veh / LOS				52.2			45.6			22.2		C	22 0		C	
Approach Delay, s/veh / LOS Intersection Delay, s/veh / LOS				52.2		2	3.7		0		·	0	C 22.0		0	
Intersection Delay, s/ven / LOS						20							-			
Multimodal Re	l Results				EB			W	B		NB			SB		
Pedestrian LOS	S Score	/ LOS	2.46	;	В	2.45	5	В	2.10		В	1.90)	В		
Bicycle LOS Sc	ore / LC	DS		0.89		А	1.23	3	А	1.35	5	А	1.30)	А	
General Inform	nation								Inters	ecti	ion Info	ormatio	on	_	-4 -/3 +/> ↓ ↓	× 1 <u>x</u>
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Agency		LAV Consulting							Durati	ion,	h	0.250			* * * *	R_
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area 7	Туре	9	Other				×
Jurisdiction		County		Time F	Period	AM P	eak Hou	ır	PHF			0.88			W = E	↓ ↓ ↓
Urban Street		Hwy 65		Analys	sis Year	2025			Analys	sis F	Period	1> 7:0	00	4		Ť
Intersection		Hwy 65/W Hermosa	St	File Na	ame	Hwy 6	65 and V	V Hei	rmosa S	St 20	025 AM	.xus			nttr	
Project Descrip	tion													ň	* 1 * * * 1	× ۲
				1			ľ									
Demand Inform	nation				EB	1		N	/B			NB			SB	
Approach Move	ement			L	Т	R	<u> </u>		Г	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			29	116	82	222	8	57 1	04	37	734	113	112	696	23
Signal Informa	tion															
	120.0	Poforonco Phaso	2	-								L L		12		~
Offset s	0	Reference Point	End										1	2	3	
Uncoordinated	No	Simult Con E/W	On	Green	0.0	0.0	0.0	0.	0 0	.0	0.0	_			_	- A
Earco Modo	Fixed	Simult. Gap E/W	On	Pod	0.0	0.0	0.0	0.		.0	0.0	_ î	Ĵ [™] I⊾1			
Force Mode	Fixeu	Simult. Gap N/S	OII	Reu	0.0	0.0	0.0	0.	0 10	.0	0.0		5	0	1	0
Timer Results	_		_	FBI		FBT	WB		WBT	•	NBI		NBT	SBI		SBT
Assigned Phase			_	7		4	3	-	8	-1	5		2	1		6
Case Number	-			1.1		4.0	2.0	\rightarrow	3.0	-	2.0		3.0	2.0		3.0
Phase Duration	, S		_	7.9		20.9	22.0)	35.1	T	8.4		63.1	13.9) (61.6 68.6
Change Period,	(Y+R	c), S		4.0		4.0	4.0		4.0		4.0		4.0	4.0		4.0
Max Allow Head	dway(<i>I</i>	<i>MAH</i>), s	AH), s g s), s			0.0	0.0		0.0		0.0		0.0	0.0		0.0
Queue Clearan	ce Time	(g s), s	0.0		0.0	0.0		0.0		0.0		0.0	0.0		0.0	
Green Extensio	n Time	(ge), s	0.0		0.0	0.0		0.0		0.0		0.0	0.0		0.0	
Phase Call Prol	bability		0.00)	0.00	0.00)	0.00		0.00		0.00	0.00) (0.00	
Max Out Proba	bility			0.00)	0.00	0.00)	0.00		0.00		0.00	0.00) (0.00
	_								_					_		
Movement Gro	oup Res	sults			EB			WI T	3	+		NB			SB	
Approach Move	ement			L		R	L		R				R	L	I	R
Assigned Move	ment	<u> </u>		/	4	14	3	8	18	5	5	2	12	1	6	16
Adjusted Flow I	Rate (v), veh/h		0	0	<u> </u>	0	0	0	4	0	0	0	0	0	0
Adjusted Satura	ation Flo	w Rate (<i>s</i>), veh/h/ln		0	0	<u> </u>	0	0	0		0	0	0	0	0	0
Queue Service	lime (g	ŋs), S ┳; (), S		0.0	0.0	<u> </u>	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
	learanc	e lime (<i>g</i> c), s		0.0	0.0		0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	/C)			0.17	0.14	<u> </u>	0.15	0.2	6 0.2	26	0.04	0.49	0.49	0.08	0.54	0.54
Capacity (c), v	en/n	·· ()/)		306	250		272	492	2 41	1	67	1/81	793	150	1947	867
Volume-to-Capa		IO(X)		0.103	0.862	<u> </u>	0.887	0.19	1 112	/1	0.602	0.448	0.155	0.811	0.389	0.029
Back of Queue	(Q), W	in (95 in percentile))	34.1	259.4		285.3	93.	1 113 7 4 (6.9 C	04.7	211.5	81.3	163.6	237.1	13.7
Back of Queue	(Q), Ve	PO(0.5 th percentile)	;) 2)	1.4	10.4		0.00	3.1	4.0		2.2	0.00	3.3	0.0	9.5	0.5
Queue Storage			0.00	50.4		50.00	0.0	7 25	4	0.00	10.00	0.00	0.00	0.00	12.0	
Uniform Delay	(u1), S		41.7	2.4		30.0	34.		.4	20.9	19.0	10.7	04.1	10.2	13.0	
Incremental De	iay (a 2), s/ven	0.1	3.4		3.9	0.			3.2	0.0	0.4	4.0	0.0	0.1	
Initial Queue De	elay (a	3), S/Ven	0.0	0.0		0.0	0.0	7 0.0	0	0.0	0.0	0.0	0.0	0.0	0.0	
Lovel of Service	u), s/ve		41./	53.8 D		53.9	34.	1 <u>3</u> 5.	.0	00.1 E	20.7	I7.Z	58.1	٥.01 ص	13.1 D	
Approach Dolo	(LUS)	LOS) //veh / LOS					15.0			_	21.0					
Intersection Do	n Delay, s/veh / LOS			52.3	,	20	40.2	-	U		21.9		0	<u> </u>		0
	ay, 5/VE				28								U			
Multimodal Re	sults			EB			W	3			NB			SB		
Pedestrian LOS	Score	/LOS	OS			В	2.45	5	В		2.10		В	1.90		В
Bicycle LOS Sc	ore / LC)S)S				1.23	3	Α		1.28	;	А	1.23	;	А

General Inform	nation								Intersec	tion Inf	ormati	on		*****	× L
Agency		LAV Consulting							Duration	, h	0.250)		×++ 4	R
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area Typ	e	Othe	ſ	<u>⊅</u>		
Jurisdiction		County		Time F	Period	AM Po Projec	eak Hou st	ır +	PHF		0.88		****	WEE	* ↓ * ↓ *
Urban Street		Hwy 65		Analys	is Yea	2025			Analysis	Period	1> 7:	00			F
Intersection		Hwy 65/W Hermosa	a St	File Na	ame	Hwy 6	5 and V	V He	rmosa St 2	2025 AN	l+Proj.	kus		==] =1 ↑ 4+ */ ↑	* (*
Project Descrip	tion												1 7		
, ,		л											1		
Demand Inform	nation				EB			V	/B		NB			SB	
Approach Move	ement			L	Т	R	L		T R	L	Т	R	L	Т	R
Demand (v), v	eh/h			34	116	82	222	8	37 120	37	843	113	126	785	26
						_		_			_				
Signal Informa	tion										ļ		†		
Cycle, s	120.0	Reference Phase	2									1	2	3	
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.	0.0	0.0					<u> </u>
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.	0.0	0.0		く 4			
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.	0 0.0	0.0		5	6	7	8
Timer Deculto			_		_	EDT				NDI	_	NDT	CDI		ODT
Timer Results				EBL	-	EBI	WB		WBI		-	NBI	SBL		SBI
Assigned Phase	e			/		4	3	\rightarrow	8	5	_	2	1	\rightarrow	0
Case Number	-			1.1	_	4.0	2.0	\rightarrow	3.0	2.0	_	3.0	2.0		3.0
Phase Duration	i, s	```		8.2		21.0	22.0)	34.8	8.4		62.0	15.0) (68.6
Change Period	, (Y+R)	c), S	s H), s				4.0	\rightarrow	4.0	4.0	_	4.0	4.0	\rightarrow	4.0
Max Allow Head	dway(/	VIAH), S	H), s				0.0	\rightarrow	0.0	0.0	_	0.0	0.0	\rightarrow	0.0
Queue Clearan	ce nine n Time	$(g_s), s$	y s), S				0.0	\rightarrow	0.0	0.0	-	0.0	0.0		0.0
Phase Call Pro	hability	(99), 3		0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Max Out Proba	bility			0.00		0.00	0.00		0.00	0.00	, ,	0.00	0.00		0.00
	Dinty			0.00	<u> </u>	0.00	0.00	,	0.00	0.00	,	0.00	0.00		0.00
Movement Gro	oup Res	sults			EB	_		W	В		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow I	Rate (v), veh/h		0	0	1	0	0	0	0	0	0	0	0	0
Adjusted Satura	ation Flo	ow Rate (s), veh/h/l	n	0	0		0	0	0	0	0	0	0	0	0
Queue Service	Time (g	g s), S		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Queue C	learanc	e Time (g c), s		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	/C)			0.18	0.14		0.15	0.2	6 0.26	0.04	0.48	0.48	0.09	0.54	0.54
Capacity (c), v	/eh/h			311	250		272	48	7 413	67	1747	778	166	1946	866
Volume-to-Cap	acity Ra	atio(X)		0.119	0.860		0.887	0.19	94 0.316	0.602	0.524	0.158	0.824	0.438	0.033
Back of Queue	(Q), ft/	/In (95 th percentile))	40	259.3		285.3	93.	5 133.4	54.7	328.6	83.3	183	268.6	15.5
Back of Queue	(Q), ve	eh/In (95 th percenti	ile)	1.6	10.4		11.4	3.7	7 5.3	2.2	13.1	3.3	7.3	10.7	0.6
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00		0.00	0.0	0 0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay	(d 1), s	/veh	41.5	50.4		50.0	34.	9 36.1	56.9	21.5	17.4	53.5	16.8	13.0	
Incremental De	lay (<i>d</i> 2	e), s/veh	0.1	3.4		3.9	0.1	1 0.2	3.2	1.1	0.4	3.9	0.7	0.1	
Initial Queue De	elay(d	з), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/ve	eh	41.6	53.7		53.9	35.	0 36.3	60.1	22.6	17.8	57.4	17.5	13.1	
Level of Service	e (LOS)		D	D		D	C	D	E	С	В	E	В	В	
Approach Dela	y, s/veh	/ LOS	51.9		D	45.1	1	D	23.5	5	С	22.7	,	С	
Intersection De	lay, s/ve	eh / LOS			29	9.3						С			
Multimodal Re	sults							W	B		NB	_		SB	
Pedestrian LOS	Score	/ LOS		2.46		В	2.45	>	В	2.10)	В	1.90		В
Bicycle LOS Sc	ore / LC	JS		0.90		A	1.26	5	A	1.38	3	A	1.33	3	A

Intersection Information Intersection Information Intersection Information Analysis UAX Consulting Analysis Value Analysis Value Analysis Value Analysis Value Analysis Value Analysis Period 1>7 Other Image: Value Value Image: Value Value Image: Value Value Image: Value Value Value Image: Value Value Value Image: Value Value Value Image: Value Value Value Value Image: Value Value Value Value Value Image: Value Val																
Agency LV Consulting Analysis Data Mar 28, 2023 Area Type Oth Use Type Oth Use Type Oth Ture Period MAPeak Hour PHI O.83 Oth Ture Period Mar 28, 2023 Area Type Oth Ture Period Mar 28, 2023 Mar 28, 2023 Area Type Oth Ture Period Mar 28, 2023 Mar 28, 2023 <td>General Inform</td> <td>nation</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Intersec</td> <td>tion Inf</td> <td>ormatio</td> <td>on</td> <td></td> <td>4 7 4 1 1</td> <td>× 1<u>4</u></td>	General Inform	nation								Intersec	tion Inf	ormatio	on		4 7 4 1 1	× 1 <u>4</u>
Analysit BMB Analysis Date Mar 28, 2023 Area Type Other O	Agency		LAV Consulting							Duration	, h	0.250		_	* * * *	R_
Jurisolition County Time Period AM Peak Nour PHF 0.88 No No <td>Analyst</td> <td></td> <td>BMB</td> <td></td> <td>Analys</td> <td>sis Date</td> <td>Mar 2</td> <td>8, 2023</td> <td></td> <td>Area Typ</td> <td>e</td> <td>Other</td> <td></td> <td></td> <td></td> <td></td>	Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area Typ	e	Other				
Urban Street Hwy 65 Analysis Year 2023 Analysis Period 1>7 Analysis Period 1>7 Analysis Period 1>7 Analysis Period 1>7 N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N N	Jurisdiction		County		Time F	Period	AM Pe	eak Hou	r	PHF		0.88			W 🗍 E B	
Intersection Hwy 6SW Hermosa St File Name Hwy 6S and W Hermosa St 2035 AM.xus Image: Control of the stand W Hermosa St 2035 AM.xus Project Description E V File Name Way 6S and W Hermosa St 2035 AM.xus Image: Control of the stand W Hermosa St 2035 AM.xus Approach Movement L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T	Urban Street		Hwy 65		Analys	sis Year	2023			Analysis	Period	1> 7:(00	<u>لا</u> جا		*
Project Description Demand Information EB VB VB VB VB Demand (v), veh/h 35 141 100 270 106 126 45 890 137 136 844 29 Signal Information Cycle, s 120.0 Reference Point End 7 R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R <td< td=""><td>Intersection</td><td></td><td>Hwy 65/W Hermosa S</td><td>t </td><td>File Na</td><td>ame</td><td>Hwy 6</td><td>5 and V</td><td>V Her</td><td>mosa St 2</td><td>2035 AN</td><td>l.xus</td><td></td><td></td><td>5117</td><td></td></td<>	Intersection		Hwy 65/W Hermosa S	t	File Na	ame	Hwy 6	5 and V	V Her	mosa St 2	2035 AN	l.xus			5117	
Demand Information L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R	Project Descrip	tion												1	4 1 4 M	* (*
Demand Information LB WB NB SB Demand (v), veh/h 35 141 100 270 106 126 45 890 137 136 844 29 Signal Information Cycle, s 120.0 Reference Point End Green 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0								1		_	_			1		
Approach Movement L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R L I R	Demand Inform	nation		_		EB		<u> </u>	W	B	<u> </u>	NB		<u> </u>	SB	
Demand (v), veh/n 35 141 100 270 126 45 890 137 136 644 29 Signal Information Cycle, s 120.0 Reference Paint End End Creen 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Approach Move	ement		_	L		R	L		R			R	L		R
Signal Information Cycle.s 120.0 Reference Prints C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C <td>Demand (v), v</td> <td>eh/h</td> <td></td> <td></td> <td>35</td> <td>141</td> <td>100</td> <td>270</td> <td>10</td> <td>126</td> <td>45</td> <td>890</td> <td>137</td> <td>136</td> <td>844</td> <td>29</td>	Demand (v), v	eh/h			35	141	100	270	10	126	45	890	137	136	844	29
Cycle, s 120.0 Reference Phase 2 Orfset, s 0 No Simult, Gap LW On 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 </td <td>Signal Informa</td> <td>tion</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>11</td> <td></td> <td></td> <td></td> <td></td>	Signal Informa	tion										11				
Offset, s 0 Reference Point End Vellow 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0<	Cvcle. s	120.0	Reference Phase	2										\mathbf{r}		
Uncoordinated Force Mode No Simult. Gap EW Simult. Gap N/S On N Red 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Offset, s	0	Reference Point E	nd								_	1	2	3	Y 4
Proce Mode Fixed Simult. Gap N/S On Red/W 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 <td>Uncoordinated</td> <td>No</td> <td>Simult, Gap E/W</td> <td>On</td> <td>Green</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>_</td> <td></td> <td></td> <td></td> <td>A</td>	Uncoordinated	No	Simult, Gap E/W	On	Green	0.0	0.0	0.0	0.0	0.0	0.0	_				A
Timer Results EBL EBT WBL WBT NBL NBL NBL SBT Assigned Phase 7 4 3 8 5 2 1 6 Case Number 1.1 4.0 2.0 3.0 2.0 3.0 2.0 3.0 Phase Duration, s 8.3 24.2 25.5 41.4 8.8 54.5 15.8 61.5 Change Period, (Y+Rc.), s 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Force Mode	Fixed	Simult, Gap N/S	On	Red	0.0	0.0	0.0	0.0) 0.0	0.0	_	5	6	7	8
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Case Number 1.1 4.0 2.0 3.0 2.0 3.0 2.0 3.0 2.0 3.0 Phase Duration, s 8.3 24.2 25.5 41.4 8.8 54.5 15.8 61.5 Change Period, (Y+R_2), s 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Assigned Phase	e			7		4	3		8	5		2	1		6
Phase Duration, s 8.3 24.2 25.5 41.4 8.8 54.5 15.8 61.5 Change Period, (YHR), s 0.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 <	Case Number				1.1		4.0	2.0		3.0	2.0		3.0	2.0		3.0
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Phase Duration	, S			8.3		24.2	25.5	5	41.4	8.8		54.5	15.8	; (61.5
Max Allow Headway (MAH), s 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Change Period,	(Y+R	c), S		4.0		4.0	4.0		4.0	4.0		4.0	4.0		4.0
Queue Clearance Time (g +), s 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Max Allow Head	dway(<i>N</i>	<i>ИАН</i>), s	0.0		0.0	0.0	\rightarrow	0.0	0.0		0.0	0.0		0.0	
Green Extension Time (g e), s 0.0 0.0 0.0 0.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Queue Clearan	ce Time	e (g s), s	0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Phase Call Probability 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 <	Green Extensio	n Time	(ge), s	0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0	
Max Out Probability 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	Phase Call Pro	bability			0.00)	0.00	0.00)	0.00	0.00)	0.00	0.00		0.00
Movement Group Results L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L I I R I I R I I R I I R I I R I I R I I <td>Max Out Proba</td> <td>bility</td> <td></td> <td></td> <td>0.00</td> <td>)</td> <td>0.00</td> <td>0.00</td> <td>)</td> <td>0.00</td> <td>0.00</td> <td>)</td> <td>0.00</td> <td>0.00</td> <td></td> <td>0.00</td>	Max Out Proba	bility			0.00)	0.00	0.00)	0.00	0.00)	0.00	0.00		0.00
Approach Movement L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R R L T R L T R L T R L T R L T R L T R L T	Movement Gro	oup Res	ults			EB			WE	3		NB			SB	
Assigned Movement7414381852121616Adjusted Flow Rate (v), veh/h0000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000<	Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	T	R
Adjusted Flow Rate (v), veh/h 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <	Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Saturation Flow Rate (s), veh/h/ln 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Adjusted Flow F	Rate (v), veh/h		0	0		0	0	0	0	0	0	0	0	0
Queue Service Time (g s), s 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	Adjusted Satura	ation Flo	w Rate (<i>s</i>), veh/h/ln		0	0		0	0	0	0	0	0	0	0	0
Cycle Queue Clearance Time (g c), s 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 <td>Queue Service</td> <td>Time (g</td> <td>g s), S</td> <td></td> <td>0.0</td> <td>0.0</td> <td></td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td>	Queue Service	Time (g	g s), S		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g/C) 0.20 0.17 0 18 0.31 0.31 0.04 0.42 0.42 0.10 0.48 0.48 Capacity (c), veh/h 343 297 324 592 502 73 1523 678 177 17.33 771 Volume-to-Capacity Ratio (X) 0.111 0.81 0.905 0.195 0.273 0.672 0.635 0.200 0.833 0.529 0.011 Back of Queue (Q), th/ln (95 th percentile) 3.6 3.2 33.2 10.51 128.2 66.9 39.4 1191 195.5 33.1 20.3 Back of Queue (Q), veh/ln (95 th percentile) 1.6 1.2 13.3 4.2 5.1 2.7 1.9 4.8 7.8 13.3 0.8 Queue Storage Ratio (RQ) (95 th percentile) 0.00 0.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.	Cycle Queue C	learance	e Time (g c), s		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capacity (c), veh/h3432973245925027315236781771733771Volume-to-Capacity Ratio (X)0.1110.8810.9050.950.2730.6720.6350.200.8330.5290.041Back of Queue (Q), tr/ln (95 th percentile)39.632.5332.910.5112.8266.939.4119.1195.531.620.3Back of Queue (Q), veh/ln (95 th percentile)1.612.11.334.25.12.715.94.87.813.30.8Queue Storage Ratio (RQ) (95 th percentile)0.000.00.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.00 <td>Green Ratio (g</td> <td>/C)</td> <td></td> <td></td> <td>0.20</td> <td>0.17</td> <td></td> <td>0.18</td> <td>0.31</td> <td>I 0.31</td> <td>0.04</td> <td>0.42</td> <td>0.42</td> <td>0.10</td> <td>0.48</td> <td>0.48</td>	Green Ratio (g	/C)			0.20	0.17		0.18	0.31	I 0.31	0.04	0.42	0.42	0.10	0.48	0.48
Volume-to-Capacity Ratio (X)0.1110.8810.9050.1950.2730.6720.6350.2200.8330.5290.041Back of Queu (Q), ft/in (95 th percentile)39.63 $2 \cdot 2$ 532.6332.91 $\cdot 2$ 128.266.93 $\cdot 4$ 19.1195.53 $\cdot 1$.620.3Back of Queu (Q), veh/in (95 th percentile)1.61 $\cdot 2$.11.334 $\cdot 2$ 5.12.71 $\cdot 9$ 4.87.81 $\cdot 3$.00.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.00	Capacity (c), v	/eh/h			343	297		324	592	502	73	1523	678	177	1733	771
Back of Queue (Q), ft/ln (95 th percentile)39.6 302.5 $add 32.5$	Volume-to-Capa	acity Ra	tio (<i>X</i>)		0.111	0.881		0.905	0.19	5 0.273	0.672	0.635	0.220	0.833	0.529	0.041
Back of Queue (Q), veh/ln (95 th percentile)1.612.1I3.34.25.12.715.94.87.813.30.8Queue Storage Ratio (RQ) (95 th percentile)0.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.00 <t< td=""><td>Back of Queue</td><td>(Q), ft/</td><td>In (95 th percentile)</td><td></td><td>39.6</td><td>302.5</td><td></td><td>332.9</td><td>105.</td><td>1 128.2</td><td>66.9</td><td>396.4</td><td>119.1</td><td>195.5</td><td>331.6</td><td>20.3</td></t<>	Back of Queue	(Q), ft/	In (95 th percentile)		39.6	302.5		332.9	105.	1 128.2	66.9	396.4	119.1	195.5	331.6	20.3
Queue Storage Ratio (RQ) (95 th percentile)0.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.000.00 <t< td=""><td>Back of Queue</td><td>(Q), ve</td><td>eh/ln (95 th percentile)</td><td></td><td>1.6</td><td>12.1</td><td></td><td>13.3</td><td>4.2</td><td>5.1</td><td>2.7</td><td>15.9</td><td>4.8</td><td>7.8</td><td>13.3</td><td>0.8</td></t<>	Back of Queue	(Q), ve	eh/ln (95 th percentile)		1.6	12.1		13.3	4.2	5.1	2.7	15.9	4.8	7.8	13.3	0.8
Uniform Delay (d 1), s/veh38.848.748.230.331.156.8 27.4 22.2 53.1 21.8 16.6Incremental Delay (d 2), s/veh0.1 3.5 3.9 0.1 0.1 4.0 2.0 0.7 3.9 1.2 0.1 Initial Queue Delay (d 3), s/veh0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 <td< td=""><td>Queue Storage</td><td>Ratio (</td><td>RQ) (95 th percentile)</td><td></td><td>0.00</td><td>0.00</td><td></td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td><td>0.00</td></td<>	Queue Storage	Ratio (RQ) (95 th percentile)		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Incremental Delay (d_2), s/veh 0.1 3.5 3.9 0.1 0.1 4.0 2.0 0.7 3.9 1.2 0.1 Initial Queue Delay (d_3), s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 <	Uniform Delay ((d 1), si	/veh		38.8	48.7		48.2	30.3	3 31.1	56.8	27.4	22.2	53.1	21.8	16.6
Initial Queue Delay (d 3), s/veh0.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.00.0	Incremental De	lay (<i>d</i> 2), s/veh		0.1	3.5		3.9	0.1	0.1	4.0	2.0	0.7	3.9	1.2	0.1
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Initial Queue De	elay(d	3), s/veh		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Level of Service (LOS)DDDDCCECECBApproach Delay, s/veh / LOS 50.5 D 42.3 D 29.9 C 27.4 CIntersection Delay, s/veh / LOS 33.2 3.2 -3.2 -3.2 -3.2 -3.2 -3.2 Multimodal ResultsEBEB -3.2 -3.2 -3.2 -3.2 -3.2 -3.2 Pedestrian LOS Score / LOS 2.46 B 2.44 B 2.11 B 1.91 B	Control Delay (d), s/ve	eh	38.9	52.2		52.1	30.3	3 31.2	60.8	29.5	22.9	57.0	23.0	16.7	
Approach Delay, s/veh / LOS 50.5 D 42.3 D 29.9 C 27.4 C Intersection Delay, s/veh / LOS 33.2	Level of Service	e (LOS)		D	D		D	С	C	E	С	С	E	С	В	
Intersection Delay, s/veh / LOS 33.2 C Multimodal Results EB WB NB SB Pedestrian LOS Score / LOS 2.46 B 2.44 B 2.11 B 1.91 B	Approach Delay	elay, s/veh / LOS			50.5	5	D	42.3	3	D	29.9)	С	27.4		С
Multimodal Results EB WB NB SB Pedestrian LOS Score / LOS 2.46 B 2.44 B 2.11 B 1.91 B	Intersection Del	lay, s/ve	r, s/veh / LOS				33	3.2						C		
Pedestrian LOS Score / LOS 2.46 B 2.44 B 2.11 B 1.91 B	Multimodal Ba	eulte			EB				2					SD		
	Pedestrian LOS	Score	/105	09			B	2 1		, R	2 11		B	1 01	30	B
Bicycle LOS Score / LOS 0.98 A 1.39 A 1.45 A 1.39 A	Bicycle LOS Sc	ore / I C)S		0.98	3	A	1.39)	A	1.45	5	A	1.39		A

General Inform	nation								Intersec	tion Inf	ormatio	on			يد ايد
Agency		LAV Consulting							Duration	, h	0.250)		* + + 4	R_
Analyst		BMB		Analys	is Date	e Mar 2	8, 2023		Area Typ	be	Other	-			×
Jurisdiction		County		Time F	Period	AM Po Projec	eak Hou st	ır +	PHF		0.88		4 4	W = E	1 ↑ * † †
Urban Street		Hwy 65		Analys	is Yea	2035			Analysis	Period	1> 7:(00			<u>~</u>
Intersection		Hwy 65/W Hermosa	a St	File Na	ame	Hwy 6	5 and V	V Hei	mosa St	2035 AN	I+Proj.x	us		4 1 4 M1	* (*
Project Descrip	tion			μ									1 7		
Demand Inform	nation				EB			N	/B		NB			SB	
Approach Move	ement			L	Т	R	L	-	T R	L	Т	R	L	Т	R
Demand (v), v	eh/h			40	141	100	270	1(06 142	45	999	137	150	933	32
				K											
Signal Informa	ation										l		* -		-
Cycle, s	120.0	Reference Phase	2									1	2	¥ _	€ ₄
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.	0.0	0.0					5
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.	0.0	0.0		く 4			
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.	0 0.0	0.0		5	6	7	8
								. 1			1		0.01		0.5.7
Timer Results				EBL	-	EBI	WB		WBT	NBI	-	NBI	SBL	-	SBI
Assigned Phase	e			7	_	4	3	_	8	5		2	1		6
Case Number				1.1		4.0	2.0		3.0	2.0		3.0	2.0		3.0
Phase Duration	l, S			8.6		24.2	25.5	5	41.1	8.8		53.5	16.8	3	61.4
Change Period	, (Y+R a	c), S	s H), s				4.0	\rightarrow	4.0	4.0		4.0	4.0		4.0
Max Allow Head	dway (A	ИАН), s	H), s				0.0	_	0.0	0.0		0.0	0.0		0.0
Queue Clearan	ce Time	e (g s), s	g s), s				0.0	_	0.0	0.0		0.0	0.0		0.0
Green Extensio	on Time	(ge), s		0.0	-	0.0	0.0	_	0.0	0.0		0.0	0.0		0.0
Phase Call Pro	bability			0.00		0.00	0.00)	0.00	0.00)	0.00	0.00)	0.00
Max Out Proba	bility			0.00		0.00	0.00)	0.00	0.00)	0.00	0.00)	0.00
Movement Gro	un Res	aults			FB			W	3		NB			SB	
Approach Move	ement				T	R	1	Т	R	1	T	R		T	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow F	Rate (v) veh/h		0	0		0	0	0	0	0	0	0	0	0
Adjusted Satura	ation Flo	w Rate (s), veh/h/l	n	0	0		0	0	0	0	0	0	0	0	0
Queue Service	Time (d	(, , , , , , , , , , , , , , , , , , ,		0.0	0.0	<u> </u>	0.0	0.0) 0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cvcle Queue C	learance	e Time (q c). s		0.0	0.0	<u> </u>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	/C)		_	0.21	0.17	<u> </u>	0.18	0.3	1 0.31	0.04	0.41	0.41	0.11	0.48	0.48
Capacity (c), y	/eh/h			348	298	1	324	588	3 498	73	1491	664	193	1732	771
Volume-to-Cap	acitv Ra	tio(X)		0.125	0.880	<u> </u>	0.905	0.19	0.310	0.672	0.728	0.224	0.844	0.586	0.045
Back of Queue	(Q), ft/	(In (95 th percentile)		45.1	302.2		332.9	105	.4 0.8	66.9	465.6	121.5	210.4	372.1	22.4
Back of Queue	(Q), ve	eh/In (95 th percenti	le)	1.8	12.1	i —	13.3	4.2	2 0.0	2.7	18.6	4.9	8.4	14.9	0.9
Queue Storage	Ratio (RQ) (95 th percent	ile)	0.00	0.00		0.00	0.0	0 0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay	(d1), s	/veh	38.7	48.7	1	48.2	30.	5 31.6	56.8	29.6	22.8	52.6	22.7	16.7	
Incremental De	lay (d 2), s/veh	0.1	3.4		3.9	0.1	0.1	4.0	3.2	0.8	3.8	1.5	0.1	
Initial Queue De	elay (d	з), s/veh	0.0	0.0	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/ve	eh		38.7	52.1		52.1	30.	5 31.8	60.8	32.8	23.6	56.4	24.1	16.8
Level of Service	e (LOS)		D	D		D	С	С	E	С	С	E	С	В	
Approach Delay	y, s/veh	/LOS		50.2		D	42.1	1	D	32.8	3	С	28.2	2	С
Intersection De	lay, s/ve	h / LOS				34	1.3						С		
Multimodal Re	sults			EB			WE	3		NB			SB		
Pedestrian LOS	S Score	/LOS		2.46		В	2.44	1	В	2.11		В	1.91		В
Bicycle LOS Sc	ore / LC	DS		0.99		А	1.42	2	А	1.55	5	В	1.49)	A

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General Inform	nation								Intersec	tion Inf	ormatio	on	_	4 74 42 1 1	× La
Agency		LAV Consulting							Duration	, h	0.250			* * * *	R_
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area Typ	е	Other		<u></u>		~_2
Jurisdiction		County		Time F	Period	AM Pe	eak Hou	r	PHF		0.88			W ‡ E 8	
Urban Street		Hwy 65		Analys	is Year	2045			Analysis	Period	1> 7:	00	1		*
Intersection		Hwy 65/W Hermosa St		File Na	ame	Hwy 6	5 and V	V Her	mosa St 2	2045 AN	1.xus			5117	
Project Descrip	tion												1	4 1 4 1 1	۲ (^۳
D			_		==				2				1		
Demand Inform	nation		\rightarrow		EB		<u> </u>	VV	B	<u> </u>	NB		<u>.</u>	SB	
Approach Move	ement		-	L	1	R	L		R 450		1070	R	L	1010	R
Demand (V), V	en/n			43	170	120	325	12	28 152	54	1073	100	164	1018	35
Signal Informa	tion														
Cvcle. s	120.0	Reference Phase	2										\mathbf{r}		
Offset, s	0	Reference Point E	nd -									1	2	3	Y 4
Uncoordinated	No	Simult. Gap E/W	Dn ,	Green	0.0	0.0	0.0	0.0	0.0	0.0	_			~	₩ A
Force Mode	Fixed	Simult. Gap N/S	Dn	Red	0.0	0.0	0.0	0.0	0.0	0.0		5	6	7	8
						1									
Timer Results				EBL	-	EBT	WB	L	WBT	NBI	-	NBT	SBL	-	SBT
Assigned Phase	е			7		4	3		8	5		2	1		6
Case Number				1.1		4.0	2.0		3.0	2.0		3.0	2.0		3.0
Phase Duration	i, S			8.8		28.8	30.6	;	50.5	9.3		42.3	18.4		51.3
Change Period	, (Y+R (c), S		4.0		4.0	4.0		4.0	4.0		4.0	4.0		4.0
Max Allow Head	dway(<i>N</i>	<i>MAH</i>), s		0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Queue Clearan	ce Time	(g s), s		0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Green Extensio	n Time	(ge), s		0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Phase Call Pro	bability			0.00) (0.00	0.00)	0.00	0.00)	0.00	0.00		0.00
Max Out Proba	bility			0.00) (0.00	0.00)	0.00	0.00)	0.00	0.00		0.00
Movement Gra		ulto			ED			\٨/٢)		ND			CD	
Approach Move	mont	Juits	-	1	ED	P			, P			P		т	P
Assigned Move	ment		-	7	1	1/	3	8	18	5	2	12	1	6	16
Adjusted Flow F	Rate (v) veh/h		0	- -	17	0	0	0	0	0	0		0	0
Adjusted Satura	ation Flo), ven/n w Rate (s) veh/h/ln	-	0	0		0	0	0	0	0	0	0	0	0
	Time ((τ_{c}) s	-	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Cycle Queue C	learance	e Time (a_c) s		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	/C)	9 (9 9) , 9		0.25	0.21		0.22	0.39	0.39	0.04	0.32	0.32	0.12	0.39	0.39
Capacity (c), y	/eh/h			383	363		401	734	622	80	1158	516	217	1432	637
Volume-to-Cap	acity Ra	tio (<i>X</i>)		0.128	0.908		0.922	0.19	8 0.278	0.767	1.053	0.366	0.859	0.808	0.062
Back of Queue	(Q), ft/	In (95 th percentile)		48	363.5		399.5	117	143.8	85.3	918.1	191.6	233.7	526	31.1
Back of Queue	(Q), ve	eh/ln (95 th percentile)		1.9	14.5		16.0	4.7	5.8	3.4	36.7	7.7	9.3	21.0	1.2
Queue Storage	Ratio (RQ) (95 th percentile)		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay	(d1), s	/veh		35.1	46.6		45.7	24.5	5 25.3	56.7	40.8	31.4	51.8	32.2	22.5
Incremental De	lay (d 2), s/veh		0.1	3.8		4.0	0.0	0.1	5.8	68.8	2.0	3.9	5.1	0.2
Initial Queue De	elay (d	3), s/veh		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh			35.2	50.4		49.7	24.5	5 25.4	62.5	109.6	33.4	55.8	37.3	22.6
Level of Service	e (LOS)	LOS)			D		D	С	С	E	F	С	E	D	С
Approach Delay	roach Delay, s/veh / LOS			48.4		D	38.3	3	D	97.8	3	F	39.4		D
Intersection De	ersection Delay, s/veh / LOS					62	2.0						E		
Multimodal Re	sults			EB			WE	3		NB			SB		
Pedestrian LOS	Score	/LOS		2.46		В	2.44	ŀ	В	2.12	2	В	1.92		В
Bicycle LOS Sc	ore / LC)S		1.11		А	1.62	2	В	1.70)	В	1.63		В

General Inform	nation								Interse	ction Inf	ormati	on	_	<u> </u>	يد ايد
Agency		LAV Consulting							Duration	n, h	0.250)		* + + 4	R_
Analyst		BMB		Analys	is Dat	e Mar 2	8, 2023		Area Ty	ре	Othe	r			×
Jurisdiction		County		Time F	Period	AM P Proje	eak Hou ct	ır +	PHF		0.88		4 44	W 🗍 E	1 ↑ * † *
Urban Street		Hwy 65		Analys	is Yea	ar 2045			Analysis	Period	1> 7:	00		5 + + 2	
Intersection		Hwy 65/W Hermosa	a St	File Na	ame	Hwy	55 and V	V He	rmosa St	2045 AN	1+Proj.	xus		ৰ † ক ম্প 1	× (*
Project Descrip	tion												1		
		^ 								1					
Demand Inform	nation				EB			V	/B		NB			SB	
Approach Move	ement			L	Т	R	L		T R	L	Т	R	L	Т	R
Demand (v), v	eh/h			48	170) 120	325	1:	28 168	54	118	7 166	178	1107	26
	tion														
	120.0	Reference Dhase	2								ļ		tz		~
Offect o	120.0	Reference Pridse	Z End									1	2	3	
Uncoordinated	No	Simult Con E/W	On	Green	0.0	0.0	0.0	0.	0 0.0	0.0				_	A
Earoo Mada	Fixed	Simult. Cap E/W	On	Pellow	0.0	0.0	0.0	0.	0 0.0	0.0	_	لما الا			•
Porce Mode	Fixed	Simult. Gap N/S	OII	Reu	0.0	0.0	0.0	0.	0 0.0	0.0		5	0	ľ	0
Timer Results			_	FBI		FBT	WB	1	WBT	NB		NBT	SBI		SBT
Assigned Phase	e			7	-	4	3	-	8	5	-	2	1		6
Case Number				1.1	+	4.0	2.0	-	3.0	2.0		3.0	2.0		3.0
Phase Duration	I S			9.0	-	28.8	26 ()	45.7	9.3		45.8	19.4		55.9
Change Period	. (Y+R)	c).s		4.0	-	4.0	4.0	+	4.0	4.0		4.0	4.0		4.0
Max Allow Head	dwav(A	иан), s	s H), s				0.0	-	0.0	0.0		0.0	0.0		0.0
Queue Clearan	ce Time	(q s). S	H), s 7 s), s				0.0	-	0.0	0.0		0.0	0.0		0.0
Green Extensio	n Time	(ge),s		0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Phase Call Pro	bability			0.00		0.00	0.00)	0.00	0.00)	0.00	0.00		0.00
Max Out Proba	bility			0.00		0.00	0.00)	0.00	0.00)	0.00	0.00	, ,	0.00
Movement Gro	oup Res	ults			EB			W	В		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow I	Rate (v), veh/h		0	0		0	0	0	0	0	0	0	0	0
Adjusted Satura	ation Flo	w Rate (<i>s</i>), veh/h/l	n	0	0		0	0	0	0	0	0	0	0	0
Queue Service	Time (g	g s), S		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Queue C	learance	e lime (<i>g c</i>), s		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	<i>VC</i>)			0.25	0.21		0.18	0.3	5 0.35	0.04	0.35	0.35	0.13	0.43	0.43
Capacity (c), V	/en/n	tic (X)		396	365	<u>,</u>	332	66	1 560	80	1260	561	233	1565	697
Volume-to-Capa		(IIIO(X))		0.138	0.90	5	1.113	0.22	20 0.341	0.764	070 4	0.330	0.868	0.804	0.042
Back of Queue	$(\mathbf{Q}), \mathbf{W}$	nn (95 in percentile)		00.0 01	15.0	+	25.2	5(00.1 2.4	0/0.4 25 1	72	240.0	044 01.9	21.2
	Ratio (PO(0.5 th percent)		2.1	0.00		23.2	0.0	0 0.0	0.00	0.00	0.00	9.9	21.0	0.0
Uniform Delay	(d_1)		35.0	46.4		49.0	27	6 20 0	56.7	30.1	28.0	51.3	20.6	10.00	
Incremental De	(u r), s		0.1	1/ 1		43.0	27.	0 29.0	5.6	46.6	1.6	38	29.0	0.1	
Initial Queue De	ay (u z	$\frac{1}{2}$, s/veh	0.1	0.0		00.0	0.		0.0	40.0	0.0	0.0	4.5	0.1	
Control Delay (d) s/ve	s), s/ven	35.0	60.6		132.5	27	7 29 1	62.3	85.7	30.5	55.1	34.1	19.8	
l evel of Service	a (I O.S.)		D	55.0 F	-	F	21. C	. <u>2</u> 3.1	52.5	55.7 F	C	F	С.	- 10.0 R	
Approach Delay	v s/veh	/105		57.0		F	82 0		F	78 2	3	F	36.7		D
Intersection De	section Delay, s/veh / LOS					6	2.3	-		10.0		-	E		5
					5							-			
Multimodal Re	sults			EB			W	В		NB			SB		
Pedestrian LOS	S Score	/ LOS		2.46	;	В	2.44	1	В	2.12	2	В	1.92		В
Bicycle LOS Sc	ore / LC	DS		1.12		А	1.65	5	В	1.8		В	1.72		В

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV (Consultir	na				Jurisc	liction			Coun	ity				
Date Performed	3/28/	/23	<u> </u>				East/	West Stre	eet		W Lir	ndmore S	St			
Analysis Year	2023						North	n/South S	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
Major Street: North-South Vehicle Volumes and Adjustments																
Vehicle Volumes and Adju	istme	nts														
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	12	8		0	12	32	0	4	644	0	0	12	584	4
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	10			N	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		14		9		14		36		5				14		
Capacity, c (veh/h)		123		647		123		614		878				830		
v/c Ratio		0.11		0.01		0.11		0.06		0.01				0.02		
95% Queue Length, Q ₉₅ (veh)		0.4		0.0		0.4		0.2		0.0				0.1		
Control Delay (s/veh)		37.8		10.6		38.0		11.2		9.1				9.4		
Level of Service (LOS)		E		В		E		В		А				А		
Approach Delay (s/veh)		2	5.9			18	3.5			0).1			0	.2	
Approach LOS			D			(с									

		Н	ICS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	ВМВ						Inters	ection			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV C	Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	23					East/	West Stre	eet		W Lin	dmore S	St			
Analysis Year	2023						North	/South S	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
	_	_	_	_]	_		_		_	_		_
								1								
Major Street: North-South																
Vehicle Volumes and Adju	Eastbound Westbound Northbound Southbound															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	12	8		0	12	37	0	4	743	0	0	13	668	4
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	10			N	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		14		9		14		42		5				15		
Capacity, c (veh/h)		91		601		90		564		807				751		
v/c Ratio		0.15		0.02		0.15		0.07		0.01				0.02		
95% Queue Length, Q ₉₅ (veh)		0.5		0.0		0.5		0.2		0.0				0.1		
Control Delay (s/veh)		51.6		11.1		51.9		11.9		9.5				9.9		
Level of Service (LOS)		F		В		F		В		A				A		
Approach Delay (s/veh)		35	5.4			21	1.7			0	.1			0	.2	
Approach LOS			E			(С									

HCSTM TWSC Version 7.9.5 Hwy 65 and W Lindmore St 2023 AM+Proj.xtw

		Н	ICS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV (Consultir	na				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	<u> </u>				East/	West Str	eet		W Lir	dmore S	St			
Analysis Year	2025						North	n/South	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
	_	_	_	_					_	_	_	_	_	_	_	_
Major Street: North-South																
Major Street: North-South Vehicle Volumes and Adjustments																
Vehicle Volumes and Adju	istme	nts														
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	12	8		0	12	33	0	4	669	0	0	12	607	4
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8		<u> </u>	8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		N	10			N	lo			N	10			N	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		14		9		14		38		5				14		
Capacity, c (veh/h)		114		634		113		601		858				809		
v/c Ratio		0.12		0.01		0.12		0.06		0.01				0.02		
95% Queue Length, Q ₉₅ (veh)		0.4		0.0		0.4		0.2		0.0				0.1		
Control Delay (s/veh)		40.8		10.8		41.1		11.4		9.2				9.5		
Level of Service (LOS)		E		В		E		В		А				А		
Approach Delay (s/veh)		2	8.8			19	9.3			0).1			0	.2	
Approach LOS			D			(с									

		Н	ICS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	ВМВ						Inters	ection			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV C	Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	23					East/	West Stre	eet		W Lin	dmore S	St			
Analysis Year	2025						North	/South S	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
								1								
								,								
Major Street: North-South																
Vehicle Volumes and Adju	Eastbound Westbound Northbound Southbound															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	12	8		0	12	38	0	4	768	0	0	13	691	4
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	10			N	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		14		9		14		43		5				15		
Capacity, c (veh/h)		84		590		83		552		788				732		
v/c Ratio		0.16		0.02		0.16		0.08		0.01				0.02		
95% Queue Length, Q ₉₅ (veh)		0.6		0.0		0.6		0.3		0.0				0.1		
Control Delay (s/veh)		56.2		11.2		56.6		12.1		9.6				10.0		
Level of Service (LOS)		F		В		F		В		A				В		
Approach Delay (s/veh)		38	8.2			22	2.8			0	.0			0	.2	
Approach LOS			E			(С									

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		Н	CS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	ВМВ						Inters	ection			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV	Consultir	a				Jurisc	liction			Coun	tv				
Date Performed	3/28/	23	.9				East/	West Str	eet		W Lir	ndmore (St			
Analysis Year	2035						North	n/South	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store		,			. ,						
Lanes			-													
								1								
								J								
Major Street: North-South																
Vehicle Volumes and Adju	justments Eastbound Westbound Northbound Southbound															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	15	10		0	15	40	0	5	811	0	0	15	736	5
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	lo			Ν	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice					<u>.</u>		<u>.</u>				<u>.</u>		
Flow Rate, v (veh/h)		17		11		17		45		6				17		
Capacity, c (veh/h)		71		567		71		531		752				700		
v/c Ratio		0.24		0.02		0.24		0.09		0.01				0.02		
95% Queue Length, Q ₉₅ (veh)		0.9		0.1		0.9		0.3		0.0				0.1		
Control Delay (s/veh)		71.1		11.5		71.8		12.4		9.8				10.3		
Level of Service (LOS)		F		В		F		В		A				В		
Approach Delay (s/veh)		4	7.3			28	3.6			0).1			. 0	.2	
Approach LOS			E			[)									

		Н	CS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information					_		Site	Infor	natio	n					_	_
Analyst	BMB						Inters	ection			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV C	Consultir	ıq				Jurisc	liction			Coun	ty				
Date Performed	3/28/	23					East/	West Str	eet		W Lin	ndmore S	St			
Analysis Year	2035						North	n/South :	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
Major Street: North-South																
Vehicle Volumes and Adju	Eastbound Westbound Northbound Southbound															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	15	10		0	15	45	0	5	910	0	0	16	820	5
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	10			N	lo			Ν	10			N	0	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		17		11		17		51		6				18		
Capacity, c (veh/h)		52		527		52		488		690				633		
v/c Ratio		0.33		0.02		0.33		0.10		0.01				0.03		
95% Queue Length, Q ₉₅ (veh)		1.4		0.1		1.4		0.4		0.0				0.1		
Control Delay (s/veh)		106.9		12.0		108.1		13.2		10.3				10.9		
Level of Service (LOS)		F		В		F		В		В				В		
Approach Delay (s/veh)		68	3.9			37	7.0			0	.1			0	.2	
Approach LOS			F			-	E									

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		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	section			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV	Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		W Lin	dmore S	St			
Analysis Year	2045						North	n/South :	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
]								
	Major Street: North-South															
Vehicle Volumes and Adju	ustments Eastbound Westbound Northbound Southboun															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	18	12		0	18	49	0	6	979	0	0	18	888	6
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	10			N	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		20		14		20		56		7				20		
Capacity, c (veh/h)		41		497		40		459		643				590		
v/c Ratio		0.50		0.03		0.51		0.12		0.01				0.03		
95% Queue Length, Q_{95} (veh)		2.5		0.1		2.5		0.4		0.0				0.1		
Control Delay (s/veh)		176.6		12.4		179.8		13.9		10.7				11.3		
Level of Service (LOS)		F		В		F		В		В				В		
Approach Delay (s/veh)		11	0.9			58	3.5			0).1			0	.2	
Approach LOS			F				F									

		Н	CS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_		
Analyst	BMB						Inters	ection			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV C	Consultin	a				Jurisc	liction			Coun	ty				
Date Performed	3/28/	23	5				East/	West Stre	eet		W Lin	dmore S	St			
Analysis Year	2045						North	n/South S	Street		Hwy	65				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
]								
								1								
	e Volumes and Adjustments															
Vehicle Volumes and Adju	Eastbound Westbound Northbound Southbound															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	18	12		0	18	54	0	6	1078	0	0	19	972	6
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	lo			N	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		20		14		20		61		7				22		
Capacity, c (veh/h)		29		462		29		421		590				533		
v/c Ratio		0.70		0.03		0.70		0.15		0.01				0.04		
95% Queue Length, Q ₉₅ (veh)		3.7		0.1		3.8		0.5		0.0				0.1		
Control Delay (s/veh)		332.9		13.0		340.3		15.0		11.2				12.0		
Level of Service (LOS)		F		В		F		В		В				В		
Approach Delay (s/veh)		20	4.9			96	5.3			0	.1			0	.2	
Approach LOS			F				F									

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		Н	ICS7	Two	-Way	' Sto	p-Co	ntrol	l Rep	ort						
General Information						_	Site	Infor	matio	n					_	_
Analyst	BMB						Inters	section			Hwy	65/W Tu	ılare Rd			
Agency/Co.	LAV	Consultir	ng				Juriso	diction			Cour	nty				
Date Performed	3/28/	/23	-				East/	West Str	eet		Hwy	65				
Analysis Year	2023						North	n/South	Street		W Tu	lare Rd				
Time Analyzed	AM F	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	vsis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	ast-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastk	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	1		0	0	0		1	0	1
Configuration		L	Т				Т	R						L		R
Volume (veh/h)		108	875				960	55						14		114
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)														()	
Right Turn Channelized						١	٩٥							Ν	lo	
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2										İ		3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	1	123							<u> </u>	16		130				
Capacity, c (veh/h)		274												22		254
v/c Ratio		0.45												0.74		0.51
95% Queue Length, Q ₉₅ (veh)		2.4												3.7		3.0
Control Delay (s/veh)		28.7												464.0		33.7
Level of Service (LOS)		D												F		D
Approach Delay (s/veh)		3	.1								-			80).7	
Approach LOS															F	

		Н	ICS7	Two	-Way	v Sto	p-Co	ntrol	l Rep	ort						
General Information							Site	Infor	matio	n					_	_
Analyst	BMB						Inters	section			Hwv	65/W Tu	lare Rd			
Agency/Co.	LAV	Consultir	ng				Juriso	liction			Coun	ity				
Date Performed	3/28/	/23	5				East/	West Str	eet		Hwy	65				
Analysis Year	2023						North	n/South	Street		W Tu	lare Rd				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	vsis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	ast-West									
Vehicle Volumes and Adj	ustme	nts														
Approach	T	Eastb	ound			West	bound		1	North	bound		1	South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	1		0	0	0		1	0	1
Configuration		L	Т				Т	R						L		R
Volume (veh/h)		130	987				1098	55						14		130
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)														(כ	
Right Turn Channelized						1	No							Ν	lo	
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice	i i												
Flow Rate, v (veh/h)		148												16		148
Capacity, c (veh/h)		216												7		205
v/c Ratio		0.68												2.12		0.72
95% Queue Length, Q ₉₅ (veh)		5.6												7.4		6.3
Control Delay (s/veh)		55.6												3183.9		64.1
Level of Service (LOS)		F												F		F
Approach Delay (s/veh)		6	.5											36	7.4	
Approach LOS		_													F	

		Н	ICS7	Two	-Way	v Sto	p-Co	ntrol	l Rep	ort						
General Information							Site	Infor	matio	n					_	
Analyst	ВМВ						Inters	ection			Hwy	65/W Tu	ılare Rd			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Cour	nty				
Date Performed	3/28/	/23	-				East/	West Str	eet		Hwy	65				
Analysis Year	2025						North	n/South	Street		W Tu	Ilare Rd				
Time Analyzed	AM F	eak Hou	ır				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	e Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	ist-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	oound			West	bound			North	nbound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	1		0	0	0		1	0	1
Configuration		L	Т				Т	R						L		R
Volume (veh/h)		112	909				997	57						15		118
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)														()	
Right Turn Channelized						1	١o							Ν	lo	
Median Type Storage				Undi	ivided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2							İ			İ		3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice	,												
Flow Rate, v (veh/h)	1	127							<u> </u>		<u> </u>	<u> </u>	<u> </u>	17		134
Capacity, c (veh/h)		256												17		240
v/c Ratio		0.50							1			1		0.99		0.56
95% Queue Length, Q ₉₅ (veh)		2.8												5.0		3.6
Control Delay (s/veh)		32.7												819.0		38.5
Level of Service (LOS)		D												F		E
Approach Delay (s/veh)		3	.6							-				12	6.6	
Approach LOS															F	

		Н	ICS7	Two	-Way	v Sto	p-Co	ntrol	l Rep	ort						
General Information							Site	Infor	matio	n						
Analyst	BMB						Inters	section			Hwy	65/W Tu	ılare Rd			
Agency/Co.	LAV	Consultir	ng				Juriso	diction			Coun	ity				
Date Performed	3/28/	/23	-				East/	West Str	eet		Hwy	65				
Analysis Year	2025						North	n/South	Street		W Tu	lare Rd				
Time Analyzed	AM F	eak Hou	ır + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	/sis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
				_				_								
					_											
					Maj	or Street: Ea	ast-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastk	bound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	1		0	0	0		1	0	1
Configuration		L	Т				Т	R						L		R
Volume (veh/h)		134	1021				1135	57						15		134
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)														()	
Right Turn Channelized						1	No							Ν	lo	
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)		152												17		152
Capacity, c (veh/h)		202												5		194
v/c Ratio		0.75												3.34		0.79
95% Queue Length, Q ₉₅ (veh)		7.1												8.9		7.9
Control Delay (s/veh)		71.9												5768.5		82.5
Level of Service (LOS)		F												F		F
Approach Delay (s/veh)		8	8.3											65	4.9	
Approach LOS	1														F	

		Ļ	<u>CS7</u>	Two	-\//av	v Sta	n-Co	ntrol	Rop	ort						
	_			100-	-vvay	5.0			пер		_	_	_	_	_	
General Information							Site	Infor	natio	n						
Analyst	BMB						Inters	section			Hwy	65/W Tu	lare Rd			
Agency/Co.	LAV C	Consultir	ng				Jurisc	liction			Coun	ity				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2035						North	n/South	Street		W Tu	lare Rd				
Time Analyzed	AM P	eak Hou	ır				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	ast-West									
Vehicle Volumes and Adju	ustme	nts			.,											
Approach	<u> </u>	Eastk	bound			West	bound			North	bound		<u> </u>	South	bound	
Movement	U	Eastbound Westbound Northbound Southbound U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T R U L T L													Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	1		0	0	0		1	0	1
Configuration		L	Т				Т	R						L		R
Volume (veh/h)		136	1103				1210	69						18		144
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%))	
Right Turn Channelized						١	١o							Ν	lo	
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)	<u> </u>	2.2										<u> </u>		3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		155							<u> </u>					20		164
Capacity, c (veh/h)		174												2		172
v/c Ratio		0.89												11.77		0.95
95% Queue Length, Q ₉₅ (veh)		11.2												11.9		13.6
Control Delay (s/veh)		133.6												23503.		174.0
Level of Service (LOS)		F												ے ۲		F
Approach Delay (c/yeh)		1.	4 7											274	56.2	
Approach LOS		1.												270	F	

		Н	ICS7	Two	-Way	v Sto	p-Co	ntrol	Rep	ort						
General Information							Site	Inform	natio	n					_	_
Analyst	BMB	_	_	_	_	_	Inters	ection	_	_	Hwy	65/W Tu	ılare Rd	_	_	_
Agency/Co.	LAV	Consultir	ng				Juriso	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2035						North	n/South	Street		W Tu	lare Rd				
Time Analyzed	AM F	Peak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	ast-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	1		0	0	0		1	0	1
Configuration		L	Т				Т	R						L		R
Volume (veh/h)		158	1215				1348	69						18		160
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized						1	٥V							Ν	10	
Median Type Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)		180												20		182
Capacity, c (veh/h)		137														139
v/c Ratio		1.31														1.31
95% Queue Length, Q ₉₅ (veh)		30.3														30.4
Control Delay (s/veh)		689.1														680.3
Level of Service (LOS)		F														F
Approach Delay (s/veh)		7	9.3													
Approach LOS																

		Н	ICS7	Two	-Way	' Sto	p-Co	ntro	l Rep	ort						
General Information						_	Site	Infor	matio	n					_	_
Analyst	BMB						Inters	section			Hwy	65/W Tu	ılare Rd			
Agency/Co.	LAV	Consultir	ng				Jurisc	liction			Coun	ity				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
 Analysis Year	2045						North	n/South	Street		W Tu	lare Rd				
Time Analyzed	AM F	Peak Hou	ır				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	vsis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes			-													
					Maj	or Street: Ea	ast-West									
Vehicle Volumes and Adj	ustme	ents														
Approach	Τ	Eastb	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	1		0	0	0		1	0	1
Configuration		L	Т				Т	R						L		R
Volume (veh/h)		164	1330				1459	84						21		173
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized						1	٧o							Ν	10	
Median Type Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, an	d Leve	el of S	ervice													
Flow Rate, v (veh/h)		186												24		197
Capacity, c (veh/h)		110														117
v/c Ratio		1.70														1.69
95% Queue Length, Q ₉₅ (veh)		44.6														46.3
Control Delay (s/veh)		1368.1														1342.0
Level of Service (LOS)		F														F
Approach Delay (s/veh)		15	50.2													
Approach LOS																

		Н	ICS7	Two	-Way	v Sto	р-Со	ntrol	Rep	ort						
General Information	neral Information alyst BMB ancy/Co. LAV Consulting a Performed 3/28/23									n	_	_	_	_		
Analyst	BMB						Inters	ection			Hwy	65/W Tu	ılare Rd			
Agency/Co.	LAV	Consultir	ng				Jurisc	liction			Coun	ity				
Date Performed	3/28,	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2045						North	n/South	Street		W Tu	lare Rd				
Time Analyzed	AM F	Peak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
				_				_								
					Maj	or Street: Ea	ast-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	1		0	0	0		1	0	1
Configuration		L	Т				Т	R						L		R
Volume (veh/h)		186	1442				1597	84						21		189
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized	<u> </u>					1	No							Ν	10	
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice	ı.												
Flow Rate, v (veh/h)	Τ	211												24		215
Capacity, c (veh/h)		86														94
v/c Ratio		2.45														2.29
95% Queue Length, Q ₉₅ (veh)		67.3														65.5
Control Delay (s/veh)		2725.3														2437.1
Level of Service (LOS)		F														F
Approach Delay (s/veh)		31	1.4												-	
Approach LOS																

General Inform	nation								Inte	ersect	ion Info	ormatio	on	4	- 4 - 1 - 4 - 1 -	¥
Agency		LAV Consulting							Du	ration,	h	0.250)		4 4	
Analyst		BMB		Analys	is Date	Mar 2	28, 202	3	Are	еа Туре	Э	Other		4		4
Jurisdiction		County		Time F	Period	AM F Proi	eak Ho	ur +	PH	IF		0.88		4 1 4	W + E	↓ ↓ ↓
Urban Street		Hwy 65		Analvs	is Yea	· 2045			Ana	alvsis I	Period	1> 7:	00			- F
Intersection		Hwy 65/W Tulare R	d	File Na	ame	Hwy	65 and	W Tul	are F	, Rd 204	5 AM+F	Proj-Mi	igated		1 1 4 M	۲ ۲
Project Descrip	tion	,								-	-	· ·	5	1 1		
· ·														1		
Demand Inform	nation				EB			V	/B			NB			SB	
Approach Move	ement			L	Т	R	L	-	Т	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			186	1442			15	597	84				21	0	189
Signal Informa	tion													_		\mathbf{A}
Cycle, s	120.0	Reference Phase	2										1	4 2	3	4
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.	0	0.0	0.0			<u>x</u>		
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.	0	0.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.	0	0.0	0.0		5	6	7	8
				EDI		EDT		.		(D.T.	NIDI	_	NET	0.00	_	0.5.7
Timer Results				EBL	-	EBI	W	3L	W	BI	NBL		NBT	SBI	-	SBI
Assigned Phase	e				\rightarrow	2	<u> </u>		(6		\rightarrow				4
Case Number						6.0			8	.0				<u> </u>		11.0
Phase Duration	, S					98.8			98	3.8						21.2
Change Period,	, (Y+R)	c), S				4.0			4	.0						4.0
Max Allow Head	dway(A	MAH), s				0.0			0	.0						0.0
Queue Clearan	ce Time	e (g s), s				0.0			0	.0						0.0
Green Extensio	n Time	(ge),s				0.0			0	.0						0.0
Phase Call Prol	bability					0.00			0.	00						0.00
Max Out Proba	bility					0.00			0.	00						0.00
Movement Gro	un Ros	aulte			EB			\\//	R			NB			SB	
Approach Move	ment	Juito			Т	R		Т		R	1	T	R	1	Т	R
Assigned Move	ment			5	2		-	6	+	16	-			7	4	14
Adjusted Flow F	Rate (v) veh/h		0	0			0	+	0				-	0	0
Adjusted Satura	ation Flo	w Rate (s) veh/h/l	n	0	0	<u> </u>		0	+	0				<u> </u>	0	0
	Time ((γ_{s}) s		0.0	0.0		-		,	0.0				<u> </u>	0.0	0.0
	learance	e Time (a_c) s		0.0	0.0	<u> </u>	-	0.0	, ,	0.0					0.0	0.0
Green Ratio (a	\sqrt{C}	o nino (g c), o		0.79	0.0			0.7	9 9	0.79				<u> </u>	0.0	0.0
Capacity(c)	/eh/h			204	2857	<u> </u>	-	150		1474				<u> </u>	260	231
Volume-to-Cap	acity Ra	utio (X)		0.993	0.549			0.61		1618					0.088	0.889
Back of Queue	(Ω) ft/	(In (95 th percentile)		360.3	198.9			254	2 2	256.9				<u> </u>	25.7	284.9
Back of Queue	(Q), u	eh/ln (95 th percenti	le)	14.4	8.0	<u> </u>		10.	2	10.3					1.0	11.4
Queue Storage	Ratio (RQ) (95 th percent	ile)	0.00	0.00			0.0	0	0.00					0.00	0.00
Uniform Delay ((d1).s	/veh	,	36.4	4.7			5.1	1	5.2					44.6	50.5
Incremental De	lay (d 2), s/veh		61.3	0.8	<u> </u>		1.9	3	2.0					0.1	19.7
Initial Queue De	cremental Delay (d ₂), s/veh							0.0)	0.0					0.0	0.0
Control Delav (control Delay (<i>d</i> 3), s/ven							7.0)	7.1					44.6	70.2
Level of Service	evel of Service (LOS)							A		A					D	E
Approach Delay	pproach Delay, s/veh / LOS					В	7	1	4	A	0.0		1	67.6	3	E
Intersection De	ntersection Delay, s/ven / LOS					1	4.8				0.0			B		-
	Isection Delay, s/ven / LOS						-									
Multimodal Re	timodal Results							W	В			NB			SB	
Pedestrian LOS	Score	/LOS		1.32	2	А	1.8	84	E	в	2.16		В	2.32	2	В
Bicycle LOS Sc	ore / LC	DS		1.95	5	В	2.0	00	E	В				0.86	6	А

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	-				East/	West Str	eet		Hwy	137				
Analysis Year	2023						North	/South	Street		Road	180				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	156	0		0	148	0		12	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)						°					0	°			0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice			-										
Flow Rate, v (veh/h)		0				0					16				3	
Capacity, c (veh/h)		1200				1393					595				655	
v/c Ratio		0.00				0.00					0.03				0.01	
95% Queue Length, Q₃₅ (veh)		0.0				0.0					0.1				0.0	
Control Delay (s/veh)		8.0				7.6					11.2				10.5	
Level of Service (LOS)		A				A					В				В	
Approach Delay (s/veh)		C	0.0			0	.0			1	1.2			. 1().5	
Approach LOS											В				В	

		Н	CS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information					_		Site	Infor	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	Iq				Jurisc	liction			Coun	ty				
Date Performed	3/28/	23					East/	West Str	eet		Hwy	, 137				
Analysis Year	2023						North	n/South	Street		Road	180				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes			-													
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ıstme	nts			.,											
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	199	0		0	189	0		12	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0			(0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		0				0					16				3	
Capacity, c (veh/h)		1120				1336					516				583	
v/c Ratio		0.00				0.00					0.03				0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.1				0.0	
Control Delay (s/veh)		8.2				7.7					12.2				11.2	
Level of Service (LOS)		A				A					В				В	
Approach Delay (s/veh)		. 0	.0			0	.0			1:	2.2			1'	1.2	
Approach LOS								1		В				B		

HCS T TWSC Version 7.9.5 Hwy 137 and Road 180 2023 AM+Proj.xtw

		Н	CS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inform	natio	n						_
Analyst	ВМВ						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	ıg				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	137				
Analysis Year	2025						North	n/South	Street		Road	180				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	162	0		0	154	0		12	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0			()	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of Se	ervice					<u> </u>		<u> </u>	<u> </u>					
Flow Rate, v (veh/h)		0				0					16				3	
Capacity, c (veh/h)		1188				1385					583				644	
v/c Ratio		0.00				0.00					0.03				0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.1				0.0	
Control Delay (s/veh)		8.0				7.6					11.3				10.6	
Level of Service (LOS)		A				A					В				В	
Approach Delay (s/veh)		0	.0			0	.0			1'	1.3			. 1().6	
Approach LOS											В				3	

		Н	ICS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information					_		Site	Infor	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	137				
Analysis Year	2025						North	n/South	Street		Road	180				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	205	0		0	195	0		12	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		0				0					16				3	
Capacity, c (veh/h)		1109				1329					506				573	
v/c Ratio		0.00				0.00					0.03				0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.1				0.0	
Control Delay (s/veh)		8.2				7.7					12.3				11.3	
Level of Service (LOS)		A				A					В				В	
Approach Delay (s/veh)		0	0.0			0	.0			1:	2.3			1'	1.3	
Approach LOS										B				B		

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		Н	ICS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inform	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	137				
Analysis Year	2035						North	n/South	Street		Road	180				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	197	0		0	186	0		15	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0			()	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of Se	ervice					<u> </u>	<u> </u>		<u> </u>					
Flow Rate, v (veh/h)		0				0					19				3	
Capacity, c (veh/h)		1126				1339					519				587	
v/c Ratio		0.00				0.00					0.04				0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.1				0.0	
Control Delay (s/veh)		8.2				7.7					12.2				11.2	
Level of Service (LOS)		A				A					В				В	
Approach Delay (s/veh)		0	.0			0	.0			12	2.2			1'	1.2	
Approach LOS											В		İ		3	

		Н	ICS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information					_		Site	Infor	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	<u> </u>				East/	West Str	eet		Hwy	, 137				
Analysis Year	2035						North	n/South	Street		Road	180				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store						1					
Lanes																
					Mai	or Street: Ea	st-West									
Vehicle Volumes and Adju	ustme	nts			.,											
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	240	0		0	227	0		15	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											C				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0				0					19				3	
Capacity, c (veh/h)		1050				1285					449				522	
v/c Ratio		0.00				0.00					0.04				0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.1				0.0	
Control Delay (s/veh)		8.4				7.8					13.4				11.9	
Level of Service (LOS)		A				A					В				В	
Approach Delay (s/veh)		C	0.0			0	.0			13	3.4	-		- 1'	1.9	-
Approach LOS											В				В	

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		Н	CS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inform	natio	n						_
Analyst	ВМВ						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	ıg				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	5				East/	West Str	eet		Hwy	, 137				
Analysis Year	2045						North	n/South	Street		Road	180				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
	_	_	_	_				_	_	_	_	_	_	_	_	_
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	237	0		0	225	0		18	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0			()	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		0				0					23				3	
Capacity, c (veh/h)		1054				1288					451				525	
v/c Ratio		0.00				0.00					0.05				0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.2				0.0	
Control Delay (s/veh)		8.4				7.8					13.4				11.9	
Level of Service (LOS)		A				A					В				В	
Approach Delay (s/veh)		0	.0			0	.0			13	3.4			1'	1.9	
Approach LOS											В				3	

		Н	ICS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	na				Jurisc	liction			Coun	ty				
Date Performed	3/28/	23					East/	West Str	eet		Hwy	, 137				
Analysis Year	2045						North	n/South :	Street		Road	180				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes			-													
					Mai	or Street: Ea	st-West									
Vehicle Volumes and Adju	ıstme	nts			.,											
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	280	0		0	268	0		18	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice										<u>.</u>			
Flow Rate, v (veh/h)		0				0					23				3	
Capacity, c (veh/h)		980				1236					389				465	
v/c Ratio		0.00				0.00					0.06				0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.2				0.0	
Control Delay (s/veh)		8.7				7.9					14.8				12.8	
Level of Service (LOS)		A				A					В				В	
Approach Delay (s/veh)		0	0.0	-		0	.0			14	4.8	-		12	2.8	
Approach LOS										В			I	3		

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		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	23	<u> </u>				East/	West Str	eet		Hwy	137				
Analysis Year	2023						North	n/South	Street		Road	188				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	224	4		0	332	20		0	8	0		16	4	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)						°					0	°			0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice			-										
Flow Rate, v (veh/h)		14				0					9				23	
Capacity, c (veh/h)		850				1300					350				350	
v/c Ratio		0.02				0.00					0.03				0.06	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.1				0.2	
Control Delay (s/veh)		9.3				7.8					15.6				16.0	
Level of Service (LOS)		A				A					С				С	
Approach Delay (s/veh)		C	.6			0	.0			1!	5.6			1(5.0	
Approach LOS										(с				С	

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		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information					_		Site	Inforr	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	, 137				
Analysis Year	2023						North	n/South :	Street		Road	188				
Time Analyzed	AM P	eak Hou	ır + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	oound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	271	4		0	377	23		0	8	0		19	4	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0			(C	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		14				0					9				26	
Capacity, c (veh/h)		784				1242					302				296	
v/c Ratio		0.02				0.00					0.03				0.09	
95% Queue Length, Q ₉₅ (veh)		0.1				0.0					0.1				0.3	
Control Delay (s/veh)		9.7				7.9					17.3				18.3	
Level of Service (LOS)		A				A					C				С	
Approach Delay (s/veh)		C).6			0	.0			1	7.3			18	3.3	
Approach LOS											С			(2	

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		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	137				
Analysis Year	2025						North	n/South :	Street		Road	188				
Time Analyzed	AM P	eak Hou	ır				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	East-'	West					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes			-													
Vehicle Volumes and Adj	ustme	nts			Maj	or Street: Ea	st-West									
Approach		Eastb	oound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	233	4		0	345	21		0	8	0		17	4	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0			. (0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	d Leve	l of S	ervice				,	,						,		
Flow Rate, v (veh/h)	<u> </u>	14				0					9				24	
Capacity, c (veh/h)		831				1288					337				337	
v/c Ratio		0.02				0.00					0.03				0.07	
95% Queue Length, Q ₉₅ (veh)		0.1				0.0					0.1				0.2	
Control Delay (s/veh)		9.4				7.8					16.0				16.5	
Level of Service (LOS)		А				А					С				С	
Approach Delay (s/veh)		0).6			0	.0			16	5.0			16	6.5	1
Approach LOS											С			(С	

		Н	ICS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information					_		Site	Inforr	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	23					East/	West Str	eet		Hwy	, 137				
Analysis Year	2025						North	n/South :	Street		Road	188				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes			-													
					Mai	or Street: Ea	st-West									
Vehicle Volumes and Adju	ıstme	nts			.,											
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	280	4		0	390	24		0	8	0		20	4	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0			(0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		14				0					9				27	
Capacity, c (veh/h)		766				1231					291				284	
v/c Ratio		0.02				0.00					0.03				0.10	
95% Queue Length, Q ₉₅ (veh)		0.1				0.0					0.1				0.3	
Control Delay (s/veh)		9.8				7.9					17.8				19.0	
Level of Service (LOS)		A				A					С				С	
Approach Delay (s/veh)			.6			0	.0			1	7.8			19	9.0	
Approach LOS											с			(С	

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		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	23	-				East/	West Str	eet		Hwy	137				
Analysis Year	2035						North	/South	Street		Road	188				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		15	282	5		0	418	25		0	10	0		20	5	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)						°					0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of Se	ervice			-										
Flow Rate, v (veh/h)		17				0					11				28	
Capacity, c (veh/h)		729				1228					273				264	
v/c Ratio		0.02				0.00					0.04				0.11	
95% Queue Length, Q ₉₅ (veh)		0.1				0.0					0.1				0.4	
Control Delay (s/veh)		10.1				7.9					18.8				20.3	
Level of Service (LOS)		В				A					С				С	
Approach Delay (s/veh)		0	.8			0	.0			- 18	3.8			20	0.3	
Approach LOS											С				С	
		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
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General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV	Consultir	na				Jurisc	liction			Coun	tv				
Date Performed	3/28/	/23	.9				East/	West Str	eet		Hwy	137				
Analysis Year	2035						North	n/South	Street		Road	188				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes			-													
Vehicle Volumes and Adju	ustme	nts			Maj	or Street: Ea	st-West									
Approach		Eastb	ound			West	bound		1	North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	10	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		15	329	5		0	463	28		0	10	0		23	5	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys							<u> </u>							
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice		,											
Flow Rate, v (veh/h)		17				0					11				32	
Capacity, c (veh/h)		672				1173					234				222	
v/c Ratio		0.03				0.00					0.05				0.14	
95% Queue Length, Q ₉₅ (veh)		0.1				0.0					0.2				0.5	
Control Delay (s/veh)		10.5				8.1					21.2				23.9	
Level of Service (LOS)		В				A					С				С	
Approach Delay (s/veh)		0	.8			0	.0			2	1.2			23	3.9	
Approach LOS	0.0 0.0										с				с	

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		Н	ICS7	Two	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inform	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	-				East/	West Str	eet		Hwy	137				
Analysis Year	2045						North	n/South	Street		Road	188				
Time Analyzed	AM P	eak Hou	ır				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	Volumes and Adjustments Eastbound Westbound Northbound Southbound															
Approach		Eastb	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		18	340	6		0	505	30		0	12	0		24	6	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)				°							0	°			0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		20				0					14				34	
Capacity, c (veh/h)		623				1160					211				196	
v/c Ratio		0.03				0.00					0.06				0.17	
95% Queue Length, Q ₉₅ (veh)		0.1				0.0					0.2				0.6	
Control Delay (s/veh)		11.0				8.1					23.3				27.2	
Level of Service (LOS)		В				A					С				D	
Approach Delay (s/veh)		. 1	.0			0	.0			23	3.3			2	7.2	
Approach LOS										(с			l)	

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		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV	Consultir	na				Jurisc	liction			Coun	tv				
Date Performed	3/28/	/23	.9				East/	West Str	eet		Hwy	137				
Analysis Year	2045						North	n/South	Street		Road	188				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store		,			. ,						
Lanes	<u> </u>		-													
					_											
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		18	387	6		0	550	33		0	12	0		27	6	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		20				0					14				38	
Capacity, c (veh/h)		575				1108					180				164	
v/c Ratio		0.04				0.00					0.08				0.23	
95% Queue Length, Q ₉₅ (veh)		0.1				0.0					0.2				0.9	
Control Delay (s/veh)		11.5				8.2					26.6				33.4	
Level of Service (LOS)		В				A					D				D	
Approach Delay (s/veh)		. 1	.0			0	.0			2	5.6			33	3.4	
Approach LOS	1.0 0.0										D				D	

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		Н	ICS7	Two-	-Way	' Stop	p-Co	ntrol	l Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	matio	n	_	_	_	_	_	
Analyst	BMB						Inters	ection			N Sp	ruce Ave	/Acacia	Ave		
Agency/Co.	LAV	Consultir	na				Jurisc	liction			Coun	tv	,			
Date Performed	3/28/	/23	.9				East/	West Str	eet		Acaci	a Ave				
Analysis Year	2023						North	n/South	Street		N Spi	ruce Ave				
Time Analyzed	AM P	eak Hou	ır				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store		,			. ,						
Lanes			,													
								1								
								J								
Major Street: North-South																
Vehicle Volumes and Adjustments Westhound Northhound Southhound																
Approach		Eastk	oound			West	bound		North	bound			South	bound		
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	9		2	2	2		21	507	1		0	412	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type Storage				Left	Only								1			
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)			11				7			24				0		
Capacity, c (veh/h)			490				292			1063				967		
v/c Ratio			0.02				0.02			0.02				0.00		
95% Queue Length, Q₃₅ (veh)			0.1				0.1			0.1				0.0		
Control Delay (s/veh)			12.5				17.6			8.5				8.7		
Level of Service (LOS)			В				С			A				A		
Approach Delay (s/veh)		1	2.5			1	7.6			0	.6			0	.0	
Approach LOS							1									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	
Analyst	BMB	_	_	_	_	_	Inters	ection	_	_	N Spi	ruce Ave	/Acacia	Ave	_	
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Acaci	a Ave				
Analysis Year	2023						North	n/South	Street		N Spi	ruce Ave				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
]								
Major Street: North-South Vehicle Volumes and Adjustments																
Vehicle Volumes and Adjustments																
Approach	Eastbound Westbound Northbound Southbound															
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	10		2	2	2		24	562	1		0	458	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)			13				7			27				0		
Capacity, c (veh/h)			453				254			1016				916		
v/c Ratio			0.03				0.03			0.03				0.00		
95% Queue Length, Q ₉₅ (veh)			0.1				0.1			0.1				0.0		
Control Delay (s/veh)			13.2				19.6			8.6				8.9		
Level of Service (LOS)			В				С			A				A		
Approach Delay (s/veh)		1	3.2			19	9.6			. 0	.7			0	.0	
Approach LOS			В			(С									
					-				-				-			

		H	ICS7	Two	-Way	' Stop	o-Co	ntrol	l Rep	ort						
General Information							Site	Infor	matio	n						
Analyst	BMB						Inters	ection			N Spi	ruce Ave	/Acacia	Ave		
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty	,	-		
Date Performed	3/28/	/23					East/	West Str	eet		Acaci	a Ave				
Analysis Year	2025	-					North	n/South	Street		N Sp	ruce Ave				
Time Analyzed	AM P	eak Hou	ır				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-S	Store		,			. ,						
lanes	-		,													
	Major Street: North-South Vehicle Volumes and Adjustments															
Approach Easthound Westhound Northbound Southbound																
Approach		Eastk	bound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	9		2	2	2		22	527	1		0	428	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type Storage				Left	Only								1			
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	1		11				7			25			<u> </u>	0		
Capacity, c (veh/h)			474				278		<u> </u>	1046				948		-
v/c Ratio			0.02				0.02			0.02				0.00		
95% Queue Lenath. O.s. (veh)			0.1				0.1			0.1				0.0		
Control Delay (s/veh)			12.8				18.3			8.5				8.8	 	-
Level of Service (LOS)			R				с.,			Δ				Δ		
Approach Delay (s/veh)		1	28			11	83			0	6			 	0	
Approach LOS	-		B				с									
	1															

	HCS7 Two-Way Stop-Control Report neral Information Site Information															
General Information							Site	Inforr	natio	n						
Analyst	BMB						Inters	ection			N Spi	ruce Ave	/Acacia	Ave		
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Acaci	a Ave				
Analysis Year	2025						North	/South	Street		N Spi	ruce Ave				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
								1								
								1								
								1.0								
Major Street: North-South																
Major Street: North-South Vehicle Volumes and Adjustments																
venicle volumes and Adju	justments Eastbound Westbound Northbound Southbound															
Approach	Eastbound Westbound Northbound Southbound															
Movement	U		T	R	U	L	T	R	U		T	R	U	L	T	R
Priority		10	11	12		7	8	9	10	1	2	3	40	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	L
Volume (veh/h)		0	1	10		2	2	2		25	582	1		0	474	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)			13				7			28				0		
Capacity, c (veh/h)			438				241			1000				898		
v/c Ratio			0.03				0.03			0.03				0.00		
95% Queue Length, Q ₉₅ (veh)			0.1				0.1			0.1				0.0		
Control Delay (s/veh)			13.5				20.3			8.7				9.0		
Level of Service (LOS)			В				С			A				A		
Approach Delay (s/veh)		1:	3.5			20	0.3			0	.7			0	.0	
Approach LOS			В			(С			-						
									1							

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	
Analyst	BMB						Inters	ection			N Sp	ruce Ave	/Acacia	Ave		
Agency/Co.	LAV	Consultir	na				Jurisc	liction			Coun	tv	,			
Date Performed	3/28/	/23	.9				East/	West Str	eet		Acaci	a Ave				
Analysis Year	2035						North	/South	Street		N Spi	ruce Ave				
Time Analyzed	AM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store		,			. ,						
Lanes			,													
								1								
								J								
Major Street: North-South																
Vehicle Volumes and Adjustments Approach Eastbound Westbound Northbound Southbound																
Approach	Eastbound Westbound Northbound Southbound														bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	11		3	3	3		26	639	1		0	519	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type Storage				Left	Only								1			
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)			14				10			30				0		
Capacity, c (veh/h)			405				210			957				849		
v/c Ratio			0.03				0.05			0.03				0.00		
95% Queue Length, Q ₉₅ (veh)			0.1				0.2			0.1				0.0		
Control Delay (s/veh)			14.2				23.0			8.9				9.2		
Level of Service (LOS)			В				С			A				A		
Approach Delay (s/veh)		14	4.2			23	3.0			. 0	.8			0	.0	
Approach LOS	B C												1			

		_							_							
	HCS7 Two-Way Stop-Control Report															
General Information							Site	Inforr	natio	n						
Analyst	BMB	_	_	_	_	_	Inters	ection	_	_	N Spi	ruce Ave	/Acacia	Ave		
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Acaci	a Ave				
Analysis Year	2035						North	/South	Street		N Spi	ruce Ave				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
								1								
Major Street: North-South																
Major Street: North-South Vehicle Volumes and Adjustments																
Approach	Eastbound Westbound Northbound Southbound															
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	1	12		3	3	3		29	694	1		0	565	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		
Proportion Time Blocked																
Percent Grade (%)		1	0				0					1				<u> </u>
Right Turn Channelized																
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)			15				10			33				0		
Capacity, c (veh/h)			373				181			914				804		
v/c Ratio			0.04				0.06			0.04				0.00		
95% Queue Length. O₀₅ (veh)			0.1				0.2			0.1				0.0		
Control Delav (s/veh)			15.1				26.1			9.1				9.5		
Level of Service (LOS)			C				D			A				A		
Approach Delay (s/veh)	-	1	5.1			24	5.1		-		.9			0	.0	
Approach LOS	15.1 26.1													0		
			-													

		Н	ICS7	Two-	-Way	' Stop	p-Co	ntrol	l Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	matio	n	_	_	_	_	_	
Analyst	BMB						Inters	ection			N Sp	ruce Ave	/Acacia	Ave		
Agency/Co.	LAV	Consultir	na				Jurisc	liction			Coun	tv	,			
Date Performed	3/28/	/23	.9				East/	West Str	eet		Acaci	a Ave				
Analysis Year	2045						North	n/South	Street		N Spi	ruce Ave				
Time Analyzed	AM F	eak Hou	ır				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	Nort	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
Major Street: North-South																
Vehicle Volumes and Adjustments Vestbound Northbound Southbound																
Approach	Eastbound Westbound Northbound So														bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	2	14		3	3	3		32	771	2		0	626	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type Storage				Left	Only								1			
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	d Leve	l of S	ervice	l .												
Flow Rate, v (veh/h)			18				10			36				0		
Capacity, c (veh/h)			284				147			861				744		
v/c Ratio			0.06				0.07			0.04				0.00		
95% Queue Length, Q ₉₅ (veh)			0.2				0.2			0.1				0.0		
Control Delay (s/veh)			18.5				31.3			9.4				9.8		
Level of Service (LOS)			С				D			A				A		
Approach Delay (s/veh)		1	8.5			3.	1.3			1	.1			0	.0	
Approach LOS			C				D									

		Н	ICS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_		
Analyst	BMB	_	_	_	_	_	Inters	ection	_	_	N Spi	ruce Ave	/Acacia	Ave		
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Acaci	a Ave				
Analysis Year	2045						North	n/South	Street		N Spi	ruce Ave				
Time Analyzed	AM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
]								
Major Street: North-South																
Vehicle Volumes and Adjustments																
Approach	Eastbound Westbound Northbound Southbound															
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	2	15		3	3	3		35	826	2		0	672	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	l Leve	l of S	ervice				<u>.</u>		<u> </u>	<u>.</u>	<u>.</u>	<u> </u>		<u>.</u>		
Flow Rate, v (veh/h)			19				10			40				0		
Capacity, c (veh/h)			257				125			823				705		
v/c Ratio			0.08				0.08			0.05				0.00		
95% Queue Length, Q ₉₅ (veh)			0.2				0.3			0.2				0.0		
Control Delay (s/veh)			20.2				36.3			9.6				10.1		
Level of Service (LOS)			С				E			A				В		
Approach Delay (s/veh)		2	0.2			36	5.3			1	.3			0	.0	
Approach LOS			С				E									

		HCS7	' All-W	Vay Sto	ор Сог	ntrol R	leport								
General Information					Site In	format	ion								
Analyst	BMB				Intersec	tion			N Spruc	e Ave/Syca	moreAve				
Agency/Co.	LAV Cor	nsulting			Jurisdic	tion			County						
Date Performed	3/28/23				East/We	est Street			Sycamo	re Ave					
Analysis Year	2023				North/S	outh Stree	t		N Spruc	e Ave					
Analysis Time Period (hrs)	0.25				Peak Ho	our Factor			0.92						
Time Analyzed	AM Pea	k Hour													
Project Description	TIS for L	indsay Gas	Station C-	-Store											
Lanes															
Vehicle Volume and Adjustments Approach Eastbound Westbound Northbound Southbound															
Approach		Eastbound Westbound Northbound Southbound													
Movement	L	Т	R	L	T	R	L	Т	R	L	Т	R			
Volume	16	128	92	4	164	52	32	420	0	44	400	4			
% Thrus in Shared Lane															
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3			
Configuration	LTR			LTR			LTR			LTR					
Flow Rate, v (veh/h)	257			239			491			487					
Percent Heavy Vehicles	2			2			2			2					
Departure Headway and Se	rvice Ti	me													
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20					
Initial Degree of Utilization, x	0.228			0.213			0.437			0.433					
Final Departure Headway, hd (s)	8.26			8.42			7.52			7.53					
Final Degree of Utilization, x	0.589			0.559			1.027			1.018					
Move-Up Time, m (s)	2.0			2.0			2.0			2.0					
Service Time, ts (s)	6.26			6.42			5.52			5.53					
Capacity, Delay and Level o	f Servic	e													
Flow Rate, v (veh/h)	257			239			491			487					
Capacity	436			428			478			478					
95% Queue Length, Q ₉₅ (veh)	3.7			3.3			14.4			14.1					
Control Delay (s/veh)	22.4			21.6			75.9			73.4					
Level of Service, LOS	С			С			F			F					
Approach Delay (s/veh)		22.4	-		21.6	-		75.9			73.4	-			
Approach LOS		С			С			F			F				
Intersection Delay, s/veh LOS		C C F F													

		HCS7	' All-W	/ay Sto	эр Сог	ntrol R	leport					
General Information					Site In	format	ion					
Analyst	BMB				Intersec	tion			N Spruc	e Ave/Syca	moreAve	
Agency/Co.	LAV Cor	nsulting			Jurisdic	tion			County			
Date Performed	3/28/23				East/We	est Street			Sycamo	re Ave		
Analysis Year	2023				North/S	outh Stree	t		N Spruc	e Ave		
Analysis Time Period (hrs)	0.25				Peak Ho	our Factor			0.92			
Time Analyzed	AM Pea	k Hour + P	roject									
Project Description	TIS for L	indsay Ga	Station C-	Store								
Lanes												
						1						
Vehicle Volume and Adjustr	nents											
Approach		Eastbound	1		Westbound	d	, I	Northboun	d	9	Southboun	d
Movement	L	Т	R	L	Т	R	L	Т	R	L	Т	R
Volume	16	128	99	5	164	52	35	464	0	44	432	4
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	264			240			542			522		
Percent Heavy Vehicles	2			2			2			2		
Departure Headway and Se	rvice Ti	me										
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.235			0.214			0.482			0.464		
Final Departure Headway, hd (s)	8.24			8.44			7.53			7.53		
Final Degree of Utilization, x	0.604			0.563			1.134			1.091		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	6.24			6.44			5.53			5.53		
Capacity, Delay and Level of	f Servic	e										
Flow Rate, v (veh/h)	264			240			542			522		
Capacity	437			427			478			478		
95% Queue Length, Q ₉₅ (veh)	3.9			3.4			18.8			17.0		
Control Delay (s/veh)	23.0			21.8			109.7			95.1		
Level of Service, LOS	С			С			F			F		
Approach Delay (s/veh)		23.0			21.8			109.7			95.1	
Approach LOS		С			С			F			F	

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Intersection Delay, s/veh | LOS

76.8

F

		HCS7	' All-W	/ay Sto	ор Сог	ntrol R	eport							
General Information		Site In	format	ion										
Analyst	BMB				Intersec	tion			N Spruc	e Ave/Syca	moreAve			
Agency/Co.	LAV Cor	nsulting			Jurisdic	tion			County					
Date Performed	3/28/23				East/We	est Street			Sycamo	re Ave				
Analysis Year	2025				North/S	outh Stree	t		N Spruc	e Ave				
Analysis Time Period (hrs)	0.25				Peak Ho	our Factor			0.92					
Time Analyzed	AM Pea	k Hour												
Project Description	TIS for L	indsay Gas	Station C-	Store										
Lanes														
						1								
Vehicle Volume and Adjust	nents													
Approach	T	Eastbound	1		Westbound			Northboun	d		Southboun	d		
Movement	L	Т	R	L	Т	R	L	Т	R	L	Т	R		
Volume	17	133	96	4	170	54	33	436	0	46	416	4		
% Thrus in Shared Lane														
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3		
Configuration	LTR			LTR			LTR			LTR				
Flow Rate, v (veh/h)	267			248			510			507				
Percent Heavy Vehicles	2			2			2			2				
Departure Headway and Se	ervice Ti	me												
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20				
Initial Degree of Utilization, x	0.238			0.220			0.453			0.450				
Final Departure Headway, hd (s)	8.29			8.46			7.59			7.59				
Final Degree of Utilization, x	0.616			0.582			1.075			1.068				
Move-Up Time, m (s)	2.0			2.0			2.0			2.0				
Service Time, ts (s)	6.29			6.46			5.59			5.59				
Capacity, Delay and Level o	f Servic	ρ												
Flow Rate, v (veh/h)	267			248			510			507				
Capacity	434			426			474			474				
95% Queue Length, Q ₉₅ (veh)	4.0			3.6			16.2			16.0				
Control Delav (s/veh)	23,7			22.6			90.4			88.3				
Level of Service, LOS	C			C			F			F				
Approach Delay (s/veh)		23.7	I		22.6	I		90.4	I		88.3	I		
Approach LOS		С			С			F			F			
Intersection Delay, s/veh LOS			6	7.1						F				

		HCS7	' All-W	Vay Sto	op Cor	ntrol R	leport					
General Information					Site In	format	ion					
Analyst	BMB				Intersec	tion			N Spruc	e Ave/Syca	moreAve	
Agency/Co.	LAV Cor	nsulting			Jurisdict	tion			County			
Date Performed	3/28/23				East/We	est Street			Sycamo	re Ave		
Analysis Year	2025				North/S	outh Stree	t		N Spruc	e Ave		
Analysis Time Period (hrs)	0.25				Peak Ho	our Factor			0.92			
Time Analyzed	AM Pea	k Hour + P	roject		<u> </u>							
Project Description	TIS for L	indsay Gas	Station C-	-Store								
Lanes												
Vehicle Volume and Adjustn	nonts						_	_	_	_	_	
		Facthours	1	1	Westhour			Vorthbour	4		outhbour	4
Approach												u D
Volumo	L 17	122	к 102		170	R E4	26	190	R	L 16	110	R
% Thrus in Shared Lane	17	155	105		170	<u> </u>	50	400	0	40	-++0	-
	11	12	13	11	12	13	11	12	13	11	12	13
Configuration	ITR			ITR			ITR			ITR		
Elow Bate v (veh/h)	275			249			561			541		
Percent Heavy Vehicles	2			2			2			2		
Departure Headway and Se	rvice Ti	me	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
Initial Departure Headway, hd (s)	3 20			3 20			3 20			3 20		
Initial Degree of Utilization, x	0.244			0.221			0.499			0.481		
Final Departure Headway, hd (s)	8 30			8.51			7.67			7.67		
Final Degree of Utilization, x	0.634			0.589			1.194			1.153		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	6.30			6.51			5.67			5.67		
Capacity, Delay and Level of	- Servic	e	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		
Elow Rate y (yeh/h)	275			2/19			561			541		
Capacity	434			423			470			470		
95% Oueue Length One (veh)	43			37			21.3			19.4		
Control Delay (s/veh)	24.6			23.0			132.1			116.9		
Level of Service, LOS	C			C			F			F		
Approach Delay (s/veh)	_	24.6		-	23.0			132.1			116.9	
Approach LOS		С			С			F			F	

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Intersection Delay, s/veh | LOS

92.1

F

		HCS7	' All-W	Vay Sto	ор Соі	ntrol R	leport					
General Information					Site In	format	ion					
Analyst	BMB				Intersec	tion			N Spruc	e Ave/Syca	moreAve	
Agency/Co.	LAV Cor	nsulting			Jurisdic	tion			County			
Date Performed	3/28/23				East/We	est Street			Sycamo	re Ave		
Analysis Year	2035				North/S	outh Stree	t		N Spruc	e Ave		
Analysis Time Period (hrs)	0.25				Peak Ho	our Factor			0.92			
Time Analyzed	AM Pea	k Hour			<u>.</u>							
Project Description	TIS for L	indsay Gas	s Station C-	-Store								
Lanes												
						1						
Vehicle Volume and Adjust	ments											
Approach		Eastbound	1		Westboun	d	1	Northboun	d	9	Southboun	d
Movement	L	Т	R	L	Т	R	L	Т	R	L	Т	R
Volume	20	161	116	5	207	66	40	529	0	55	504	5
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	323			302			618			613		
Percent Heavy Vehicles	2			2			2			2		
Departure Headway and Se	ervice Ti	me										
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.287			0.269			0.550			0.545		
Final Departure Headway, hd (s)	8.70			8.87			8.39			8.39		
Final Degree of Utilization, x	0.780			0.745			1.442			1.429		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	6.70			6.87			6.39			6.39		
Capacity, Delay and Level o	f Servic	e										
Flow Rate, v (veh/h)	323			302			618			613		
Capacity	414			406			429			429		
95% Queue Length, Q ₉₅ (veh)	6.7			6.0			31.1			30.5		
Control Delay (s/veh)	36.4			33.6			234.7			229.4		
Level of Service, LOS	E			D			F			F		
Approach Delay (s/veh)		36.4			33.6			234.7			229.4	
Approach LOS		E			D			F			F	
Intersection Delay, s/veh LOS			16	5.7						F		

		HCS7	7 All-W	lay Sto	ор Соі	ntrol R	leport									
General Information					Site In	format	ion									
Analyst	BMB				Intersec	tion			N Spruc	e Ave/Syca	imoreAve					
Agency/Co.	LAV Cor	nsulting			Jurisdic	tion			County							
Date Performed	3/28/23				East/We	est Street			Sycamo	re Ave						
Analysis Year	2035				North/S	South Stree	t		N Spruc	e Ave						
Analysis Time Period (hrs)	0.25				Peak Ho	our Factor			0.92							
Time Analyzed	AM Pea	k Hour + P	Project													
Project Description	TIS for L	indsay Ga	s Station C-	-Store												
Lanes																
	nents Eastbound Westbound Northbound Southbound															
Vehicle Volume and Adjustr	nents	ents														
Approach		Fasthound	4		Westhoun	d		Northboun			Southboun	d				
Movement		т	R		т	R		т	R	· ·	т	R				
Volume	20	161	123	6	207	66	/3	573	0	55	536	5				
% Thrus in Shared Lane	20		123	Ŭ	207	00		515	0	55	550	5				
Lane	11	12	13	11	12	13	11	12	13	11	12	13				
Configuration	LTR			LTR			LTR			LTR						
Flow Rate, v (veh/h)	330			303			670			648						
Percent Heavy Vehicles	2			2			2			2						
Departure Headway and Se	rvice Ti	me	<u> </u>		<u> </u>	<u> </u>		<u> </u>	<u> </u>		<u> </u>	<u> </u>				
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20						
Initial Degree of Utilization, x	0.294			0.270			0.595			0.576						
Final Departure Headway, hd (s)	8.71			8.92			8.46			8.46						
Final Degree of Utilization, x	0.799			0.752			1.573			1.522						
Move-Up Time, m (s)	2.0			2.0			2.0			2.0						
Service Time, ts (s)	6.71			6.92			6.46			6.46						
Capacity, Delay and Level of	f Servic	e														
Flow Rate, v (veh/h)	330			303			670			648						
Capacity	413			404			426			426						
95% Queue Length, Q₀₅ (veh)	7.1			6.1			37.2			34.8						
Control Delay (s/veh)	38.5			34.4			290.8			268.9						
Level of Service, LOS	E			D			F			F						
Approach Delay (s/veh)		38.5			34.4	-		290.8	-		268.9					

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Е

Approach LOS

Intersection Delay, s/veh | LOS

200.9

D

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		HCS7	' All-W	Vay Sto	ор Соі	ntrol R	leport					
General Information					Site In	format	ion					
Analyst	ВМВ				Intersec	tion			N Spruc	ce Ave/Syca	moreAve	
Agency/Co.	LAV Cor	nsulting			Jurisdic	tion			County			
Date Performed	3/28/23				East/We	est Street			Sycamo	ore Ave		
Analysis Year	2045				North/S	outh Stree	t		N Spruc	ce Ave		
Analysis Time Period (hrs)	1.00				Peak Ho	our Factor			0.92			
Time Analyzed	AM Pea	k Hour										
Project Description	TIS for L	indsay Gas	Station C-	-Store								
Lanes												
Vehicle Volume and Adjust	ments											
Approach		Eastbounc	I		Westboun	d	I	Northboun	d	9	Southboun	d
Movement	L	Т	R	L	Т	R	L	Т	R	L	Т	R
Volume	24	195	140	6	249	79	49	636	0	57	608	6
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	390			363			745			729		
Percent Heavy Vehicles	2			2			2			2		
Departure Headway and Se	ervice Ti	me										
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.347			0.323			0.662			0.648		
Final Departure Headway, hd (s)	9.25			9.46			9.53			9.53		
Final Degree of Utilization, x	1.003			0.954			1.971			1.930		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	7.25			7.46			7.53			7.53		
Capacity, Delay and Level o	of Servic	e										
Flow Rate, v (veh/h)	390			363			745			729		
Capacity	389			381			378			378		
95% Queue Length, Q ₉₅ (veh)	24.5			19.4			189.3			181.8		
Control Delay (s/veh)	144.0			105.0			1779.7			1706.6		
Level of Service, LOS	F			F			F			F		
Approach Delay (s/veh)		144.0			105.0	-		1779.7			1706.6	
Approach LOS		F			F			F			F	
Intersection Delay, s/veh LOS			119	- 96.2			1			F		

		HCS7	' All-V	Vay Sto	ор Со	ntrol F	Report					
General Information					Site In	nformat	ion					
Analyst	BMB				Intersed	ction			N Sprud	e Ave/Syca	amoreAve	
Agency/Co.	LAV Cor	nsulting			Jurisdic	tion			County			
Date Performed	3/28/23				East/We	est Street			Sycamo	re Ave		
Analysis Year	2045				North/S	South Stree	t		N Sprud	e Ave		
Analysis Time Period (hrs)	1.00				Peak Ho	our Factor			0.92			
Time Analyzed	AM Pea	k Hour + P	roject									
Project Description	TIS for L	indsay Ga	s Station C	-Store								
Lanes												
						_						
Vehicle Volume and Adjustr	nents											
Approach	<u> </u>	Eastbound	1		Westboun	d		Northboun	d		Southboun	d
Movement	L	Т	R	L	Т	R	L	Т	R	L	Т	R
Volume	24	195	147	7	249	79	52	682	0	67	640	6
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	398			364			798			775		
Percent Heavy Vehicles	2			2			2			2		
Departure Headway and Se	rvice Ti	me										
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.354			0.324			0.709			0.689		
Final Departure Headway, hd (s)	9.26			9.46			9.50			9.50		
Final Degree of Utilization, x	1.024			0.957			2.106			2.046		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	7.26			7.46			7.50			7.50		
Capacity, Delay and Level o	f Servic	e										
Flow Rate, v (veh/h)	398			364			798			775		
Capacity	389			380			379			379		
95% Queue Length, Q ₉₅ (veh)	26.8			19.6			215.1			203.8		
Control Delay (s/veh)	165.9			107.2			2021.7			1913.6		
Level of Service, LOS	F			F			F			F		
Approach Delay (s/veh)		165.9			107.2			2021.7			1913.6	

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F

Approach LOS

Intersection Delay, s/veh | LOS

1371.0

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F

HCS7 Signalized Intersection Results Summary

General Inform	nation								Intersed	tion Inf	ormatio	on	al al		× 1,
Agency		LAV Consulting							Duratior	ı, h	0.250			2+2	
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area Ty	с	Other		4		
Jurisdiction		County		Time F	Period	AM Pe Projec	eak Hou :t	ır +	PHF		0.88		4 1 4	W = E	1 +
Urban Street		N Spruce Ave		Analys	is Year	2045			Analysis	Period	1> 7:(00			*
Intersection		N Spruce Ave/Svca	more	File Na	ame	N Spr	uce Ave	& S\	/camore /	Ave 2045	5 AM+P	roi-mit		ो । च तक प्ला	* (*
Project Descrip	tion			I		<u> </u>		,				,	1 7		
, , ,		,											1		
Demand Inform	nation				EB			N	/B		NB			SB	
Approach Move	ement			L	Т	R	L	-	T R	L	Т	R	L	Т	R
Demand (v), v	eh/h			24	195	147	7	24	49 79	52	682	0	67	640	6
				1			_			_				1	
Signal Informa	tion		-								ļ		-+-		\rightarrow
Cycle, s	120.0	Reference Phase	2									1		3	4
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.0	0.0	0.0					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0.0	0.0		く 4			4
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0 0.0	0.0		5	6	7	8
Timor Populto			_	EDI	_	EDT	\//D			ND	_	NDT	CDI	_	ерт
Assigned Phase	<u></u>			EDL			VVD	-+			-	2		-	6
Caso Number	5					0		\rightarrow	4	1 1		2	11		3.0
Phase Number	<u>_</u>					9.0 10.9		\rightarrow	9.0	0.1		5.0 67.4	0.5		5.0 67.9
Change Duration	, S (V+D			<u> </u>		19.0		\rightarrow	23.3	9.1		4 0	9.5		4.0
Max Allow Hear		с), S MAH) s				4.0		-	4.0	4.0		4.0	4.0		4.0
	co Time	$(a_{\alpha}) \in $		<u> </u>		0.0	<u> </u>	\rightarrow	0.0	0.0		0.0	0.0		0.0
Green Extensio	n Time	(g, s), s				0.0		-	0.0	0.0		0.0	0.0		0.0
Phase Call Pro	bability	(3,), -				0.00		\rightarrow	0.00	0.00)	0.00	0.00) (0.00
Max Out Proba	bility					0.00			0.00	0.00)	0.00	0.00) (0.00
	,														
Movement Gro	oup Res	sults			EB			WE	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow F	Rate (v), veh/h		0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Satura	ation Flo	w Rate (s), veh/h/l	n	0	0	0	0	0	0	0	0	0	0	0	0
Queue Service	lime (g	gs), s ≖		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Queue C	learanc	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	/C)			0.13	0.13	0.13	0.16	0.1	6 0.16	0.57	0.53	0.53	0.57	0.53	0.53
Capacity (c), v	en/n	tic (X)		238	250	212	292	306	259	323	1004	851	308	1010	856
Volume-to-Capa		IIIO (X) /In (95 th porcontilo)		20.5	0.848	0.754	0.026	215	5 100 4	0.175	0.738	0.000	26.8	0.089	0.008
Back of Queue	$(\mathbf{Q}), \mathbf{u}$	ah/in (95 in percentie)	(ما	30.5	209.0	203.7	0.4	12	.5 100.4 6 4.0	20.5	22.7	0.0	30.0 1.5	20.5	0.1
Queue Storage	Ratio (RQ) (95 th percent	ile)	0.00	0.00	0.0	0.0	0.0		0.00	0.00	0.0	0.00	0.00	0.0
Uniform Delay ((d 1), s	/veh		45.9	50.9	50.2	42.4	49.	2 44.6	16.6	21.9	0.0	17.4	20.8	13.2
Incremental De	lav (<i>d</i> 2), s/veh		0.1	3.1	2.1	0.0	3.4	0.3	0.1	4.9	0.0	0.1	3.8	0.0
Initial Queue De	elav (d	3), s/veh	_	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delav (d), s/ve	eh		46.0	54.0	52.3	42.4	52.	6 44.9	16.7	26.7	0.0	17.6	24.6	13.2
Level of Service	e (LOS)			D	D	D	D	D	D	В	С		В	С	В
Approach Delay	, s/veh	/ LOS		52.8	3	D	50.6	3	D	26.0)	С	23.9		С
Intersection De	lay, s/ve	h / LOS				33	8.7						С		
Multimodal Re	sults				EB			WE	3		NB			SB	
Pedestrian LOS	Score	/LOS		2.16	;	В	2.14	1	В	2.09)	В	2.09		В
Bicycle LOS Sc	ore / LC	DS		1.14		А	1.09)	А	1.80)	В	1.77		В

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		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	l Rep	ort						
General Information							Site	Infor	matio	n					_	_
Analyst	ВМВ						Inters	ection			Hwy	65/Mario	old St			
Agency/Co.	LAV (Consultir	ηα				Jurisc	liction			Coun	tv				
Date Performed	3/28/	23	.9				East/	West Str	eet		Ave 2	208				
Analysis Year	2023						North	n/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	North	n-South	-				Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store					/						
lanes			,													
					_			1								
	Major Street: North-South															
Vehicle Volumes and Adiu	Major Street: North-South															
Approach		Fasth	ound			West	bound		1	North	bound			South	bound	
Movement	U	1	т	R	U		т	R	U	1	т	R	U	1	т	R
Priority		10	11	12		7	8	9	10	1	2	3	40	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	т	R		L	т	R
Volume (veh/h)		0	4	20		24	0	0	0	0	864	10	0	20	768	8
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																<u> </u>
Percent Grade (%)			0				0									<u> </u>
Right Turn Channelized		Ν	10			Ν	lo			Ν	10			N	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9	<u> </u>	4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice													<u> </u>
Flow Rate, v (veh/h)		5		23		27		0		0			<u> </u>	23		
Capacity, c (veh/h)		61		552		179		508		726				657		
v/c Ratio		0.07		0.04		0.15		0.00		0.00				0.03		
95% Queue Length, Q ₉₅ (veh)		0.2		0.1		0.5		0.0		0.0				0.1		
Control Delay (s/veh)		69.1		11.8		28.7		12.1		10.0				10.7		
Level of Service (LOS)		F		В		D		В		A				В		
Approach Delay (s/veh)		2'	1.4			28	3.7			0	.0			0	.3	
Approach LOS		(с			[D									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_		_	_		Site	Inforr	natio	n	_				_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	gold St			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	23	<u> </u>				East/	West Stre	eet		Ave 2	208				
Analysis Year	2023						North	/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
	_]	_		_				_	
Vehicle Volumes and Adju	Major Street: North-South															
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	4	20		24	0	0	0	0	933	10	0	22	834	8
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	10			Ν	10			Ν	lo			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		5		23		27		0		0				25		
Capacity, c (veh/h)		48		521		158		478		679				612		
v/c Ratio		0.10		0.04		0.17		0.00		0.00				0.04		
95% Queue Length, Q_{95} (veh)		0.3		0.1		0.6		0.0		0.0				0.1		
Control Delay (s/veh)		88.3		12.2		32.6		12.5		10.3				11.1		
Level of Service (LOS)		F		В		D		В		В				В		
Approach Delay (s/veh)		24	4.9			32	2.6			0	.0			0	.3	
Approach LOS			c				 D									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	l Rep	ort						
General Information							Site	Infor	matio	n					_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	old St			
Agency/Co.	LAV	Consultir	na				Jurisc	liction			Coun	tv	<i>joid bt</i>			
Date Performed	3/28/	23	.9				East/	West Str	eet		Ave 2	208				
Analysis Year	2025	20					North	n/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fc	or Lindsa	v Gas Sta	ation C-S	Store											
lanes			,													
					_			1								
	Major Street: North-South															
Vehicle Volumes and Adju	Major Street: North-South															
Approach		Eastb	ound			West	bound		1	North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	4	21		25	0	0	0	0	898	10	0	21	798	8
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	10			Ν	10			Ν	١o			N	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		<u> </u>
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice		,											
Flow Rate, v (veh/h)		5		24		28		0		0				24		
Capacity, c (veh/h)		54		538		168		493		704				634		
v/c Ratio		0.08		0.04		0.17		0.00		0.00				0.04		
95% Queue Length, Q ₉₅ (veh)		0.3		0.1		0.6		0.0		0.0				0.1		
Control Delay (s/veh)		77.5		12.0		30.7		12.3		10.1				10.9		
Level of Service (LOS)		F		В		D		В		В				В		
Approach Delay (s/veh)		22	2.5			30	0.7			0	0.0			0	.3	
Approach LOS		(С			[D									

		Н	ICS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	gold St			
Agency/Co.	LAV (Consultir	na				Jurisc	liction			Coun	ity	,			
Date Performed	3/28/	/23					East/	West Str	eet		Ave 2	208				
Analysis Year	2025						North	n/South :	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
]								
								- 1								
	Major Street: North-South															
Vehicle Volumes and Adju	Stments															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	4	21		25	0	0	0	0	967	10	0	23	864	8
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	10			Ν	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		5		24		28		0		0				26		
Capacity, c (veh/h)		43		508		148		464		658				591		
v/c Ratio		0.11		0.05		0.19		0.00		0.00				0.04		
95% Queue Length, Q_{95} (veh)		0.4		0.1		0.7		0.0		0.0				0.1		
Control Delay (s/veh)		99.7		12.4		35.0		12.8		10.5				11.4		
Level of Service (LOS)		F		В		E		В		В				В		
Approach Delay (s/veh)		2	6.4			35	5.0			0	.0			0	.3	
Approach LOS			D				E									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inform	natio	n	_	_	_	_	_	_
Analyst	ВМВ						Inters	section			Hwy	65/Mario	old St			
Agency/Co.	LAV	Consultir	ηα				Jurisc	liction			Coun	tv				
Date Performed	3/28/	23	.9				East/	West Str	eet		Ave 2	.08				
Analysis Year	2035						North	n/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store					- /						
lanes			,													
					_			1								
Major Street: North-South Vehicle Volumes and Adjustments																
Vehicle Volumes and Adju	Istments Eastbound Westbound Northbound Southbound															
Approach		Eastb	ound			West	bound		<u> </u>	North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	5	25		30	0	0	0	0	1089	13	0	25	968	10
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0	1								<u></u>
Right Turn Channelized		Ν	lo			Ν	lo			Ν	١o			N	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice				<u> </u>							<u> </u>		
Flow Rate, v (veh/h)		6		28		34		0		0				28		
Capacity, c (veh/h)		28		464		116		417		590				520		
v/c Ratio		0.20		0.06		0.29		0.00		0.00				0.05		
95% Queue Length, Q ₉₅ (veh)		0.7		0.2		1.2		0.0		0.0				0.2		
Control Delay (s/veh)		163.8		13.3		48.6		13.6		11.1				12.3		
Level of Service (LOS)		F		В		E		В		В				В		
Approach Delay (s/veh)		38	8.4			48	3.6			0	0.0			. 0	.3	
Approach LOS			E				E									

		Н	ICS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_			_	_	_	Site	Inforr	natio	n	_	_			_	_
Analyst	ВМВ						Inters	ection			Hwy	65/Mario	gold St			
Agency/Co.	LAV C	Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	<u> </u>				East/	West Str	eet		Ave 2	208				
Analysis Year	2035						North	n/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
]				_			_	
				_				_								
Major Street: North-South Vehicle Volumes and Adjustments																
Major Street: North-South Vehicle Volumes and Adjustments																
Vehicle Volumes and Adju	istme	nts														
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	5	25		30	0	0	0	0	1158	13	0	27	1034	10
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	10			Ν	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		6		28		34		0		0				31		
Capacity, c (veh/h)		22		438		101		393		552				484		
v/c Ratio		0.26		0.06		0.34		0.00		0.00				0.06		
95% Queue Length, Q ₉₅ (veh)		0.9		0.2		1.5		0.0		0.0				0.2		
Control Delay (s/veh)		223.1		13.8		58.5		14.2		11.5				12.9		
Level of Service (LOS)		F		В		F		В		В				В		
Approach Delay (s/veh)		48	8.7			58	3.5			0	.0			0	.3	
Approach LOS			E				F									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	gold St			
Agency/Co.	LAV C	Consultir	na				Jurisc	liction			Coun	ty	,			
Date Performed	3/28/	/23					East/	West Str	eet		Ave 2	.08				
Analysis Year	2045						North	n/South :	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
								1								
Major Street: North-South Vehicle Volumes and Adjustments																
Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	6	30		36	0	0	0	0	1313	15	0	30	1167	12
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	10			N	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice	i i												
Flow Rate, v (veh/h)		7		34		41		0		0				34		
Capacity, c (veh/h)		13		390		65		343		480				411		
v/c Ratio		0.53		0.09		0.63		0.00		0.00				0.08		
95% Queue Length, Q_{95} (veh)		2.0		0.3		3.8		0.0		0.0				0.3		
Control Delay (s/veh)		530.2		15.1		143.5		15.5		12.5				14.5		
Level of Service (LOS)		F		С		F		С		В				В		
Approach Delay (s/veh)		10	1.0			14	3.5			0	.0			0	.4	
Approach LOS			F				F									

		Н	CS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_		_	_	_		Site	Inforr	natio	n	_	_			_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	gold St			
Agency/Co.	LAV (Consultir	g				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Ave 2	208				
Analysis Year	2045						North	/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
	_]								
				_				_								
Major Street: North-South Vehicle Volumes and Adjustments																
Vehicle Volumes and Adjustments Approach Eastbound Westbound Northbound Southbound																
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	6	30		36	0	0	0	0	1382	15	0	32	1233	12
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			. (0									
Right Turn Channelized		Ν	10			Ν	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		7		34		41		0		0				36		
Capacity, c (veh/h)		10		368		47		323		448				383		
v/c Ratio		0.69		0.09		0.86		0.00		0.00				0.10		
95% Queue Length, Q ₉₅ (veh)		2.5		0.3		6.4		0.0		0.0				0.3		
Control Delay (s/veh)		812.8		15.8		321.8		16.2		13.0				15.4		
Level of Service (LOS)		F		С		F		С		В				С		
Approach Delay (s/veh)		14	8.6			32	1.8			0	0.0			0	.4	
Approach LOS			F				F									

		Н	ICS7	Two	-Way	' Sto	p-Co	ntrol	l Rep	ort						
General Information							Site	Inform	matio	n						_
Analyst	BMB						Inters	section			Hwy	65/Ceda	ir Ave			
Agency/Co.	LAV (Consultir	ng				Juriso	liction			Coun	ity				
Date Performed	3/28/	/23	<u> </u>				East/	West Str	eet		Hwy	65				
Analysis Year	2023						North	n/South	Street		Ceda	r Ave				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
	Major Street: East-West															
Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		0	636				600	0						0		0
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0													0	
Capacity, c (veh/h)		558														
v/c Ratio		0.00														
95% Queue Length, Q ₉₅ (veh)		0.0														
Control Delay (s/veh)		11.4														
Level of Service (LOS)		В														
Approach Delay (s/veh)		0	.0													
Approach LOS																

		Н	ICS7	Two	-Way	' Sto	p-Co	ntrol	l Rep	ort						
General Information							Site	Infor	matio	n						_
Analyst	BMB						Inter	section			Hwy	65/Ceda	ir Ave			
Agency/Co.	LAV (Consultir	ng				Juriso	diction			Coun	ity				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2023						Nort	n/South	Street		Ceda	r Ave				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	/sis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store					. ,						
Lanes			-													
					Maj	or Street: Ea	ast-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastk	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		121	636				656	0						130		56
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice)												
Flow Rate, v (veh/h)		138													211	
Capacity, c (veh/h)		507													89	
v/c Ratio		0.27													2.36	
95% Queue Length, Q ₉₅ (veh)		1.1													65.8	
Control Delay (s/veh)		14.7													2564.7	
Level of Service (LOS)		В													F	
Approach Delay (s/veh)		2	4											250	64.7	
Approach LOS															F	

		Н	ICS7	Two	-Way	' Sto	p-Co	ntrol	l Rep	ort						
General Information							Site	Inform	matio	n						_
Analyst	BMB						Inters	section			Hwy	65/Ceda	ir Ave			
Agency/Co.	LAV (Consultir	ng				Juriso	liction			Coun	ity				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2025						North	n/South	Street		Ceda	r Ave				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-S	Store											
Lanes																
					Maji	or Street: Ea	ast-West									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastk	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		0	661				623	0						0		0
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice													·
Flow Rate, v (veh/h)		0													0	
Capacity, c (veh/h)		537														
v/c Ratio		0.00														
95% Queue Length, Q ₉₅ (veh)		0.0														
Control Delay (s/veh)		11.7														
Level of Service (LOS)		В														
Approach Delay (s/veh)		C	0.0							1						
Approach LOS																

		Н	ICS7	Two	-Way	' Sto	p-Co	ntrol	l Rep	ort						
General Information						_	Site	Infor	matio	n						_
Analyst	ВМВ						Inters	ection			Hwy	65/Ceda	ir Ave			
Agency/Co.	LAV	Consultir	ng				Jurisc	liction			Coun	ity				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2025						North	n/South	Street		Ceda	r Ave				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-	Store											
Lanes																
					Maj	or Street: Ea	sst-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	bound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		121	661				679	0						130		56
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice					<u> </u>	-			-		<u>.</u>		
Flow Rate, v (veh/h)	T	138													211	
Capacity, c (veh/h)		488													82	
v/c Ratio		0.28													2.58	
95% Queue Length, Q ₉₅ (veh)		1.2													69.4	
Control Delay (s/veh)		15.3													2970.2	
Level of Service (LOS)		С													F	
Approach Delay (s/veh)		2	2.4							1				29	70.2	
Approach LOS					1										F	

		Н	CS7	Two	-Way	' Sto	p-Co	ntrol	l Rep	ort						
General Information						_	Site	Inform	matio	n						_
Analyst	BMB						Inters	section			Hwy	65/Ceda	ir Ave			
Agency/Co.	LAV (Consultir	Iq				Juriso	liction			Coun	ity				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2035						North	n/South	Street		Ceda	r Ave				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store					. ,						
Lanes			-													
Vehicle Volumes and Adju	ustme	nts			Maj	or Street: Ea	ast-West									
Approach		Eastk	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		0	801				756	0						0		0
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)		0													0	
Capacity, c (veh/h)		428														
v/c Ratio		0.00														
95% Queue Length, Q ₉₅ (veh)		0.0														
Control Delay (s/veh)		13.4														
Level of Service (LOS)		В														
Approach Delay (s/veh)		C	.0													
Approach LOS																

		Н	ICS7	Two	-Way	' Sto	p-Co	ntrol	l Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	matio	n	_	_	_	_	_	_
Analyst	ВМВ						Inters	ection			Hwy	65/Ceda	r Ave			
Agency/Co.	LAV	Consultir	ng				Juriso	liction			Coun	ity				
Date Performed	3/28/	/23	5				East/	West Str	eet		Hwy	65				
Analysis Year	2035						North	n/South	Street		Ceda	r Ave				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West	-				Analy	sis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-S	Store						1					
Lanes																
					Maj	or Street: Ea	ast-West									
Vehicle Volumes and Adj	ustme	ents														
Approach		Eastb	bound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		121	801				812	0						130		56
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice	•												
Flow Rate, v (veh/h)		138													211	
Capacity, c (veh/h)		389													48	
v/c Ratio		0.35													4.42	
95% Queue Length, Q ₉₅ (veh)		1.6													85.5	
Control Delay (s/veh)		19.3													6341.0	
Level of Service (LOS)		C													F	
Approach Delay (s/veh)		2	2.5	-		_		-				-		634	41.0	
Approach LOS														F		

		Н	ICS7	Two	-Way	' Sto	p-Co	ntrol	l Rep	ort						
General Information						_	Site	Inform	matio	n						_
Analyst	BMB						Inters	section			Hwy	65/Ceda	r Ave			
Agency/Co.	LAV (Consultir	ng				Juriso	liction			Coun	ity				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2045						North	n/South	Street		Ceda	r Ave				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-S	Store											
Lanes			-													
					Maji	or Street: Ea	ast-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		0	967				912	0						0		0
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice		<u>.</u>				-		-	-		<u>.</u>		
Flow Rate, v (veh/h)		0													0	
Capacity, c (veh/h)		327														
v/c Ratio		0.00														
95% Queue Length, Q ₉₅ (veh)		0.0														
Control Delay (s/veh)		16.0														
Level of Service (LOS)		С														
Approach Delay (s/veh)		C	0.0							1						
Approach LOS																

		H	ICS7	Two-	-Way	' Stoj	p-Co	ntrol	Rep	ort						
General Information							Site	Infor	natio	n						
Analyst	BMB						Inters	section			Hwy	65/Ceda	r Ave			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ity				
Date Performed	3/28/	/23	5				East/	West Str	eet		Hwy	65				
Analysis Year	2045						North	n/South	Street		Ceda	r Ave				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					_											
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	oound			West	bound			North	bound			South	bound	_
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	10	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		0	1	0
Configuration		L	Т					TR							LR	
Volume (veh/h)		121	967				968	0						130		56
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)		1	1			<u> </u>	1	1		1	1	I			0	<u>.</u>
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	vs														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2				-						<u> </u>		3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay Queue Length and	l l eve		ervice													
Flow Bate y (yeb/b)		138					1		1	1		1			211	
Capacity c (veh/h)		297										-			24	<u> </u>
v/c Batio		0.46													8.97	
95% Queue Length, Qor (veh)		25													97.2	<u> </u>
Control Delay (s/veh)		27.4													14681	
															7	
Level of Service (LOS)		D													F	
Approach Delay (s/veh)		3	8.0											146	81.7	
Approach LOS															F	
	Iformation		-								-					
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General Inform	nation								Inte	ersect	ion Info	rmatio	on		┙╡┵╪╸╷	þa l _{al}
Agency		LAV Consulting							Du	ration,	h	0.250)		1 k	
Analyst		BMB		Analys	sis Date	e Mar 2	28, 2023		Are	ea Type	Э	Othe	r	4		x 4
Jurisdiction		County		Time F	Period	PM P Proi	eak Hou	ır +	PH	IF		0.88		1 1 1	W H E	↓ ↓ ↓
Urban Street		Hwy 65		Analys	sis Yea	r 2045			An	alysis l	Period	1> 7:	00			
Intersection		Hwy 65/Cedar Ave		File Na	ame	Hwy	65 and C	Cedar	Ave	e 2045	PM+Pro	oj-Mitig	ated.xu	s	াৰা কিপি	7 4
Project Descrip	tion															
		0					11							-0 -1/		
Demand Inform	nation				EB			W	/B			NB			SB	u
Approach Move	ment			L	Т	R	L		Г	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			121	967			96	68	0				130	0	56
	<u>tion</u>				1			1		1			1			
	100 0	Deference Dhase	2											~		
Cycle, s	120.0	Reference Priase	Z End										1	⇒ 2	3	4
Unseed, S	U No	Simult Con E/M	Enu	Green	0.0	0.0	0.0	0.0	0	0.0	0.0			<u> </u>		
	Tived	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0	0.0	0.0	_	_		_	
Force Mode	Fixed	Simult. Gap N/S	On	Rea	0.0	0.0	0.0	0.0	0	0.0	0.0		5	6	7	8
Timer Results	_		_	FBI		FBT	WB	1	W	/BT	NBI		NBT	SB		SBT
Assigned Phase						2		-		6					_	4
Case Number						6.0		-	8	0						11.0
Phase Duration	s					104.6			10	4.6						15.4
Change Period	, 3 (V+R)		S			4 0	<u> </u>	-	4	. 0						4.0
Max Allow Hear	way (A	MAH)s	. s .H), s			0.0	-		ب 0	0						0.0
		$(a_{\alpha}) \in $			0.0	<u> </u>	-	0	.0						0.0	
Green Extensio	n Time	$(q_{s}), s$				0.0	-	-	0	0		-				0.0
Phase Call Prot	nahility	(90),0				0.00	<u> </u>	-	0	00						0.00
Max Out Proba	hility					0.00			0.	00						0.00
	omry					0.00			0.							0.00
Movement Gro	up Res	sults			EB			WE	3			NB			SB	
Approach Move	ement			L	Т	R	L	Т		R	L	Т	R	L	Т	R
Assigned Move	ment			5	2			6		16				7	4	14
Adjusted Flow F	Rate (<i>v</i>), veh/h		0	0			0							0	0
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	n	0	0			0							0	0
Queue Service	Time (g	g s), s		0.0	0.0			0.0)						0.0	0.0
Cycle Queue C	learance	e Time (<i>g c</i>), s		0.0	0.0			0.0)						0.0	0.0
Green Ratio (g	/C)			0.84	0.84										0.09	0.09
Capacity (c), v	eh/h			407	1593										172	153
Volume-to-Capa	acity Ra	itio(X)		0.323	0.660			0.00	00						0.822	0.398
Back of Queue	(Q), ft/	/In (95 th percentile))	73.6	188.9			0							188.5	75.8
Back of Queue	(Q), ve	eh/In (95 th percenti	ile)	2.9	7.6			0.0)						7.5	3.0
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00			0.0	0						0.00	0.00
Uniform Delay (d 1), si	/veh		10.4	3.5		<u> </u>								53.3	51.1
Incremental De	mental Delay (<i>d</i> ₂), s/veh			2.1	2.2			0.0)						3.7	0.6
Initial Queue De	nitial Queue Delay (d 3), s/veh			0.0	0.0			0.0							0.0	0.0
Control Delay (control Delay (d), s/veh			12.5	5.7									_	57.0	51.7
Level of Service	e (LOS)	DS)			A							_			E	D
Approach Delay	ay, s/veh / LOS			6.4		A	5.7		-	A	0.0			55.	4	E
Intersection Del	ay, s/ve	en / LOS			1	0.2							В			
Multimodal Re	sults							WF	3			NB			SB	
Pedestrian I OS	Score	/ LOS	OS			A	1.83	2	F	в	1.74		В	1.9	6	В
Bicycle LOS Sc	ore / LC)S	S			В	2.22	2	F	в		+	-	0.8	2	A
,																

General Inform	nation								Interse	ction	Info	ormatio	on	2		¥ ¥
Agency		LAV Consulting							Duratic	n, h		0.250			44	
Analyst		BMB		Analys	is Date	e Mar 2	8, 2023		Area T	/pe		Other		4		× ↓
Jurisdiction		County		Time F	Period	PM			PHF			0.88			WHE	
Urban Street		Hwy 65		Analys	is Yea	r 2023			Analys	s Peri	iod	1> 7:0	00			T I
Intersection		Hwy 65/Hwy 137		File Na	ame	Hwy 6	5 and ⊦	lwy 1	37 2023	PM.x	us				5 10	4
Project Descrip	tion			л										1	* 1 4 1	7 4
Demand Inform	nation				EB			N	/B			NB			SB	
Approach Move	ement			L	Т	R	L	-	T R		L	Т	R	L	T	R
Demand (v), v	eh/h			21	427	58	11	4	51 12	9	75	137	19	264	247	15
				i											_	
Signal Informa	tion	(1										x	A		-
Cycle, s	120.0	Reference Phase	2										1	2	3	\mathbf{Y}_{4}
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.	0.0) (0.0					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.	0 0.0) (0.0			→	•	Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.	0 0.0) (0.0	_	5	Y 6	7	8
			_							-						0.5.7
Timer Results				EBL	-	EBI	WB		WBI	+	NBL	-	NBI	SBL	-	SBI
Assigned Phase	9			1		6	5	_	2	+		_	4		_	8
Case Number				2.0	_	3.0	2.0	-	3.0	+-			10.0		_	10.0
Phase Duration	, S	`		7.2		/1.3	6.0	_	70.1	+			17.1	<u> </u>	_	25.6
Change Period,	(Y+R)	c), S		4.0	_	4.0	4.0	_	4.0	+		_	4.0	<u> </u>		4.0
Max Allow Head	dway(/	MAH), s		0.0		0.0	0.0	_	0.0	+-			0.0		_	0.0
Queue Clearan	eue Clearance Time (g_s), s					0.0	0.0	\rightarrow	0.0	+-		_	0.0	<u> </u>	_	0.0
Green Extensio	een Extension Time ($g e$), s					0.0	0.0	\rightarrow	0.0	+-			0.0	<u> </u>	_	0.0
Phase Call Prol	Dability			0.00		0.00	0.00)	0.00	+			0.00	<u> </u>	_	0.00
Max Out Proba	bility			0.00		0.00	0.00)	0.00				0.00			0.00
Movement Gro	oup Res	sults			EB			W	3			NB			SB	
Approach Move	ement				T	R	1	Т	R			T	R	1	Т	R
Assigned Move	ment			1	6	16	5	2	12		7	4	14	3	8	18
Adjusted Flow F	Rate (v), veh/h		0	0	0	0	0	0	()	0		0	0	
Adjusted Satura	ation Flo	w Rate (s), veh/h/	n	0	0	0	0	0	0)	0		0	0	
Queue Service	Time (d	(s). S		0.0	0.0	0.0	0.0	0.0) 0.0	0.	.0	0.0		0.0	0.0	
Cvcle Queue C	learanc	e Time (<i>q</i> c). s		0.0	0.0	0.0	0.0	0.0	0.0	0.	.0	0.0		0.0	0.0	
Green Ratio (g	/C)			0.03	0.56	0.56	0.02	0.5	5 0.55	0.	11	0.11		0.18	0.18	
Capacity (c), v	/ veh/h			48	1066	903	30	104	6 887	19	98	203		326	339	
Volume-to-Cap	acity Ra	itio (X)		0.473	0.436	0.070	0.402	0.46	69 0.15	3 0.4	12	0.835		0.881	0.841	
Back of Queue	(Q), ft/	/In (95 th percentile))	32.1	298.5	35.7	17.3	32	5 86.2	10	3.4	221.9		333.2	326.6	
Back of Queue	(Q), ve	eh/In (95 th percent	ile)	1.3	11.9	1.4	0.7	13.	0 3.4	4	.1	8.9		13.3	13.1	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.0	0 0.00	0.0	00	0.00		0.00	0.00	
Uniform Delay (niform Delay (<i>d</i> 1), s/veh				15.3	12.0	58.4	16.	3 13.3	49	9.8	52.4		47.9	47.5	
Incremental Delay (d_2), s/veh				2.7	1.3	0.1	3.2	1.5	5 0.4	0.	.5	3.4		3.1	2.2	
Initial Queue Delay (d 3), s/veh				0.0	0.0	0.0	0.0	0.0) 0.0	0.	.0	0.0		0.0	0.0	
Control Delay (d), s/veh				60.2	16.6	12.2	61.7	17.	8 13.7	50).4	55.8		51.0	49.7	
Level of Service (LOS)				E	В	В	E	В	В		5	Е		D	D	
Approach Delay, s/veh / LOS				17.9		В	17.7	7	В		54.0		D	50.4		D
Intersection De				31	.6							С				
Multimodal Re			EB			W	3			NB			SB			
Pedestrian LOS	n LOS Score / LOS					В	1.90)	В		2.14		В	2.16	6	В
Bicycle LOS Sc	ore / LC	DS		1.40		А	1.55	5	В		0.90		А	1.43	3	А

General Inform	nation								Inters	ecti	ion Info	ormatio	on	_		⊨ L <u>a</u>
Agency		LAV Consulting							Durati	on,	h	0.250			** \$	k
Analyst		BMB		Analys	sis Date	e Mar 2	8, 2023		Area ⁻	Гуре	;	Other		<u></u> 4 →7		×_ 12
Jurisdiction		County		Time F	Period	PM +	Project		PHF			0.88			W SE	
Urban Street		Hwy 65		Analys	sis Year	r 2023			Analy	sis F	Period	1> 7:(00			* ~
Intersection		Hwy 65/Hwy 137		File Na	ame	Hwy 6	5 and ⊢	lwy 1	37 202	3 PI	M+Proj	.xus			ካቱ	
Project Descrip	tion													ľ	41441	× 1*
		•		-												
Demand Inform	nation				EB			N	/B			NB			SB	
Approach Move	ement			L	Т	R	L		Г	R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			21	468	58	12	49	98 1	43	75	137	21	288	247	15
	4 1010													-		
Signal Informa	tion		0										7	$ \rightarrow $		sta
Cycle, s	120.0	Reference Phase	2										1	2	3	
Offset, s	0		Ena	Green	0.0	0.0	0.0	0.0	0 0	.0	0.0					
	INO	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0 0	.0	0.0			\rightarrow		Φ
Force Mode	Fixed	Simult. Gap N/S	On	Rea	0.0	0.0	0.0	0.0	0 0	.0	0.0		5	Y 6	7	8
Timor Posults			_	ERI	_	ERT	\//R					_		SBI		SBT
Assigned Phase				1	-	6	5		2	-	NDL	-		30	-	8
Case Number	<u> </u>			2.0		3.0	2.0	\rightarrow	20	+			- 10.0			10.0
Phase Duration	s			7.2		69.3	6.1	-+	68.2	+			17.3			27.3
Change Period	, 3 (V+R	~) s		4.0		4.0	4.0	-+	4.0	+			4.0		-	4.0
Max Allow Hear	way (I	ΜΔΗ) s		4.0		0.0	4.0	-	0.0	-			0.0			0.0
Queue Clearan	ce Time	$(a_s)_s$	0.0		0.0	0.0	\rightarrow	0.0	+			0.0			0.0	
Green Extensio	n Time	(g;),c	0.0		0.0	0.0	-+	0.0				0.0			0.0	
Phase Call Pro	ension Time (g e), s Probability)	0.00	0.0	,	0.00	+			0.00	<u> </u>		0.00
Max Out Proba	bility			0.00)	0.00	0.00)	0.00				0.00			0.00
	Sinty			0.00		0.00	0.00		0.00				0.00			0.00
Movement Gro	oup Res	ults			EB			WE	3			NB			SB	
Approach Move	ement			L	Т	R	L	Т	R		L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2	12	2	7	4	14	3	8	18
Adjusted Flow F	Rate (<i>v</i>), veh/h		0	0	0	0	0	0		0	0		0	0	
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0	0		0	0		0	0	
Queue Service	Time (g	g s), s		0.0	0.0	0.0	0.0	0.0) 0.0	0	0.0	0.0		0.0	0.0	
Cycle Queue C	learanc	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0) 0.0	0	0.0	0.0		0.0	0.0	
Green Ratio (g	/C)			0.03	0.54	0.54	0.02	0.5	3 0.5	3	0.11	0.11		0.19	0.19	
Capacity (<i>c</i>), v	reh/h			48	1033	876	32	101	6 86	1	200	205		352	366	
Volume-to-Capa	acity Ra	itio(X)		0.473	0.492	0.072	0.409	0.53	3 0.18	80	0.407	0.837		0.889	0.779	
Back of Queue	(Q), ft/	In (95 th percentile))	32.1	344.5	37.4	18.7	378	.5 100	.9	103.2	224.2		357.1	319.4	
Back of Queue	(Q), ve	eh/In (95 th percenti	ile)	1.3	13.8	1.5	0.7	15.	1 4.(0	4.1	9.0		14.3	12.8	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.0	0 0.0	0	0.00	0.00		0.00	0.00	
Uniform Delay (Delay (<i>d</i> 1), s/veh			57.6	17.0	13.0	58.3	18.	2 14.	.4	49.7	52.3		47.1	45.9	
Incremental De	mental Delay (<i>d</i> ₂), s/veh			2.7	1.7	0.2	3.1	2.0) 0.	5	0.5	3.4		3.1	1.4	
Initial Queue De	itial Queue Delay (d_3), s/veh				0.0	0.0	0.0	0.0) 0.0	0	0.0	0.0		0.0	0.0	
Control Delay (ontrol Delay (d), s/veh			60.2	18.7	13.2	61.4	20.	2 14.	.8	50.2	55.7		50.2	47.2	
Level of Service	Service (LOS)			E	В	В	E	C	В	4	D	E		D	D	
Approach Delay	pproach Delay, s/veh / LOS				7	В	19.7	7	В		54.0		D	48.8	3	D
Intersection De	tersection Delay, s/veh / LOS					31	.8							С		
Multimedal De	ultimodal Results							\\/							CD	
Podostrian LOS	modal Results strian LOS Score / LOS					P	1.00			-	0.14	ND	P	2.46	30	P
			.OS				1.90	,	D	\rightarrow	2.14	·		2.10	,	
Dicycle LOS SC	ole / LC	13		1.47		А	1.00	,	D		0.91		А	1.47		А

General Inform	nation								Intersec	tion Inf	ormatic	on	2	4241	¥ ¥
Agency		LAV Consulting							Duration	, h	0.250			44	
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area Typ	e	Other		4		4
Jurisdiction		County		Time F	Period	PM			PHF		0.88			W	
Urban Street		Hwy 65		Analys	is Yea	· 2025			Analysis	Period	1> 7:0	00			r T
Intersection		Hwy 65/Hwy 137		File Na	ame	Hwy 6	5 and ⊦	łwy 1	37 2025 F	PM.xus				5 10	4
Project Descrip	tion			л				-					1	1 1 4 M	× (*
		1													
Demand Inform	nation				EB			W	В		NB			SB	
Approach Move	ement			L	Т	R	L		- R	L	Т	R	L	Т	R
Demand (v), v	eh/h			22	444	60	11	46	69 134	78	142	20	274	257	16
Signal Informa	tion		-									x	A		-
Cycle, s	120.0	Reference Phase	2									1	2	3	
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.0	0.0	0.0					1
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0.0	0.0				 	Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0) 0.0	0.0		5	6	7	8
T . D . K			_	EDI		EDT					_		0.01	_	ODT
Assigned Dhee				EBL	-	EBI	VVB			NBI	-		SBL	-	SBI
Assigned Phase	9			1		0	5	\rightarrow	2	<u> </u>	_	4		_	8
Case Number				2.0		3.0	2.0	-	3.0			10.0			10.0
Change Duration	, s (V D			1.3		10.1	0.0		00.0	<u> </u>	_	17.5		_	20.4
Change Period,	(Y+R)	c), S		4.0		4.0	4.0	-	4.0			4.0		_	4.0
	Allow Headway (<i>MAH</i>), s ue Clearance Time (<i>g</i> s), s					0.0	0.0	\rightarrow	0.0	<u> </u>		0.0			0.0
Queue Clearan	ieue Clearance Time (g_s), s					0.0	0.0	-	0.0	<u> </u>		0.0	<u> </u>		0.0
Bhase Cell Brol	n nne	(ge), s		0.0		0.0	0.0		0.0	<u> </u>		0.0	<u> </u>		0.0
Max Out Broba	bility			0.00		0.00	0.00		0.00			0.00	<u> </u>		0.00
	onity			0.00	,	0.00	0.00	,	0.00			0.00			0.00
Movement Gro	oup Res	ults			EB			WE	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F	Rate (v), veh/h		0	0	0	0	0	0	0	0		0	0	
Adjusted Satura	ation Flo	w Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0	0	0	0		0	0	
Queue Service	Time (g	g s), S		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Cycle Queue C	learanc	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Green Ratio (g	/C)			0.03	0.55	0.55	0.02	0.54	4 0.54	0.11	0.11		0.19	0.19	
Capacity (c), v	/eh/h			50	1047	887	30	102	6 870	204	210		337	350	
Volume-to-Capa	acity Ra	itio(X)		0.481	0.461	0.073	0.402	0.49	7 0.167	0.415	0.839		0.884	0.847	
Back of Queue	(Q), ft/	In (95 th percentile))	33.6	319	38.1	17.3	348	92.5	107.2	228.4		343.2	337.8	
Back of Queue	(Q), ve	eh/In (95 th percenti	ile)	1.3	12.8	1.5	0.7	13.9	3.7	4.3	9.1		13.7	13.5	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	
Uniform Delay (Jniform Delay (d_1), s/veh					12.6	58.4	17.3	3 14.0	49.5	52.2		47.6	47.2	
Incremental De		2.7	1.5	0.2	3.2	1.7	0.4	0.5	3.4		3.1	2.2			
Initial Queue De		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0			
Control Delay (60.2	17.7	12.8	61.7	19.1	1 14.4	50.0	55.6		50.6	49.4			
Level of Service		E	В	В	E	В	В	D	Е		D	D			
Approach Delay		18.9		В	18.8	3	В	53.8	3	D	50.0		D		
Intersection De	Intersection Delay, s/veh / LOS					32	2.0						С		
	Multimodel Depute														
Multimodal Re			EB			WE	3		NB			SB			
Pedestrian LOS	edestrian LOS Score / LOS					В	1.90)	В	2.14		В	2.16		В
Bicycle LOS Sc	ore / LC	DS		1.43	3	А	1.59)	В	0.92	2	А	1.47		A

General Inform	nation								Inter	secti	ion Infe	ormatic	on	4	4 7 4 1	× (<u>x</u>
Agency		LAV Consulting							Durat	tion,	h	0.250			*+ %	
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area	Туре	Э	Other		A 		K K
Jurisdiction		County		Time F	Period	PM +	Project		PHF			0.88		*	W = E	↓ ↓ ↓
Urban Street		Hwy 65		Analys	sis Year	2025			Analy	/sis F	Period	1> 7:(00			*
Intersection		Hwy 65/Hwy 137		File Na	ame	Hwy 6	5 and F	lwy 1	37 202	25 PI	M+Proj	.xus			5 10	
Project Descrip	tion			n										1	* 1 4 1 1	* (*
				k			1									
Demand Inform	nation				EB			W	'B			NB			SB	
Approach Move	ement			L	Т	R	L			R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			22	483	60	12	51	16 1	148	78	142	22	298	257	16
0: 11.6	<u></u>													_		
Signal Informa			0	-									x	$ \rightarrow $		sta
Cycle, s	120.0	Reference Phase	2										1	2	3	
Offset, s	0		Ena	Green	0.0	0.0	0.0	0.0) (0.0	0.0					
	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0		0.0	0.0			\rightarrow	_ ■	Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0) (0.0	0.0		5		7	8
Timor Poculto			_	EBI		CDT	\//R		\//P ⁻	т	NRI	_		SPI	_	орт –
Assigned Phase				1	-	6	5		2	<u> </u>	NDL	-		301	·	8
Case Number	5			2.0		3.0	2.0	\rightarrow	2 0				10.0			10.0
Phase Duration	5		_	7.3		68 1	6.1	-	66.9	,			17.7	<u> </u>		28.1
Change Period	, 3 (Y+R)	~) s		4.0		4.0	4.0	-	4.0	-			4.0			4.0
Max Allow Hear	way (A	/, , , , , , , , , , , , , , , , , ,		4.0		0.0	0.0	-	0.0				0.0			0.0
Queue Clearan	ce Time	(a_s) s	0.0		0.0	0.0	-	0.0				0.0			0.0	
Green Extensio	n Time	(q_{e}) s	0.0		0.0	0.0	-	0.0				0.0			0.0	
Phase Call Pro	bability	ne (g _e), s tv)	0.00	0.00	<u>,</u>	0.00)			0.00			0.00
Max Out Proba	bility			0.00)	0.00	0.00)	0.00)			0.00			0.00
	Sinty			0.00		0.00	0.00		0.00				0.00			0.00
Movement Gro	oup Res	ults			EB			WE	3			NB			SB	
Approach Move	ement			L	Т	R	L	Т	F	२	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2	1	2	7	4	14	3	8	18
Adjusted Flow F	Rate(<i>v</i>), veh/h		0	0	0	0	0	0)	0	0		0	0	
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/ln		0	0	0	0	0	()	0	0		0	0	
Queue Service	Time (g	g s), S		0.0	0.0	0.0	0.0	0.0	0.	.0	0.0	0.0		0.0	0.0	
Cycle Queue C	learance	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0	0.	.0	0.0	0.0		0.0	0.0	
Green Ratio (g	/C)			0.03	0.53	0.53	0.02	0.5	2 0.	52	0.11	0.11		0.20	0.20	
Capacity (c), v	/eh/h			50	1015	860	32	996	i 8∠	44	207	212		363	377	
Volume-to-Capa	acity Ra	tio (X)		0.481	0.517	0.076	0.409	0.56	3 0.1	91	0.410	0.841		0.892	0.786	
Back of Queue	(Q), ft/	In (95 th percentile)		33.6	365.7	39.8	18.7	404.	1 10	7.6	106.9	230.7		366.9	330	
Back of Queue	(Q), ve	eh/In (95 th percentile	e)	1.3	14.6	1.6	0.7	16.2	2 4.	.3	4.3	9.2		14.7	13.2	
Queue Storage	Ratio (RQ) (95 th percentil	e)	0.00	0.00	0.00	0.00	0.0	0.0	00	0.00	0.00		0.00	0.00	
Uniform Delay ((d 1), s	/veh		57.5	18.0	13.6	58.3	19.3	3 15	5.1	49.4	52.1		46.7	45.5	
Incremental De	ay (<i>d</i> ₂), s/veh			2.7	1.9	0.2	3.1	2.3	0.	.5	0.5	3.4		3.1	1.4	
Initial Queue De	ue Delay (<i>d</i> ₃), s/veh			0.0	0.0	0.0	0.0	0.0	0.	.0	0.0	0.0		0.0	0.0	
Control Delay (Delay (d), s/veh			60.2	19.9	13.7	61.4	21.0	3 15	5.6	49.9	55.5		49.8	46.9	
Level of Service	e (LOS)	(LOS)			В	В	E	С	E	3	D	E		D	D	
Approach Delay	oach Delay, s/veh / LOS			20.8	3	С	21.0)	С		53.7		D	48.4		D
Intersection De	ection Delay, s/veh / LOS					32	2.4							С		
	al Rosults														0.5	
Multimodal Re	esults			1.00	EB	D	4.01	WE	5		0.45	NB	D	0.45	SB	
Pedestrian LOS	Score	/ LUS	DS			В	1.90		В		2.13		В	2.16		В
BICYCIE LOS SC	ore / LC	15)S				1.70)	В		0.92		A	1.51		В

General Inform	nation								Intersec	tion Inf	ormatic	on	<u>,</u>	at 2/2 etp ↓ ,	⊨ L <u>a</u>
Agency		LAV Consulting							Duration	, h	0.250			4 L	
Analyst		BMB		Analys	sis Date	e Mar 2	8, 2023		Area Typ	e	Other		4		4
Jurisdiction		County		Time F	Period	PM			PHF		0.88			W	
Urban Street		Hwy 65		Analys	sis Yea	2035			Analysis	Period	1> 7:0	00			
Intersection		Hwy 65/Hwy 137		File Na	ame	Hwy 6	5 and F	lwy 1	37 2035 F	PM.xus				5 6	× 1
Project Descrip	tion			1									1	****	*] *
Demand Inform	nation				EB			W	В		NB			SB	
Approach Move	ement			L	Т	R	L	Г	- R	L	Т	R	L	Т	R
Demand (v), v	eh/h			26	538	73	14	56	68 163	95	173	24	333	311	19
							_								
Signal Informa	tion	1	1									,	A		-+-
Cycle, s	120.0	Reference Phase	2									1	2	3	\mathbf{Y}_{4}
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.0	0.0	0.0					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0.0	0.0				•	Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0.0	0.0		5	6	7	8
							1						_	1	
Timer Results				EBL		EBT	WB		WBT	NBI	-	NBT	SBL	-	SBT
Assigned Phase	9			1		6	5	_	2			4		_	8
Case Number				2.0		3.0	2.0		3.0			10.0			10.0
Phase Duration	, S			7.7		62.9	6.4		61.6			20.0			30.7
Change Period,	(Y+R)	c), S		4.0		4.0	4.0		4.0			4.0			4.0
Max Allow Head	dway(A	<i>MAH</i>), s	0.0		0.0	0.0		0.0			0.0			0.0	
Queue Clearan	ce Time	e (g s), s		0.0		0.0	0.0		0.0			0.0			0.0
Green Extensio	n Extension Time ($g e$), s					0.0	0.0		0.0			0.0			0.0
Phase Call Prol	bability			0.00)	0.00	0.00)	0.00			0.00			0.00
Max Out Proba	bility			0.00)	0.00	0.00)	0.00			0.00			0.00
Movement Gro	oup Res	ults			EB			WE	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F	Rate (v), veh/h		0	0	0	0	0	0	0	0		0	0	
Adjusted Satura	ation Flo	w Rate (s), veh/h/	n	0	0	0	0	0	0	0	0		0	0	
Queue Service	Time (a	7 s). S		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Cycle Queue C	learance	e Time (a c), s		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Green Ratio (g	/C)	, s		0.03	0.49	0.49	0.02	0.48	3 0.48	0.13	0.13		0.22	0.22	
Capacity (c), v	/eh/h			55	933	790	36	912	2 773	241	248		403	418	
Volume-to-Capa	acity Ra	tio(X)		0.512	0.627	0.100	0.423	0.67	7 0.229	0.428	0.863		0.899	0.857	
Back of Queue	(Q), ft/	In (95 th percentile))	39.6	459.1	54.6	21.7	504	134	128.4	266.2		400.1	390.2	
Back of Queue	(Q), ve	eh/In (95 th percent	ile)	1.6	18.4	2.2	0.9	20.2	2 5.4	5.1	10.6		16.0	15.6	
Queue Storage	Ratio (RQ) (95 th percen	tile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	
Uniform Delay (rm Delay (d_1), s/veh				22.5	16.4	58.1	24.0) 18.2	47.8	50.9		45.3	44.8	
Incremental De	cremental Delay (<i>d</i> ₂), s/veh				3.2	0.3	2.9	4.0	0.7	0.4	3.5		3.0	2.0	
Initial Queue Delay ($d s$), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (<i>d</i>), s/veh				60.0	25.7	16.6	61.0	28.0) 18.9	48.2	54.4		48.3	46.8	
Level of Service (LOS)				Е	С	В	E	С	В	D	D		D	D	
Approach Delay		26.0)	С	26.7	7	С	52.4		D	47.6	6	D		
Intersection De	Intersection Delay, s/veh / LOS					35	5.6						D		
Multimodal Po	Multimodal Results							\//□	2		NR			SB	
Pedestrian I OS	edestrian LOS Score / LOS					B	1 01		R	2 13		B	2 16		B
Ricycle I OS So			1.81	2	B	1.9	, ,	B	2.10	,	Δ	1.60	, ,	B	
		<i>,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1.03	,	U	1.02	-	D	1.0		Λ	1.00	,	D

General Inform	nation								Int	tersect	ion Inf	ormatic	on	<u>_</u>	4241	× (<u>x</u>
Agency		LAV Consulting							Du	uration,	h	0.250			* 4	R
Analyst		BMB		Analys	sis Dat	e Mar 2	8, 2023		Are	еа Тур	е	Other		4		K K
Jurisdiction		County		Time F	Period	PM +	Project		PH	ΗF		0.88		*	W E	
Urban Street		Hwy 65		Analys	sis Yea	r 2035			An	alysis	Period	1> 7:0	00			*
Intersection		Hwy 65/Hwy 137		File Na	ame	Hwy 6	5 and F	lwy 1	37 2	2035 P	M+Proj	.xus			5 10	
Project Descrip	tion			n										- T	* 1 4 1 1	* (*
				r			Ļ							N		
Demand Inform	nation				EB			V	/B			NB			SB	
Approach Move	ement			L	Т	R	<u> </u>		Т	R		Т	R	L	Т	R
Demand (v), v	eh/h			26	538	73	15	6	15	177	95	173	26	357	311	19
0	1 ¹													_		
Signal Informa			0	1									x	$ \rightarrow $		st a
Cycle, s	120.0	Reference Phase	2 End										1	2	3	
Offset, s	U	Reference Point	Ena	Green	0.0	0.0	0.0	0.	0	0.0	0.0					
	NO	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.	0	0.0	0.0			\rightarrow	-	Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.	0	0.0	0.0		5		7	8
Timor Posults			_	EDI		ERT	\\/P		١٨.		NRI	_		SBI	_	SBT
Assigned Phase	<u> </u>			1	-	6	5		~ ~ ~	2	NDI	-		301	-	8
Case Number	0			2.0		3.0	2.0	-	3	20			- 10.0			10.0
Phase Duration				2.0		60.8	2.0		50	9.0 9.7			20.2		_	32 /
Change Period	(V+R)	~) c		4.0		4.0	0.0		1	1.0		-	10.2			4.0
Max Allow Hear	, (7 .7() dway (A	ΜΔΗ) s		4.0		0.0	4.0	-	- 0	10			4.0 0.0			0.0
Queue Clearan	ce Time	$a(a_s)$ s		0.0		0.0	0.0	-	0	0			0.0			0.0
Green Extensio	e Clearance Time (g s), s n Extension Time (g e), s					0.0	0.0	-	0) ()			0.0			0.0
Phase Call Pro	en Extension Time (g e), s					0.00	0.0)	0	00			0.0	<u> </u>		0.0
Max Out Proba	hility			0.00	, ,	0.00	0.00))	0.	.00			0.00	<u> </u>		0.00
Max Out 1 1054	onity			0.00	, I	0.00	0.00		0.	.00			0.00			0.00
Movement Gro	oup Res	ults			EB			W	В			NB			SB	
Approach Move	ement			L	Т	R	L	Т		R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2		12	7	4	14	3	8	18
Adjusted Flow I	Rate(<i>v</i>), veh/h		0	0	0	0	0		0	0	0		0	0	
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	In	0	0	0	0	0		0	0	0		0	0	
Queue Service	Time (g	g s), s		0.0	0.0	0.0	0.0	0.0)	0.0	0.0	0.0		0.0	0.0	
Cycle Queue C	learance	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0)	0.0	0.0	0.0		0.0	0.0	
Green Ratio (g	/C)			0.03	0.47	0.47	0.02	0.4	6	0.46	0.14	0.14		0.24	0.24	
Capacity (c), v	/eh/h			55	900	763	38	88	2	747	244	251		429	446	
Volume-to-Cap	acity Ra	tio(X)		0.512	0.650	0.104	0.430	0.75	58 (0.257	0.423	0.863		0.905	0.805	
Back of Queue	(Q), ft/	In (95 th percentile))	39.6	476.1	56.8	23.2	585	.4	153	128.1	268.2		422.9	381.4	
Back of Queue	(Q), ve	eh/In (95 th percent	ile)	1.6	19.0	2.3	0.9	23.	4	6.1	5.1	10.7		16.9	15.3	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.0	0	0.00	0.00	0.00		0.00	0.00	
Uniform Delay	niform Delay (d 1), s/veh				24.0	17.5	58.0	26.	6	19.6	47.6	50.8		44.5	43.2	
Incremental De	cremental Delay (d ₂), s/veh				3.6	0.3	2.8	6.1	1	0.8	0.4	3.4		3.0	1.3	
Initial Queue De	nitial Queue Delay (<i>d</i> ₃), s/veh				0.0	0.0	0.0	0.0)	0.0	0.0	0.0		0.0	0.0	
Control Delay (Control Delay (d), s/veh				27.6	17.8	60.9	32.	6	20.4	48.0	54.2		47.5	44.5	
Level of Service	evel of Service (LOS)				С	В	E	C		С	D	D		D	D	
Approach Delay	Approach Delay, s/veh / LOS				3	С	30.5	5		С	52.2	2	D	46.0		D
Intersection De	lay, s/ve	h / LOS				36	6.8							D		
	Multimodal Results															
Multimodal Re		EB			W	В			NB	_		SB				
Pedestrian LOS	5 Score	1.91		В	1.91	1		В	2.13	3	В	2.16		В		
Bicycle LOS Sc	ore / LC)S		1.63	3	В	1.93	3		В	1.01		A	1.72		В

General Inform	nation								Interse	ectio	on Info	ormatic	on	2	****	⊨ L <u>⊾</u>
Agency		LAV Consulting							Duratio	on, ł	n	0.250			44	
Analyst		BMB		Analys	is Dat	e Mar 2	8, 2023		Area T	ype		Other		4		
Jurisdiction		County		Time F	Period	PM			PHF			0.88			W	↓ ↓ ↓
Urban Street		Hwy 65		Analys	is Yea	r 2045			Analys	is P	Period	1> 7:(00			* *
Intersection		Hwy 65/Hwy 137		File Na	ame	Hwy 6	5 and F	lwy 1	37 2045	5 PN	/l.xus				5 1/2	×
Project Descrip	tion			л										1	*	7
		1														
Demand Inform	nation				EB			W	′B			NB			SB	
Approach Move	ement			L	Т	R	L		Г F	ξ	L	Т	R	L	Т	R
Demand (v), v	eh/h			32	649	88	17	68	36 19	95	114	208	29	401	375	23
Signal Informa	tion		-										x	A		-
Cycle, s	120.0	Reference Phase	2										1	2	3	
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.0	0.0	0	0.0					I
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0.0	0	0.0			→	•	Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0.0	0	0.0		5	6	7	8
					_					-						0.0.7
Timer Results				EBL	-	EBI	WB		WBI	+	NBL	-	NBI	SBI		SBI
Assigned Phase	9			1		6	5	\rightarrow	2	+			4		_	8
Case Number				2.0		3.0	2.0	\rightarrow	3.0	+			10.0			10.0
Phase Duration	, S	\ -		8.1	-	54.7	6.8	\rightarrow	53.3	+		-	22.8		_	35.7
Change Period,	(Y+R	c), S		4.0		4.0	4.0	\rightarrow	4.0	+		_	4.0			4.0
Max Allow Head	الow Headway (<i>MAH</i>), s e Clearance Time (م s), s					0.0	0.0	\rightarrow	0.0	+			0.0	<u> </u>	_	0.0
Queue Clearan	eue Clearance Time ($g s$), s					0.0	0.0	\rightarrow	0.0	+			0.0			0.0
Green Extensio	n lime	(ge),s		0.0		0.0	0.0	\rightarrow	0.0	+			0.0	<u> </u>	_	0.0
Phase Call Prol	bability			0.00		0.00	0.00)	0.00	+			0.00			0.00
Max Out Proba	bility			0.00		0.00	0.00)	0.00				0.00			0.00
Movement Gro	up Res	ults			EB			WE	3	Т		NB			SB	
Approach Move	ment			L	Т	R	L	Т	R	Т	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2	12		7	4	14	3	8	18
Adjusted Flow F	Rate (v), veh/h		0	0	0	0	0	0	Т	0	0		0	0	
Adjusted Satura	ation Flo	w Rate (s), veh/h/l	n	0	0	0	0	0	0		0	0		0	0	
Queue Service	Time (g	g s), S		0.0	0.0	0.0	0.0	0.0	0.0	Т	0.0	0.0		0.0	0.0	
Cycle Queue C	learanc	e Time (g c), s		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Green Ratio (g	/C)			0.03	0.42	0.42	0.02	0.4	1 0.41	1	0.16	0.16		0.26	0.26	
Capacity (c), v	/eh/h			62	803	680	42	781	1 662	2	284	292		478	497	
Volume-to-Cap	acity Ra	tio(X)		0.560	0.879	0.141	0.444	0.95	5 0.32	0 0	0.436	0.883		0.912	0.871	
Back of Queue	(Q), ft/	In (95 th percentile))	48.7	714.3	77.6	26.2	836.	9 191.	4	151	321.4		478.1	457.9	
Back of Queue	(Q), ve	eh/In (95 th percenti	ile)	1.9	28.6	3.1	1.0	33.	5 7.7		6.0	12.9		19.1	18.3	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.0	0.00 C)	0.00	0.00		0.00	0.00	
Uniform Delay (ueue Storage Ratio (RQ) (95 th percentile) niform Delay (d_1), s/veh				31.8	21.3	57.9	34.	2 24.0)	45.8	49.5		42.8	42.2	
Incremental De		2.9	13.1	0.4	2.7	22.8	8 1.3		0.4	8.6		6.6	3.5			
Initial Queue De		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0			
Control Delay (60.0	44.9	21.7	60.6	57.	1 25.2	2	46.2	58.1		49.4	45.7			
Level of Service		Е	D	С	Е	E	С		D	Е		D	D			
Approach Delay		42.9		D	50.2	2	D		54.2		D	47.6	3	D		
Intersection De				48	3.0							D				
Multimodal Re			EB			WE	3			NB			SB			
Pedestrian LOS	Jestrian LOS Score / LOS					В	1.92	2	В		2.13		В	2.16	6	В
Bicycle LOS Sc	ore / LC	DS		1.87		В	2.10)	В		1.12		А	1.92	2	В

General Inform	nation							Intersec	tion Inf	ormatic	on	4	4241	≤ L <u>s</u>
Agency		LAV Consulting						Duration	, h	0.250			* 4	R
Analyst		BMB	Analys	sis Date	Mar 2	8, 2023		Area Typ	e	Other		4		K 2
Jurisdiction		County	Time F	Period	PM +	Project		PHF		0.88		*	W E	↓ ↓
Urban Street		Hwy 65	Analys	sis Year	2045			Analysis	Period	1> 7:0	00			1 ¥ 12
Intersection		Hwy 65/Hwy 137	File Na	ame	Hwy 6	5 and F	lwy 1	37 2045 F	PM+Proj	.xus			5 14	×
Project Descrip	tion								,			5	4 1 4 Y	▼ [*]
, , ,														
Demand Inform	nation			EB			W	′B		NB			SB	
Approach Move	ement		L	Т	R	L	1	Г R	L	Т	R	L	Т	R
Demand (v), v	eh/h		32	688	88	18	73	33 210	114	208	31	425	375	23
Signal Informa	tion										_	A l		
Cycle, s	120.0	Reference Phase 2											2	Y
Offset, s	0	Reference Point End	Green	0.0	0.0	0.0	0.0	0 0 0	0.0	_		2	3	4
Uncoordinated	No	Simult. Gap E/W On	Yellow	0.0	0.0	0.0	0.0	0.0	0.0				 	Φ
Force Mode	Fixed	Simult. Gap N/S On	Red	0.0	0.0	0.0	0.0	0.0	0.0		5	Y 6	7	8
Timer Results			EBI	-	EBT	WB	L	WBT	NBL	-	NBT	SBL	-	SBT
Assigned Phase	e		1		6	5		2			4			8
Case Number			2.0		3.0	2.0		3.0			10.0			10.0
Phase Duration	, S		8.1		57.0	6.9		55.8			19.0			37.1
Change Period,	, (Y+R)	c), S	4.0		4.0	4.0		4.0			4.0			4.0
Max Allow Head	dway(A	<i>IAH</i>), s	0.0		0.0	0.0		0.0			0.0			0.0
Queue Clearan	ue Clearance Time (g_s) , s				0.0	0.0		0.0			0.0			0.0
Green Extensio	een Extension Time ($g \in$), s				0.0	0.0		0.0			0.0			0.0
Phase Call Prol	reen Extension Time (<i>g e</i>), s nase Call Probability				0.00	0.00)	0.00			0.00			0.00
Max Out Proba	bility		0.00)	0.00	0.00)	0.00			0.00			0.00
Movement Gro	un Ros	ulte		EB			\//F	2		NB			SB	
Approach Move	ment	Juito		Т	R		Т	R		Т	R	1	т	R
Assigned Move	ment		1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F	Rate (v) veh/h		0	0	0	0	0	0	0		0	0	10
Adjusted Satura	tion Ele	y, VCI/II	0	0	0	0		0	0	0		0	0	
			0	0						0		0.0	0	
		$f = \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} $	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Cycle Queue C		e fille (g c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Green Katio (g	/C)		62	840	711	13	820) 605	226	232		100	510	
Volume-to-Can	acity Ra	tio (X)	0.557	0.881	0 133	45	020	1 0 325	0.542	1 107		499	0.824	
Back of Queue	(Q), ft/	(In (95 th percentile)	48.2	735	73.5	27.4	878	1 196.2	158.3	486.6		480.4	436.9	
Back of Queue	(Q), ve	eh/ln (95 th percentile)	1.9	29.4	2.9	1.1	35.	1 7.8	6.3	19.5		19.2	17.5	
Queue Storage	Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00		0.00	0.00	
Uniform Delay (ieue Storage Ratio (<i>RQ</i>) (95 th percentile) iform Delay (<i>d</i> 1), s/veh			30.6	19.9	57.8	33.	1 22.6	49.3	52.5		42.1	40.7	
Incremental De	niform Delay (d ː), s/ven icremental Delay (d ː), s/veh			12.8	0.4	2.7	23.	3 1.2	1.5	90.8		2.9	1.3	
Initial Queue De	itial Queue Delay ($d z$), s/veh			0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Control Delay (Control Delay (<i>d</i>), s/veh			43.4	20.2	60.5	56.	5 23.8	50.7	143.3		45.0	42.0	
Level of Service	evel of Service (LOS)			D	С	E	E	С	D	F		D	D	
Approach Delay	pproach Delay, s/veh / LOS			3	D	49.4	1	D	113.4	4	F	43.5		D
Intersection Delay, s/veh / LOS					53	3.3						D		
Multimodal Re		EB			WE	3		NB			SB			
Pedestrian LOS	trian LOS Score / LOS				В	1.92	2	В	2.13	3	В	2.16		В
Bicycle LOS Sc	ore / LC	DS	1.92	2	В	2.19)	В	1.11		А	1.95		В

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HCS[™] Streets Version 7.9.5

		Н	ICS7	Two	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						
Analyst	BMB						Inters	ection			Hwy	65/Mario	gold St			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Mario	yold St				
Analysis Year	2023						North	n/South :	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	1-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
								- 11								
	Major Street: North-South															
Vehicle Volumes and Adj	ustme	stments Eastbound Westbound Southbound														
Approach		Eastk	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	0	0		28	4	8	0	0	792	36	0	4	1008	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									6
Right Turn Channelized		١	10			Ν	10			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)		0		0		36		9		0				5		
Capacity, c (veh/h)				448		144		540		572				688		
v/c Ratio				0.00		0.25		0.02		0.00				0.01		
95% Queue Length, Q ₉₅ (veh)				0.0		1.0		0.1		0.0				0.0		
Control Delay (s/veh)				13.0		38.5		11.8		11.3				10.3		
Level of Service (LOS)				В		E		В		В				В		
Approach Delay (s/veh)						33	3.1			0	.0			. 0	.0	
Approach LOS						[D									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	aold St			
Agency/Co.	LAV (Consultir	na				Jurisc	liction			Coun	ity	_			
Date Performed	3/28/	/23					East/	West Str	eet		Mario	yold St				
Analysis Year	2023						North	n/South :	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Majo	r Street: Nor	th-South									
Vehicle Volumes and Adju	ıstme	stments Eastbound Westbound Southbound														
Approach		Eastb	ound	_		West	oound	_		North	bound	_		South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	0	0		28	4	9	0	0	869	36	0	4	1084	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	lo			N	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	d Level of Service													<u>.</u>		
Flow Rate, v (veh/h)		0		0		36		10		0				5		
Capacity, c (veh/h)				419		121		505		529				636		
v/c Ratio				0.00		0.30		0.02		0.00				0.01		
95% Queue Length, Q ₉₅ (veh)				0.0		1.3		0.1		0.0				0.0		
Control Delay (s/veh)				13.6		47.6		12.3		11.8				10.7		
Level of Service (LOS)				В		E		В		В				В		
Approach Delay (s/veh)			-			39	9.8	-		0	0.0	-		0	.0	
Approach LOS						I	E									

HCS 1 TWSC Version 7.9.5 Hwy 65 and Marigold St 2023 PM+Proj.xtw

		Н	ICS7	Two	-Way	' Stop	o-Co	ntrol	l Rep	ort						
General Information		_	_	_	_		Site	Infor	matio	n	_	_	_		_	
Analyst	ВМВ						Inters	ection			Hwy	65/Mario	gold St			
Agency/Co.	LAV	Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Mario	yold St				
Analysis Year	2025						North	n/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	Nort	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-S	Store											
Lanes																
							_	1								
	Adjustments															
Vehicle Volumes and Adj	ustme	stments Eastbound Westbound Southbound														
Approach	T	Eastk	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	0	0		29	4	8	0	0	823	37	0	4	1047	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									r
Right Turn Channelized		١	10			Ν	10			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	Τ	0		0		38		9		0				5		
Capacity, c (veh/h)				433		134		526		550				666		
v/c Ratio				0.00		0.28		0.02		0.00				0.01		
95% Queue Length, Q ₉₅ (veh)				0.0		1.1		0.1		0.0				0.0		
Control Delay (s/veh)				13.3		42.2		12.0		11.5				10.4		
Level of Service (LOS)				В		E		В		В				В		
Approach Delay (s/veh)						36	5.3	-		0	.0	-		0	.0	e
Approach LOS							E									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	_
Analyst	ВМВ						Inters	section			Hwy	65/Mario	aold St			
Agency/Co.	LAV	Consultir	ng				Jurisc	liction			Coun	ity	5			
Date Performed	3/28/	23	5				East/	West Str	eet		Mario	gold St				
Analysis Year	2025						North	n/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	vsis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store		,			. ,						
Lanes			-													
								1								
Major Street: North-South																
Vehicle Volumes and Adju	stments Eacthound Westhound Northbound Southbound															
Approach		Eastbound Westbound Northbound													bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	0	0		29	4	9	0	0	900	37	0	4	1123	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	10			Ν	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0		0		38		10		0				5		
Capacity, c (veh/h)				405		112		492		508				616		
v/c Ratio				0.00		0.33		0.02		0.00				0.01		
95% Queue Length, Q ₉₅ (veh)				0.0		1.4		0.1		0.0				0.0		
Control Delay (s/veh)				13.9		52.8		12.5		12.1				10.9		
Level of Service (LOS)				В		F		В		В				В		
Approach Delay (s/veh)		-	-			- 44	4.2			0	0.0	-		0	.0	e
Approach LOS							E									

HCS 1 TWSC Version 7.9.5 Hwy 65 and Marigold St 2025 PM+Proj.xtw

		Н	ICS7	Two	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/Mario	aold St			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ity	y			
Date Performed	3/28/	/23	5				East/	West Str	eet		Mario	gold St				
Analysis Year	2035						North	n/South :	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	h-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					_			1								
	Major Street: North-South															
Vehicle Volumes and Adj	ustme	stments														
Approach		Eastbound Westbound Northbound Southbou													bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	0	0		35	5	10	0	0	998	45	0	5	1270	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		١	10			Ν	10			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	d Leve	l of S	ervice	•												
Flow Rate, v (veh/h)		0		0		45		11		0				6		
Capacity, c (veh/h)				356		84		452		437				552		
v/c Ratio				0.00		0.54		0.03		0.00				0.01		
95% Queue Length, Q ₉₅ (veh)				0.0		3.1		0.1		0.0				0.0		
Control Delay (s/veh)				15.1		96.3		13.2		13.2				11.6		
Level of Service (LOS)				C		F		В		В				В		
Approach Delay (s/veh)						79	9.6			0	0.0			0	.0	
Approach LOS							F									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	
Analyst	BMB						Inters	ection			Hwy	65/Mario	gold St			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Mario	yold St				
Analysis Year	2035						North	n/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
	Major Street: North-South															
Vehicle Volumes and Adju	Easthound Westhound Northbound Southbound															
Approach		Eastbound Westbound Northbound Southbound														
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	0	0		35	5	11	0	0	1075	45	0	5	1346	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			()									6
Right Turn Channelized		Ν	10			N	lo			Ν	10			N	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0		0		45		13		0				6		
Capacity, c (veh/h)				333		69		422		403				510		
v/c Ratio				0.00		0.66		0.03		0.00				0.01		
95% Queue Length, Q ₉₅ (veh)				0.0		4.2		0.1		0.0				0.0		
Control Delay (s/veh)				15.8		144.8		13.8		13.9				12.1		
Level of Service (LOS)				С		F		В		В				В		
Approach Delay (s/veh)						11	6.5			0	.0			0	.0	
Approach LOS							F									

		Н	ICS7	Two	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_		Site	Infor	natio	n	_	_	_	_	_	
Analyst	BMB						Inters	ection			Hwy	65/Mario	gold St			
Agency/Co.	LAV	Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Mario	yold St				
Analysis Year	2045						North	n/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	Nort	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-S	Store											
Lanes																
]								
					_		_	1								
Major Street: North-South																
Vehicle Volumes and Adj	ustme	Istments														
Approach	T	Eastbound Westbound Northbound Southbound														
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	0	0		43	6	12	0	0	1204	55	0	6	1532	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0	°			0									r
Right Turn Channelized		١	10			Ν	10			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, an	d Leve	l of S	ervice	•												
Flow Rate, v (veh/h)	Τ	0		0		56		14		0				7		
Capacity, c (veh/h)				283		46		377		332				442		
v/c Ratio				0.00		1.20		0.04		0.00				0.02		
95% Queue Length, Q ₉₅ (veh)				0.0		11.7		0.1		0.0				0.0		
Control Delay (s/veh)				17.7		706.9		14.9		15.8				13.3		
Level of Service (LOS)				С		F		В		С				В		
Approach Delay (s/veh)				-		57	0.8	-		0	.0	-		0	.1	e
Approach LOS							F									

		Н	ICS7	Two-	-Way	v Stop	o-Co	ntrol	l Rep	ort						
General Information	_	_	_	_	_		Site	Infor	matio	n	_	_	_	_	_	_
Analyst	вмв						Inters	ection			Hwy	65/Mario	old St			
Agency/Co.	LAV	Consultir	na				Jurisc	liction			Coun	tv	<u> </u>			
Date Performed	3/28/	23	5				East/	West Str	eet		Mario	gold St				
Analysis Year	2045						North	n/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store		,			. ,						
Lanes			-													
					_			1								
Major Street: North-South																
Vehicle Volumes and Adiu	ustments															
Approach		Eastbound Westbound Northbound Southbound														
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	т	R
Volume (veh/h)		0	0	0		43	6	13	0	0	1281	55	0	6	1608	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			. (0			1					1	<u>I</u>
Right Turn Channelized		Ν	lo			N	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	Leve	l of Se	ervice													
Flow Rate, v (veh/h)		0	<u> </u>	0		56		15		0	<u> </u>	<u> </u>		7		
Capacity, c (veh/h)				264		38		353		307				408		
v/c Ratio				0.00		1.48		0.04		0.00				0.02		
95% Queue Length, Q₀₅ (veh)				0.0		14.7		0.1		0.0				0.1		
Control Delay (s/veh)				18.6		1199.0		15.7		16.7				14.0		
Level of Service (LOS)				С		F		С		С				В		
Approach Delay (s/veh)						95	0.9			0	.0			0	.1	
Approach LOS							F							-		

HCS 1 TWSC Version 7.9.5 Hwy 65 and Marigold St 2045 PM+Proj.xtw

General Inform	nation								Inte	ersecti	ion Infe	ormatio	on	*		× l <u>x</u>
Agency		LAV Consulting							Du	ration,	h	0.250)		-ta	K
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Are	еа Туре	;	Other	•	×		
Jurisdiction		County		Time F	Period	PM			PH	lF		0.88			W = E	↓ ↓ ↓
Urban Street		Hwy 65		Analys	sis Year	2023			Ana	alysis F	Period	1> 7:	00	*		*
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	I Spr	uce /	Ave 20	23 PM.	xus			**	
Project Descrip	tion														41491	* (*
		*		I.							11					
Demand Inform	nation				EB			N	/B			NB			SB	
Approach Move	ement			L	Т	R	L		Т	R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			6	657	5	3	6	70	456	1	2	0	424	6	10
	4 1010													_		
Signal Informa	tion		0										~	4		sta
Cycle, s	120.0	Reference Phase	2										1	2	3	
Offset, s	0		Ena	Green	0.0	0.0	0.0	0.	0	0.0	0.0					
	INO	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.	0	0.0	0.0	¥		\leftrightarrow	_	ф
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.	0	0.0	0.0		5	Y 6	7	8
Timor Posults			_	ERI	_	EBT	\//R		۱۸/					SBI		SBT
Assigned Phase				1	-	6	5		00	2	NDL	-		30	-	8
Case Number	<u> </u>			2.0		3.0	2.0	\rightarrow	3	2			12.0			12.0
Phase Duration	s			5.2		72.8	4.6	+	72	2.2		_	4.6			38.0
Change Period	, 3 (V+R			4.0		4.0	4.0	\rightarrow	4	. 0			4.0			4.0
Max Allow Hear	Headway (<i>MAH</i>), s					0.0	4.0	-	ب	0			0.0			0.0
Queue Clearan	ow Headway (<i>MAH</i>), s Clearance Time (<i>g</i> s), s					0.0	0.0	-	0	0			0.0			0.0
Green Extensio	e Clearance Time (g_s), s					0.0	0.0	-	0	0			0.0			0.0
Phase Call Pro	hability	(9,0), 3		0.0)	0.00	0.0)	0	00			0.00	<u> </u>		0.00
Max Out Proba	hility			0.00)	0.00	0.00)	0.0	00			0.00			0.00
	onity			0.00	· .	0.00	0.00		0.				0.00			0.00
Movement Gro	oup Res	sults			EB			W	В			NB			SB	
Approach Move	ement			L	Т	R	L	Т		R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2		12	7	4	14	3	8	18
Adjusted Flow F	Rate (<i>v</i>), veh/h		0	0	0	0	0		0		0			0	
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0		0		0			0	
Queue Service	Time (g	g s), S		0.0	0.0	0.0	0.0	0.0)	0.0		0.0			0.0	
Cycle Queue C	learanc	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0)	0.0		0.0			0.0	
Green Ratio (g	/C)			0.01	0.57	0.57	0.01	0.5	7	0.57		0.01			0.28	
Capacity (<i>c</i>), v	reh/h			18	1089	923	9	108	80	916		10			511	
Volume-to-Capa	acity Ra	itio(X)		0.369	0.656	0.006	0.350	0.67	74 0	0.541		0.338			0.936	
Back of Queue	(Q), ft/	/In (95 th percentile))	9.8	493.3	2.9	5.4	513	.2 3	336.9		5.3			504.7	
Back of Queue	(Q), ve	eh/In (95 th percenti	le)	0.4	19.7	0.1	0.2	20.	5	13.5		0.2	<u> </u>		20.2	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.0	0	0.00		0.00			0.00	
Uniform Delay ((d1), s	/veh		59.0	17.5	11.0	59.5	18.	1	16.1		59.5			41.9	
Incremental De	cremental Delay (<i>d</i> ₂), s/veh			4.7	3.1	0.0	8.1	3.4	1	2.3		7.5			3.6	
Initial Queue De	itial Queue Delay (<i>d</i> ₃), s/veh			0.0	0.0	0.0	0.0	0.0)	0.0		0.0			0.0	
Control Delay (ontrol Delay (<i>d</i>), s/veh			63.7	20.6	11.0	67.6	21.	5	18.4		67.0			45.6	
Level of Service	evel of Service (LOS)				С	В	E	C		В		E			D	
Approach Delay	Approach Delay, s/veh / LOS)	С	20.4	1	(С	67.0		E	45.6	6	D
Intersection De	ntersection Delay, s/veh / LOS					25	5.5							С		
Re-14	ultimodel Reculto							1.4.4							05	
Multimodal Re	imodal Results					P	4.07	W	в		0.45	NB	D	0.45	SB	
Pedestrian LOS	Score	/ LUS		1.67		В	1.67		E	В	2.13	5	В	2.16		В
BICYCIE LOS SC	ore / LC	72		1.69	,	В	2.51		(U I	0.49		А	1.28	5	A

r.															
General Inform	nation								Intersec	tion Inf	ormati	on		14444 144	te la
Agency		LAV Consulting							Duration	, h	0.25)		Ť	R.
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area Ty	be	Othe	r	≯		<u>≮</u> _2
Jurisdiction		County		Time F	Period	PM			PHF		0.88			W 🗍 E	↓ ↓ ↓
Urban Street		Hwy 65		Analys	sis Year	2023 ·	+ Projec	t	Analysis	Period	1> 7:	00	2 A		¥ F
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	l Spru	ice Ave 2	023 PM	+Proj.x	us		**	
Project Descrip	tion			-										ነ ላ ሰቀጥ	۲
				1											
Demand Inform	nation				EB			W	В		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			6	728	5	4	73	8 500	1	2	1	473	6	10
Signal Informa	tion														
	120.0	Reference Dhase	2									~	\rightarrow		512
Offect o	0	Reference Pridse	Z End									1	2	3	4
Unsee, s	U		Enu	Green	0.0	0.0	0.0	0.0	0.0	0.0					
	INO Tixoa al	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0.0	0.0	I		\rightarrow	_	хtх Г
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0.0	0.0		5	Y 6	7	8
Timor Posults			_	EBI		ERT	W/R	1	W/BT	NB	1	NRT	SB	1	SBT
Assigned Phase	<u></u>		_	1		6	5		2			4	30	-	8
Case Number	5			2.0		3.0	2.0		3.0			12.0			12.0
Phase Duration	. S		_	5.2		68.9	4.8		68.5			4.8	-		41.5
Change Period.	(Y+R)	c), S		4.0		4.0	4.0	-	4.0			4.0	-		4.0
Max Allow Head	Allow Headway (<i>MAH</i>), s					0.0	0.0		0.0			0.0			0.0
Queue Clearan	The Clearance Time (g_s), s					0.0	0.0		0.0			0.0			0.0
Green Extensio	eue Clearance Time (<i>g</i> _s), s en Extension Time (<i>g</i> _e), s					0.0	0.0		0.0			0.0			0.0
Phase Call Prol	bability			0.00)	0.00	0.00)	0.00			0.00			0.00
Max Out Proba	bility			0.00)	0.00	0.00)	0.00			0.00			0.00
	_				= 0			14/5						0.5	
Movement Gro	oup Res	sults			EB	D			5 		NB		<u> </u>	SB	
Approach Move	mont			L 1	I 6	<u>к</u>	_ L	1	12		1	14			К 10
Adjusted Flow) vob/b			0	10	5	2	12	/	4	14	3	0	10
Adjusted Flow r), ven/n		0	0	0	0	0	0		0	-			
Adjusted Satura		w Rate (s), ven/n/i	n	0	0	0	0	0	0		0			0	
Queue Service	Time (g	Js), S T: ())		0.0	0.0	0.0	0.0	0.0	0.0	<u> </u>	0.0	-	-	0.0	
		e Time (<i>g c)</i> , s		0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Green Ralio (g	/0) /oh/h			18	1027	870	12	102	1 866		12	-	-	565	
Volume-to-Can	acity Ra	tio (X)		0 360	0 770	0,00	0.356	0.78	5 0.628		0 358		-	0.0/1	
Back of Queue	(Q), ft/	(In (95 th percentile)		9.8	628.9	3.1	6.9	647.	5 408.2		6.9	-	-	548.3	
Back of Queue	(Q), K	eh/ln (95 th percenti	le)	0.4	25.2	0.1	0.3	25.9) 16.3		0.3			21.9	
Queue Storage	Ratio (RQ) (95 th percent	ile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00		-	0.00	
Uniform Delay ((d1), s	/veh	,	59.0	21.7	12.7	59.3	22.2	2 19.4		59.3			40.2	
Incremental De	lav (<i>d</i> 2). s/veh		4.7	5.6	0.0	6.4	6.1	3.4		6.5			3.6	
Initial Queue De	nitial Queue Delay (d_3), s/veh			0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Control Delay (Control Delay (d), s/veh			63.7	27.3	12.7	65.7	28.3	3 22.8		65.8			43.8	
Level of Service	Level of Service (LOS)				С	В	E	С	C		E			D	
Approach Delay, s/veh / LOS				27.5	5	С	26.2	2	С	65.	8	E	43.	8	D
Intersection De				30).1						С				
Multimodal Re	ultimodal Results							WE	3		NB			SB	
Pedestrian LOS	Score	/LOS		1.67	'	В	1.67	7	В	2.1	2	В	2.1	6	В
Bicycle LOS Sc	estrian LOS Score / LOS cle LOS Score / LOS					В	2.72	2	С	0.4	9	А	1.3	6	А

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HCS[™] Streets Version 7.9.5

General Inform	nation								Inte	ersecti	on Info	ormatio	on	*	1 + 44 k	× l <u>x</u>
Agency		LAV Consulting							Du	ration,	h	0.250		-	wher	K
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Are	еа Туре	;	Other		×		
Jurisdiction		County		Time F	Period	PM			PH	lF		0.88			W = E	↓ ↓ ↓
Urban Street		Hwy 65		Analys	sis Year	2025			Ana	alysis F	Period	1> 7:	00	*		*
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	I Spr	uce /	Ave 20	25 PM.	xus			***	
Project Descrip	tion														41491	* (*
		*									v					
Demand Inform	nation				EB			N	/B			NB			SB	
Approach Move	ement			L	Т	R	L		Т	R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			6	683	5	3	69	96	474	1	2	0	441	6	10
	4 1010													_		
Signal Informa	tion		0										x	\mathbf{A}		sta
Cycle, s	120.0	Reference Phase	2										1	2	3	
Offset, s	0		Ena	Green	0.0	0.0	0.0	0.	0	0.0	0.0					
	INO	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0	0.0	0.0			\leftrightarrow	_ 	ф
Force Mode	Fixed	Simult. Gap N/S	On	Rea	0.0	0.0	0.0	0.	0	0.0	0.0		5	Y 6	7	8
Timor Pequite				EDI		EPT			10/	/BT	ND		NPT	C DI		SBT
Assigned Phase	<u></u>				-	6	5			2	INDL			301		о о
Caso Number	5			2.0		3.0	2.0	-	2	2			4 12.0			12.0
Phase Duration	<u> </u>			2.0		5.0 71.6	2.0	-	71	1.0			12.0			30.2
Change Period	, 3 (V+P			J.Z		1.0	4.0		1	0			4.0			4.0
Max Allow Hear	way (I	(), S (/// H) e		4.0		4.0	4.0	-	4	.0			4.0			4.0
Queue Clearan	ce Time	$(a_s)_s$		0.0		0.0	0.0	-	0	0			0.0			0.0
Green Extensio	e Clearance Time (g_s), s					0.0	0.0	-	0	.0			0.0			0.0
Phase Call Pro	hahility	(ge), s		0.0		0.0	0.0	<u>,</u>	0	00		+	0.0			0.0
Max Out Proba	bility			0.00	,	0.00	0.00	, ,	0.	00			0.00			0.00
	onity			0.00	,	0.00	0.00	,	0.	.00			0.00			0.00
Movement Gro	oup Res	sults			EB			W	В			NB			SB	
Approach Move	ement			L	Т	R	L	Т		R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2		12	7	4	14	3	8	18
Adjusted Flow F	Rate (<i>v</i>), veh/h		0	0	0	0	0		0		0			0	
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0		0		0			0	
Queue Service	Time (g	g s), s		0.0	0.0	0.0	0.0	0.0)	0.0		0.0			0.0	
Cycle Queue C	learanc	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0)	0.0		0.0			0.0	
Green Ratio (g	/C)			0.01	0.56	0.56	0.01	0.5	6	0.56		0.01			0.29	
Capacity (<i>c</i>), v	eh/h			18	1070	907	9	106	51	899		10			530	
Volume-to-Capa	acity Ra	itio(X)		0.368	0.694	0.006	0.350	0.71	13 0	0.573		0.338			0.938	
Back of Queue	(Q), ft/	In (95 th percentile))	9.8	535.8	2.9	5.4	557	.6 3	362.3		5.3			519.8	
Back of Queue	(Q), ve	eh/In (95 th percenti	le)	0.4	21.4	0.1	0.2	22.	3	14.5		0.2			20.8	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.0	0	0.00		0.00			0.00	
Uniform Delay ((d1), s	/veh		59.0	18.8	11.5	59.5	19.	4	17.2		59.5			41.3	
Incremental De	cremental Delay (<i>d</i> ₂), s/veh			4.7	3.7	0.0	8.1	4.1	1	2.7		7.5			3.6	
Initial Queue De	tial Queue Delay (<i>d</i> ₃), s/veh			0.0	0.0	0.0	0.0	0.0)	0.0		0.0			0.0	
Control Delay (ontrol Delay (<i>d</i>), s/veh			63.7	22.5	11.5	67.6	23.	5	19.9		67.0			45.0	
Level of Service	evel of Service (LOS)				С	В	E	С		В		E			D	
Approach Delay	Approach Delay, s/veh / LOS				3	С	22.2	2	(С	67.0		E	45.0)	D
Intersection De	ntersection Delay, s/veh / LOS					26	6.9							С		
	ultimodel Reculte														0.5	
Multimodal Re	modal Results					P	4.07	W	в -		0.10	NB	D	0.11	SB	
Pedestrian LOS	Score	/ LUS		1.67		В	1.67		E	В	2.12		В	2.16		В
BICYCIE LOS SC	ore / LC	72	1.73	5	В	2.59	1	(U I	0.49		A	1.31		A	

General Inform	nation								Inte	ersecti	on Info	ormati	on	_		te la
Agency		LAV Consulting							Dur	ration, I	h	0.250)	_	4	R.
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area	а Туре	•	Othe	r	×		×_ <mark>≿</mark>
Jurisdiction		County		Time F	Period	PM			PHF	F		0.88			W	↓ ↓ ↓
Urban Street		Hwy 65		Analys	is Year	2025	+ Projec	xt	Ana	alysis F	Period	1> 7:	00	14		۲.
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	I Spri	uce A	Ave 202	25 PM-	+Proj.x	us			
Project Descrip	tion														ነዻተቍ፞፞፞፞፞ጞ	7 4
				1			ľ									
Demand Inform	nation				EB			N	/B			NB			SB	
Approach Move	ement			L	Т	R	L		Г	R	L	Т	R		Т	R
Demand (v), v	eh/h			6	754	5	4	76	64	518	1	2	1	490	6	10
Signal Informa	tion													K		
	120.0	Poforonco Phasa	2										~			sta
Offect e	0	Reference Pridse	End										1	2	3	4
Unsee, s	U		Ellu	Green	0.0	0.0	0.0	0.0	0	0.0	0.0					
	INO	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0	0.0	0.0			\rightarrow	_	х р
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0	0.0	0.0		5	Y 6	7	8
Timor Posults			_	EBI		ERT	W/R	1	\٨/٢	BT	NRI		NRT	SB	1	SBT
Assigned Phase	۵			1		6	5		2	>		-	4			8
Case Number	<u> </u>			2.0		3.0	2.0	\rightarrow	3	0			12.0			12.0
Phase Duration	S			5.2		67.6	4.8	-	67	.3			4.8			42.7
Change Period	. (Y+R (c). S		4.0		4.0	4.0	\rightarrow	4.	.0			4.0			4.0
Max Allow Head	ow Headway (<i>MAH</i>), s					0.0	0.0		0.	.0			0.0			0.0
Queue Clearan	e Clearance Time (g_s), s					0.0	0.0	\rightarrow	0.	.0			0.0			0.0
Green Extensio	ue Clearance Time (<i>g</i> s), s en Extension Time (<i>g</i> e), s					0.0	0.0		0.	.0			0.0			0.0
Phase Call Pro	bability			0.00) (0.00	0.00)	0.0	00			0.00	1		0.00
Max Out Proba	bility			0.00) (0.00	0.00)	0.0	00			0.00			0.00
Movement Gro	oup Res	ults			EB			WE	3			NB			SB	
Approach Move	ement			L	Т	R	L	Т		R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2		12	7	4	14	3	8	18
Adjusted Flow I	Rate (v), veh/h		0	0	0	0	0		0		0			0	
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0		0		0			0	
Queue Service	Time (g	g s), S		0.0	0.0	0.0	0.0	0.0)	0.0		0.0			0.0	
Cycle Queue C	learance	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0		0.0		0.0			0.0	
Green Ratio (g	/C)			0.01	0.53	0.53	0.01	0.5	3 C	0.53		0.01			0.32	
Capacity (c), v	/eh/h			18	1008	854	12	100	2 8	849		12			583	
Volume-to-Cap	acity Ra	tio(X)		0.369	0.813	0.006	0.356	0.82	29 0	.663		0.358		<u> </u>	0.943	
Back of Queue	(Q), ft/	In (95 th percentile)		9.8	685.8	3.2	6.9	709	.4 4	39.6		6.9			563.1	
Back of Queue	(Q), ve	eh/In (95 th percenti	le)	0.4	27.4	0.1	0.3	28.4	4 1	17.6		0.3		<u> </u>	22.5	
Queue Storage	Ratio (RQ) (95 th percent	ile)	0.00	0.00	0.00	0.00	0.0	0 0	0.00		0.00			0.00	
Uniform Delay ((d 1), si	/veh		59.0	23.3	13.3	59.3	23.	8 2	20.6		59.3		<u> </u>	39.6	
Incremental De	cremental Delay (<i>d</i> ₂), s/veh			4.7	7.2	0.0	6.4	7.9) (4.1		6.5		<u> </u>	3.6	
Initial Queue De	nitial Queue Delay (<i>d</i> ₃), s/veh			0.0	0.0	0.0	0.0	0.0)	0.0		0.0			0.0	
Control Delay (Control Delay (d), s/veh			63.7	30.4	13.3	65.7	31.	7 2	24.7		65.8			43.2	
Level of Service	Level of Service (LOS)				С	B	E	C		С		E				
Approach Delay, s/veh / LOS				30.6		C	29.0)	C	;	65.8		E	43.2	2	D
Intersection De	ntersection Delay, s/veh / LOS					32	2.3							C		
Multimodal Po	ultimodal Results							\\/[3			NR			SB	
Pedestrian LOS	timodal Results					B	1 68	3	R	3	2 12		B	2 1	3	В
Bicycle LOS Sc	ore / I C)S		1.86	;	B	2.79	}	0	;	0.49		A	1.4	2	A
,																

General Inform	nation								Inter	rsecti	on Info	ormatio	on	×		× (<u>x</u>
Agency		LAV Consulting							Dura	ation, l	h	0.250		7	wher	R
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area	а Туре	;	Other		×		K K
Jurisdiction		County		Time F	Period	PM			PHF	:		0.88		*	W = E	× ↓ ↓
Urban Street		Hwy 65		Analys	sis Year	2035			Anal	lysis F	Period	1> 7:(00			*
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	I Spri	ice Av	ve 203	35 PM.	xus			***	
Project Descrip	tion			0											41471	* (*
				I												
Demand Inforr	nation				EB			W	/B			NB			SB	
Approach Move	ement			L	Т	R	L		<u> </u>	R	L	Т	R	L	Т	R
Demand (<i>v</i>), v	eh/h			8	828	6	4	84	14	575	1	3	0	534	8	13
	4!			h										_		
Signal Informa	tion		0										7	4		sta
Cycle, s	120.0	Reference Phase	Z										1	2	3	4
Offset, s	U	Reference Point	Ena	Green	0.0	0.0	0.0	0.0)	0.0	0.0					L
	INO	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0)	0.0	0.0			\leftrightarrow	_ 	ф
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0)	0.0	0.0		5	Y 6	7	8
Timor Booulto			_	EDI		CDT	W/P			т	NDI	_		<u>SDI</u>	_	CDT
Assigned Phase	<u> </u>				-	6	5		2		INDL	·		30		8 8
Case Number				2.0		3.0	2.0	\rightarrow	2	-			12.0			12.0
Phase Duration	. S			5.5		64.1	4.8	-	63.4	4			4.8			46.3
Change Period	, (Y+R	c), S		4.0		4.0	4.0		4.0)			4.0			4.0
Max Allow Head	Allow Headway (<i>MAH</i>), s					0.0	0.0		0.0)			0.0			0.0
Queue Clearan	ue Clearance Time (g_s), s					0.0	0.0		0.0)			0.0			0.0
Green Extensio	eue Clearance Time (<i>g</i> _s), s en Extension Time (<i>g</i> _e), s					0.0	0.0		0.0)			0.0			0.0
Phase Call Pro	bability			0.00)	0.00	0.00)	0.0	0			0.00			0.00
Max Out Proba	bility			0.00)	0.00	0.00)	0.0	0			0.00			0.00
	_								-							
Movement Gro	oup Res	sults			EB	-			3	_		NB	-	<u> </u>	SB	
Approach Move	ement			L		R	L			R 40		1	R	L		R
Assigned wove)		1	6	16	5	2		12	/	4	14	3	8	18
Adjusted Flow I), ven/n		0	0	0	0	0	+	0		0			0	
			1	0	0	0	0					0			0	
Queue Service		f(s), S		0.0	0.0	0.0	0.0	0.0		0.0		0.0		<u> </u>	0.0	
Cycle Queue C		e filme (<i>g</i> c), s		0.0	0.0	0.0	0.0	0.0		1.0		0.01		<u> </u>	0.0	
Green Katio (g	/C)			23	0.50	806	12	0.4	3 0	707		13			636	
	acity Ra	tio(X)		0.382	0.046	0.008	0.356	0 07	, , 6 0 ·	97 784		0 3/13			0.048	
Back of Queue	(Q), ft/	(In (95 th percentile)		12.8	920.5	4.2	6.9	993	7 55	55.9		6.8			605.8	
Back of Queue	(Q). Ve	eh/In (95 th percenti	e)	0.5	36.8	0.2	0.3	39.	7 2	2.2		0.3			24.2	
Queue Storage	Ratio (RQ) (95 th percent	ile)	0.00	0.00	0.00	0.00	0.0	0 0	.00		0.00			0.00	
Uniform Delay	(d1), s	/veh	,	58.8	28.4	15.0	59.3	29.0	6 2	5.0		59.3			37.8	
Incremental De	lay (<i>d</i> 2), s/veh		3.9	18.7	0.0	6.4	24.0	0 7	7.6		5.8			3.6	
Initial Queue De	cremental Delay (d 2), s/ven itial Queue Delay (d 3), s/veh			0.0	0.0	0.0	0.0	0.0		0.0		0.0			0.0	
Control Delay (ontrol Delay (<i>d</i>), s/veh			62.6	47.1	15.0	65.7	53.0	3 32	2.6		65.2			41.4	
Level of Service	evel of Service (LOS)			E	D	В	E	D		С		Е			D	
Approach Dela	Approach Delay, s/veh / LOS			47.1		D	45.2	2	D		65.2		Е	41.4		D
ntersection Delay, s/veh / LOS						45	5.0							D		
Multimodal Re	ultimodal Results				EB	D	4.00	WE	5	_	0.40	NB	D	0.11	SB	
Pedestrian LOS	Score	/ LUS		1.68	5	В	1.68	5	В	\rightarrow	2.12		В	2.16		В
BICYCIE LOS SC	estrian LOS Score / LOS de LOS Score / LOS					В	3.04	+	С		0.49		А	1.48	5	A

General Inform	nation								Intersec	tion In	format	ion	_	t at the t	4× 14
Agency		LAV Consulting							Duration	, h	0.25	0	_1		R_
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area Ty	be	Othe	er	×		~_⊱
Jurisdiction		County		Time F	Period	PM			PHF		0.88			W 🕇 E S	
Urban Street		Hwy 65		Analys	sis Year	2035	+ Projec	:t	Analysis	Period	1> 7	:00	<u>م</u>		7 7
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	l Spru	ce Ave 2	035 PI	/I+Proj.:	kus		***	
Project Descrip	tion													ካ ላ ተቀጥ	1 4
Demand Inform	nation				EB			W	В		NE	3		SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	t L	Т	R
Demand (v), v	eh/h			8	899	6	5	91	2 619	1	3	1	583	8	13
Signal Informa	tion			-									-A		r † 1
Cycle, s	120.0	Reference Phase	2								_	1	2	3	\mathbf{Y}_{4}
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.0	0.0	0.0)				
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0.0	0.0)		→		Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0.0	0.0)	5	6	7	8
Timer Results			_	EBI	_	EBT	WB	L.	WBT	NE	3L	NBT	SE	L	SBT
Assigned Phase	e			1		6	5		2			4			8
Case Number				2.0		3.0	2.0		3.0			12.0			12.0
Phase Duration	, S			5.5		66.9	5.0		66.4			5.0			43.1
Change Period,	(Y+R a	:), s		4.0		4.0	4.0		4.0			4.0			4.0
Max Allow Head	dway (A	/AH), s		0.0		0.0	0.0		0.0			0.0			0.0
Queue Clearan	ce Time	(gs), s		0.0		0.0	0.0		0.0			0.0			0.0
Green Extensio	n Time	(g e), s		0.0		0.0	0.0		0.0			0.0			0.0
Phase Call Prol	bability			0.00)	0.00	0.00)	0.00			0.00			0.00
Max Out Proba	bility			0.00)	0.00	0.00)	0.00			0.00			0.00
Movement Gro	oup Res	ults			FB			WB			NB			SB	
Approach Move	ement		_	L	T	R	L	T	R	L	T	R	L	Т	R
Assigned Move	ment			1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow F	Rate (v), veh/h		0	0	0	0	0	0		0			0	
Adjusted Satura	ation Flo	w Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0	0		0			0	
Queue Service	Time (g	y s), S		0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Cycle Queue C	learance	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Green Ratio (g	/C)			0.01	0.52	0.52	0.01	0.52	0.52		0.01			0.33	
Capacity (c), v	/eh/h			23	1020	864	15	1012	2 858		15			566	
Volume-to-Capa	acity Ra	tio (X)		0.381	0.958	0.008	0.362	0.98	0.785		0.360)		1.161	
Back of Queue	(Q), ft/	In (95 th percentile))	12.8	985.8	3.8	8.4	1046 8	5. 567.2		8.3			1081.1	
Back of Queue	(Q), ve	eh/In (95 th percenti	ile)	0.5	39.4	0.2	0.3	41.9	22.7		0.3			43.2	
Queue Storage	Ratio (RQ)(95 th percent	tile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	
Uniform Delay (iform Delay (d_1), s/veh					12.9	59.2	27.4	22.5		59.2			41.2	
Incremental De	cremental Delay (d ₂), s/veh					0.0	5.4	23.8	7.1		5.3			89.2	
Initial Queue De	nitial Queue Delay (<i>d</i> ₃), s/veh					0.0	0.0	0.0	0.0		0.0			0.0	
Control Delay (62.6	46.2	12.9	64.6	51.2	29.6		64.5			130.4			
Level of Service	evel of Service (LOS)					В	E	D	C		E			F	
Approach Delay		46.1		D	42.6	j	D	64	.5	E	130	.4	F		
Intersection De				61	1.0						E				
Multimodal Re	ultimodal Results							WB			NB			SB	
Pedestrian LOS	Score	/LOS		1.68	3	В	1.68	3	В	2.1	2	В	2.1	6	В
Bicycle LOS Sc	ore / LC	S		2.13	3	В	3.24		С	0.5	50	Α	1.5	7	В

General Information								Intersed	tion In	formati	on		│₄₄₄₄+↓	<u>ه لي</u>
Agency	LAV Consulting							Duratior	, h	0.25	0		*‡*	R
Analyst	BMB		Analys	sis Date	Mar 2	8, 2023		Area Ty	e	Othe	r			
Jurisdiction	County		Time F	Period	PM			PHF		0.88		*	W E	↓ ↓ ↓
Urban Street	Hwy 65		Analys	sis Year	2045			Analysis	Period	1> 7	:00			¥
Intersection	Hwy 65/N Spruce Av	ve	File Na	ame	Hwy 6	5 and N	l Spru	ce Ave 2	045 PN	l.xus				· ·
Project Description			л										1 4 1 4 Y 1	• (*
			_											
Demand Information				EB			W	3		NE	;		SB	
Approach Movement			L	Т	R	L	Т	R	L	Т	R	L	T	R
Demand (v), veh/h			9	999	8	5	101	8 693	2	3	0	644	9	15
						_								
Signal Information	rr											A		-+-
Cycle, s 120.0	Reference Phase	2								_		2	3	\mathbf{Y}_{4}
Offset, s 0	Reference Point	End	Green	0.0	0.0	0.0	0.0	0.0	0.0					
Uncoordinated No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0.0	0.0				•	Φ
Force Mode Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0.0	0.0		5	6	7	8
		_				1								
Timer Results			EBL		EBT	WB		WBT	NE	L	NBT	SB		SBT
Assigned Phase			1	\rightarrow	6	5	\rightarrow	2			4			8
Case Number			2.0		3.0	2.0	\rightarrow	3.0			12.0	<u> </u>	_	12.0
Phase Duration, s	\ \		5.7		68.3	5.0	\rightarrow	67.6			5.0			41.7
Change Period, (Y+R	c), S		4.0		4.0	4.0	_	4.0			4.0		_	4.0
Max Allow Headway (I	MAH), s		0.0		0.0	0.0	\rightarrow	0.0			0.0	<u> </u>	_	0.0
Queue Clearance Time	e (gs), s		0.0		0.0	0.0	\rightarrow	0.0			0.0			0.0
Green Extension Time	(ge), s		0.0		0.0	0.0		0.0			0.0	<u> </u>	_	0.0
Phase Call Probability			0.00) (0.00	0.00)	0.00			0.00	<u> </u>		J.00
Max Out Probability			0.00)	0.00	0.00		0.00			0.00			J.00
Movement Group Res	ults			EB			WB			NB			SB	
Approach Movement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Movement			1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h		0	0	0	0	0	0		0			0	
Adjusted Saturation Flo	ow Rate (<i>s</i>), veh/h/lr	۱	0	0	0	0	0	0		0			0	
Queue Service Time (g s), S		0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Cycle Queue Clearanc	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0	0.0		0.0			0.0	
Green Ratio (g/C)			0.01	0.54	0.54	0.01	0.53	0.53		0.01			0.31	
Capacity (c), veh/h			25	1047	887	15	1036	878		16			540	
Volume-to-Capacity Ra	itio(X)		0.388	1.037	0.010	0.362	1.068	3 0.858		0.351			1.344	
Back of Queue (Q), ft	In (95 th percentile)		14.3	1259. 7	4.9	8.4	1367	672.8		8.3			1464.4	
Back of Queue (Q), v	eh/In (95 th percentil	e)	0.6	50.4	0.2	0.3	54.7	26.9		0.3			58.6	
Queue Storage Ratio (RQ) (95 th percent	ile)	0.00	0.00	0.00	0.00	0.00	0.00		0.00			0.00	
Uniform Delay (d 1), s	$y (d_1)$, s/veh			26.9	12.2	59.2	27.3	23.3		59.2			42.1	
Incremental Delay (d 2	ental Delay (<i>d</i> ₂), s/veh				0.0	5.4	48.0	10.6		4.9			157.7	
Initial Queue Delay (d	al Queue Delay (d ȝ), s/veh				0.0	0.0	0.0	0.0		0.0			0.0	
Control Delay (d), s/v	ntrol Delay (<i>d</i>), s/veh				12.2	64.6	75.3	33.9		64.1			199.8	
Level of Service (LOS)	l of Service (LOS)				В	E	F	С		E			F	
Approach Delay, s/veh	pproach Delay, s/veh / LOS				E	58.5	5	E	64.	1	E	199.	8	F
Intersection Delay, s/ve				88	3.0						F			
Multimodal Results				EB			WB			NB			SB	
Pedestrian LOS Score	/LOS		1.67	/	В	1.68	3	В	2.1	2	В	2.16	3	В
Bicycle LOS Score / LO	DS		2.31		В	3.57	·	D	0.5	0	А	1.69	9	В

General Inform	nation								Inters	secti	on Info	ormatio	on			⊨ L <u>⊾</u>
Agency		LAV Consulting							Durat	tion, ł	n	0.250				R_
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area	Туре		Other		≯≯		<
Jurisdiction		County		Time F	Period	PM			PHF			0.88			W ‡ E 8	+ - -
Urban Street		Hwy 65		Analys	is Year	2045 ·	+ Projec	t	Analy	/sis P	Period	1> 7:0	00	4		* ~
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	l Spru	ice Av	e 204	45 PM-	+Proj.xı	ls		***	
Project Descrip	tion														14144	<u>۲</u>
Demand Inform	nation				FB			W	B			NB			SB	
Approach Move	ement				Т	R	1.1	Т	·	R	1	Т	R		T	R
Demand (v) v	eh/h			9	1070	8	6	108	36 7	737	2	3	1	693	9	15
	011/11			Ū	1010	Ū	Ū	100			-	U	· ·	000	U	10
Signal Informa	tion												_	<u> </u>		•
Cycle, s	120.0	Reference Phase	2													Ŷ
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.0		1 0	0.0		1	2	3	4
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0		0.0	0.0				1	Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0) (0.0	0.0		5	Y 6	7	8
Timer Results				EBL	-	EBT	WB	-	WB1	г	NBL	-	NBT	SB		SBT
Assigned Phase	9			1		6	5		2	_			4	<u> </u>		8
Case Number				2.0		3.0	2.0	\rightarrow	3.0				12.0	<u> </u>		12.0
Phase Duration	, S	```		5.7		/1.7	5.2	_	71.2	2			5.2	<u> </u>		38.0
Change Period,	(Y+R a	;), S		4.0		4.0	4.0	_	4.0	-			4.0	<u> </u>		4.0
Max Allow Head	e Clearance Time (g s), s					0.0	0.0	_	0.0	-			0.0		_	0.0
Queue Clearan	ueue Clearance Time (g_s), s					0.0	0.0	+	0.0	-			0.0		_	0.0
Green Extensio	ireen Extension Time (g e), s					0.0	0.0		0.0	_		_	0.0			0.0
Max Out Broba	bility			0.00		0.00	0.00		0.00	, 			0.00			0.00
Max Out Floba	onity			0.00		0.00	0.00	, I	0.00	,			0.00			0.00
Movement Gro	oup Res	ults			EB			WB	;	Т		NB			SB	
Approach Move	ement			L	Т	R	L	Т	F	२	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2	1	2	7	4	14	3	8	18
Adjusted Flow F	Rate (v), veh/h		0	0	0	0	0	C)		0			0	
Adjusted Satura	ation Flo	w Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0	C)		0			0	
Queue Service	Time (g	ŋ s), S		0.0	0.0	0.0	0.0	0.0	0.	.0		0.0			0.0	
Cycle Queue C	learance	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0	0.	.0		0.0			0.0	
Green Ratio (g	/C)			0.01	0.50	0.56	0.01	100	0.0	50		10			0.28	
Capacity (c), v	en/n	+;- (X)		25	1102	934	18	1094	+ 92			18			483	
Volume-to-Capa		lio (X)	\	0.388	1.050	0.009	0.369	1.07		2 2		0.300		-	1.015	
Back of Queue	(Q), II/	in (95 in percentile))	14.5	2	4.5	9.0	1403 5	5. 093	5.5		9.0			1909.1	
Back of Queue	(Q), ve	eh/In (95 th percenti	ile)	0.6	54.8	0.2	0.4	58.5	5 27	'.7		0.4			79.6	
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00	0.00	0.00	0.00) 0.0	00		0.00			0.00	
Uniform Delay ((d 1), s/	veh		58.7	25.2	10.6	59.0	25.5	5 21	.5		59.0			44.0	
Incremental De	lay (<i>d</i> 2		3.6	43.0	0.0	4.7	51.2	2 10).5		4.6			279.7		
Initial Queue De	tial Queue Delay (d 3), s/veh					0.0	0.0	0.0	0.	.0		0.0			0.0	
Control Delay (62.3	68.2	10.7	63.7	76.6	32	2.0		63.7			323.7			
Level of Service		E	F	B	E	F		;		E		0.000	F			
Approach Delay		67.8	5	E	58.6		E		63.7		E	323.	1	F		
Intersection De				11	3.0							F				
Multimodal Re	sults				EB			WB	;			NB			SB	
Pedestrian LOS	Score	/LOS		1.67	·	В	1.67	·	В		2.13		В	2.1	3	В
Bicycle LOS Sc	ore / LC	S		2.44		В	3.77	,	D		0.50		А	1.7	7	В

	eral Information															
General Inform	nation								Inter	rsect	ion Inf	ormatio	on	2		¥ L <u>.</u>
Agency		LAV Consulting							Dura	ation,	h	0.250		_1	4 4 4	
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area	а Туре	e	Other				4 4 5
Jurisdiction		County		Time F	Period	PM			PHF	-		0.88			W S E	+ + - +
Urban Street		Hwy 65		Analys	sis Year	2045 Mitiga	+ Projec ited	xt -	Anal	lysis I	Period	1> 7:(00	2 kl		*
Intersection		Hwy 65/N Spruce A	ve	File Na	ame	Hwy 6	5 and N	I Spri	L L C e Av	ve 20	45 PM	+Proj-N	litigate		ম্শ বা শব্দ পৰ	۲ (۲
Project Descrip	tion							· ·					0			
, , ,																
Demand Inform	nation				EB			W	/B			NB			SB	
Approach Move	ment			L	Т	R	L		Г	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			9	1070	8	6	10	86	737	2	3	1	693	9	15
					_	_					_					
Signal Informa	tion												x	$\overline{\mathbf{A}}$		-
Cycle, s	120.0	Reference Phase	2										1	2	3	
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.0) (0.0	0.0					1
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0)	0.0	0.0			4		Φ
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0) (0.0	0.0		5	6	7	8
Timer Results				EBI		EBI	WB		WB	31	NBI	-	NBI	SBL		SBI
Assigned Phase	9			1	_	6	5		2			_	4		\rightarrow	8
				1.1		4.0	1.1	_	4.0)			12.0	<u> </u>	\rightarrow	10.0
Phase Duration	, S	`		5.7	_	/6.8	5.2		76.3	3		_	5.2			32.9
Change Period,	(Y+R)	c), S		4.0		4.0	4.0	_	4.0)			4.0	<u> </u>	\rightarrow	4.0
Max Allow Head	ax Allow Headway (MAH), s ueue Clearance Time (g s), s					0.0	0.0	\rightarrow	0.0)		_	0.0		\rightarrow	0.0
Queue Clearan	ueue Clearance Time (g s), s green Extension Time (g e), s				_	0.0	0.0		0.0)		_	0.0	<u> </u>	\rightarrow	0.0
Green Extensio	Breen Extension Time ($g \in $), s					0.0	0.0	\rightarrow	0.0)			0.0	<u> </u>	\rightarrow	0.0
Phase Call Proi				0.00)	0.00	0.00		0.00	0		_	0.00	<u> </u>		0.00
Max Out Proba	oility			0.00)	0.00	0.00)	0.00	0			0.00			0.00
Movement Gro	up Res	sults			EB			WE	3			NB			SB	
Approach Move	ment			L	Т	R	L	Т	F	R	L	Т	R	L	Т	R
Assigned Move	ment			1	6	16	5	2	1	12	7	4	14	3	8	18
Adjusted Flow F	Rate (<i>v</i>), veh/h		0	0	0	0	0		0		0		0	0	
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	n	0	0	0	0	0		0		0		0	0	
Queue Service	Time (g	g s), S		0.0	0.0	0.0	0.0	0.0	0	0.0		0.0		0.0	0.0	
Cycle Queue C	learance	e Time (<i>g c</i>), s		0.0	0.0	0.0	0.0	0.0	0	0.0		0.0		0.0	0.0	
Green Ratio (g	/C)			0.62	0.61	0.61	0.61	0.6	0.	.60		0.01		0.24	0.24	
Capacity (<i>c</i>), v	eh/h			92	1153	1150	284	114	5 10	000		18		844	410	
Volume-to-Capa	acity Ra	itio(X)		0.106	0.509	0.509	0.023	0.86	5 0.9	991		0.367		0.893	0.064	
Back of Queue	(Q), ft/	(In (95 th percentile)		7.6	347.6	346.9	2.9	794.	1 10	039. 1		9.8		405.1	26.6	
Back of Queue	(Q), ve	eh/In (95 th percenti	le)	0.3	13.9	13.9	0.1	31.8	8 41	1.6		0.4		16.2	1.1	
Queue Storage	Ratio (RQ) (95 th percent	ile)	0.00	0.00	0.00	0.00	0.0	0 0.	.00		0.00		0.00	0.00	
Uniform Delay (d 1), s	/veh		29.4	13.4	13.4	11.0	19.8	8 23	3.5		59.0		44.1	35.2	
Incremental De	emental Delay (<i>d</i> ₂), s/veh			0.2	1.6	1.6	0.0	8.8	26	6.3		4.6		1.4	0.0	
Initial Queue De	itial Queue Delay (d ȝ), s/veh				0.0	0.0	0.0	0.0	0	0.0		0.0		0.0	0.0	
Control Delay (Control Delay (<i>d</i>), s/veh				15.0	15.0	11.0	28.0	6 49	9.9		63.7		45.5	35.2	
Level of Service	evel of Service (LOS)				В	В	В	С	[D		E		D	D	
Approach Delay		15.1		В	39.1		D		63.7		E	45.1		D		
Intersection De				33	3.2							С				
Multimodal Ba	culte				EP			\٨/٢	2						C P	
Pedestrian LOS	Score	/1.05		1 64		B	2.00	2	, 		2 20		B	2 20		B
Ricycle I OS So				1.00	,	Δ	2.00	2	D		2.30		Δ	2.32	, — —	B
Dicycle LOG 30	JIG/LC			1.40		~	2.10	,	D		0.50		Л	1.77		U

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General Inform	nation								Inters	secti	ion Info	ormatio	on		4 7 4 + 1	× 1,
Agency		LAV Consulting							Durat	tion,	h	0.250			* + + 4	R_
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area	Туре	e	Other				×_}
Jurisdiction		County		Time F	Period	PM P	eak Hou	ır	PHF			0.88			W = E	↓ ↓ ↓
Urban Street		Hwy 65		Analys	is Year	2023			Analy	/sis F	Period	1> 7:(00	7 × 7		Ť
Intersection		Hwy 65/W Hermosa	St	File Na	ame	Hwy 6	65 and V	V Hei	mosa	St 20	023 PN	l.xus			<u>n</u> ttr	
Project Descrip	tion													ñ	* 1 * * * 1	× ۲
				_												
Demand Inform	nation				EB			N	/B			NB			SB	
Approach Move	ement			L	Т	R	<u> </u>		Г	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			39	115	61	184	7	5 1	102	39	673	138	103	706	35
Signal Informa	tion															
	120.0	Reference Phase	2											12		~
Offset s	0	Reference Point	End										1	2	3	
Uncoordinated	No	Simult Con E/W	On	Green	0.0	0.0	0.0	0.	0 0	0.0	0.0	_			_	-
Earco Modo	Fixed	Simult Cap N/S	On	Pod	0.0	0.0	0.0	0.0).0	0.0	î	ך ["] ⊾ו			
Force Mode	Fixeu	Simult. Gap N/S	OII	Reu	0.0	0.0	0.0	0.		5.0	0.0		3	0	1	0
Timer Results	_		_	FBI		FBT	WB	1	WB	г	NBI		NBT	SBI		SBT
Assigned Phase			_	7		4	3	-	8		5		2	1		6
Case Number	-			1.1		4.0	2.0	\rightarrow	3.0		2.0	+	3.0	2.0		3.0
Phase Duration	, S		_	8.5		19.2	19.3	3	29.9	,	8.5		68.3	13.2		73.0
Change Period,	(Y+R	c), S		4.0		4.0	4.0		4.0		4.0		4.0	4.0		4.0
Max Allow Head	dway(<i>I</i>	<i>MAH</i>), s		0.0		0.0	0.0		0.0		0.0		0.0	0.0		0.0
Queue Clearan	eue Clearance Time (g_s) , s			0.0		0.0	0.0		0.0		0.0		0.0	0.0		0.0
Green Extensio	reen Extension Time ($g \in$), s			0.0		0.0	0.0		0.0		0.0		0.0	0.0		0.0
Phase Call Prol	reen Extension Time (<i>g e</i>), s hase Call Probability			0.00)	0.00	0.00)	0.00)	0.00)	0.00	0.00		0.00
Max Out Proba	bility			0.00)	0.00	0.00)	0.00)	0.00)	0.00	0.00		0.00
Movement Gro	un Res	ults			FB			W/F	3			NB			SB	
Approach Move	ment		_		Т	R	1	Т	F	२	1	Т	R		T	R
Assigned Move	ment			7	4	14	3	8	1	8	5	2	12	1	6	16
Adjusted Flow F	Rate (v), veh/h	_	0	0		0	0	()	0	0	0	0	0	0
Adjusted Satura	ation Flo	w Rate (s), veh/h/lr		0	0		0	0)	0	0	0	0	0	0
Queue Service	Time (d	as). s	_	0.0	0.0		0.0	0.0) 0.	.0	0.0	0.0	0.0	0.0	0.0	0.0
Cvcle Queue C	learanc	e Time (a_c), s		0.0	0.0		0.0	0.0) 0.	.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	/C)			0.16	0.13		0.13	0.2	2 0.2	22	0.04	0.54	0.54	0.08	0.58	0.58
Capacity (c), v	/ reh/h			298	226		230	41() 34	18	68	1938	863	139	2080	926
Volume-to-Capa	acity Ra	tio(X)		0.142	0.846		0.868	0.19	9 0.3	319	0.619	0.377	0.174	0.803	0.369	0.041
Back of Queue	(Q), ft/	In (95 th percentile)		46.8	236.8		246.6	85.	1 119	9.2	57.7	230.4	90	150.8	219.8	18.7
Back of Queue	(Q), ve	eh/In (95 th percentil	e)	1.9	9.5		9.9	3.4	4.	.8	2.3	9.2	3.6	6.0	8.8	0.7
Queue Storage	Ratio (RQ) (95 th percenti	le)	0.00	0.00		0.00	0.0	0 0.0	00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay ((d1), s	/veh		42.9	51.3		51.4	38.	5 39	9.6	56.9	16.2	14.3	54.5	13.8	11.1
Incremental De	lay (<i>d</i> 2), s/veh [d			3.3		3.9	0.1	0.	.2	3.4	0.6	0.4	4.0	0.5	0.1
Initial Queue De	elay (<i>d</i>	(d 2), s/ven r (d 3), s/veh			0.0		0.0	0.0) 0.	.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (ol Delay (<i>d</i>), s/veh			43.0	54.6		55.2	38.	6 39	9.8	60.2	16.8	14.7	58.5	14.3	11.2
Level of Service	evel of Service (LOS)			D	D		E	D)	Е	В	В	E	В	В
Approach Delay	Approach Delay, s/veh / LOS			52.5	;	D	47.4	ł	D		18.4		В	19.5		В
Intersection De	ntersection Delay, s/veh / LOS					26	6.7							С		
Multimodal Re	sults	;			EB			W	3			NB	_		SB	_
Pedestrian LOS	Score	/ LOS		2.46	,	В	2.45		B		2.09	,	В	1.89		В
BICYCle LOS Sc	ore / LC	5		0.87		А	1.14	F	Α		1.25		A	1.24		A

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General Inform	nation								Intersec	tion Inf	ormati	on		4 24 44 1	يد ايد
Agency		LAV Consulting							Duration	, h	0.250)		* + + 4	R_
Analyst		BMB		Analys	is Dat	e Mar 2	8, 2023		Area Typ	e	Othe	-	<u>⊅</u> →		×
Jurisdiction		County		Time F	Period	PM P Projec	eak Hou ct	ır +	PHF		0.88		* ***	W ∯ E	1 ↑ * † *
Urban Street		Hwy 65		Analys	is Yea	r 2023			Analysis	Period	1> 7:	00		5 + + 2	×-
Intersection		Hwy 65/W Hermosa	a St	File Na	ame	Hwy 6	5 and V	V Hei	rmosa St 2	2023 PN	1+Proj.x	kus		41471	× (*
Project Descrip	tion												1		
		•					11						ļ.		
Demand Inform	nation				EB			N	/B		NB			SB	
Approach Move	ement			L	Т	R	L		T R	L	Т	R	L	Т	R
Demand (v), v	eh/h			44	115	61	184	7	5 116	39	764	138	116	796	40
	4!											- 1			
Signal Informa		Deference Dhase	0								ļ		12		~
Cycle, s	120.0	Reference Phase	Z									1	2	3	★ 4
Ulisel, s	U	Simult Cap 5/M	Ena	Green	0.0	0.0	0.0	0.	0.0	0.0				_	5
	Tixed	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0 0.0	0.0	_ [רא ∠		<u>∕</u>	•
Force Mode	Fixed	Simult. Gap N/S	On	Rea	0.0	0.0	0.0	0.	0 0.0	0.0		5	6	1	8
Timer Results			_	FBI		FBT	WB	1	WBT	NBI		NBT	SBI		SBT
Assigned Phase	e			7	-	4	3	-	8	5	-	2	1		6
Case Number	<u> </u>			11		4.0	2.0	-	3.0	2.0		3.0	2.0		3.0
Phase Duration			_	8.8		19.2	19.3	3	29.7	8.5		67.3	14.3	3	73.0
Change Period	(Y+R)	c) s		4.0		4.0	4 0		4 0	4.0		4.0	4.0		4.0
Max Allow Head	dwav (A	иан), s	_	0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Queue Clearan	ax Allow Headway (<i>MAH</i>), s ueue Clearance Time (<i>g</i> s), s					0.0	0.0	-	0.0	0.0		0.0	0.0		0.0
Green Extensio	n Time	(ge), s		0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Phase Call Pro	bability			0.00)	0.00	0.00)	0.00	0.00)	0.00	0.00)	0.00
Max Out Proba	bility			0.00		0.00	0.00)	0.00	0.00)	0.00	0.00) (0.00
	·														
Movement Gro	oup Res	ults			EB			W	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow I	Rate(<i>v</i>), veh/h		0	0		0	0	0	0	0	0	0	0	0
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	n	0	0	<u> </u>	0	0	0	0	0	0	0	0	0
Queue Service	Time (g	g s), S		0.0	0.0	<u> </u>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Queue C	learance	e Time (<i>g c</i>), s		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	/C)			0.17	0.13		0.13	0.2	1 0.21	0.04	0.53	0.53	0.09	0.57	0.57
Capacity (c), v	/eh/h			302	227		230	40	7 345	68	1907	849	155	2079	925
Volume-to-Capa	acity Ra			0.159	0.844		0.868	0.20	0 0.366	0.619	0.435	0.177	0.815	0.416	0.047
Back of Queue	$(Q), \pi/$	n (95 th percentile)		52.9	236.7		246.6	85.	3 137.4	57.7	268.2	92.2	169	249	21.5
Ducuo Storago	(Q), Ve	PO(95 th percent)	ile)	2.1	9.5		9.9	3.4		2.3	0.00	3.7	0.0	0.00	0.9
				42.8	51.2		51.4	38	7 40.2	56.0	17.4	14.8	53.0	14.3	11.2
Incremental De	(u r), s			42.0	31.2		31.4	0.1	1 40.2	3.4	0.7	0.5	30	0.6	0.1
Initial Queue De	ay (u z	$\frac{1}{2}$, s/veh		0.1	0.0		0.0		1 0.2	0.0	0.7	0.0	0.0	0.0	0.1
Control Delay (nitial Queue Delay (<i>d</i> ₃), s/veh Control Delay (<i>d</i>), s/veh						55.2	20.0	8 10 1	60.2	18.1	15.2	57.0	1/ 0	11.2
Level of Service		42.9 D	0 4 .3 П		55.Z	<u> 30.</u> П	0 40.4 N	50.2 E	R	R	57.9 F	R	R R		
Approach Delay	Approach Delay, s/veh / LOS					D	L 47 /			10 5		B	20.0		B
Intersection De		52.2		26	38	•	U	13.0			0.0		-		
	ntersection Delay, s/veh / LOS					20							<u> </u>		
Multimodal Re	nodal Results							W	3		NB			SB	
Pedestrian LOS	S Score	/LOS		2.46	;	В	2.46	3	В	2.09)	В	1.89)	В
Bicycle LOS Sc	ore / LC	DS		0.88		А	1.16	3	А	1.33	3	А	1.34		А

General Inform	nation								Inter	rsecti	ion Info	ormatio	on	_		× L
Agency		LAV Consulting							Dura	ation,	h	0.250			* + + 4	R.
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area	а Туре	;	Other		<u>⊅</u>		
Jurisdiction		County		Time F	Period	PM P	eak Hou	ır	PHF	=		0.88			W E	4 ↓ ↓
Urban Street		Hwy 65		Analys	sis Year	2025			Anal	lysis F	Period	1> 7:(00	1		* /
Intersection		Hwy 65/W Hermosa	a St	File Na	ame	Hwy 6	5 and V	V He	mosa	a St 2(025 PN	l.xus			h t t r	
Project Descrip	tion			8										1	* 1 * * * 1	* (*
		*		I.			v									
Demand Inforr	nation				EB			V	/B			NB			SB	
Approach Move	ement			L	Т	R	<u> </u>		г	R	L	Т	R	L	Т	R
Demand(<i>v</i>), v	eh/h			41	119	63	191	7	'8	106	41	699	143	107	734	36
Oinn al Informa	4!															
Signal Informa	100.0	Defense Dhara	0	-								Ļ		ta l		~
Cycle, s	120.0	Reference Phase	Z										1	2	3	★ 4
Offset, s	0		Ena	Green	0.0	0.0	0.0	0.	0	0.0	0.0					5
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.	0	0.0	0.0		\ 4		╱	
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.	0	0.0	0.0		5	6	7	8
Timer Deculto			_							T		_		CDI		ODT
Assigned Dhose					-		2		000	51	INDL 5	-				6
Assigned Phase				11	_	4	3	\rightarrow	0	0	20		2	20		20
Case Number	<u> </u>			1.1		4.0	2.0	,	3.0	0	2.0		3.U 67.0	2.0		3.0
Change Duration	, S			0.0		19.0	19.0	>	30.0	.0	0.0		4.0	13.0	<u> </u>	4.0
		c), S		4.0		4.0	4.0	-	4.0	0	4.0		4.0	4.0	_	4.0
	How freadway (<i>MAH</i>), s re Clearance Time ($g s$), s					0.0	0.0	+	0.0		0.0	-	0.0	0.0		0.0
Croop Extensio	ueue Clearance Time (g s), s reen Extension Time (g e), s					0.0	0.0		0.0	0	0.0		0.0	0.0	_	0.0
Bhase Call Bro	reen Extension Time (g e), s					0.0	0.0	\rightarrow	0.0		0.0		0.0	0.0		0.0
Max Out Broba	bility			0.00)	0.00	0.00		0.0		0.00		0.00	0.00		0.00
Max Out Floba	onity			0.00)	0.00	0.00	,	0.0		0.00		0.00	0.00		0.00
Movement Gro	oup Res	sults			EB			W	3			NB			SB	
Approach Move	ement			L	Т	R	L	Т		R	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	· /	18	5	2	12	1	6	16
Adjusted Flow I	Rate (v), veh/h		0	0		0	0		0	0	0	0	0	0	0
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	n	0	0		0	0		0	0	0	0	0	0	0
Queue Service	Time (g	g s), S		0.0	0.0		0.0	0.0) (0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Queue C	learanc	e Time (<i>g c</i>), s		0.0	0.0		0.0	0.0) (0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	/C)			0.17	0.13		0.13	0.2	2 0).22	0.04	0.53	0.53	0.08	0.57	0.57
Capacity (c), v	/eh/h			304	233		238	424	4 3	359	70	1900	846	144	2048	912
Volume-to-Cap	acity Ra	itio(X)		0.147	0.850		0.872	0.20	00 0.3	.321	0.636	0.400	0.184	0.807	0.390	0.043
Back of Queue	(Q), ft/	/In (95 th percentile))	48.9	242.8		254.1	87.	8 1	123	60.7	245.6	96.4	156.4	234	19.8
Back of Queue	(Q), ve	eh/In (95 th percenti	le)	2.0	9.7		10.2	3.5	5 4	4.9	2.4	9.8	3.9	6.3	9.4	0.8
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00		0.00	0.0	0 0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay	(d 1), s	/veh		42.5	51.0		51.1	37.	9 3	9.0	56.8	17.1	15.0	54.3	14.5	11.6
Incremental De	lay (<i>d</i> 2	y (d 2), s/veh			3.3		3.9	0.1		0.2	3.5	0.6	0.5	4.0	0.6	0.1
Initial Queue De	elay(d	ay (d 3), s/veh			0.0		0.0	0.0) (0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (trol Delay (d), s/veh				54.4		55.0	38.	0 3	9.2	60.4	17.8	15.4	58.3	15.0	11.7
Level of Service	evel of Service (LOS)				D		D	D		D	E	В	В	E	В	В
Approach Delay	Approach Delay, s/veh / LOS					D	47.0)	D		19.4		В	20.2		С
Intersection De	ntersection Delay, s/veh / LOS					27	7.2							С		
Multimodal Re	sults			EB			W	3			NB			SB		
Pedestrian LOS	Score	/LOS		2.46	3	В	2.45	5	В		2.09		В	1.89		В
Bicycle LOS Sc	ore / LC	DS		0.89)	А	1.16	6	Α		1.28		А	1.27		A

General Inforn	nation								Inters	ect	ion Info	ormatio	on		<u> </u>	× L
Agency		LAV Consulting							Durati	on,	h	0.250			* + + 4	R.
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area 7	Гуре	Э	Other		<u>⊅</u>		
Jurisdiction		County		Time F	Period	PM Pe	eak Hou	ır	PHF			0.88			W	• • • ↓ • ↓
Urban Street		Hwy 65		Analys	is Year	2025			Analys	sis F	Period	1> 7:(00	4		*
Intersection		Hwy 65/W Hermosa	a St	File Na	ame	Hwy 6	5 and V	V Hei	rmosa S	St 20	025 PN	l+Proj.x	us		nttr	
Project Descrip	tion													ľ	* 1 ***** 1	* (*
							ľ									
Demand Inform	nation				EB			N	/B			NB		<u> </u>	SB	
Approach Move	ement			L	Т	R	L		ГІ	R	L	Т	R	L L	Т	R
Demand (v), v	eh/h			46	119	63	191	7	'8 1: 1:	20	41	790	143	120	824	41
Signal Informa	tion															
	120.0	Reference Dhase	2									ļ		12		~
Offect o	120.0	Reference Priase	Z End										1	2	3	
Unseerdingtod	No		On	Green	0.0	0.0	0.0	0.	0 0	.0	0.0				_	A
Earco Modo	Fixed	Simult Cap N/S	On	Pod	0.0	0.0	0.0	0.		.0	0.0	_	∕ [⊺] _{⊾1}			•
Force wode	Fixed	Sinuit. Gap N/S	OII	Reu	0.0	0.0	0.0	0.	0 0	.0	0.0		3	0	1	0
Timer Results				FRI		FBT	WR		WRT		NBI		NBT	SBI		SBT
Assigned Phase	e			7	-	4	3		8		5	-	2	1		6
Case Number	<u> </u>			11		4.0	2.0	-	3.0	-	2.0		3.0	2.0		3.0
Phase Duration	1.5			8.9		19.6	19.8	3	30.6		8.6		66 0	14 6	;	71.9
Change Period	(Y+R)	c) S		4.0		4.0	4.0		4.0		4.0		4 0	4.0		4.0
Max Allow Hear	dway (/	MAH)s		4.0		0.0	4.0	-	0.0	-	0.0		0.0	4.0		0.0
Queue Clearan	ueue Clearance Time (g_s), s					0.0	0.0	-	0.0		0.0		0.0	0.0		0.0
Green Extensio	ueue Clearance Time (<i>g</i> s), s reen Extension Time (<i>g</i> e), s					0.0	0.0	-	0.0		0.0		0.0	0.0		0.0
Phase Call Pro	bability	(90),0		0.00		0.0	0.00)	0.00		0.00		0.00	0.00		0.00
Max Out Proba	bility			0.00		0.00	0.00)	0.00		0.00		0.00	0.00		0.00
Max Out 1705a	Sinty			0.00		0.00	0.00	,	0.00		0.00		0.00	0.00		0.00
Movement Gro	oup Res	sults			EB			W	3	Т		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R		L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	18	3	5	2	12	1	6	16
Adjusted Flow I	Rate(<i>v</i>), veh/h		0	0		0	0	0		0	0	0	0	0	0
Adjusted Satura	ation Flo	ow Rate (<i>s</i>), veh/h/l	n	0	0		0	0	0		0	0	0	0	0	0
Queue Service	Time (g	g s), S		0.0	0.0		0.0	0.0) 0.0)	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Queue C	learanc	e Time (<i>g c</i>), s		0.0	0.0		0.0	0.0) 0.0)	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	ı∕C)			0.17	0.13		0.13	0.2	2 0.2	2	0.04	0.52	0.52	0.09	0.57	0.57
Capacity (c), v	/eh/h			307	233		238	42	1 35	7	70	1869	832	159	2047	911
Volume-to-Cap	acity Ra	itio(X)		0.163	0.848		0.872	0.20	0.36	66	0.636	0.459	0.187	0.819	0.437	0.049
Back of Queue	(Q), ft/	/In (95 th percentile))	55	242.7		254.1	88	141	.1	60.7	284.6	98.8	174.6	264.6	22.7
Back of Queue	(Q), ve	eh/In (95 th percenti	ile)	2.2	9.7		10.2	3.5	5 5.6	3	2.4	11.4	4.0	7.0	10.6	0.9
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00		0.00	0.0	0 0.0	0	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay	(d 1), s	/veh		42.4	51.0		51.1	38.	1 39.	6	56.8	18.4	15.5	53.8	15.0	11.6
Incremental De	cremental Delay (d_2), s/veh				3.3		3.9	0.1	l 0.2	2	3.5	0.8	0.5	3.9	0.7	0.1
Initial Queue D	itial Queue Delay (d 3), s/veh				0.0		0.0	0.0) 0.0)	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (Control Delay (d), s/veh						55.0	38.	2 39.	8	60.4	19.2	16.0	57.7	15.7	11.7
Level of Service		D	D		D	D	D		Е	В	В	E	В	В		
Approach Dela		51.9		D	46.9)	D		20.5		С	20.7	·	С		
Intersection De				27	7.3							С				
Multimodal Re	sults				EB			W	3			NB			SB	
Pedestrian LOS	S Score	/ LOS		2.46	;	В	2.45	5	В		2.09		В	1.89		В
Bicycle LOS Sc	ore / LC	DS		0.90		А	1.19)	А		1.36		A	1.37		A

									1							
General Inform	nation								Inters	sect	ion Info	ormatio	on		4 ~~ 4> + +	⊾ l <u>a</u>
Agency		LAV Consulting							Durat	tion,	h	0.250			* + + 4	R.
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area	Туре	e	Other				×_}
Jurisdiction		County		Time F	Period	PM P	eak Hou	ır	PHF			0.88			W	↓ ↓ ↓
Urban Street		Hwy 65		Analys	sis Year	2035			Analy	ysis F	Period	1> 7:0	00	2 R		Ť
Intersection		Hwy 65/W Hermosa	St	File Na	ame	Hwy 6	5 and V	V Hei	mosa	St 2	035 PN	l.xus			<u>n</u> ttr	
Project Descrip	tion													ñ	* 1 * * * 1	r (ř
				1												
Demand Inform	nation				EB			N	/B			NB			SB	1
Approach Move	ement			L	Т	R	L		Г	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			49	145	77	232	9	5 1	129	49	848	174	130	890	44
Signal Informa	tion															
	120.0	Poforonco Phaco	2	-								L L		17		~
Offset s	0	Reference Point	End										1	2	3	
Uncoordinated	No	Simult Con E/M	On	Green	0.0	0.0	0.0	0.	0 0	0.0	0.0	_			_	A
Earco Modo	Eivod	Simult Cap N/S	On	Pod	0.0	0.0	0.0	0.0		0.0	0.0	_ î	Ĵ [™] I⊾1			
Force Mode	Fixeu	Simult. Gap N/S	On	Reu	0.0	0.0	0.0	0.		0.0	0.0		5	0	1	0
Timer Results	_		_	FBI		FBT	WB	1	WB	т	NBI		NBT	SBI		SBT
Assigned Phase			_	7	-	4	3	-	8	-	5		2	1	-	6
Case Number	-			1.1		4.0	2.0	\rightarrow	3.0		2.0		3.0	2.0		3.0
Phase Duration	, S		_	9.0		22.6	22.8	3	36.4	1	9.0		59.3	15.3		6.6 65.7
Change Period,	(Y+R	c), S		4.0		4.0	4.0		4.0		4.0		4.0	4.0		4.0
Max Allow Head	dway (<i>N</i>	<i>MAH</i>), s		0.0		0.0	0.0		0.0		0.0		0.0	0.0		0.0
Queue Clearan	The Clearance Time (g_s) , s			0.0		0.0	0.0		0.0		0.0		0.0	0.0		0.0
Green Extensio	een Extension Time ($g e$), s			0.0		0.0	0.0		0.0		0.0		0.0	0.0		0.0
Phase Call Prol	reen Extension Time (<i>g</i> e), s nase Call Probability			0.00)	0.00	0.00)	0.00)	0.00		0.00	0.00		0.00
Max Out Proba	bility			0.00)	0.00	0.00)	0.00)	0.00		0.00	0.00		0.00
							_		_							
Movement Gro	oup Res	sults			EB	-		W	3			NB		<u> </u>	SB	-
Approach Move	ement			L		R	L	1	F	۲ م			R		1	R
Assigned Move	ment	<u> </u>		/	4	14	3	8	1	8	5	2	12	1	6	16
Adjusted Flow I	Rate (v), veh/h		0	0		0	0	(0	0	0	0	0	0	0
Adjusted Satura	ation Flo	w Rate (s), veh/h/ln		0	0		0	0		0	0	0	0	0	0	0
Queue Service	lime (g	g s), S		0.0	0.0		0.0	0.0) 0.	.0	0.0	0.0	0.0	0.0	0.0	0.0
	learance	e lime (<i>g</i> c), s		0.0	0.0		0.0	0.0) 0.	.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	/C)			0.20	0.15		0.16	0.2		27	0.04	0.46	0.46	0.09	0.51	0.51
Capacity (c), v	en/n			338	2//	<u> </u>	283	512	2 43	34	75	1668	743	1/1	1859	828
Volume-to-Capa		IO(X)		0.158	0.872		0.891	10.20	1 14	1 2	0.708	0.552	0.255	0.828	0.520	0.058
Back of Queue	$(Q), \Pi$	in (95 in percentile)	-)	0.0	283.5		295.4	100	.4 14	1.3	13.2	345.9	142	188.8	320.0	28.4
Back of Queue	(Q), Ve	PO) (05 th percentil	e)	2.3	0.00		11.8	4.0		.7	2.9	13.8	5.7	7.0	13.1	1.1
Queue Storage		RQ) (95 in percentin	e)	0.00	40.5		0.00	0.0	0 0.0	- 1	0.00	0.00	0.00	0.00	10.2	0.00
Uniform Delay	$(u_1), s_1$			39.9	49.5		49.0	33.	0 30	2	0.00	23.4	19.7	20	19.3	14.0
Incremental De	iay (a 2	d 2), s/veh			3.3		3.9	0.1		.2	4.5	1.3	0.8	3.9	1.0	0.1
Initial Queue De	Delay (d ȝ), s/veh			0.0	0.0		0.0	0.0	0 25	.0	0.0	0.0	0.0	0.0	0.0	0.0
Lovel of Service	ontrol Delay (d), s/veh			40.0	52.9		03.5	33.	9 35 F	J.Z	01.3 E	24.7	20.6	57.3	20.4	14.7 D
Approach Dolo	evel of Service (LOS) opproach Delay, s/veh / LOS			50.6			14.3				25.7			24.7		
Intersection Do	Approach Delay, s/veh / LOS ntersection Delay, s/veh / LOS				,	20	44.3	,	U		20.7		0	24.7 C		0
	tersection Delay, s/veh / LOS					30								U		
Multimodal Re	sults	:			EB			W	3			NB			SB	
Pedestrian LOS	Score	/LOS		2.46	3	В	2.45	5	В		2.10		В	1.90		В
Bicycle LOS Sc	ore / LC)S	S				1.31		А		1.45	,	А	1.44		А

General Inform	nation								Inters	sect	ion Info	ormatio	on			u l <u>u</u>
Agency		LAV Consulting							Durat	tion,	h	0.250			x + + 4	R
Analyst		BMB		Analys	sis Date	Mar 2	8, 2023		Area	Туре	e	Other				<u>لم</u> م
Jurisdiction		County		Time F	Period	PM Pe	eak Hou	ır	PHF			0.88			W = E	
Urban Street		Hwy 65		Analys	sis Year	2035			Analy	/sis l	Period	1> 7:(00	- * *		*
Intersection		Hwy 65/W Hermosa	a St	File Na	ame	Hwy 6	5 and V	V He	rmosa	St 2	035 PN	l+Proj.>	us		5 t t r	
Project Descrip	tion													ĥ	* 1 4 1 1	* (*
				_												
Demand Inform	nation				EB			V	VВ			NB			SB	
Approach Move	ement			L	Т	R	L		т	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			54	145	77	232	9	95 1	143	49	939	174	143	980	49
	tion													1		
		Deference Dhase	2	-								ļ		12		~
Cycle, s	120.0	Reference Phase	Z End										1	2	3	
Unseerdingtod	No		Cin	Green	0.0	0.0	0.0	0.	0 0	0.0	0.0					<u> </u>
	Tived	Simult Cap N/S	On	Yellow	0.0	0.0	0.0	0.).0	0.0	_ ^	רא ∕			•
Force wode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.	0 [[J.U	0.0		5	6	1	8
Timor Posults			_	ERI		EBT	W/R		W/B1	г	NRI		NBT	SBI	_	SBT
Assigned Phase				7	-		3		8		5		2	1	-	6
Case Number	6			11		4 0	2.0	\rightarrow	3.0		20		2	2.0		3.0
Phase Duration				9.2		4.0 22.6	2.0	2	36.2	,	9.0		58.3	16 3	2	65 7
Change Period	(V+R	~) s		4.0		4 0	4.0		4.0		4.0		4 0	4.0	, ,	4.0
Max Allow Hear	$\frac{1}{2}$	ΜΔΗ) s		4.0		0.0	4.0	-	0.0		0.0		0.0	4.0		0.0
Queue Clearan	ueue Clearance Time (g_s), s					0.0	0.0	\rightarrow	0.0		0.0		0.0	0.0		0.0
Green Extensio	ueue Clearance Time (g s), s reen Extension Time (g e), s					0.0	0.0	-	0.0		0.0		0.0	0.0		0.0
Phase Call Pro	reen Extension Time (g e), s					0.00	0.0	<u>,</u>	0.0		0.0		0.00	0.0		0.0
Max Out Proba	bility			0.00	, ,	0.00	0.00	, ,	0.00		0.00		0.00	0.00	, , , , , , , , , , , , , , , , , , ,	0.00
	onity			0.00	,	0.00	0.00	,	0.00	,	0.00		0.00	0.00	, , ,	0.00
Movement Gro	oup Res	ults			EB			W	В			NB			SB	
Approach Move	ement			L	Т	R	L	Т	F	र	L	Т	R	L	Т	R
Assigned Move	ment			7	4	14	3	8	1	8	5	2	12	1	6	16
Adjusted Flow I	Rate (v), veh/h		0	0		0	0	C)	0	0	0	0	0	0
Adjusted Satura	ation Flo	w Rate (<i>s</i>), veh/h/l	n	0	0		0	0	C)	0	0	0	0	0	0
Queue Service	Time (g	g s), S		0.0	0.0		0.0	0.0) 0.	.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Queue C	learanc	e Time (<i>g c</i>), s		0.0	0.0		0.0	0.0) 0.	.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	v/C)			0.20	0.16		0.16	0.2	7 0.2	27	0.04	0.45	0.45	0.10	0.51	0.51
Capacity (c), v	/eh/h			341	277		283	51	0 43	32	75	1638	729	185	1859	827
Volume-to-Cap	acity Ra	itio(X)		0.172	0.870		0.891	0.20	0.3	60	0.708	0.623	0.259	0.839	0.573	0.064
Back of Queue	(Q), ft/	In (95 th percentile)		62.3	283.2		295.4	100	.5 158	8.8	73.2	396.3	145	203.2	365.5	31.8
Back of Queue	(Q), Ve	eh/In (95 th percenti	le)	2.5	11.3		11.8	4.() 6.	.4	2.9	15.9	5.8	8.1	14.6	1.3
Queue Storage	Ratio (RQ) (95 th percent	ile)	0.00	0.00		0.00	0.0	0 0.0	00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay	(d 1), s	/veh		39.9	49.5		49.6	34.	0 35	5.5	56.8	25.0	20.4	52.9	20.1	14.7
Incremental De	remental Delay (d_2), s/veh			0.1	3.3		3.9	0.1	1 0.	.2	4.5	1.8	0.9	3.8	1.3	0.1
Initial Queue De	tial Queue Delay (<i>d z</i>), s/veh				0.0		0.0	0.0) 0.	.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (<i>d</i>), s/veh				40.0	52.8		53.5	34.	0 35	5.7	61.3	26.8	21.2	56.7	21.4	14.8
Level of Service	evel of Service (LOS)						D	С	C)	Е	С	С	E	С	В
Approach Dela		50.3	3	D	44.2	2	D		27.4		С	25.4		С		
Intersection De				31	1.3							С				
	nersedion beidy, siver i Loo															
Multimodal Re	sults				EB			W	В			NB			SB	
Pedestrian LOS	S Score	/LOS		2.46	5	В	2.45	5	В		2.10		В	1.90)	В
Bicycle LOS Sc	ore / LC	DS		0.98	3	А	1.33	3	Α		1.53		В	1.54		В

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HCS[™] Streets Version 7.9.5

General Inform	nation								Intersec	tion Inf	ormatio	on		4 74 42 1 1	× l <u>s</u>
Agency		LAV Consulting							Duration	h	0.250			* + + 4	R
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area Typ	е	Other				×
Jurisdiction		County		Time F	Period	PM Pe	eak Hou	r	PHF		0.88			W = E	↓ ↓
Urban Street		Hwy 65		Analys	is Year	2045			Analysis	Period	1> 7:(00	2 R		Ť
Intersection		Hwy 65/W Hermosa	a St	File Na	ame	Hwy 6	5 and V	V Her	mosa St 2	2045 PN	1.xus			5 1 1 7	
Project Descrip	tion												ñ	* 1 * * * 1	× (*
Demand Inform	nation				EB			W	B		NB			SB	
Approach Move	ement				Т	R		Т	R		Т	R		Т	R
Demand (<i>v</i>), v	eh/h			59	175	93	280	11	4 155	59	1023	210	157	1073	53
Signal Informa	tion														
	120.0	Reference Phase	2								ļ		12		~
Offset s	0	Reference Point	End									1	2	3	4
Uncoordinated	No	Simult Gap E/M	On	Green	0.0	0.0	0.0	0.0	0.0	0.0					A
Eorce Mode	Fixed	Simult. Gap E/W	On	Pellow	0.0	0.0	0.0	0.0	0.0	0.0	_ î	ך "∣⊾ז			
T OICE MODE	TIXEd	Sindit. Gap N/S	On	Itteu	0.0	0.0	0.0	0.0	0.0	0.0			9		0
Timer Results			_	FBI		FBT	WB		WBT	NBI		NBT	SBI		SBT
Assigned Phase	Э		_	7		4	3	-	8	5		2	1		6
Case Number				1.1		4.0	2.0	+	3.0	2.0		3.0	2.0		3.0
Phase Duration	, S			9.3		26.0	26.2	2	43.0	9.6		50.4	17.3		58.2
Change Period	(Y+R	c), S		4.0		4.0	4.0		4.0	4.0		4.0	4.0		4.0
Max Allow Head	dway(<i>N</i>	<i>ИАН</i>), s		0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Queue Clearan	ueue Clearance Time (g_s), s			0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Green Extensio	reen Extension Time ($g \in J$, s			0.0		0.0	0.0		0.0	0.0		0.0	0.0		0.0
Phase Call Pro	reen Extension Time (<i>g</i> _e), s hase Call Probability) (0.00	0.00)	0.00	0.00)	0.00	0.00		0.00
Max Out Proba	bility			0.00) (0.00	0.00)	0.00	0.00)	0.00	0.00		0.00
	_														
Movement Gro	oup Res	ults			EB			WE			NB		<u> </u>	SB	
Approach Move	ement				1	R	L	1	R	L		R		I	R
Assigned wove	ment	<u> </u>		/	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow I), ven/n		0	0		0	0	0	0	0	0	0	0	0
Adjusted Satura		w Rate (s), ven/n/l	n	0	0		0	0	0	0	0	0	0	0	0
Queue Service	Time (g	js), S . Time (0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Queue C		e Time (<i>g c</i>), s		0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	/C)			0.23	0.10		0.19	617	522	0.05	1200	0.39	201	1622	0.45
Volume to Con	en/n	tio (X)		3/0	329 0.007		0.000	017	023	04	0.705	023	201	0 714	0.070
Back of Oueue	(O) ft/	llio (X) In (95 th percentile)		65.3	0.007 327 9		342.7	110	1 0.322 7 157 4	0.700 88.7	0.795 507 7	204.9	218.2	470	40.3
Back of Queue	$(\mathbf{Q}), \mathbf{u}$	h/ln (95 th percentic)	(ما	2.6	13.1		13.7	110.	63	3.5	20.3	82	8.7	18.8	1.6
	Ratio (RO) (95 th percent	ile)	0.00	0.00		0.00	0.00	0.0	0.00	0.00	0.2	0.0	0.00	0.00
Uniform Delay	(d_1)	/veh		37.1	47.8		47.9	29.2	30.5	56.6	32.6	26.3	52.4	26.7	18.7
Incremental De	orm Delay (d 1), s/veh			01	32		39	0.1	0.1	5.4	47	17	3.8	27	0.2
Initial Queue De	nental Delay (<i>d</i> ₂), s/veh Queue Delay (<i>d</i> ₃), s/veh			0.1	0.0		0.0	0.1	0.1	0.0	4 .7	0.0	0.0	0.0	0.2
Control Delay ((a_3) , s/ven pontrol Delay (d), s/veh			37.2	51.0		51.8	20 2	30.7	61.9	37.3	28.0	56.2	29.4	18.9
Level of Service	evel of Service (LOS)			D	D		D	20.0	, 00.7 C	F	D	20.0 C	F	20.4 C	B
Approach Delay	Approach Delay, s/veh / LOS			48 5		D	41 1		D	36 0		D	32.2		C
Intersection De	Approach Delay, s/veh / LOS ntersection Delay, s/veh / LOS					36	5.9		-	00.0		-	D		-
	ntersection Delay, s/veh / LOS												-		
Multimodal Re	Iltimodal Results				EB			WE	3		NB			SB	
Pedestrian LOS	Score	/ LOS		2.46	;	В	2.44	-	В	2.11		В	1.91		В
Bicycle LOS Sc	ore / LC	S		1.07		А	1.47	/	А	1.65	5	В	1.64		В

General InformationAgencyLAV ConsultingDuration, h0.250AnalystBMBAnalysis DateMar 28, 2023Area TypeOtherJurisdictionCountyTime PeriodPM Peak HourPHF0.88Urban StreetHwy 65Analysis Year2045Analysis Period1> 7:00IntersectionHwy 65/W Hermosa StFile NameHwy 65 and W Hermosa St 2045 PM+Proj.xus1Project DescriptionCountyFile NameHwy 65 and W Hermosa St 2045 PM+Proj.xus1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
AgencyLAV ConsultingDuration, h0.250AnalystBMBAnalysis DateMar 28, 2023Area TypeOtherJurisdictionCountyTime PeriodPM Peak HourPHF0.88Urban StreetHwy 65Analysis Year2045Analysis Period1> 7:00IntersectionHwy 65/W Hermosa StFile NameHwy 65 and W Hermosa St 2045 PM+Proj.xusIntersection	₹}
AnalystBMBAnalysis DateMar 28, 2023Area TypeOtherJurisdictionCountyTime PeriodPM Peak HourPHF0.88Urban StreetHwy 65Analysis Year2045Analysis Period1> 7:00IntersectionHwy 65/W Hermosa StFile NameHwy 65 and W Hermosa St 2045 PM+Proj.xusImage: County Project Description	<->▲
JurisdictionCountyTime PeriodPM Peak HourPHF0.88Urban StreetHwy 65Analysis Year2045Analysis Period1> 7:00IntersectionHwy 65/W Hermosa StFile NameHwy 65 and W Hermosa St 2045 PM+Proj.xus1> 1Project Description	
Urban Street Hwy 65 Analysis Year 2045 Analysis Period 1> 7:00 Intersection Hwy 65/W Hermosa St File Name Hwy 65 and W Hermosa St 2045 PM+Proj.xus Image: Comparison of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term o	
Intersection Hwy 65/W Hermosa St File Name Hwy 65 and W Hermosa St 2045 PM+Proj.xus Project Description Image: Comparison of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of the term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of term of te	**
Project Description	
	ſ
Demand Information EB WB NB SB	
Approach Movement L I R L I R L I R L I R L I	R
Demand (v), veh/h 64 175 93 280 114 169 59 1114 210 170 1163	58
Signal Information	
Cycle, s 120.0 Reference Phase 2	Ζ
Offset s 0 Reference Point End	\mathbf{Y}_{4}
Uncoordinated No. Simult Gap F/W On Vollow 0.0 0.0 0.0 0.0 0.0 0.0 Vollow 0.0 0.0 0.0 0.0 Vollow 0.0 0.0 0.0 0.0 Vollow 0.0 0.0 0.0 Vollow 0.0 0.0 0.0 Vollow 0.0 0.0 0.0 Vollow 0.0 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 Vollow 0.0 0.0 Vollow 0.0 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Vollow 0.0 Voll	4
Force Mode Fixed Simult Gap N/S On Red 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	8
Timer Results EBL EBT WBL WBT NBL NBT SBL S	BT
Assigned Phase 7 4 3 8 5 2 1	6
Case Number 1.1 4.0 2.0 3.0 2.0 3.0 2.0	3.0
Phase Duration, s 9.4 26.1 26.2 42.9 9.6 49.4 18.3 5	8.1
Change Period, (Y+R c), s 4.0 4.0 4.0 4.0 4.0 4.0 4.0	1.0
Max Allow Headway (MAH), s 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0).0
Queue Clearance Time (g s), s 0.0 0.0 0.0 0.0 0.0 0.0).0
Green Extension Time (g e), s 0.0 0.0 0.0 0.0 0.0 0.0).0
Phase Call Probability 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	.00
Max Out Probability 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 </td <td>.00</td>	.00
Movement Group Results EB WB NB SB	
Approach Movement L T R L T R L T R L T R L T	R
Assigned Movement 7 4 14 3 8 18 5 2 12 1 6	16
Adjusted Flow Rate (v), veh/h 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0
Adjusted Saturation Flow Rate (s), veh/h/ln 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 <td>0</td>	0
Queue Service Time (g s), s 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0<	0.0
Cycle Queue Clearance Time (g c), s 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0
Green Ratio (g/C) 0.23 0.18 0.19 0.32 0.32 0.05 0.38 0.38 0.12 0.45	0.45
Capacity (c), veh/h 378 329 335 616 522 84 1369 609 215 1632	726
Volume-to-Capacity Ratio (X) 0.184 0.886 0.908 0.201 0.352 0.766 0.884 0.375 0.858 0.775	0.087
Back of Queue (Q), ft/ln (95 th percentile) 70.9 327.8 342.7 110.9 173.7 88.7 588.9 207.8 231.9 525.2	44.2
Back of Queue (Q), veh/ln (95 th percentile) 2.8 13.1 13.7 4.4 6.9 3.5 23.6 8.3 9.3 21.0	1.8
Queue Storage Ratio (RQ) (95 th percentile) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	0.00
Uniform Delay (d 1), s/veh 37.1 47.7 47.9 29.3 30.9 56.6 34.8 27.0 51.9 27.8	18.8
Incremental Delay (<i>d</i> 2), s/veh 0.1 3.2 3.9 0.1 0.2 5.4 8.6 1.8 3.8 3.7	0.2
Initial Queue Delay (d 3), s/veh 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 <	0.0
Control Delay (d), s/veh 37.2 50.9 51.8 29.4 31.1 61.9 43.5 28.8 55.7 31.4	19.0
Level of Service (LOS) D D D C C E D C E C	B
Approach Delay, s/veh / LOS 48.3 D 41.0 D 42.0 D 33.9	C
Intersection Delay, s/ven / LOS 39.4 D	
Multimodal Results EB WB NB SB	
Pedestrian LOS Score / LOS 2.46 B 2.44 B 2.11 B 1.91	В
	В

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HCS[™] Streets Version 7.9.5

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	
Analyst	BMB						Inters	ection			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ity				
Date Performed	3/28/	/23					East/	West Str	eet		W Lin	ndmore S	St			
Analysis Year	2023						North	n/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
]								
Major Street: North-South																
Major Street: North-South																
Vehicle Volumes and Adju	justments															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	20	16		8	4	16	0	40	828	8	0	24	684	4
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	lo			Ν	lo			Ν	lo			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		T
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice					<u>.</u>		<u>.</u>				<u>.</u>		
Flow Rate, v (veh/h)		23		18		14		18		45				27		
Capacity, c (veh/h)		60		593		96		524		794				683		
v/c Ratio		0.38		0.03		0.14		0.03		0.06				0.04		
95% Queue Length, Q ₉₅ (veh)		1.7		0.1		0.5		0.1		0.2				0.1		
Control Delay (s/veh)		99.9		11.3		48.8		12.1		9.8				10.5		
Level of Service (LOS)		F		В		E		В		A				В		
Approach Delay (s/veh)		6	0.5			27	7.8			0).4			0	.4	
Approach LOS			F			[5									

		Н	CS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV	Consultir	q				Jurisc	liction			Coun	ty				
Date Performed	3/28/	23					East/	West Str	eet		W Lin	dmore S	St			
Analysis Year	2023						North	n/South :	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
								1								
Major Street: North-South																
Major Street: North-South																
Vehicle Volumes and Adju	justments															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	20	16		8	4	18	0	40	913	8	0	27	767	4
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	lo			N	lo			Ν	10			N	0	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		23		18		14		20		45				31		
Capacity, c (veh/h)		44		552		71		486		730				626		
v/c Ratio		0.51		0.03		0.19		0.04		0.06				0.05		
95% Queue Length, Q ₉₅ (veh)		2.6		0.1		0.7		0.1		0.2				0.2		
Control Delay (s/veh)		164.8		11.7		67.9		12.7		10.3				11.0		
Level of Service (LOS)		F		В		F		В		В				В		
Approach Delay (s/veh)		96	5.8			34	4.8	-		0	.4	-		0	.4	
Approach LOS			F			[)									

HCS TWSC Version 7.9.5 Hwy 65 and W Lindmore St 2023 PM+Proj.xtw
		Н	CS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	
Analyst	BMB						Inters	ection			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV C	Consultir	q				Jurisc	liction			Coun	ity				
Date Performed	3/28/	23	5				East/	West Str	eet		W Lir	ndmore S	St			
Analysis Year	2025						North	n/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
]								
Major Street: North-South																
Major Street: North-South Vehicle Volumes and Adjustments																
Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	21	17		8	4	17	0	42	860	8	0	25	711	4
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	lo			N	lo			Ν	lo			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		24		19		14		19		48				28		
Capacity, c (veh/h)		54		580		85		509		772				661		
v/c Ratio		0.45		0.03		0.16		0.04		0.06				0.04		
95% Queue Length, Q ₉₅ (veh)		2.1		0.1		0.6		0.1		0.2				0.1		
Control Delay (s/veh)		123.4		11.4		55.6		12.3		10.0				10.7		
Level of Service (LOS)		F		В		F		В		A				В		
Approach Delay (s/veh)		73	3.3			30).3	-		0).5	-		0	.4	
Approach LOS			F			[)									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n					_	_
Analyst	BMB						Inters	section			Hwy	65/W Lir	ndmore S	St		_
Agency/Co.	LAV (Consultir	ng				Jurisc	diction			Coun	ity				
Date Performed	3/28/	/23					East/	West Str	eet		W Lir	ndmore S	St			
Analysis Year	2025						North	n/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	vsis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
Vehicle Volumes and Adju	Major Street: North-South Istments Eastbound Westbound Northbound Southbound U L T R U L T R U L T															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	21	17		8	4	19	0	42	945	8	0	28	794	4
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	10			N	lo			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		24		19		14		22		48				32		
Capacity, c (veh/h)		39		539		60		473		710				606		
v/c Ratio		0.61		0.04		0.23		0.05		0.07				0.05		
95% Queue Length, Q_{95} (veh)		3.3		0.1		0.9		0.1		0.2				0.2		
Control Delay (s/veh)		217.1		11.9		83.0		13.0		10.4				11.3		
Level of Service (LOS)		F		В		F		В		В				В		
Approach Delay (s/veh)		12	5.3			40).1			0).4			0	.4	
Approach LOS	F B F B B B F 125.3															

HCS TWSC Version 7.9.5 Hwy 65 and W Lindmore St 2025 PM+Proj.xtw

		Н	CS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV (Consultir	q				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		W Lin	dmore :	St			
Analysis Year	2035						North	n/South	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
Major Street: North-South																
Major Street: North-South Vehicle Volumes and Adjustments																
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	25	20		10	5	20	0	50	1043	10	0	30	862	5
Percent Heavy Vehicles (%)	<u> </u>	8	8	8		8	8	8	8	8			8	8		<u> </u>
Proportion Time Blocked																
Percent Grade (%)	<u> </u>		0				0									
Right Turn Channelized	<u> </u>	Ν	10			N	10			Ν	lo			N	0	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)		28		23		17		23		57				34		
Capacity, c (veh/h)		28		508				434		661				547		
v/c Ratio		1.03		0.04				0.05		0.09				0.06		
95% Queue Length, Q ₉₅ (veh)		6.7		0.1				0.2		0.3				0.2		
Control Delay (s/veh)		649.5		12.4				13.7		11.0				12.0		
Level of Service (LOS)		F		В				В		В				В		
Approach Delay (s/veh)		36	6.4							0).5			0	.4	
Approach LOS			F													

HCS TW TWSC Version 7.9.5 Hwy 65 and W Lindmore St 2035 PM.xtw

		Н	CS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						_
Analyst	BMB						Inters	ection			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV C	Consultir	Iq				Jurisc	liction			Coun	ty				
Date Performed	3/28/	23					East/	West Stre	eet		W Lin	dmore S	St			
Analysis Year	2035						North	n/South S	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
								1								_
Major Street: North-South Vehicle Volumes and Adjustments																
Vehicle Volumes and Adju	umes and Adjustments Eastbound Westbound Northbound Southbound															
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	25	20		10	5	22	0	50	1128	10	0	33	945	5
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0			(0									
Right Turn Channelized		Ν	lo			N	lo			Ν	lo			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		28		23		17		25		57				38		
Capacity, c (veh/h)		20		473				403		608				501		
v/c Ratio		1.42		0.05				0.06		0.09				0.07		
95% Queue Length, Q ₉₅ (veh)		8.9		0.2				0.2		0.3				0.2		
Control Delay (s/veh)		1331.9		13.0				14.5		11.5				12.8		
Level of Service (LOS)		F		В				В		В				В		
Approach Delay (s/veh)		74	5.7							0).5			0	.4	
Approach LOS			F													

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		Н	CS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_	_	_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV (Consultir	Iq				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	5				East/	West Str	eet		W Lin	dmore S	St			
Analysis Year	2045						North	n/South :	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	Nort	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
	_		_	_]		_		_			_	
								- 11								
Major Street: North-South																
Major Street: North-South Vehicle Volumes and Adjustments																
Vehicle Volumes and Adju	ustments Eastbound Westbound Northbound Southbound															
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	Т	R
Volume (veh/h)		0	30	24		12	6	24	0	61	1259	12	0	36	1040	6
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		Ν	lo			Ν	10			Ν	lo			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	d Leve	l of Se	ervice													
Flow Rate, v (veh/h)		34		27		20		27		69				41		
Capacity, c (veh/h)		12		436				360		551				436		
v/c Ratio		2.81		0.06				0.08		0.13				0.09		
95% Queue Length, Q ₉₅ (veh)		14.5		0.2				0.2		0.4				0.3		
Control Delay (s/veh)		3972.9		13.8				15.8		12.5				14.1		
Level of Service (LOS)		F		В				C		В				В		
Approach Delay (s/veh)		22	13.3							0	0.6			0	.5	
Approach LOS			F													

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		Н	ICS7	Two	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						
Analyst	BMB						Inters	section			Hwy	65/W Lir	ndmore S	St		
Agency/Co.	LAV (Consultir	ng				Jurisc	diction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		W Lir	dmore S	St			
Analysis Year	2045						North	n/South :	Street		Hwy	65				
Time Analyzed	PM P	eak Hou	ır + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	vsis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-S	Store											
Lanes			-													
								1								
Major Street: North-South																
Major Street: North-South Vehicle Volumes and Adjustments Approach Eastbound Westbound Northbound																
venicle volumes and Adj	ustme	nts											1			
Approach		Eastk	oound			West	bound			North	bound			South	bound	
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	10	1	2	3	40	4	5	6
Number of Lanes		0	1	1		0	1	1	0	1	2	1	0	1	2	1
Configuration		LT		R		LT		R		L	Т	R		L	T	R
Volume (veh/h)		0	30	24		12	6	26	0	61	1344	12	0	61	1344	12
Percent Heavy Vehicles (%)		8	8	8		8	8	8	8	8			8	8		<u> </u>
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized		1	٥V			Ν	10			Ν	10			Ν	lo	
Median Type Storage				Left	Only								1			
Critical and Follow-up Ho	eadwa	ys														
Base Critical Headway (sec)		7.5	6.5	6.9		7.5	6.5	6.9		4.1				4.1		
Critical Headway (sec)		6.48	6.66	7.06		7.66	6.66	7.06		4.26				4.26		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.08	3.38		3.58	4.08	3.38		2.28				2.28		
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	1	34		27		20		30		69				69		
Capacity, c (veh/h)				334				334		399				399		
v/c Ratio				0.08				0.09		0.17				0.17		
95% Queue Length, Q ₉₅ (veh)				0.3				0.3		0.6				0.6		
Control Delay (s/veh)				16.7				16.8		15.9				15.9		
Level of Service (LOS)				С				С		С				С		
Approach Delay (s/veh)										0	.7			0	.7	
Approach LOS																

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		Н	ICS7	Two	-Way	' Sto	p-Co	ntrol	Rep	ort						
General Information							Site	Infor	natio	n						_
Analyst	BMB						Inters	ection			Hwy	65/W Tu	ılare Rd			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ity				
Date Performed	3/28/	/23	<u> </u>				East/	West Str	eet		Hwy	65				
Analysis Year	2023						North	n/South	Street		W Tu	lare Rd				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					_											
					Maj	or Street: Ea	ast-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	10	1	2	3	40	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
	<u> </u>	L	T			<u> </u>		TR				<u> </u>		L		R
Volume (veh/h)		117	1135				1046	46				<u> </u>		19		96
Percent Heavy Vehicles (%)	<u> </u>	8										<u> </u>		8		8
Proportion Time Blocked																
Percent Grade (%)	<u> </u>												<u> </u>	()	
Right Turn Channelized					·									N	0	
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)		133												22		109
Capacity, c (veh/h)		240												9		215
v/c Ratio		0.55												2.39		0.51
95% Queue Length, Q ₉₅ (veh)		3.5												9.6		2.9
Control Delay (s/veh)		38.2								1				3473.1		38.7
Level of Service (LOS)		E												F		E
Approach Delay (s/veh)		3	.6											60	6.1	
Approach LOS														l	F	

		F	ICS7	Two	-Way	' Sto	p-Co	ntrol	Rep	ort						
General Information							Site	Infor	natio	n						_
Analyst	BMB						Inters	ection			Hwy	65/W Tu	lare Rd			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ity				
Date Performed	3/28/	/23	<u> </u>				East/	West Str	eet		Hwy	65				
Analysis Year	2023						North	n/South	Street		W Tu	lare Rd				
Time Analyzed	PM P	eak Hou	ır + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	iy Gas St	ation C-S	Store											
Lanes																
		_		_				_	_	_	_	_	_			
				_				_								
					_											
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adj	ustme	nts														
Approach	1	stments Eastbound Northbound Southbo U L T R U L T R U L													bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	Т					TR						L		R
Volume (veh/h)		133	1249				1162	46						19		108
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)														()	
Right Turn Channelized														N	ю	
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	T	151	<u> </u>							<u> </u>		<u> </u>		22		123
Capacity, c (veh/h)		197												3		179
v/c Ratio		0.77												7.26		0.68
95% Queue Length, Q ₉₅ (veh)		7.5												12.0		5.5
Control Delay (s/veh)		77.3												13752.		65.7
		-												7		-
Level of Service (LOS)	-	F												F		F
Approach Delay (s/veh)		7	4.4											211	3.3	
Approach LOS	1														7	

		Н	ICS7	Two	-Way	v Sto	р-Со	ntrol	l Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	matio	n	_	_	_	_	_	
Analyst	BMB						Inters	section			Hwy	65/W Tu	ulare Rd			
Agency/Co.	LAV	Consultir	ng				Juriso	liction			Cour	nty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2025						North	n/South	Street		W Tu	ılare Rd				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	vsis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ei	ast-West									
Vehicle Volumes and Adj	ustme	nts														
Approach	T	Eastk	oound			West	bound			North	nbound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	Т					TR						L		R
Volume (veh/h)		122	1179				1087	48						20		100
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized														Ν	10	
Median Type Storage				Undi	ivided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	Τ	139												23		114
Capacity, c (veh/h)		223												6		201
v/c Ratio		0.62												3.51		0.56
95% Queue Length, Q ₉₅ (veh)		4.5												11.2		3.6
Control Delay (s/veh)		46.7												5747.2		45.4
Level of Service (LOS)		E												F		E
Approach Delay (s/veh)		4	.4											. 99	5.7	
Approach LOS															F	

		Η	ICS7	Two	-Way	' Sto	p-Co	ntrol	Rep	ort						
General Information							Site	Inform	natio	n						
Analyst	BMB						Inters	ection			Hwy	65/W Tu	lare Rd			
Agency/Co.	LAV (Consultir	ıg				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2025						North	/South	Street		W Tu	lare Rd				
Time Analyzed	PM P	eak Hou	ır + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maji	or Street: Ea	ıst-West									
Vehicle Volumes and Adj	ustme	nts														
Approach	T	Eastbound Westbound Northbound Southbo													bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	Т					TR						L		R
Volume (veh/h)		138	1293				1203	48						20		112
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)														. ()	
Right Turn Channelized														N	0	
Median Type Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)	T	4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	T	157												23		127
Capacity, c (veh/h)		182												2		168
v/c Ratio		0.86												14.86		0.76
95% Queue Length, Q ₉₅ (veh)		10.2												13.2		7.0
Control Delay (s/veh)		114.0												29611. 8		85.5
Level of Service (LOS)		F												F		F
Approach Delay (s/veh)		1	1.0											455	9.2	
Approach LOS															=	

		H	ICS7	Two	-Way	' Sto	p-Co	ntrol	l Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	matio	n	_	_	_	_	_	
Analyst	BMB						Inters	section			Hwy	65/W Tu	ulare Rd			
Agency/Co.	LAV	Consultir	ng				Jurisc	liction			Cour	nty				
Date Performed	3/28/	/23	-				East/	West Str	eet		Hwy	65				
Analysis Year	2035						North	n/South	Street		W Tu	ılare Rd				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	vsis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: E	ast-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	bound			West	bound			North	nbound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	Т					TR						L		R
Volume (veh/h)		147	1430				1318	58				<u> </u>		24		121
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized														1	10	
Median Type Storage				Undi	ivided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)		167					<u> </u>			<u> </u>	<u> </u>	<u> </u>	<u> </u>	27		138
Capacity, c (veh/h)		147														139
v/c Ratio		1.14														0.99
95% Queue Length, Q ₉₅ (veh)		21.7														14.0
Control Delay (s/veh)		409.1														234.9
Level of Service (LOS)		F														F
Approach Delay (s/veh)		. 3	8.1													
Approach LOS																

		Н	CS7	Two	-Way	' Sto	р-Со	ntrol	Rep	ort						
General Information						_	Site	Inform	natio	n		_			_	_
Analyst	BMB	_	_	_	_	_	Inters	section	_	_	Hwy	65/W Tu	ılare Rd	_	_	_
Agency/Co.	LAV	Consultir	ıg				Juriso	diction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	65				
Analysis Year	2035						North	n/South	Street		W Tu	lare Rd				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	vsis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
				_				_								
					Maj	or Street: Ea	ast-West									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	Т					TR						L		R
Volume (veh/h)		163	1544				1434	58						24		133
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized														Ν	10	
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		185												27		151
Capacity, c (veh/h)		120														116
v/c Ratio		1.54														1.30
95% Queue Length, Q ₉₅ (veh)		39.6														26.3
Control Delay (s/veh)		1091.8														694.4
Level of Service (LOS)		F														F
Approach Delay (s/veh)		10	4.3													
Approach LOS																

		Н	ICS7	Two	-Way	' Sto	р-Со	ntrol	l Rep	ort						
General Information							Site	Infor	matio	n						
Analyst	ВМВ						Inters	ection			Hwy	65/W Τι	ulare Rd			
Agency/Co.	LAV	Consultir	ng				Jurisc	liction			Cour	ity				
Date Performed	3/28,	/23	5				East/	West Str	eet		Hwy	65				
Analysis Year	2045						North	n/South	Street		W Tu	lare Rd				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street. F.	act.West									
Vehicle Volumes and Ad	justme	nts														
Approach		Eastk	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	Т					TR						L		R
Volume (veh/h)		178	1725				1590	70						29		146
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized														١	10	
Median Type Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, an	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	T	202												33		166
Capacity, c (veh/h)		90														90
v/c Ratio		2.26														1.85
95% Queue Length, Q ₉₅ (veh)		61.3														43.8
Control Delay (s/veh)		2383.1														1662.
Level of Service (LOS)		F														F
Approach Delay (s/veh)		22	2.9													
Approach LOS																

		Н	ICS7	Two	-Way	' Sto	p-Co	ntrol	l Rep	ort						
General Information							Site	Infor	matio	n						
Analyst	BMB						Inters	ection			Hwy	65/W Tu	ılare Rd			
Agency/Co.	LAV	Consultir	ng				Jurisc	liction			Coun	ity				
Date Performed	3/28,	/23	5				East/	West Str	eet		Hwy	65				
Analysis Year	2045						North	n/South	Street		W Tu	lare Rd				
Time Analyzed	PM F	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Er	ast-West									
Vehicle Volumes and Adj	ustme	ents														
Approach		Eastk	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	1	0	0	0	1	0		0	0	0		1	0	1
Configuration		L	Т					TR						L		R
Volume (veh/h)		194	1839				1706	70						29		158
Percent Heavy Vehicles (%)		8												8		8
Proportion Time Blocked																
Percent Grade (%)															0	
Right Turn Channelized														Ν	10	
Median Type Storage				Undi	vided											
Critical and Follow-up H	eadwa	ys														
Base Critical Headway (sec)		4.1												7.1		6.2
Critical Headway (sec)		6.48												6.48		6.28
Base Follow-Up Headway (sec)		2.2												3.5		3.3
Follow-Up Headway (sec)		2.34												3.57		3.37
Delay, Queue Length, an	d Leve	el of S	ervice	I.												
Flow Rate, v (veh/h)		220												33		180
Capacity, c (veh/h)		73														74
v/c Ratio		3.02														2.41
95% Queue Length, Q ₉₅ (veh)		77.9														57.3
Control Delay (s/veh)		3759.4														2678.0
Level of Service (LOS)		F														F
Approach Delay (s/veh)		35	8.7	-		-		-							_	
Approach LOS																

HCS7 Signalized Intersection Results Summary

General Inform	nation									Int	tersect	ion Info	ormati	on		┙┪┶╋╽	14 1
Agency		LAV Consulting								Du	iration,	h	0.250)		4 4	
Analyst		BMB		Analys	is Dat	te I	Mar 28	3, 2023		Are	еа Туре	;	Othe	r	4		↓ ↓
Jurisdiction		County		Time F	Period	F	PM Pe Proi	ak Hou	r+	PH	łF		0.88			W TE	*- ↓ ↓ ↓
Urban Street		Hwv 65		Analvs	is Yea	ar 2	2045			An	alvsis F	Period	1> 7:	00			Ē
Intersection		Hwy 65/Cedar Ave		File Na	ame	Ē	Hwy 6	5 and V	V Tula	are l	, Rd 204	5 PM+F	Proj-Mi	tigated		<u>ነ</u> ተ ተ ቀ ካ	1 1 1
Project Descrip	tion						,							0	1		
· ·																	
Demand Inform	nation				EB				W	'B			NB			SB	
Approach Move	ement			L	Т		R	L	ד	Γ	R	L	Т	R	L	Т	R
Demand (v), v	eh/h			194	183	9			17	06	70				29	0	158
																	-
Signal Informa	tion														_		\mathbf{A}
Cycle, s	120.0	Reference Phase	2											1	4 2	3	▲↓ ⁴
Offset, s	0	Reference Point	End	Green	0.0		0.0	0.0	0.0)	0.0	0.0			<u>⊼</u>		
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0		0.0	0.0	0.0)	0.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0		0.0	0.0	0.0)	0.0	0.0		5	6	7	8
				EDI	_				. 1		(D.T.			NET	0.5		0.0.7
Timer Results				EBL		EF	BI	WB	-	V	VBI	NBL	-	NBI	SB	L	SBI
Assigned Phase	e				\rightarrow	2	2		_	-	6						4
Case Number						6.	.0			8	3.0						11.0
Phase Duration	, S					10	1.4			10)1.4						18.6
Change Period,	, (Y+R)	c), S				4.	.0			4	1.0						4.0
Max Allow Head	dway(A	ИАН), s				0.	.0			0).0						0.0
Queue Clearan	ce Time	e (g s), s				0.	.0			0	0.0						0.0
Green Extensio	n Time	(ge),s				0.	.0			0).0						0.0
Phase Call Prol	bability					0.0	00			0.	.00						0.00
Max Out Proba	bility					0.0	00			0.	.00						0.00
Movement Gro		ulte			ER					2			NB			SB	_
Approach Move	mont	Suits			ED T		P	1		,	P	1		P		<u>ЗБ</u>	P
Assigned Move	ment			5	2	+	T.		6	+	16	-		IX.	7	1	14
Adjusted Flow F	Pate (v) veh/h		0	0	+	_		0	+	0				-	-	0
Adjusted Flow I	tion Ele), ven/n w Rate (s) veh/h/l	n	0	0	+	_		0	+	0					0	0
					0.0	+	_		0.0		0.0					0.0	0.0
	learance	g(s), s		0.0	0.0	+	_		0.0	+	0.0					0.0	0.0
Green Ratio (a		c mile (g ;), 3		0.0	0.0	+	_		0.0	1	0.0					0.0	0.0
	/0)			203	2037	, –	_		154	2	1521					220	106
Volume-to-Can	acity Ra	tio (X)		1 038	2937	1	_		0.62	2	0.635					0 1/13	0.877
Back of Oueue	(0) ft	(In (95 th percentile)		394.4	236/	1	_		226	2 4	220 Q					36.8	268.3
Back of Queue	$(\mathbf{Q}), \mathbf{u}$	h/ln (95 th percenti	le)	15.8	9.5	-	_		9.0		92					1.5	10.7
Queue Storage	Ratio (RQ) (95 th percent	tile)	0.00	0.00				0.00	5	0.00					0.00	0.00
Uniform Delay ((d1). s	/veh	,	34.2	4.8				4.3		4.4					47.1	51.8
Incremental De	lav (<i>d</i> 2). s/veh		73.6	1.3	+			1.9		2.0					0.1	30.8
Initial Queue De	elav (d	3). s/veh		0.0	0.0	+			0.0		0.0				-	0.0	0.0
Control Delay (nitial Queue Delay (d ₃), s/veh								6.3		6.4					47.2	82.7
Level of Service	evel of Service (LOS)					+			Δ	+	A					П.2	F
Approach Delay		15.7	· ·	F	3	63			A	0.0			77	2	F		
Intersection Del		10.7			- 14	4				0.0			<u>, , ,</u> В	-	_		
Multimodal Re	Iultimodal Results								WE	3			NB			SB	
Pedestrian LOS	rian LOS Score / LOS					A	A	1.83	3		В	2.16		В	2.3	2	В
Bicycle LOS Sc	ore / LC	DS		2.31		E	3	2.08	3		В				0.8	2	А

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		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inform	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	-				East/	West Str	eet		Hwy	137				
Analysis Year	2023						North	n/South	Street		Road	180				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	176	12		0	196	0		1	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)						°					0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0				0					3				3	
Capacity, c (veh/h)		1107				1351					578				587	
v/c Ratio		0.00				0.00					0.01				0.01	
95% Queue Length, Q₃₅ (veh)		0.0				0.0					0.0				0.0	
Control Delay (s/veh)		8.3				7.7					11.3				11.2	
Level of Service (LOS)		A				A					В				В	
Approach Delay (s/veh)		0	.0			0	.0			1 [.]	1.3			1 ⁻	1.2	
Approach LOS											В				В	

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inform	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	na				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	, 137				
Analysis Year	2023						North	n/South	Street		Road	180				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store						I					
Lanes			-													
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	206	12		0	233	0		1	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0				0					3				3	
Capacity, c (veh/h)		1040				1312					526				533	
v/c Ratio		0.00				0.00					0.01				0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0				0.0	
Control Delay (s/veh)		8.5				7.7					11.9				11.8	
Level of Service (LOS)		A				A					В				В	
Approach Delay (s/veh)		C	0.0	-		0	.0	-		- 1'	1.9	-		1'	1.8	
Approach LOS		_	_								В			ļ	В	

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		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inform	natio	n						
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	137				
Analysis Year	2025						North	n/South	Street		Road	180				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	183	12		0	204	0		1	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0			(0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)		0				0					3				3	
Capacity, c (veh/h)		1092				1342					566				575	
v/c Ratio		0.00				0.00					0.01				0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0				0.0	
Control Delay (s/veh)		8.3				7.7					11.4				11.3	
Level of Service (LOS)		А				A					В				В	
Approach Delay (s/veh)		0	.0			0	.0			1	1.4			1'	1.3	
Approach LOS											В			l	В	

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		Н	CS7	Two	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information					_		Site	Infor	natio	n						_
Analyst	BMB						Inters	section			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	q				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	5				East/	West Str	eet		Hwy	137				
Analysis Year	2025						North	n/South	Street		Road	180				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period	(hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	213	12		0	241	0		1	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0			()	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of Se	ervice			-										
Flow Rate, v (veh/h)		0				0					3				3	
Capacity, c (veh/h)		1026				1303					515				522	
v/c Ratio		0.00				0.00					0.01				0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0				0.0	
Control Delay (s/veh)		8.5				7.8					12.0				11.9	
Level of Service (LOS)		А				A					В				В	
Approach Delay (s/veh)		0	.0			0	.0			1:	2.0			1'	1.9	
Approach LOS											В				3	

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		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inform	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	na				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	, 137				
Analysis Year	2035						North	n/South	Street		Road	180				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes			-													
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	222	15		0	247	0		1	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)						°					0	°			0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	d Leve	l of S	ervice		<u> </u>		<u> </u>	<u> </u>	<u> </u>							
Flow Rate, v (veh/h)		0				0					3				3	
Capacity, c (veh/h)		1016				1288					502				510	
v/c Ratio		0.00				0.00					0.01				0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0				0.0	
Control Delay (s/veh)		8.5				7.8					12.2				12.1	
Level of Service (LOS)		А				A					В				В	
Approach Delay (s/veh)		0	.0			0	.0			1	2.2			12	2.1	
Approach LOS											В				В	

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		Н	CS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inform	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	ıg				Jurisc	liction			Coun	ty				
Date Performed	3/28/	23					East/	West Str	eet		Hwy ⁻	137				
Analysis Year	2035						North	n/South	Street		Road	180				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	252	15		0	284	0		1	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											C				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of Se	ervice		<u>.</u>		<u>.</u>	<u>.</u>	<u> </u>				<u>.</u>	<u>.</u>		
Flow Rate, v (veh/h)		0				0					3				3	
Capacity, c (veh/h)		954				1252					456				463	
v/c Ratio		0.00				0.00					0.01				0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0				0.0	
Control Delay (s/veh)		8.8				7.9					12.9				12.8	
Level of Service (LOS)		A				A					В				В	
Approach Delay (s/veh)		0	.0	-		0	.0	-		12	2.9	-		- 12	2.8	-
Approach LOS											В				B	

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		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Infor	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	na				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	, 137				
Analysis Year	2045						North	n/South	Street		Road	180				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes			-													
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	268	18		0	298	0		1	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0				0					3				3	
Capacity, c (veh/h)		932				1229					436				442	
v/c Ratio		0.00				0.00					0.01				0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0				0.0	
Control Delay (s/veh)		8.9				7.9					13.3				13.2	
Level of Service (LOS)		А				A					В				В	
Approach Delay (s/veh)		C	0.0			0	.0	-		1	3.3	-		13	3.2	
Approach LOS											В				В	

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		Н	ICS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information					_		Site	Infor	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 180			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	5				East/	West Str	eet		Hwy	, 137				
Analysis Year	2045						North	n/South	Street		Road	180				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ıstme	nts			.,											
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	298	18		0	335	0		1	1	1		1	1	1
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		0				0					3				3	
Capacity, c (veh/h)		875				1194					395				401	
v/c Ratio		0.00				0.00					0.01				0.01	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0				0.0	
Control Delay (s/veh)		9.1				8.0					14.2				14.1	
Level of Service (LOS)		A				A					В				В	
Approach Delay (s/veh)		C	0.0			0	.0			14	4.2			14	4.1	
Approach LOS											B				B	

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		Н	ICS7	Two	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inform	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	137				
Analysis Year	2023						North	n/South	Street		Road	188				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		8	296	8		0	388	28		4	12	0		16	8	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)				°		°					0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)		9				0					18				27	
Capacity, c (veh/h)		763				1208					283				282	
v/c Ratio		0.01				0.00					0.06				0.10	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.2				0.3	
Control Delay (s/veh)		9.8				8.0					18.6				19.1	
Level of Service (LOS)		А				A					С				С	
Approach Delay (s/veh)		C).4			0	.0			18	8.6			19	9.1	
Approach LOS											С			(с	

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		Н	CS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information					_		Site	Infor	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV (Consultir	ıg				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	5				East/	West Str	eet		Hwy	, 137				
Analysis Year	2023						North	n/South	Street		Road	188				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ıstme	nts			.,											
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		8	329	8		0	428	31		4	12	0		18	8	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0			(0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		9				0					18				30	
Capacity, c (veh/h)		709				1170					250				247	
v/c Ratio		0.01				0.00					0.07				0.12	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.2				0.4	
Control Delay (s/veh)		10.1				8.1					20.5				21.6	
Level of Service (LOS)		В				A					C				C	
Approach Delay (s/veh)		0	.4			0	.0			20	0.5			2'	1.6	
Approach LOS									(С			(C		

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		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	23	-				East/	West Str	eet		Hwy	137				
Analysis Year	2025						North	n/South	Street		Road	188				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		8	308	8		0	403	29		4	12	0		17	8	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)						°					0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice			-										
Flow Rate, v (veh/h)		9				0					18				28	
Capacity, c (veh/h)		743				1194					270				268	
v/c Ratio		0.01				0.00					0.07				0.11	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.2				0.4	
Control Delay (s/veh)		9.9				8.0					19.3				20.0	
Level of Service (LOS)		A				A					С				С	
Approach Delay (s/veh)		C	.4			0	.0			19	9.3			20	0.0	
Approach LOS										(с				С	

		Н	ICS7	Two-	Way	' Stop	o-Co	ntrol	Rep	ort						
General Information	_	_	_	_		_	Site	Inforr	natio	n	_	_	_	_	_	_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	<u> </u>				East/	West Str	eet		Hwy	137				
Analysis Year	2025						North	/South	Street		Road	188				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ıstme	nts														
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		8	341	8		0	443	32		4	12	0		19	8	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)		9				0					18				31	
Capacity, c (veh/h)		690				1157					239				234	
v/c Ratio		0.01				0.00					0.08				0.13	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.2				0.4	
Control Delay (s/veh)		10.3				8.1					21.3				22.7	
Level of Service (LOS)		В				A					C				C	
Approach Delay (s/veh)		C	.4			0	.0			2	1.3			22	2.7	
Approach LOS											С			(C	

HCS T TWSC Version 7.9.5 Hwy 137 and Road 188 2025 PM+Proj.xtw

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	137				
Analysis Year	2035						North	/South	Street		Road	188				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastb	ound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		10	373	10		0	489	35		5	15	0		20	10	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)						°					0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)		11				0					23				34	
Capacity, c (veh/h)		635				1119					206				199	
v/c Ratio		0.02				0.00					0.11				0.17	
95% Queue Length, Q ₉₅ (veh)		0.1				0.0					0.4				0.6	
Control Delay (s/veh)		10.8				8.2					24.7				26.8	
Level of Service (LOS)		В				A					С				D	
Approach Delay (s/veh)		0	.5			0	.0			24	4.7			20	5.8	
Approach LOS	0.5 0.0										с			l	D	

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information					_		Site	Inforr	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	137				
Analysis Year	2035						North	/South	Street		Road	188				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ıstme	nts			.,											
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		10	406	10		0	529	38		5	15	0		22	10	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0			(0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		11				0					23				36	
Capacity, c (veh/h)		590				1084					181				173	
v/c Ratio		0.02				0.00					0.13				0.21	
95% Queue Length, Q ₉₅ (veh)		0.1				0.0					0.4				0.8	
Control Delay (s/veh)		11.2				8.3					27.8				31.3	
Level of Service (LOS)		В				A					D				D	
Approach Delay (s/veh)		0	.5	-		0	.0			27	7.8	-		3′	1.3	-
Approach LOS									I	D			[)		

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		Н	ICS7	Two	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23					East/	West Str	eet		Hwy	137				
Analysis Year	2045						North	n/South :	Street		Road	188				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fac	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes			-													
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ustme	nts			-											
Approach		Eastk	bound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	450	12		0	590	43		6	18	0		24	12	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)		14				0					27				41	
Capacity, c (veh/h)		528				1037					147				138	
v/c Ratio		0.03				0.00					0.19				0.30	
95% Queue Length, Q ₉₅ (veh)		0.1				0.0					0.7				1.2	
Control Delay (s/veh)		12.0				8.5					35.0				42.1	
Level of Service (LOS)		В				A					D				E	
Approach Delay (s/veh)		C).7	-		0	0.0	-		3	5.0	-		42	2.1	-
Approach LOS										D				E		

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information					_		Site	Infor	natio	n						_
Analyst	BMB						Inters	ection			Hwy	137/Roa	d 188			
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	5				East/	West Str	eet		Hwy	, 137				
Analysis Year	2045						North	n/South	Street		Road	188				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	East-	West					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes																
					Maj	or Street: Ea	st-West									
Vehicle Volumes and Adju	ıstme	nts			.,											
Approach		Eastb	ound			West	oound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		12	483	12		0	630	46		6	18	0		25	12	0
Percent Heavy Vehicles (%)		8				3				14	14	14		8	3	8
Proportion Time Blocked																
Percent Grade (%)											0				0	
Right Turn Channelized																
Median Type Storage				Undi	vided											
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		6.48				4.13				7.24	6.64	6.34		7.18	6.53	6.28
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.34				2.23				3.63	4.13	3.43		3.57	4.03	3.37
Delay, Queue Length, and	l Leve	l of Se	ervice													
Flow Rate, v (veh/h)		14				0					27				42	
Capacity, c (veh/h)		490				1004					129				119	
v/c Ratio		0.03				0.00					0.21				0.35	
95% Queue Length, Q ₉₅ (veh)		0.1				0.0					0.8				1.6	
Control Delay (s/veh)		12.6				8.6					40.3				51.6	
Level of Service (LOS)		В				A					E				F	
Approach Delay (s/veh)		0	.8			0	.0			40	0.3			5	1.6	
Approach LOS										E				F		

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		H	ICS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Infor	natio	n							
Analyst	BMB						Inters	ection			N Spi	ruce Ave	/Acacia	Ave		
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ity	,	-		
Date Performed	3/28/	/23					East/	West Str	eet		Acaci	a Ave				
Analysis Year	2023	-					North	n/South	Street		N Sp	ruce Ave				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-S	Store		,			. ,						
lanes	<u> </u>		,													
					Мајо	r Street: Nor	rth-South									
Vehicle Volumes and Adj	ustme	nts														
Approach		Eastk	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	19		2	3	0		9	398	0		2	439	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		
Proportion Time Blocked																
Percent Grade (%)			0				0									6
Right Turn Channelized																
Median Type Storage				Left	Only								1			
Critical and Follow-up He	eadwa	ys							<u> </u>							
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	T		22		<u> </u>		6	<u> </u>		10				2		
Capacity, c (veh/h)			560				272			1035				1077	<u> </u>	
v/c Ratio			0.04				0.02			0.01				0.00		
95% Queue Lenath. O₀₅ (veh)			0.1				0.1			0.0				0.0		
Control Delay (s/veh)	-		117				18.5		-	85		-		83	<u> </u>	
Level of Service (LOS)			R				с.,			Δ				Δ		
Approach Delay (s/veh)		1	17			15	85			0	3			 	1	
Approach LOS			B			(C									

		H	ICS7	Two	-Way	' Stop	o-Co	ntrol	l Rep	ort						
General Information							Site	Infor	matio	n						
Analyst	ВМВ						Inters	ection			N Sp	ruce Ave	/Acacia	Ave		
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty	,	-		
Date Performed	3/28/	/23					East/	West Str	eet		Acaci	a Ave				
Analysis Year	2023	-					North	n/South	Street		N Sp	ruce Ave				
Time Analyzed	PM P	eak Hou	r + Proie	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-S	Store		,			. ,						
lanes			,													
					_	_		1								
Vehicle Volumes and Adi	ustmo	ntc			majo	Succe No										
Approach		Eastk	ound			Wast	bound		1	North	bound			South	bound	
Movement		1	т	R		1	т	R			т	R		J	т	R
Priority	Ū	10	11	12		7	8	9	111	1	2	3	411	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0		0
		, , , , , , , , , , , , , , , , , , ,	ITR				ITR				ITR				ITR	
Volume (veh/h)		0	0	21		2	3	0		10	435	0		2	479	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		-
Proportion Time Blocked		<u> </u>					-							-		
Percent Grade (%)			0				0									
Right Turn Channelized			-				-									
Median Type Storage				Left	l Onlv								1			
Critical and Follow-up He	adwa	vs														
Base Critical Headway (sec)		71	65	62		71	65	62	1	41				41		
Critical Headway (sec)		6.48	6.58	6.28		7.1	6.58	6.28	<u> </u>	4.18				/ 18		
Base Follow-Up Headway (sec)		2.5	4.0	2.2		2.5	4.0	2.2	<u> </u>	4.10				4.10		
Follow-Up Headway (sec)		2.34	4.07	3.5		3.57	4.07	3.5	<u> </u>	2.2				2.2		
Dolow Queue Longth and				5.51	<u> </u>	5.51	4.07	5.51		2.21	<u> </u>	<u> </u>	<u> </u>	2.21	L	L
Delay, Queue Length, and			ervice		1			1	1		1					
Flow Rate, v (veh/h)			24				6		<u> </u>	11				2	<u> </u>	<u> </u>
Capacity, c (veh/h)			527				242		<u> </u>	995				1039		<u> </u>
v/c Ratio			0.05				0.02			0.01				0.00		<u> </u>
95% Queue Length, Q ₉₅ (veh)			0.1				0.1			0.0				0.0		
Control Delay (s/veh)			12.2				20.2			8.7				8.5		
Level of Service (LOS)			В				C			A				A		
Approach Delay (s/veh)		1	2.2			20	0.2			0	.3			0	.1	
Approach LOS			В			(С									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	l Rep	ort						
General Information	_	_	_	_		_	Site	Infor	matio	n	_	_	_	_		
Analyst	BMB						Inter	rection	matio		N Spi		Acacia	Διο		
Anarov/Co		Consultir	ng ang				lurise	liction			Coun	tv	Acacia	Ave		
Date Performed	3/28	/23	ig				Fact/	Mast Str	oot		Acaci					
	2025	23					North	Vest Str	Stroot		N Spi					
Time Analyzed		aak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	Nort	a-South					Analy		Period	(hrs)	1.00					
Project Description		r Lindea	w Gas St	ation C-9	Store		Analy		renou	(1115)	1.00					
	11310		ly Gas St	ation C-	store											
Lanes																
				ł.												
					Majo	r Street: Nor	rth-South]								
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastb	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	20		2	3	0		9	414	0		2	456	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type Storage				Left	Only								1			
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	<u> </u>		23				6			10				2		
Capacity, c (veh/h)			546				259			1018				1061		-
v/c Ratio			0.04				0.02			0.01				0.00		
95% Queue Lenath, Ong (veh)			0.1				0.1			0.0				0.0		
Control Delay (s/veh)			11.9				19.2			8.6				8.4		
Level of Service (LOS)			В				C			A				A		
Approach Delay (s/veh)		1	1.9			19	9.2	1		0	.3			0	.1	
Approach LOS			В			(с									

		H	ICS7	Two	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						
Analyst	BMB						Inters	ection			N Spi	ruce Ave	/Acacia	Ave		
Agency/Co.	LAV (Consultir	ng				Jurisc	liction			Coun	ty	,	-		
Date Performed	3/28/	/23					East/	West Str	eet		Acaci	a Ave				
Analysis Year	2025	-					North	/South	Street		N Spi	ruce Ave				
Time Analyzed	PM P	eak Hou	r + Proie	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-S	Store		,			. ,						
lanes	<u> </u>		,													
								1								
Vehicle Volumes and Adi	ustmo	nte			major		Journ									
		5			1	14/				NI - di	h a sal		1	C . Il		
Approach		EdSu		р		vvesti	T T	р		North		р		South		Р
Deierite	0	L 10	11	К 12	0			R	111			R 2				R
Number of Lance		10	1	12		/	0	9	10		2	3	40	4	1	0
		0		0		0		0	0	0		0	0	0		
				22		2		0	<u> </u>	10				2	406	
Volume (ven/n)		0	0	22		2	3	0		10	451	0		2	496	0
Percent Heavy vehicles (%)		8	8	8		8	8	8		8				8		
							0		<u> </u>							
Percent Grade (%)			0				0									
				1.0					<u> </u>				1			
	<u> </u>			Len	Uniy								1			
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)			25				6			11				2		
Capacity, c (veh/h)			514				231			979				1023		
v/c Ratio			0.05				0.02			0.01				0.00		
95% Queue Length, Q ₉₅ (veh)			0.2				0.1			0.0				0.0		
Control Delay (s/veh)			12.4				21.0			8.7				8.5		
Level of Service (LOS)			В				С			А				A		
Approach Delay (s/veh)		1	2.4			2'	1.0			0).3			0	.1	
Approach LOS			В			(С									

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	l Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	matio	n	_	_	_	_	_	
Analyst	BMB						Inters	ection			N Sp	ruce Ave	/Acacia	Ave		
Agency/Co.	LAV	Consultir	na				Jurisc	liction			Coun	tv	,			
Date Performed	3/28/	/23	.9				East/	West Str	eet		Acaci	a Ave				
Analysis Year	2035						North	n/South	Street		N Spi	ruce Ave				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	North	1-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store		,			. ,						
Lanes			,													
								1								
								J								
Vehicle Volumes and Adju	ustme	nts														
Approach		Eastk	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	24		3	4	0		11	501	0		3	553	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		
Proportion Time Blocked																
Percent Grade (%)			0				0									6
Right Turn Channelized																
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	l Leve	l of S	ervice													
Flow Rate, v (veh/h)			27				8			13				3		
Capacity, c (veh/h)			472				199			925				974		
v/c Ratio			0.06				0.04			0.01				0.00		
95% Queue Length, Q₅₅ (veh)			0.2				0.1			0.0				0.0		
Control Delay (s/veh)			13.1				23.9			8.9				8.7		
Level of Service (LOS)			В				С			A				A		
Approach Delay (s/veh)		1	3.1			23	3.9			0	.4			0	.1	
Approach LOS			В				С						1			
		Η	ICS7	Two	-Way	' Stop	o-Co	ntrol	Rep	ort						
------------------------------	----------------	-------------------------------------------	-----------	-----------	--------	-------------	----------	----------	----------	-------	-------	----------	---------	------	-----	---
General Information							Site	Infor	natio	n						
Analyst	BMB						Inters	ection			N Spi	ruce Ave	/Acacia	Ave		
Agency/Co.	LAV	Consultir	ng				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	5				East/	West Str	eet		Acaci	a Ave				
Analysis Year	2035						North	n/South	Street		N Spi	ruce Ave				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fa	ctor		0.88					
Intersection Orientation	Nort	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas St	ation C-S	Store					. ,						
Lanes			-													
					_	_	_	1								
					. Maia	Chroade Nie	th Couth									
	nd Adjustments															
Vehicle Volumes and Adj	ustme	Istments														
Approach		Eastbound Westbound Northbound Southbound														
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	26		3	4	0		12	538	0		3	593	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type Storage				Left	Only								1			
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)	1		30				8			14		<u> </u>		3		
Capacity, c (veh/h)			444				177			890				939		
v/c Ratio			0.07				0.04			0.02				0.00		
95% Queue Lenath. O.s. (veh)			0.2				0.1			0.0				0.0		
Control Delav (s/veh)			13.7				26.3			9,1				8.8		-
Level of Service (LOS)			R				_0.5			Δ				Δ		
Approach Delay (s/veh)		1	37			24	63			0	4			0	1	
Approach LOS		1.	 B				D							0		
	1		-													

		Н	ICS7	Two-	-Way	' Stop	o-Co	ntrol	l Rep	ort						
General Information	_	_	_	_	_	_	Site	Infor	matio	n	_	_	_	_	_	
Analyst	BMB						Inters	ection			N Sp	ruce Ave	/Acacia	Ave		
Agency/Co.	LAV	Consultir	na				Jurisc	liction			Coun	tv	,			
Date Performed	3/28/	/23	.9				East/	West Str	eet		Acaci	a Ave				
Analysis Year	2045	-					North	n/South	Street		N Sp	ruce Ave				
Time Analyzed	PM P	eak Hou	r				Peak	Hour Fa	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period ((hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store		,			. ,						
Lanes			,													
								1								
								J								
							_									
					Majo	r Street: Noi	rth-South									
Vehicle Volumes and Adj	ustme	tments														
Approach		Eastk	oound			West	bound			North	bound			South	bound	
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	29		3	5	0		14	605	0		3	667	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type Storage				Left	Only								1			
Critical and Follow-up He	eadwa	ys														
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	d Leve	l of S	ervice													
Flow Rate, v (veh/h)			33				9			16				3		
Capacity, c (veh/h)			397				139			827				879		
v/c Ratio			0.08				0.07			0.02				0.00		
95% Queue Length, Q₃₅ (veh)			0.3				0.2			0.1				0.0		
Control Delay (s/veh)			14.9				32.8			9.4				9.1		
Level of Service (LOS)			В				D			A				A		
Approach Delay (s/veh)		1	4.9			32	2.8			0	.5			0	.1	
Approach LOS			В				D						1			

		Н	CS7	Two-	-Way	' Stop	o-Co	ntrol	Rep	ort						
General Information							Site	Inforr	natio	n						
Analyst	BMB						Inters	ection			N Spi	ruce Ave	/Acacia	Ave		
Agency/Co.	LAV C	Consultir	q				Jurisc	liction			Coun	ty				
Date Performed	3/28/	/23	<u> </u>				East/	West Str	eet		Acaci	a Ave				
Analysis Year	2045						North	n/South :	Street		N Spi	ruce Ave				
Time Analyzed	PM P	eak Hou	r + Proje	ect			Peak	Hour Fac	ctor		0.88					
Intersection Orientation	North	n-South					Analy	sis Time	Period (hrs)	1.00					
Project Description	TIS fo	or Lindsa	y Gas Sta	ation C-S	Store											
Lanes			-													
								1								
					Major	Street: Noi	rth-South									
Vehicle Volumes and Adju	Istments															
Approach	Eastbound Westbound Northbound Southbound															
Movement	U	L	Т	R	U	L	Т	R	U	L	Т	R	U	L	Т	R
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	0	0	0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		0	0	31		3	5	0		15	642	0		3	707	0
Percent Heavy Vehicles (%)		8	8	8		8	8	8		8				8		
Proportion Time Blocked																
Percent Grade (%)			0				0									
Right Turn Channelized																
Median Type Storage				Left	Only								1			
Critical and Follow-up He	adwa	ys														
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		6.48	6.58	6.28		7.18	6.58	6.28		4.18				4.18		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		2.34	4.07	3.37		3.57	4.07	3.37		2.27				2.27		
Delay, Queue Length, and	nd Level of Service															
Flow Rate, v (veh/h)			35				9			17				3		
Capacity, c (veh/h)			374				123			795				848		
v/c Ratio			0.09				0.07			0.02				0.00		
95% Queue Length, Q ₉₅ (veh)			0.3				0.2			0.1				0.0		
Control Delay (s/veh)			15.6				36.7			9.6				9.3		
Level of Service (LOS)			С				E			A				A		
Approach Delay (s/veh)		1	5.6			36	6.7			0	.6			0	.1	
Approach LOS		(C				E									

		HCS7	' All-W	/ay Sto	op Cor	ntrol R	leport					
General Information					Site In	format	ion					
Analyst	BMB				Intersec	tion			N Spruc	e Ave/Syca	moreAve	
Agency/Co.	LAV Cor	nsulting			Jurisdict	ion			County			
Date Performed	3/28/23				East/We	st Street			Sycamo	re Ave		
Analysis Year	2023				North/S	outh Stree	t		N Spruc	e Ave		
Analysis Time Period (hrs)	1.00				Peak Ho	our Factor			0.92			
Time Analyzed	PM Pea	(Hour										
Project Description	TIS for L	indsay Gas	Station C-	Store								
Lanes												
						1						
Vehicle Volume and Adjust	ments											
Approach	1	Eastbound Westbound Northbound Southbound										
Movement	L	Image: Lastbound Image: Westbound Image: March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March and March an										R
Volume	0	152	56	0	60	8	72	408	0	12	296	12
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	226			74			522			348		
Percent Heavy Vehicles	2			2			2			2		
Departure Headway and Se	ervice Ti	me	<u> </u>			<u> </u>	<u> </u>	<u> </u>	<u> </u>			
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.201			0.066			0.464			0.309		<u> </u>
Final Departure Headway, hd (s)	6.36			6.92			5.59			5.81		
Final Degree of Utilization, x	0.400			0.142			0.809			0.562		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	4.36			4.92			3.59			3.81		
Capacity, Delay and Level o	f Servic	e										
Flow Rate, v (veh/h)	226			74			522			348		
Capacity	566			520			645			619		
95% Queue Length, Q ₉₅ (veh)	2.0			0.5			10.8			3.7		
Control Delay (s/veh)	13.6			11.1			30.9			16.2		
Level of Service, LOS	В			В			D			С		
Approach Delay (s/veh)		13.6	I		11.1	I		30.9	I		16.2	L
Approach LOS		В			В			D			С	
Intersection Delay, s/veh LOS			2	1.9						C		

		HCS7	' All-W	/ay Sto	op Cor	ntrol R	eport							
General Information					Site In	format	ion							
Analyst	BMB				Intersec	tion			N Spruc	e Ave/Syca	moreAve			
Agency/Co.	LAV Cor	nsulting			Jurisdict	tion			County					
Date Performed	3/28/23				East/We	est Street			Sycamo	re Ave				
Analysis Year	2023				North/S	outh Stree	t		N Spruc	e Ave				
Analysis Time Period (hrs)	1.00				Peak Ho	our Factor			0.96					
Time Analyzed	PM Peal	k Hour + P	roject											
Project Description	TIS for L	indsay Gas	Station C-	Store										
Lanes														
			[
Vehicle Volume and Adjustn	nents	ents												
Approach		Eastbound Westbound Northbound Southbound												
Movement	L	Т	R	L	Т	R	L	Т	R	L	Т	R		
Volume	0	152	62	0	60	8	77	435	0	12	325	12		
% Thrus in Shared Lane														
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3		
Configuration	LTR			LTR			LTR			LTR				
Flow Rate, v (veh/h)	223			71			533			364				
Percent Heavy Vehicles	2			2			2			2				
Departure Headway and Ser	vice Ti	me												
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20				
Initial Degree of Utilization, x	0.198			0.063			0.474			0.323				
Final Departure Headway, hd (s)	6.41			7.00			5.60			5.82				
Final Degree of Utilization, x	0.397			0.138			0.830			0.588				
Move-Up Time, m (s)	2.0			2.0			2.0			2.0				
Service Time, ts (s)	4.41			5.00			3.60			3.82				
Capacity, Delay and Level of	Servic	e												
Flow Rate, v (veh/h)	223			71			533			364				
Capacity	561			514			643			618				
95% Queue Length, Q ₉₅ (veh)	2.0			0.5			12.0			4.1				
Control Delay (s/veh)	13.6			11.1			33.8			17.0				
Level of Service, LOS	В			В			D			С				
Approach Delay (s/veh)		13.6			11.1			33.8			17.0			
Approach LOS		В			В			D			С			

Intersection Delay, s/veh | LOS

23.5

С

		HCS7	' All-W	/ay Sto	op Cor	ntrol R	leport					
General Information					Site In	format	ion					
Analyst	BMB				Intersec	tion			N Spruc	e Ave/Syca	imoreAve	
Agency/Co.	LAV Cor	nsulting			Jurisdict	ion			County			
Date Performed	3/28/23				East/We	st Street			Sycamo	re Ave		
Analysis Year	2025				North/S	outh Stree	t		N Spruc	e Ave		
Analysis Time Period (hrs)	1.00				Peak Ho	our Factor			0.92			
Time Analyzed	PM Pea	k Hour										
Project Description	TIS for L	indsay Gas	Station C-	Store								
Lanes												
Vehicle Volume and Adjust	nents											
Approach		Eastbound Westbound Northbound Southbound										
Movement	L	Eastbound Westbound Northbound Southbound L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L R L									R	
Volume	0	158	58	0	62	8	75	424	0	12	308	12
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	235			76			542			361		
Percent Heavy Vehicles	2			2			2			2		
Departure Headway and Se	rvice Ti	me	<u> </u>			<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.209			0.068			0.482			0.321		
Final Departure Headway, hd (s)	6.55			7.19			5.72			5.98		
Final Degree of Utilization, x	0.427			0.152			0.862			0.599		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	4.55			5.19			3.72			3.98		
Capacity, Delay and Level o	f Servic	e										
Flow Rate, v (veh/h)	235			76			542			361		
	549			501			629			602		
95% Queue Length, Q ₉₅ (veh)	2.2			0.5			14.1			4.3		
Control Delay (s/veh)	14.4			11.5			40.4			17.8		
Level of Service, LOS	В			В			E			С		
Approach Delay (s/veh)		14.4	I		11.5	I		40.4	I		17.8	I
Approach LOS		В			В			E			С	
Intersection Delay, s/veh LOS			2	6.9						D		

		HCS7	' All-W	/ay Sto	op Cor	ntrol R	leport						
General Information					Site In	format	ion						
Analyst	BMB				Intersec	tion			N Spruc	e Ave/Syca	imoreAve		
Agency/Co.	LAV Cor	nsulting			Jurisdict	tion			County				
Date Performed	3/28/23				East/We	est Street			Sycamo	re Ave			
Analysis Year	2025				North/S	outh Stree	t		N Spruc	e Ave			
Analysis Time Period (hrs)	1.00				Peak Ho	our Factor			0.94				
Time Analyzed	PM Pea	k Hour + P	roject										
Project Description	TIS for L	indsay Gas	Station C-	Store									
Lanes													
						_							
			[
Vehicle Volume and Adjustn	nents												
Approach		Eastbound	1		Northboun	d	9	Southboun	d				
Movement	L	Т	R	L	Т	R	L	Т	R	L	Т	R	
Volume	0	158	64	0	62	8	80	451	0	12	337	12	
% Thrus in Shared Lane													
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	
Configuration	LTR			LTR			LTR			LTR			
Flow Rate, v (veh/h)	236			74			565			384			
Percent Heavy Vehicles	2			2			2			2			
Departure Headway and Se	rvice Ti	me											
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20			
Initial Degree of Utilization, x	0.210			0.066			0.502			0.341			
Final Departure Headway, hd (s)	6.70			7.40			5.80			6.07			
Final Degree of Utilization, x	0.439			0.153			0.910			0.647			
Move-Up Time, m (s)	2.0			2.0			2.0			2.0			
Service Time, ts (s)	4.70			5.40			3.80			4.07			
Capacity, Delay and Level of	Servic	Service											
Flow Rate, v (veh/h)	236			74			565			384			
Capacity	538			487			621			593			
95% Queue Length, Q₃₅ (veh)	2.3			0.5			18.3			5.2			
Control Delay (s/veh)	14.9			11.7			54.5			20.0			
Level of Service, LOS	В			В			F			С			
Approach Delay (s/veh)		14.9			11.7			54.5			20.0		
Approach LOS		В			В			F			С		

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Intersection Delay, s/veh | LOS

34.0

D

		HCS7	' All-W	/ay Sto	op Cor	ntrol R	leport					
General Information					Site In	format	ion					
Analyst	BMB				Intersec	tion			N Spruc	e Ave/Syca	moreAve	
Agency/Co.	LAV Cor	nsulting			Jurisdict	tion			County			
Date Performed	3/28/23				East/We	est Street			Sycamo	re Ave		
Analysis Year	2035				North/S	outh Stree	t		N Spruc	e Ave		
Analysis Time Period (hrs)	1.00				Peak Ho	our Factor			0.92			
Time Analyzed	PM Pea	(Hour										
Project Description	TIS for L	indsay Gas	Station C-	Store								
Lanes												
						1						
Vehicle Volume and Adjust	nents											
Approach		Eastbound Westbound Northbound Southbound										
Movement	L	Eastbound Westbound Northbound Southbound L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L R L R L R L R L R L R L R L R R L R R R R R R R R R R R R R R R R R R R R R R R R R R R R R R R R R R R R R									R	
Volume	0	192	71	0	76	10	91	514	0	15	373	15
% Thrus in Shared Lane												
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	286			93			658			438		
Percent Heavy Vehicles	2			2			2			2		
Departure Headway and Se	rvice Ti	me	<u> </u>			<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.254			0.083			0.585			0.389		
Final Departure Headway, hd (s)	7.06			7.95			6.36			6.50		
Final Degree of Utilization, x	0.561			0.206			1.162			0.791		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, ts (s)	5.06			5.95			4.36			4.50		
Capacity, Delay and Level o	f Servic	e								<u> </u>		<u> </u>
Flow Rate, v (veh/h)	286			93			658			438		
Capacity	510			453			566			554		
95% Queue Length, Q ₉₅ (veh)	3.7			0.8			61.9			9.7		
Control Delay (s/veh)	19.0			13.0			341.6			32.6		
Level of Service, LOS	С			В			F			D		
Approach Delay (s/veh)		19.0	I		13.0	I		341.6	I		32.6	I
Approach LOS		С			В			F			D	
Intersection Delay, s/veh LOS			16	6.5						F		

		HCS7	7 All-W	/ay Sto	op Cor	ntrol R	eport							
General Information					Site In	format	ion							
Analyst	BMB				Intersec	tion			N Spruc	e Ave/Syca	moreAve			
Agency/Co.	LAV Cor	nsulting			Jurisdict	tion			County					
Date Performed	3/28/23				East/We	est Street			Sycamo	re Ave				
Analysis Year	2035				North/S	outh Stree	t		N Spruc	e Ave				
Analysis Time Period (hrs)	1.00				Peak Ho	our Factor			0.94					
Time Analyzed	PM Peal	k Hour + P	roject											
Project Description	TIS for L	indsay Ga	s Station C-	Store										
Lanes														
Vehicle Volume and Adjustr	nents	ents												
Approach		Eastbound	ł		Westbound	d	1	Northboun	d		Southboun	d		
Movement	L	Eastbound R L 0 192 77 0				R	L	Т	R	L	Т	R		
Volume	0	192	77	0	76	10	96	544	0	15	402	15		
% Thrus in Shared Lane														
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3		
Configuration	LTR			LTR			LTR			LTR				
Flow Rate, v (veh/h)	286			91			681			460				
Percent Heavy Vehicles	2			2			2			2				
Departure Headway and Se	rvice Ti	me												
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20				
Initial Degree of Utilization, x	0.254			0.081			0.605			0.409				
Final Departure Headway, hd (s)	7.11			8.04			6.42			6.51				
Final Degree of Utilization, x	0.565			0.204			1.214			0.830				
Move-Up Time, m (s)	2.0			2.0			2.0			2.0				
Service Time, ts (s)	5.11			6.04			4.42			4.51				
Capacity, Delay and Level of	f Servic	e												
Flow Rate, v (veh/h)	286			91			681			460				
Capacity	507			448			561			553				
95% Queue Length, Q ₉₅ (veh)	3.8			0.8			73.9			11.8				
Control Delay (s/veh)	19.2			13.1			429.0			38.6				
Level of Service, LOS	с			В			F			E				
Approach Delay (s/veh)		19.2			13.1			429.0			38.6			
Approach LOS		С			В			F			E			

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Intersection Delay, s/veh | LOS

208.5

F

		HCS7	' All-W	/ay Sto	ор Сог	ntrol R	leport						
General Information					Site In	format	ion						
Analyst	BMB				Intersec	tion			N Spruc	e Ave/Syca	imoreAve		
Agency/Co.	LAV Cor	nsulting			Jurisdic	tion			County				
Date Performed	3/28/23				East/We	est Street			Sycamo	re Ave			
Analysis Year	2045				North/S	outh Stree	t		N Spruc	e Ave			
Analysis Time Period (hrs)	1.00				Peak Ho	our Factor			0.92				
Time Analyzed	PM Pea	(Hour											
Project Description	TIS for L	indsay Gas	Station C-	Store									
Lanes													
						1							
Vehicle Volume and Adjust	ments	nents											
Approach	Eastbound Westbound Northbound Southbound											d	
Movement	L	Eastbound Westbound Northbound Southbound L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L R L T R L T R L T R L T R L R L R L R L R L R L R L R										R	
Volume	0	231	85	0	91	12	109	617	0	18	450	18	
% Thrus in Shared Lane													
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3	
Configuration	LTR			LTR			LTR			LTR			
Flow Rate, v (veh/h)	343			112			789			528			
Percent Heavy Vehicles	2			2			2			2			
Departure Headway and Se	rvice Ti	me	<u> </u>			<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
Initial Departure Headway, hd (s)	3.20			3.20			3.20			3.20			
Initial Degree of Utilization, x	0.305			0.100			0.701			0.470			
Final Departure Headway, hd (s)	7.56			8.81			7.11			7.06			
Final Degree of Utilization, x	0.722			0.274			1.558			1.036			
Move-Up Time, m (s)	2.0			2.0			2.0			2.0			
Service Time, ts (s)	5.56			6.81			5.11			5.06			
Capacity, Delay and Level o	f Servic	e											
Flow Rate, v (veh/h)	343			112			789			528			
Capacity	476			409			506			510			
95% Queue Length, Q ₉₅ (veh)	7.0			1.1			149.3			33.2			
Control Delav (s/veh)	29,4			15.1			1034.2			162.2			
Level of Service. LOS	D			С			F			F			
Approach Delay (s/veh)		29.4	I		15.1	I		1034.2	I		162.2	I	
Approach LOS		D			С			F			F		
Intersection Delay, s/veh LOS			51	5.3						F			

HCS7 Signalized Intersection Results Summary

General Inform	nation								Intersec	tion Inf	ormatio	on	2		s la
Agency		LAV Consulting							Duration	, h	0.250			2+2	
Analyst		BMB		Analys	is Date	Mar 2	8, 2023		Area Typ	e	Other		4		
Jurisdiction		County		Time F	Period	PM Pe Proied	eak Hou t	ır +	PHF		0.88		* * * *	W HE	1 + 1 +
Urban Street		N Spruce Ave		Analys	is Year	2045			Analysis	Period	1> 7:(00			x-
Intersection		N Spruce Ave/Syca	more	File Na	ame	N Spr	uce Ave	& Sy	/camore A	ve 2045	5 PM+P	roj-mit		<u>]</u> [제 1 4 1 1 1	* (*
Project Descrip	tion											,	1 7		
Demand Inform	nation				EB			N	/B		NB			SB	
Approach Move	ement			L	Т	R	L	-	T R	L	Т	R	L	T	R
Demand (v), v	eh/h			0	231	91	0	9	1 12	114	634	0	18	479	6
				1		_	_		1					1	
Signal Informa	ition		-								ļ		-+-		$\overline{\mathbf{A}}$
Cycle, s	120.0	Reference Phase	2									1		3	4
Offset, s	0	Reference Point	End	Green	0.0	0.0	0.0	0.0	0.0	0.0					
Uncoordinated	No	Simult. Gap E/W	On	Yellow	0.0	0.0	0.0	0.0	0.0	0.0		く IA			4
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0 0.0	0.0	_	5	6	7	Y 8
T . D K			_	EDI	_	EDT						NDT	0.01		ODT
Timer Results				EBI		EBI	VVB	- +		NBI	-	NBI	SBL	-	SB1
Assigned Phase	e			<u> </u>	_	8	<u> </u>	\rightarrow	4	5	_	2	1	_	6
				<u> </u>		9.0	<u> </u>		9.0	1.1	_	3.0	1.1		3.0
Phase Duration	i, S	\ \		<u> </u>	\rightarrow	21.9	<u> </u>	\rightarrow	12.0	9.9		79.2	6.9	_	/6.1
Change Period	lge Period, (Y+ <i>R c</i>), s Allow Headway (<i>MAH</i>), s					4.0	<u> </u>	\rightarrow	4.0	4.0		4.0	4.0		4.0
Max Allow Head	x Allow Headway (<i>MAH</i>), s eue Clearance Time (<i>g</i> s), s					0.0	<u> </u>	\rightarrow	0.0	0.0	_	0.0	0.0	_	0.0
Queue Clearan	eue Clearance Time (g_s), s					0.0		\rightarrow	0.0	0.0		0.0	0.0		0.0
Green Extensio	h n nme	(ge), s				0.0		\rightarrow	0.0	0.0		0.0	0.0		0.0
Phase Call Pro						0.00		\rightarrow	0.00	0.00)	0.00	0.00		0.00
Max Out Proba	DIIILY					0.00			0.00	0.00)	0.00	0.00		5.00
Movement Gro	oup Res	ults			EB			W	3		NB			SB	
Approach Move	ement			L	Т	R	L	Т	R	L	Т	R	L	Т	R
Assigned Move	ment			3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow I	Rate (v), veh/h		0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Satura	ation Flo	w Rate (s), veh/h/l	n	0	0	0	0	0	0	0	0	0	0	0	0
Queue Service	Time (g	g s), S		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Queue C	learance	e Time (<i>g</i> c), s		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ratio (g	/C)			0.15	0.15	0.15	0.07	0.0	7 0.07	0.66	0.63	0.63	0.63	0.60	0.60
Capacity (c), v	/eh/h			270	284	240	121	127	7 108	552	1190	1009	407	1142	968
Volume-to-Cap	acity Ra	itio(X)		0.000	0.885	0.411	0.000	0.77	7 0.121	0.224	0.579	0.000	0.048	0.456	0.007
Back of Queue	(Q), ft/	In (95 th percentile)		0	325.7	118.7	0	135	.4 16.5	47	389.4	0	8	296.1	3
Back of Queue	(Q), ve	eh/In (95 th percenti	le)	0.0	13.0	4.7	0.0	5.4	0.7	1.9	15.6	0.0	0.3	11.8	0.1
Queue Storage	Ratio (RQ) (95 th percent	ile)	0.00	0.00	0.00	0.00	0.0	0 0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay	(d 1), s/	/veh		0.0	50.0	46.3	0.0	55.	1 52.7	9.3	13.1	0.0	11.1	13.1	9.6
Incremental De	lay (<i>d</i> 2), s/veh		0.0	14.5	0.4	0.0	3.8	3 0.2	0.1	2.1	0.0	0.0	1.3	0.0
Initial Queue De	nitial Queue Delay (<i>d</i> 3), s/veh			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (<i>d</i>), s/veh				0.0	64.5	46.7	0.0	58.	9 52.8	9.3	15.2	0.0	11.1	14.5	9.6
Level of Service	evel of Service (LOS)				Е	D		E	D	Α	В		В	В	А
Approach Dela	pproach Delay, s/veh / LOS			59.5		Е	58.2	2	Е	14.3	3	В	14.3	3	В
Intersection De	tersection Delay, s/veh / LOS					25	5.7						С		
Multimodal Ba	eulte				EP			\٨/٢	3		NP			S P	
Pedestrian LOS	Soore	/1.05		2 10		B	2.1/	1		2.07		B	2.00	30	B
Riovelo LOS So				2.10		Δ	2.14	7	۵ ۸	2.07	2	B	2.00	<u>, </u>	Δ
				1.07		A	0.07		A	1.03	,	D	1.35		A

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Street Segments

Fax:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.LAV consultDate Performed3/28/2023Analysis Time PeriodAM Peak Hour Highway Hwy 65 Cedar Ave/N Spruce Ave From/To Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 1114 veh/h Opposing direction volume, Vo 660 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 0.994 Grade adj. factor,(note-1) fg 1.00 1.00 1211 pc/h Directional flow rate,(note-2) vi 722 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.6 mi/h mi/h Average travel speed, ATSd 37.4 Percent Free Flow Speed, PFFS 70.6 00

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 1211 pc e-4) BPTSFd	Or 80.7 % 13.1 88.9 %	pposing (1.0 1.00 1.000 1.00 717	o) pc/h
Level of Service and O	ther Performa	nce Measu	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT1560	E 0.71 0 T 0.0 T 1700 T 1700 T 1700 T	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 37.4 88.9 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	ive , Lde peed, Ld	-	mi mi
Adj. factor for the effect of passing on average speed, fpl	lane		_	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl	'Sn]	_	0
Tercent free from speed including pass	ing iane, irr	obt -	0.0	0
Percent Time-Spent-Fol	lowing with P	assing La	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin of effective	ive lengt g, Lde length of	- -	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	_	mi
on percent time-spent-tollowing, f Percent time-spent-following	рт		_	
including passing lane, PTSFpl			-	90 10
Level of Service and Other Perfo	rmance Measur	es with B	Passing I	ane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E - \	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1210.9
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.79
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour + Project Highway Hwy 65 Cedar Ave/N Spruce Ave From/To Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 1261 veh/h Opposing direction volume, Vo 799 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 Grade adj. factor,(note-1) fg 1.00 1.00 1371 pc/h Directional flow rate,(note-2) vi 868 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h 35.2 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 66.3 90

Phone: E-Mail

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 1371 pc e-4) BPTSFd	c/h 84.6 % 11.0 91.3 %	pposing 1.0 1.0 1.000 1.00 868	(o) pc/h
Level of Service and O	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.81 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 35.2 91.3 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	tive d, Lde speed, Ld	-	mi mi
on average speed, fpl	Ialle		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFF	Spl	- 0.0	00
Percent Time-Spent-Fol	lowing with F	assing T.	ane	
	····	· · · ·		
of passing lane for percent time-s Length of two-lane highway downstream	witnin effect pent-followin of effective	ive leng ng, Lde length o	f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	-	mi
Percent time-spent-following, I including passing lane PTSED	рт		_	Q.
Including passing talle, Piorpi			Deee'ss T	-0
Level of Service and Other Perfo	rmance Measur	res with	rassing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	è		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1370.7
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.85
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Fax:

Phone:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.LAV consultDate Performed3/28/2023Analysis Time PeriodAM Peak Hour Highway Hwy 65 Cedar Ave/N Spruce Ave From/To Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 % - % Access point density 8 /mi Up/down Analysis direction volume, Vd 1157 veh/h Opposing direction volume, Vo 686 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 0.994 Grade adj. factor,(note-1) fg 1.00 1.00 Directional flow rate,(note-2) vi 1258 pc/h 750 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h Adjustment for no-passing zones, fnp 0.5 mi/h Average travel speed, ATSd 36.9 Percent Free Flow Speed, PFFS 69.6 90

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1258 pc e-4) BPTSFd	c/h 82.1 % 12.4 89.9 %	<pre>pposing 1.0 1.0 1.000 1.000 746 </pre>	(o) pc/h
Level of Service and O	ther Performa	ance Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.74 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 36.9 89.9 E	mi mi mi/h
Average Travel Spee	d with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	cive d, Lde speed, Ld	-	mi mi
Adj. factor for the effect of passing on average speed, fpl	lane		_	
Average travel speed including passing	lane, ATSpl		-	
Percent free flow speed including pass	ing lane, PFE	FSpl	0.0	010
Percent Time-Spent-Fol	lowing with H	Passing I	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followir	tive leng	th	mi
the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followi lane	ing, Ld	- -	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			_	90
Level of Service and Other Perfo	rmance Measur	res with	Passing 1	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	2		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1257.6
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.81
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour + Project Highway Hwy 65 Cedar Ave/N Spruce Ave From/To Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 1304 veh/h Opposing direction volume, Vo 825 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 Grade adj. factor,(note-1) fg 1.00 1.00 1417 pc/h Directional flow rate,(note-2) vi 897 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h 34.6 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 65.3 90

Phone: E-Mail

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1417 pc e-4) BPTSFd	C/h 85.8 % 10.4 92.2 %	pposing 1.0 1.0 1.000 1.00 897	(o) pc/h
Level of Service and O	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.83 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 34.6 92.2 E	mi mi mi/h
Average Travel Spee	d with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	cive d, Lde speed, Ld	-	mi mi
on average speed, fpl	Ialle		-	
Average travel speed including passing Percent free flow speed including pass	<pre>lane, ATSpl ing lane, PFB</pre>	FSpl	- 0.0	00
Percent Time-Spent-Fol	lowing with F	Passing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir of effective	tive leng ng, Lde length o	th - f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ing, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	рт		-	0
including passing lane, PTSFpl			-	ŏ
Level of Service and Other Perfo	rmance Measur	res with	Passing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1417.4
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.87
Bicycle LOS	E

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Phone: E-Mail:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1558 pc e-4) BPTSFd	/h 87.9 % 9.3 93.8 %	pposing 1.0 1.0 1.000 1.00 904	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT1560	E 0.92 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 33.4 93.8 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective rage travel s lane	ive , Lde peed, Ld	-	mi mi
on average speed, fpl			-	
Percent free flow speed including passing	ing lane, PFF	Spl	0.0	00
Percent Time-Spent-Fol	lowing with P	assing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followin	ive leng g, Lde	rth _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followi lane	length o ng, Ld	- -	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measur	es with	Passing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1557.6
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.91
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 1685 pc e-4) BPTSFd	/h 90.4 8.0 95.3	Dpposing 1.0 1.0 1.000 1.00 1055	(o) pc/h
Level of Service and C	ther Performa	nce Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.99 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - - 31.3 95.3 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective rage travel s lane	ive , Lde peed, Lo	- 1 -	mi mi
on average speed, fpl			-	
Percent free flow speed including passing	ing lane, PFF	Spl	0.0	00
Percent Time-Spent-Fol	lowing with P	assing I	Lane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followin	ive leng g, Lde	gth	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followi lane	length ong, Ld	- -	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	010
Level of Service and Other Perfo	rmance Measur	es with	Passing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1684.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.95
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1841 pc/ ce-4) BPTSFd 9 8 9	Op 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	posing (1.0 1.0 1.000 1.00 1090	o) pc/h
Level of Service and C	ther Performan	ice Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	F 1 260 0 1 1 1	08 v v .0 v .700 v .700 v .700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	ane, Lu	0.0 - 29.8 97.4 F	mi mi mi/h
Average Travel Spee	ed with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	Lde Lde Deed, Ld	-	mi mi
on average speed, fpl			-	
Percent free flow speed including passing	sing lane, PFFS	pl	0.0	olo
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ve lengt , Lde	h _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective l spent-followin lane	ength of Ig, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measure	es with P	assing L	ane
Level of service including passing lan Peak 15-min total travel time, TT15	ne, LOSpl E -	- V	eh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1841.3
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	5.00
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 2001 pc/3 xe-4) BPTSFd 9 8 9	Op h 4.4 % .0 9.3 %	posing (1.0 1.00 1.000 1.00 1241	o) pc/h
Level of Service and C	ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	F 1 260 0 1 1 1	.18 v .0 700 700 700 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing lass, Lpl s, Lpl) from above)	ane, Lu	0.0 - 27.4 99.3 F	mi mi mi/h
Average Travel Spee	ed with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effection travel speed, of effective trage travel spe lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl			-	
Average travel speed including passing Percent free flow speed including pass	sing lane, ATSpl	pl	0.0	olo
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effections pent-following	ve lengt , Lde	h _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective lo spent-following lane	ength of g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	olc
Level of Service and Other Performance Measures with Passing Lane				
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl E -	v	eh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	2001.1
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	5.04
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.
E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.LAV consult.Date Performed3/28/2023Analysis Time PeriodAM Peak Hour Hwy 65 Highway Cedar Ave/Tulare Rd From/To Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20
% Access point density 8 00 Up/down /mi Analysis direction volume, Vd 880 veh/h Opposing direction volume, Vo 983 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 1.00 957 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 1068 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h 36.8 mi/h Average travel speed, ATSd

69.5

8

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Percent Free Flow Speed, PFFS

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 957 pc xe-4) BPTSFd	/h 77.7 % 13.3 84.0 %	pposing 1.0 1.0 1.000 1.00 1068	(o) pc/h
Level of Service and C)ther Performa	nce Meası	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	7MT15 260	E 0.56 0 7 0.0 7 1700 7 1700 7 1700 7	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 36.8 84.0 E	mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective trage travel s	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	Lane		-	
Average travel speed including passing	g lane, ATSpl	(m)	-	Q.
	, ing talle, FFF		0.0	-0
Percent Time-Spent-Fol	Lowing with P	assing La	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin of effective	ive lengt g, Lde length of	- -	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi	ng, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	рт		_	
including passing lane, PTSFpl			-	010
Level of Service and Other Perfo	ormance Measur	es with H	Passing I	ane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E - \	veh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	956.5
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.67
Bicycle LOS	Ε

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% Access point density 8 00 Up/down /mi Analysis direction volume, Vd 954 veh/h Opposing direction volume, Vo 1117 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 Grade adj. factor,(note-1) fg 1.00 1.00 1037 pc/h Directional flow rate,(note-2) vi 1214 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h 35.1 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 66.2 2

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Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1037 pc/ ce-4) BPTSFd 8 1 8	Op 1.0 % 1.1 6.1 %	posing 1.0 1.00 1.000 1.00 1214	(0) pc/h
Level of Service and C	ther Performan	ice Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	E 0 760 0 1 1 1	2.0.61 v 0.0 v 700 v 700 v 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing L	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	ane, Lu	0.0 - 35.1 86.1 E	mi mi mi/h
Average Travel Spee	ed with Passin	ig Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	Lde Lde Deed, Ld	-	mi mi
on average speed, fpl			-	
Percent free flow speed including passing	ing lane, PFFS	pl	0.0	00
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ve lengt	h _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective l spent-followin lane	ength of 1g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	010
Level of Service and Other Perfo	ormance Measure	es with P	assing I	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl E -	. V	eh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1037.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.71
Bicycle LOS	E

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% Access point density 8 /mi Up/down Analysis direction volume, Vd 914 veh/h Opposing direction volume, Vo 1021 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor, (note-1) fg 1.00 Directional flow rate, (note-2) vi 993 pc/h 1.000 1.00 1110 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h

36.2

68.3

mi/h

8

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Phone:

Average travel speed, ATSd

Percent Free Flow Speed, PFFS

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 993 pc/ ce-4) BPTSFd 7 1 8	Op 9.1 % 2.6 35.0 %	posing (1.0 1.00 1.000 1.00 1110	o) pc/h
Level of Service and C	ther Performan	ice Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	E 0 '60 0 1 1 1	2).58) v).0 v .700 v .700 v .700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing L	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	.ane, Lu	0.0 - 36.2 85.0 E	mi mi mi/h
Average Travel Spee	d with Passin	ig Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	.ve Lde beed, Ld	-	mi mi
on average speed, fpl	lane, ATSpl		-	
Percent free flow speed including passing	ing lane, PFFS	Spl	0.0	010
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti	ve lengt , Lde	h _	mi
the passing lane for percent time- Adj. factor for the effect of passing	of effective f spent-followin lane	iength of ig, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	рт		_	
including passing lane, PTSFpl			-	010
Level of Service and Other Perfo	rmance Measure	es with P	assing L	ane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl E -	- v	eh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	993.5
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.69
Bicycle LOS	Ε

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% Access point density 8 00 Up/down /mi Analysis direction volume, Vd 988 veh/h Opposing direction volume, Vo 1155 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 Grade adj. factor,(note-1) fg 1.00 1.00 1074 pc/h Directional flow rate,(note-2) vi 1255 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h mi/h Average travel speed, ATSd 34.5 Percent Free Flow Speed, PFFS 65.0 90

Phone:

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1074 pc e-4) BPTSFd	c/h 82.3 10.3 87.0	Opposing 1.0 1.0 1.000 1.00 1255 %	(o) pc/h
Level of Service and C	ther Performa	ance Mea	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.63 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, L	0.0 u – 34.5 87.0 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	cive d, Lde speed, Lo	- d -	mi mi
Adj. factor for the effect of passing on average speed, fpl	lane		_	
Average travel speed including passing	lane, ATSpl		-	0
Percent free flow speed including pass	ing lane, PFF	Spl	0.0	ð
Percent Time-Spent-Fol	lowing with F	Passing :	Lane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin	ive lend ng, Lde length (gth - of	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi	.ng, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	ЪΤ		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measur	es with	Passing	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	le, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	2		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1073.9
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.73
Bicycle LOS	E

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Adjustment for no-passing zones, fnp0.5mi/hAverage travel speed, ATSd32.7mi/hPercent Free Flow Speed, PFFS61.8%

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1205 pc e-4) BPTSFd	c/h 85.7 8.2 89.6	Opposing 1.0 1.0 1.000 1.000 1347 %	(o) pc/h
Level of Service and C	ther Performa	ance Mea	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.71 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, I	0.0 - 32.7 89.6 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane	<u></u>	
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective trage travel s lane	ive 1, Lde speed, L	- .d -	mi mi
on average speed, fpl			_	
Average travel speed including passing Percent free flow speed including pass	ing lane, ATSpl	Spl	- 0.0	00
Percent Time-Spent-Fol	lowing with B	Passing	Lane	
of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir of effective	ive len 1g, Lde length	of	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	.ng, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	ЪТ		-	٥.
including passing lane, PTSFpl			-	5
Level of Service and Other Perfo	rmance Measur	res with	n Passing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	2		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1205.4
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.78
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour + Project Agency/Co. Highway Hwy 65 Cedar Ave/Tulare Rd From/To Jurisdiction County Analysis Year 2035 Description TIS for Commercia Development Input Data____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 1183 veh/h Opposing direction volume, Vo 1373 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 Grade adj. factor,(note-1) fg 1.00 1.00 Directional flow rate,(note-2) vi 1286 pc/h 1492 pc/h Free-Flow Speed from Field Measurement: Field measured speed,(note-3) S FM mi/h Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h 31.0 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 58.5 90

Fax:

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 1286 pc .e-4) BPTSFd	/h 87.9 % 7.1 91.2 %	<pre>ppposing 1.0 1.0 1.000 1.000 1.00 1492 </pre>	(o) pc/h
Level of Service and C	ther Performa	nce Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.76 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 31.0 91.2 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective rage travel s lane	ive , Lde peed, Ld	-	mi mi
on average speed, fpl			-	
Average travel speed including passing Percent free flow speed including pass	ing lane, PFF	Spl	0.0	olo
Percent Time-Spent-Fol	lowing with P	assing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followin	ive leng g, Lde	,th	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followi lane	length c ng, Ld)f _	mi
on percent time-spent-following, f Percent time-spent-following	pl		_	
including passing lane, PTSFpl			_	010
Level of Service and Other Perfo	rmance Measur	es with	Passing I	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1285.9
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.82
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.LAV consult.Date Performed3/28/2023Analysis Time PeriodAM Peak Hour Highway Hwy 65 Cedar Ave/Tulare Rd From/To County Jurisdiction Analysis Year 2045 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.87 Highway classClassIPeak hour factor, PHF0.87Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 % - % Access point density 8 /mi Up/down Analysis direction volume, Vd 1336 veh/h Opposing direction volume, Vo 1494 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 Grade adj. factor,(note-1) fg 1.00 1.00 Directional flow rate,(note-2) vi 1536 pc/h 1717 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h

Adjustment for no-passing zones, fnp0.5mi/hAverage travel speed, ATSd27.3mi/hPercent Free Flow Speed, PFFS51.5%

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1536 pc xe-4) BPTSFd	c/h 91.7 5.5 94.3	Opposing 1.0 1.0 1.000 1.000 1717 %	(o) pc/h
Level of Service and C	ther Performa	ance Mea	asures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	7MT15 760	F 0.90 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) From above)	lane, I	0.0 27.3 94.3 F	mi mi mi/h
Average Travel Spee	ed with Passi	ing Lane	2	
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective trage travel s lane	cive d, Lde speed, I	- 	mi mi
on average speed, fpl			-	
Average travel speed including passing Percent free flow speed including pass	ing lane, ATSpl	FSpl	0.0	00
Percent Time-Spent-Fol	lowing with B	Passing	Lane	
Devent room longth of two long highway	within offort	iuo lor		
of passing lane for percent time-s Length of two-lane highway downstream	pent-followir of effective	ng, Lde length	of	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ing, Ld	-	mi
Percent time-spent-following	рт		-	0_
including passing lane, PTSPpl			-	6
Level of Service and Other Perfo	ormance Measur	res with	n Passing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	ne, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	e		

Posted speed limit, SpOPercent of segment with occupied on-highway parking0Pavement rating, P3Flow rate in outside lane, vOL1535.6Effective width of outside lane, We24.00Effective speed factor, St4.79Bicycle LOS Score, BLOS4.88Bicycle LOSE

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour + Project Agency/Co. Highway Hwy 65 Cedar Ave/Tulare Rd From/To Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 1412 veh/h Opposing direction volume, Vo 1628 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 Grade adj. factor,(note-1) fg 1.00 1.00 Directional flow rate,(note-2) vi 1535 pc/h 1770 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h Adjustment for no-passing zones, fnp 0.5 26.9 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 50.7

90

Phone: E-Mail:

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.000 1535 pc ce-4) BPTSFd	c/h 91.7 5.8 94.4	Opposing 1.0 1.0 1.000 1.000 1770 %	(o) pc/h
Level of Service and (Other Performa	ance Mea	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	7MT15 560	F 0.90 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	Lane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing rs, Lpl) from above)	lane, L	0.0 - 26.9 94.4 F	mi mi mi/h
Average Travel Spee	ed with Pass:	ing Lane	<u>.</u>	
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect e travel speed of effective erage travel s lane	cive d, Lde speed, L	- .d -	mi mi
on average speed, fpl	r lane. ATSpl		-	
Percent free flow speed including passing	sing lane, PFI	FSpl	0.0	olo
Percent Time-Spent-Fol	llowing with 1	Passing	Lane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect	tive len ng, Lde	ngth -	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective -spent-follow: lane	length ing, Ld	- -	mi
on percent time-spent-following, i Percent time-spent-following	fpl		-	
including passing lane, PTSFpl			-	010
Level of Service and Other Perfo	ormance Measu	res with	Passing	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1534.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.91
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Project Information				
Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2023	
Jurisdiction	County	Time Analyzed	AM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	851			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capa	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data				
Direction 2	600			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Hermosa St to Lindmore St - 2023 AM.xuf

Project Information

Analyst	вмв	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2023
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			

Direction 1 Geometric Data

Direction 1	960			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capa	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Densit	у			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 1 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	

Bicycle Level of Service (LOS)

А

42

Average Effective Width (We), ft

Direction 2 Geometric Data				
Direction 2	685			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Hermosa St to Lindmore St - 2023 AM+Proj.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2025	
Jurisdiction	County	Time Analyzed	AM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	884			
Number of Lanes (N) In	2	Torrain Typo		

Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Cap	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 1 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	

Direction 2 Geometric Data				
Direction 2	623			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А	
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Hwy 65 - Hermosa St to Lindmore St - 2025 AM.xuf

Project Information

Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2025	
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	993			
Number of Lanes (N), In	2	Terrain Type	Level	

Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capa	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density	y			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 1 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	

Direction 2 Geometric Data				
Direction 2	708			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Hermosa St to Lindmore St - 2025 AM+Proj.xuf

Project Information

Measured or Base Free-Flow Speed

Base Free-Flow Speed (BFFS), mi/h

Free-Flow Speed (FFS), mi/h

Lane Width, ft

Median Type

Base

55.0

12

54.5

Divided

Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2035	
Jurisdiction	County	Time Analyzed	AM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1072			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	

Grade Length, mi

Access Point Density, pts/mi

Left-Side Lateral Clearance (LCR), ft

Total Lateral Clearance (TLC), ft

-

2.0

6

12

		1		
Direction 1 Adjustment Factors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			

Direction 1 Demand and Capacity

Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

-			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	741			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Facto	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densit	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Hermosa St to Lindmore St - 2035 AM.xuf

Project Information			
Analyst	ВМВ	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2035
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			
Direction 1	1181		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.5		
Direction 1 Adjustment Facto	rs		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 1 Demand and Capa	acity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 1 Speed and Density			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Madian Tuna Adjustment (f. 4)		Level of Convice (LOC)	

Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А	
Access Point Density Adjustment (fA)	0.5			
Direction 1 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	

Direction 2 Geometric Data				
Direction 2	826			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _P), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densit	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Hermosa St to Lindmore St - 2035 AM+Proj.xuf
Project Information					
Analyst	ВМВ	Date	3/28/2023		
Agency	LAV Consulting	Analysis Year	2045		
Jurisdiction	County	Time Analyzed	AM Peak Hour		
Project Description	TIS for Commercial Development	Units	U.S. Customary		
Direction 1 Geometric Data					
Direction 1	1293				
Number of Lanes (N), In	2	Terrain Type	Level		
Segment Length (L), ft	-	Percent Grade, %	-		
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-		
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0		
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6		
Median Type	Divided	Total Lateral Clearance (TLC), ft	12		
Free-Flow Speed (FFS), mi/h	54.5				
Direction 1 Adjustment Fact	Direction 1 Adjustment Factors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000		

Driver Population CAF	1.000			
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	

Direction 1 Demand and Capacity

•	,		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	912			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Hermosa St to Lindmore St - 2045 AM.xuf

Project Information

Analyst	вмв	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2045
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			

Direction 1	1407			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capa	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	

Direction 1 Bicycle LOS

Access Point Density Adjustment (fA)

0.5

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	997			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Hermosa St to Lindmore St - 2045 AM+Proj.xuf

Project Information				
Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2023	
Jurisdiction	County	Time Analyzed	AM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	648			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Factors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			

Direction 1 Demand and Capacity

Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	

Direction 1 Speed and Density

-			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	344			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _P), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Lindmore St to Marigold St - 2023 AM.xuf

Project Information

Lane Width, ft Median Type

Free-Flow Speed (FFS), mi/h

Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2023	
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	747			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	

Direction 1 Adjustment Factors Driver Population All Familiar Final Speed Adjustment Factor (SAF) 1.000 **Driver Population SAF** 1.000 Final Capacity Adjustment Factor (CAF) 1.000 1.000 **Driver Population CAF Direction 1 Demand and Capacity** 1.000 Volume(V) veh/h 0 Heavy Vehicle Adjustment Factor (fHV)

Left-Side Lateral Clearance (LCR), ft

Total Lateral Clearance (TLC), ft

6

12

12

54.5

Divided

		, , , , , , , , , , , , , , , , , , ,	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

-			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	422			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Lindmore St to Marigold St - 2023 AM+Proj.xuf

Project Information				
Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2025	
Jurisdiction	County	Time Analyzed	AM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	673			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capa	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Densit	y			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 1 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	

Bicyle LOS Score (BLOS)

Bicycle Level of Service (LOS)

Effective Width of Volume (Wv), ft

Average Effective Width (We), ft

36

42

0.00

А

Direction 2 Geometric Data				
Direction 2	357			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Lindmore St to Marigold St - 2025 AM.xuf

Project Information

Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2025	
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	772			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L) ft	_	Percent Grade %	_	

Segment Length (L), π	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	

Direction 1 Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data					
Direction 2	435				
Number of Lanes (N), In	2	Terrain Type	Level		
Segment Length (L), ft	-	Percent Grade, %	-		
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-		
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0		
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6		
Median Type	Divided	Total Lateral Clearance (TLC), ft	12		
Free-Flow Speed (FFS), mi/h	54.5				
Direction 2 Adjustment Factor	Drs				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000		
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000		
Driver Population CAF	1.000				
Direction 2 Demand and Cap	Direction 2 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000		
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0		
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090		
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090		
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00		
Direction 2 Speed and Densi	ty				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5		
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0		
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A		
Access Point Density Adjustment (fA)	0.5				
Direction 2 Bicycle LOS					
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62		
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00		
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A		
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Hwy 65 - Lindmore St to Marigold St - 2025 AM+Proj.xuf

Project Information				
Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2035	
Jurisdiction	County	Time Analyzed	AM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	816			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	

Direction 1 Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data				
Direction 2	433			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Lindmore St to Marigold St - 2035 AM.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2035	
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	915			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	

Direction 1 Adjustment Factors

54.5

Free-Flow Speed (FFS), mi/h

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity

Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	

Direction 1 Speed and Density

Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	511			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hvy 65 - Lindmore St to Marigold St - 2035 AM+Proj.xuf

nerated: 07/20/

Project Information

Base Free-Flow Speed (BFFS), mi/h

Direction 1 Adjustment Factors

Free-Flow Speed (FFS), mi/h

Lane Width, ft

Median Type

Driver Population

-			
Analyst	вмв	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2045
Jurisdiction	County	Time Analyzed	AM Peak Hour
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			
Direction 1	985		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-

Access Point Density, pts/mi

Left-Side Lateral Clearance (LCR), ft

Final Speed Adjustment Factor (SAF)

Total Lateral Clearance (TLC), ft

2.0

6

12

1.000

Direction 1 Demand and Capacity						
Driver Population CAF	1.000					
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000			

55.0

12

54.5

Divided

All Familiar

Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data					
Direction 2	523				
Number of Lanes (N), In	2	Terrain Type	Level		
Segment Length (L), ft	-	Percent Grade, %	-		
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-		
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0		
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6		
Median Type	Divided	Total Lateral Clearance (TLC), ft	12		
Free-Flow Speed (FFS), mi/h	54.5				
Direction 2 Adjustment Factor	ors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000		
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000		
Driver Population CAF	1.000				
Direction 2 Demand and Cap	acity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000		
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0		
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090		
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090		
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00		
Direction 2 Speed and Densi	ty				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5		
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0		
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A		
Access Point Density Adjustment (fA)	0.5				
Direction 2 Bicycle LOS	Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62		
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00		
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A		
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Hwy 65 - Lindmore St to Marigold St - 2045 AM.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2045
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Commetric Data			

Direction 1 Geometric Data

Average Effective Width (We), ft

42

Direction 1	1084		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.5		
Direction 1 Adjustment Facto	rs		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 1 Demand and Capa	acity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 1 Speed and Densit	у		
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		
Direction 1 Bicycle LOS			
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00

Bicycle Level of Service (LOS)

А

Direction 2 Geometric Data				
Direction 2	601			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Lindmore St to Marigold St - 2045 AM+Proj.xuf

Project Information

Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2023	
Jurisdiction	County	Time Analyzed	AM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	480			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (I) ft		Percent Grade %		

Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Factors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density				
Lane Width Adjustment (flw)	0.0	Average Speed (S) mi/h	54 5	

Direction 1 Bicycle I OS				
Access Point Density Adjustment (fA)	0.5			
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	

Flow Rate in Outside Lane (vOL),veh/h 0 Effective Speed Factor (St) 4.62 Effective Width of Volume (Wv), ft 36 Bicyle LOS Score (BLOS) 0.00 Average Effective Width (We), ft 42 Bicycle Level of Service (LOS) A

Direction 2 Geometric Data				
Direction 2	508			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Marigold St to Ave 208 - 2023 AM.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2023
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			

Direction 1 568 2 Number of Lanes (N), In Terrain Type Level Segment Length (L), ft Percent Grade, % _ _ Measured or Base Free-Flow Speed Grade Length, mi Base _ 55.0 2.0 Base Free-Flow Speed (BFFS), mi/h Access Point Density, pts/mi 12 6 Lane Width, ft Left-Side Lateral Clearance (LCR), ft Median Type Divided Total Lateral Clearance (TLC), ft 12 Free-Flow Speed (FFS), mi/h 54.5 **Direction 1 Adjustment Factors Driver Population** All Familiar Final Speed Adjustment Factor (SAF) 1.000 1.000 **Driver Population SAF** 1.000 Final Capacity Adjustment Factor (CAF) **Driver Population CAF** 1.000 **Direction 1 Demand and Capacity** Volume(V) veh/h 0 Heavy Vehicle Adjustment Factor (fHV) 1.000 Peak Hour Factor 88.0 Flow Rate (Vp), pc/h/ln 0 Total Trucks, % 0.00 Capacity (c), pc/h/ln 2090 Single-Unit Trucks (SUT), % Adjusted Capacity (cadj), pc/h/ln 2090 _ Tractor-Trailers (TT), % Volume-to-Capacity Ratio (v/c) 0.00 _

Direction 1 Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data				
Direction 2	578			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _P), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densit	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Marigold St to Ave 208 - 2023 AM+Proj.xuf

Project Information				
Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2025	
Jurisdiction	County	Time Analyzed	AM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	499			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Factors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			

Direction 1 Demand and Capacity

_	,		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data				
Direction 2	528			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _P), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densit	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Marigold St to Ave 208 - 2025 AM.xuf

Project Information

Direction 1 Geometric Data			
Project Description	TIS for Commercial Development	Units	U.S. Customary
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project
Agency	LAV Consulting	Analysis Year	2025
Analyst	ВМВ	Date	3/28/2023
1			

Direction 1	587		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.5		
Direction 1 Adjustment Facto	rs		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 1 Demand and Cap	acity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090

Direction 1 Speed and Density

_

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.5		

Volume-to-Capacity Ratio (v/c)

0.00

Direction 1 Bicycle LOS

Tractor-Trailers (TT), %

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data				
Direction 2	598			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Marigold St to Ave 208 - 2025 AM+Proj.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2035	
Jurisdiction	County	Time Analyzed	AM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	605			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			

Direction 1 Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity

Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	

Direction 1 Speed and Density

Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	637			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Facto	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densit	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Marigold St to Ave 208 - 2035 AM.xuf

Project Information

Measured or Base Free-Flow Speed

Base Free-Flow Speed (BFFS), mi/h

Free-Flow Speed (FFS), mi/h

Lane Width, ft

Median Type

Base

55.0

12

54.5

Divided

Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2023	
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	693			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	

Grade Length, mi

Access Point Density, pts/mi

Left-Side Lateral Clearance (LCR), ft

Total Lateral Clearance (TLC), ft

-

2.0

6

12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity

Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	710			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Marigold St to Ave 208 - 2035 AM+Proj.xuf

Project Information

Average Effective Width (We), ft

42

Analyst	ВМВ	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2045
Jurisdiction	County	Time Analyzed	AM Peak Hour
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			
Direction 1	729		
Number of Lanes (N), In	2	Terrain Type	Level
Commont Longth (1) ft		Democrat Creade 0/	

Number of Lanes (N), In	2	тегталт туре	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Densit	у			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 1 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	

Bicycle Level of Service (LOS)

А

Direction 2 Geometric Data				
Direction 2	772			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Marigold St to Ave 208 - 2045 AM.xuf

Project Information				
Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2045	
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	817			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	

	°	rieuvy veniele / lajustinent ruetor (inv)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density				
Lane Width Adjustment (flw)	0.0	Average Speed (S) mi/h	54 5	

Access Point Density Adjustment (fA)	0.5		
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data				
Direction 2	853			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Facto	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity	•		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densit	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Marigold St to Ave 208 - 2045 AM+Proj.xuf
Fax:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.Date ConstructDate Performed3/28/2023Analysis Time PeriodAM Peak Hour Highway Hwy 65 N Spruce Ave/Hwy 137 From/To Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 623 veh/h Opposing direction volume, Vo 622 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 681 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 680 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h 53.0 mi/h Free-flow speed, FFSd Adjustment for no-passing zones, fnp 0.7 mi/h 41.8 mi/h Average travel speed, ATSd

78.8

90

Phone:

Percent Free Flow Speed, PFFS

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 677 pc/ .e-4) BPTSFd 6 2 7	Dp h 3.4 % 1.1 4.0 %	posing 1.0 1.00 1.000 1.00 676	(o) pc/h
Level of Service and C	ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 00 060 0 1 1 1	.40 v .0 700 700 700 v 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) rom above)	ane, Lu	0.0 - 41.8 74.0 D	mi mi mi/h
Average Travel Spee	d with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl			_	
Percent free flow speed including passing	ing lane, PFFS	pl	0.0	00
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ve lengt , Lde	h _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective 1 spent-followin lane	ength of .g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measure	s with P	assing 3	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl E -	V	eh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	677.2
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.49
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour + Project Highway Hwy 65 N Spruce Ave/Hwy 137 From/To Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20
% Access point density 8 00 Up/down /mi Analysis direction volume, Vd 695 veh/h Opposing direction volume, Vo 707 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 760 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 773 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h Adjustment for no-passing zones, fnp 0.5 40.6 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 76.6 00

Phone:

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 755 pc e-4) BPTSFd	/h 67.3 % 18.6 76.5 %	pposing 1.0 1.0 1.000 1.00 768	(o) pc/h
Level of Service and C	ther Performa	nce Measu	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.44 0 x 0.0 x 1700 x 1700 x 1700 x	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 40.6 76.5 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	Talle		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFF	Spl	- 0.0	00
Percent Time-Spent-Fol	lowing with P	assing La	ne	
	i i i i i i i i i i i i i i i i i i i			
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin of effective	ive lengt g, Lde length of	- -	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	b⊤		-	
including passing lane, PTSFpl			-	50
Level of Service and Other Perfo	rmance Measur	es with B	Passing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E - \	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	755.4
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.55
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Fax:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/co.IntroductionDate Performed3/28/2023Analysis Time PeriodAM Peak Hour Highway Hwy 65 N Spruce Ave/Hwy 137 From/To Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 648 veh/h Opposing direction volume, Vo 647 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 709 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 708 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.6 mi/h 41.4 mi/h Average travel speed, ATSd

78.1

2

Percent Free Flow Speed, PFFS

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 704 pc/ e-4) BPTSFd 6 1 7	0p h 4.4 % 9.9 4.4 %	pposing 1.0 1.0 1.000 1.00 703	(o) pc/h
Level of Service and C	ther Performan	ce Measu	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 0 0 60 0 1 1 1	.41 vv .0 vv 700 vv 700 vv 700 vv	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) rom above)	ane, Lu	0.0 - 41.4 74.4 D	mi mi mi/h
Average Travel Spee	d with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl	lane. ATSpl		-	
Percent free flow speed including passing	ing lane, PFFS	pl	0.0	010
Percent Time-Spent-Fol	lowing with Pa	ssing La	ine	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ve lengt , Lde	.h 	mi
the passing lane for percent time- Adj. factor for the effect of passing	of effective f spent-followin lane	ength oi g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	рı		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measure	s with P	assing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl E -	V	reh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	704.3
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.51
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Fax:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour + Project Highway Hwy 65 N Spruce Ave/Hwy 137 From/To Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 % - % Access point density 8 /mi Up/down Analysis direction volume, Vd 719 veh/h Opposing direction volume, Vo 732 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 786 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 800 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h 40.2 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 75.9 90

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 782 pc e-4) BPTSFd	/h 68.8 % 18.1 77.8 %	pposing 1.0 1.00 1.000 1.00 796	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	7MT15 960	D 0.46 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 40.2 77.8 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective rage travel s lane	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	lane, ATSpl		-	
Percent free flow speed including passing	ing lane, PFF	Spl	0.0	0
Percent Time-Spent-Fol	lowing with P	assing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followin	ive leng g, Lde	th _	mi
the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followi lane	ng, Ld	I _	mi
on percent time-spent-following, f Percent time-spent-following	ЪТ		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measur	es with	Passing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	781.5
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.57
Bicycle LOS	Ε

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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/co.IntroductionDate Performed3/28/2023Analysis Time PeriodAM Peak Hour Highway Hwy 65 N Spruce Ave/Hwy 137 From/To Jurisdiction County Analysis Year 2035 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 785 veh/h Opposing direction volume, Vo 784 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor, (note-1) fg 1.00 Directional flow rate, (note-2) vi 853 pc/h 1.000 1.00 852 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h 0.5 Adjustment for no-passing zones, fnp mi/h 39.3 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 74.2 00

Phone:

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.000 853 pc/ e-4) BPTSFd 7 1 8	Op h 1.7 % 6.7 0.1 %	posing 1.0 1.0 1.000 1.00 852	(o) pc/h
Level of Service and C	ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	E 0 0 0 0 0 0 1 1 1	.50 v .0 v 700 v 700 v 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	ane, Lu	0.0 - 39.3 80.1 E	mi mi mi/h
Average Travel Spee	d with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl			-	
Percent free flow speed including passing	ing lane, PFFS	pl	0.0	010
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ve lengt , Lde	h _	
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective l spent-followin lane	ength of g, Ld	-	mi
on percent time-spent-following, f	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measure	s with P	assing I	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	le, LOSpl E -	V	eh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	853.3
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.61
Bicycle LOS	Ε

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Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 932 pc e-4) BPTSFd	c/h 75.3 % 14.9 82.7 %	Dpposing 1.0 1.0 1.000 1.000 945	(o) pc/h
Level of Service and C	ther Performa	ance Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.55 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 1 - 38.0 82.7 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	cive d, Lde speed, Lo	-	mi mi
Adj. factor for the effect of passing on average speed, fpl	lane		_	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl	Spl	- 0.0	00
Dercent Time-Spent-Fol	lowing with I	assina T	lane	-
	Ling with r			
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir of effective	cive leng ng, Lde length c	yth - of	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	lng, Ld	-	mi
Percent time-spent-following	ΡT		_	ç
Including passing lane, PISPPI			_	ō
Level of Service and Other Perfo	rmance Measur	res with	Passing 1	lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	931.5
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.65
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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69.0

90

Phone:

Percent Free Flow Speed, PFFS

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1028 pc .e-4) BPTSFd	c/h 79.0 % 13.0 85.5 %	ppposing 1.0 1.0 1.000 1.000 1028	(o) pc/h
Level of Service and C	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.60 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 36.6 85.5 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	cive d, Lde speed, Ld	- l -	mi mi
Adj. factor for the effect of passing on average speed, fpl	lane		_	
Average travel speed including passing	lane, ATSpl		-	0
Percent free flow speed including pass	ing iane, PFF	эрт	0.0	6
Percent Time-Spent-Fol	lowing with F	Passing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin	ive leng ng, Lde length c	1th 	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi	.ng, Ld	_	mi
on percent time-spent-following, f Percent time-spent-following	рl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measur	es with	Passing I	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	è		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1028.3
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.70
Bicycle LOS	E

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Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1107 pc/3 xe-4) BPTSFd 8 1 8	Op 2.0 % 1.4 7.7 %	posing 1.0 1.0 1.000 1.00 1121	(o) pc/h
Level of Service and C	ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	E 0 260 0 1 1 1	.65 v .0 v 700 v 700 v 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing L	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	ane, Lu	0.0 - 35.3 87.7 E	mi mi mi/h
Average Travel Spee	ed with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effection travel speed, of effective trage travel spe lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl	ISDO ATCOL		_	
Percent free flow speed including passing	sing lane, PFFS	pl	0.0	00
Percent Time-Spent-Fol	lowing with Pa	ssing La:	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effections	ve lengt , Lde	h _	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-following lane	g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	ЪТ		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measure	s with P	assing 1	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	ne, LOSpl E -	V	eh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1106.5
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.74
Bicycle LOS	E

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Project Information				
Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2023	
Jurisdiction	County	Time Analyzed	AM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1015			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 1 Adjustment Factors				

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity

• • • • • • • • • • • • • • • • • • •	,		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.3		

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data			
Direction 2	801		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.8		
Direction 2 Adjustment Factor	ors		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Cap	acity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 2 Speed and Densi	ty		
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.3		
Direction 2 Bicycle LOS		-	
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A
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Hwy 65 - Tulare Rd to Hermosa St - 2023 AM.xuf

Project Information				
Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2023	
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1153			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capa	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.3			
Direction 1 Bicycle LOS				

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	907			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.3			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Tulare Rd to Hermosa St - 2023 AM+Proj.xuf

Project Information

Measured or Base Free-Flow Speed

Base Free-Flow Speed (BFFS), mi/h

Lane Width, ft

Median Type

Base

55.0

12

Divided

Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2025	
Jurisdiction	County	Time Analyzed	AM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1054			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	

Grade Length, mi

Access Point Density, pts/mi

Left-Side Lateral Clearance (LCR), ft

Total Lateral Clearance (TLC), ft

-

6

12

1.0

Free-Flow Speed (FFS), mi/h	54.8			
Direction 1 Adjustment Factors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			

Direction 1 Demand and Capacity

	-		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.3		

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	832			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.3			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Tulare Rd to Hermosa St - 2025 AM.xuf

Project Information

Base Free-Flow Speed (BFFS), mi/h

Free-Flow Speed (FFS), mi/h

Lane Width, ft

Median Type

Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2025	
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1192			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	

Access Point Density, pts/mi

Left-Side Lateral Clearance (LCR), ft

Total Lateral Clearance (TLC), ft

1.0

6

12

Direction 1 Adjustment Factors					
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000		
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000		
Driver Population CAF	1.000				
Direction 1 Demand and Capa	ocity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000		
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0		

55.0

12

54.8

Divided

Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А	
Access Point Density Adjustment (fA)	0.3			
Direction 1 Bicycle LOS				

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	938			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.3			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (voL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Tulare Rd to Hermosa St - 2025 AM+Proj.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2035	
Jurisdiction	County	Time Analyzed	AM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1279			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			

Direction 1 Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity

-	-		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.3		

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	1009			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 2 Adjustment Factor	Drs	-		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.3			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Tulare Rd to Hermosa St - 2035 AM.xuf

Project Information

Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2035	
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1417			
Number of Lanes (N), In	2	Terrain Type	Level	

Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 1 Adjustment Factors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	

Direction 1 Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.3		

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	1115			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.3			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Tulare Rd to Hermosa St - 2035 AM+Proj.xuf
HCS7 Multilane Highway Report

Project Information				
Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2045	
Jurisdiction	County	Time Analyzed	AM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1543			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Cap	acity	2 		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density				
Lane Width Adjustment (flw)	0.0	Average Speed (S) mi/h	54.8	

	0.0	Average Speed (S), min	54.6
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.3		
Direction 1 Bicycle LOS			
Direction 1 Bicycle LOS Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62

Bicycle Level of Service (LOS)

А

42

Average Effective Width (We), ft

Direction 2 Geometric Data			
Direction 2	1217		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.8		
Direction 2 Adjustment Factor	ors		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Cap	acity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 2 Speed and Densi	ty		
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.3		
Direction 2 Bicycle LOS			
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A
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Hwy 65 - Tulare Rd to Hermosa St - 2045 AM.xuf

HCS7 Multilane Highway Report

Project Information

Base Free-Flow Speed (BFFS), mi/h

Direction 1 Adjustment Factors

Free-Flow Speed (FFS), mi/h

Lane Width, ft

Median Type

-			
Analyst	ВМВ	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2045
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			
Direction 1	1681		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-

Access Point Density, pts/mi

Left-Side Lateral Clearance (LCR), ft

Total Lateral Clearance (TLC), ft

1.0

6

12

Direction 1 Demand and Capacity					
Driver Population CAF	1.000				
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000		

55.0

12

Divided

54.8

Direction i Demand and Capa	icity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.3		

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data			
Direction 2	1323		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.8		
Direction 2 Adjustment Factor	ors		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Cap	acity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (V _P), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 2 Speed and Densit	ty		
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.3		
Direction 2 Bicycle LOS		-	
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A
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Hwy 65 - Tulare Rd to Hermosa St - 2045 AM+Proj.xuf

Fax:

Phone:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/co.Int. concerciDate Performed3/28/2023Analysis Time PeriodAM Peak HourTable Period127 Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction Analysis Year 2023 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak nour factor, rmr0.02Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 352 veh/h Opposing direction volume, Vo 564 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.3 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.982 Grade adj. factor, (note-1) fg 1.00 0.994 1.00 390 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 617 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.8 mi/h 44.4 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 83.8 00

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 385 pc/ .e-4) BPTSFd	0) 44.9 % 24.4 54.3 %	pposing 1.0 1.0 1.000 1.00 613	(o) pc/h
Level of Service and C	ther Performar	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	I (0 (MT15) (60) (0 1 1 1 1 1 1	D D D D D D D D D D D D D D	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing 1 s, Lpl) rom above)	lane, Lu	0.0 - 44.4 54.3 D	mi mi mi/h
Average Travel Spee	d with Passir	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effects travel speed, of effective rage travel sp lane	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	lana Ameni		-	
Percent free flow speed including passing	ing lane, PFFS	Spl	0.0	olo
Percent Time-Spent-Fol	lowing with Pa	assing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ive leng g, Lde		mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective l spent-followir lane	length o ng, Ld	f _	mi
on percent time-spent-following, f	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measure	es with	Passing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl –		veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	382.6
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.20
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour + Project Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction Analysis Year 2023 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 400 veh/h Opposing direction volume, Vo 619 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.3 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.982 Grade adj. factor (note-1) fg 1 00 0.994 1.00 443 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 677 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h 0.7 Adjustment for no-passing zones, fnp 43.7 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 82.4 00

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 435 pc ce-4) BPTSFd	c/h 48.9 23.1 58.0	Opposing 1.0 1.0 1.000 1.00 673 %	(o) pc/h
Level of Service and C	ther Performa	ance Mea	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 960	D 0.26 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl mom above)	lane, L	0.0 - 43.7 58.0 D	mi mi mi/h
Average Travel Spee	ed with Pass	ing Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective rage travel s lane	cive d, Lde speed, Lo	- d -	mi mi
on average speed, fpl			-	
Percent free flow speed including passing	sing lane, PFI	FSpl	0.0	010
Percent Time-Spent-Fol	lowing with H	Passing 1	Lane	
Downstream length of two-lane highway	within effect	tive lend	gth	mi
Length of two-lane highway downstream	of effective	length (of	
Adj. factor for the effect of passing on percent time-spent-following, f	spent-follow: lane pl	ing, Ld	_	mı
Percent time-spent-following including passing lane, PTSFpl			-	<u>0</u>
Level of Service and Other Perfo	ormance Measuu	res with	Passing	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	re⊥ of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	434.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.27
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/co.Int. concerciDate Performed3/28/2023Analysis Time PeriodAM Peak HourTable Period127 Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction Analysis Year 2025 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 366 veh/h Opposing direction volume, Vo 586 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.3 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.982 Grade adj. factor (note-1) fg 1 00 0.994 1.00 405 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 641 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h 0.7 mi/h Adjustment for no-passing zones, fnp 44.2 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 83.3 90

Phone: E-Mail:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 400 pc xe-4) BPTSFd	C) 23.8 55.2 %	pposing 1.0 1.00 1.000 1.00 637	(o) pc/h
Level of Service and C	ther Performa	ince Measi	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	D 0.23 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 44.2 55.2 D	mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	l, Lde peed, Ld	-	mi mi
on average speed, fpl	Lane		_	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl	'Spl	_ 0_0	0
Dercent Time-Coest Tol	lowing with r	accina T	ano	č
rercent iime-spent-for		assing Lo		
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin of effective	ive leng g, Lde length o:	th - f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	.ng, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	рт		-	0
including passing lane, PTSFpl			-	ŏ
Level of Service and Other Perfo	ormance Measur	es with 1	Passing I	lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E 	veh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	397.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.22
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour + Project Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction Analysis Year 2025 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 414 veh/h Opposing direction volume, Vo 641 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.3 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.982 Grade adj. factor (note-1) fg 1 00 0.994 1.00 458 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 701 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.6 mi/h 43.4 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 81.9 90

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 450 pc, e-4) BPTSFd	/h 50.9 % 22.5 59.7 %	pposing 1.0 1.00 1.000 1.000 697	(0) pc/h
Level of Service and C	ther Performan	nce Meası	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	/MT15 () '60 ()	D 0.26 0 7 0.0 7 1700 7 1700 7 1700 7	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing is, Lpl)) from above)	lane, Lu	0.0 - 43.4 59.7 D	mi mi mi/h
Average Travel Spee	d with Passin	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect: e travel speed of effective erage travel sp lane	ive , Lde peed, Ld	-	mi mi
on average speed, fpl Average travel speed including passing	lane, ATSpl		_	
Percent free flow speed including pass	sing lane, PFF	Spl	0.0	010
Percent Time-Spent-Fol	lowing with Pa	assing La	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect: pent-following	ive lengt g, Lde	th	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective i spent-followin lane	length oi ng, Ld	£ _	mi
on percent time-spent-following, f Percent time-spent-following	pl		_	
including passing lane, PTSFpl			-	olo
Level of Service and Other Perfo	ormance Measure	es with H	Passing 1	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	le, LOSpl I	E - 7	veh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	450.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.29
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/co.Int. concerciDate Performed3/28/2023Analysis Time PeriodAM Peak HourTable Period127 Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction Analysis Year 2035 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 443 veh/h Opposing direction volume, Vo 740 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.2 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.988 Grade adj. factor, (note-1) fg 1.00 0.994 1.00 487 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 809 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h 42.5 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 80.2 8

Phone: E-Mail:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 482 pc xe-4) BPTSFd	c/h 53.8 % 19.6 61.1 %	pposing 1.0 1.0 1.000 1.000 804	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	D 0.28 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 42.5 61.1 D	mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective trage travel s	tive d, Lde speed, Ld	-	mi mi
on average speed, fpl	1 dille		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFF	Spl	- 0.0	00
Percent Time-Spent-Fol	lowing with F	Passing L	ane	
Devent norm longth of two long highway				
of passing lane for percent time-s Length of two-lane highway downstream	spent-followin of effective	ig, Lde length o	f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	.ng, Ld	_	mi
Percent time-spent-following including passing lane DTSED	. Г . т		_	2
I and of Completered Other Deco	umongo Maari		Deceine	0
Level of Service and Other Perio	rmance Measur	es with	rassing l	Jaile
Level of service including passing lan Peak 15-min total travel time, TT15	le, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	è		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	481.5
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.32
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour + Project Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction Analysis Year 2035 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 491 veh/h Opposing direction volume, Vo 765 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.2 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.988 Grade adj. factor (note-1) fg 1 00 0.994 1.00 540 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 837 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h Adjustment for no-passing zones, fnp 0.5 41.9 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 79.0 90

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 534 pc e-4) BPTSFd	c/h 57.5 % 19.0 64.9 %	pposing 1.0 1.0 1.000 1.00 832	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.31 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 41.9 64.9 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	tive d, Lde speed, Ld	-	mi mi
on average speed, fpl	Lane		-	
Average travel speed including passing	lane, ATSpl	ren l	-	Q.
	ing talle, PPP	горт	0.0	-0-
Percent Time-Spent-Fol	lowing with E	assing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin of effective	ive leng ng, Lde length o	th _ f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	-	mi
Percent time-spent-following	ΡΤ		-	0
including passing lane, PTSEpl			-	5
Level of Service and Other Perfo	rmance Measur	es with	Passing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	è		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	533.7
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.37
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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Fax:

Phone:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/co.Int. concerciDate Performed3/28/2023Analysis Time PeriodAM Peak HourTable Period127 Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction Analysis Year 2045 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 535 veh/h Opposing direction volume, Vo 858 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 1.000 1.00 585 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 933 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h Adjustment for no-passing zones, fnp 0.5 40.8 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 76.9 9

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 582 pc e-4) BPTSFd	c/h 61.2 % 17.2 67.8 %	<pre>pposing 1.0 1.0 1.000 1.000 933 </pre>	(o) pc/h
Level of Service and C	ther Performa	ance Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.34 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 40.8 67.8 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	tive d, Lde speed, Ld	- 1 -	mi mi
Adj. factor for the effect of passing on average speed, fpl	Lane		-	
Average travel speed including passing	lane, ATSpl	- Sol	-	<u>0</u>
Torono from speed including pass	le 'se 't'	. ~ P +	0.0	U
Percent Time-Spent-Fol	lowing with H	assing I	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir of effective	ive leng ng, Lde length c	sth - of	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	_	mi
Percent time-spent-following	bτ		_	0
including passing lane, PTSEpl			-	ŏ
Level of Service and Other Perfo	rmance Measur	res with	Passing I	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	581.5
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.42
Bicycle LOS	D

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Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 634 pc/1 ce-4) BPTSFd 64 1 7	Op 4.3 % 6.4 0.7 %	posing 1.0 1.00 1.000 1.00 992	(o) pc/h
Level of Service and C	ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 0 0 0 0 0 0 1 1 1 1 1 1	.37 v .0 v 700 v 700 v 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing lass, Lpl) from above)	ane, Lu	0.0 - 44.8 70.7 D	mi mi mi/h
Average Travel Spee	ed with Passing	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effective of effective erage travel spe lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl	lana Ameni		-	
Percent free flow speed including passing	sing lane, PFFS	pl	0.0	010
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effective pent-following	ve lengt , Lde	h	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective le spent-following lane	ength of g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	010
Level of Service and Other Perfo	ormance Measures	s with P	assing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl E -	v	eh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	633.7
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.46
Bicycle LOS	D

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E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.LAV consult.Date Performed3/28/2023Analysis Time PeriodAM Peak HourTag127 Highway Hwy 137 Road 188/Road 180 From/To Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 148 veh/h Opposing direction volume, Vo 240 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.7 1.4 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.960 Grade adj. factor, (note-1) fg 1.00 0.977 1.00 168 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 267 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h 1.3 Adjustment for no-passing zones, fnp mi/h 48.3 mi/h Average travel speed, ATSd

91.1

2

Phone:

Percent Free Flow Speed, PFFS

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 162 pc xe-4) BPTSFd	c/h 18.8 % 35.1 32.2 %	pposing 1.1 1.0 0.994 1.00 262	(o) pc/h
Level of Service and C	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	C 0.09 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 48.3 32.2 C	mi mi mi/h
Average Travel Spee	ed with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective trage travel s	live d, Lde speed, Ld	-	mi mi
Adj. factor for the effect of passing on average speed, fpl	lane		_	
Average travel speed including passing	lane, ATSpl		-	0,
reident free from speed including pass	ing tane, PF	горт	0.0	0
Percent Time-Spent-Fol	lowing with H	Passing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir	tive leng ng, Lde	rth -	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi	ing, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	ЪΤ		-	
including passing lane, PTSFpl			_	0
Level of Service and Other Performance Measures with Passing Lane				
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	2		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	160.9
Effective width of outside lane, We	28.68
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	2.53
Bicycle LOS	С

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Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 207 pc xe-4) BPTSFd	c/h 25.3 % 36.4 39.8 %	pposing (1.1 1.0 0.994 1.00 314	pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	C 0.12 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 47.6 39.8 C	mi mi mi/h
Average Travel Spee	ed with Passi	.ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective trage travel s	live d, Lde peed, Ld	-	mi mi
on average speed, fpl	Talle		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl sing lane, PFE	Spl	- 0.0	00
Percent Time-Spent-Fol	lowing with E	assing L	ane	
		· ·] · · ·	· ·	
of passing lane for percent time-s Length of two-lane highway downstream	pent-followin of effective	ig, Lde length o	f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	.ng, Ld	-	mi
Percent time-spent-following	Ът		-	<u>0</u>
Iowol of Corrigo and Other Design	manca Mara		Dogoir - T	0
Level of Service and other Performance Measures with Passing Lane				
Level of service including passing lar Peak 15-min total travel time, TT15	le, LOSpl	E 	veh-h	
Bicycle Lev	vel of Service	è		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	205.4
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	3.89
Bicycle LOS	D

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- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.LAV consult.Date Performed3/28/2023Analysis Time PeriodAM Peak HourTag127 Highway Hwy 137 Road 188/Road 180 From/To Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 154 veh/h Opposing direction volume, Vo 249 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.6 1.4 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.965 Grade adj. factor (note-1) fg 1 00 0.977 1.00 173 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 277 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.3 mi/h 48.2 mi/h Average travel speed, ATSd

90.9

00

Phone:

Percent Free Flow Speed, PFFS

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 168 pc xe-4) BPTSFd	c/h 20.3 % 35.2 33.7 %	pposing (1.1 1.0 0.994 1.00 272	pc/h
Level of Service and C	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	C 0.10 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 48.2 33.7 C	mi mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	tive d, Lde speed, Ld	-	mi mi
on average speed, fpl	Talle		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl	Spl	- 0.0	0
Percent Time-Spent-Fol	lowing with F	Passing T.	ane	
		, ,		
of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin of effective	ive leng ng, Lde length o	f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	bτ		_	0
including passing lane, PTSEpl			-	5
Level of Service and Other Performance Measures with Passing Lane				
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	è		
Posted speed limit, Sp	55			
-----------------------------------------------------	-------			
Percent of segment with occupied on-highway parking	0			
Pavement rating, P	3			
Flow rate in outside lane, vOL	167.4			
Effective width of outside lane, We	28.14			
Effective speed factor, St	4.79			
Bicycle LOS Score, BLOS	2.70			
Bicycle LOS	С			

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Fax:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour + Project Agency/Co. Highway Hwy 137 Road 188/Road 180 From/To Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 195 veh/h Opposing direction volume, Vo 296 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.4 1.5 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.971 Grade adj. factor (note-1) fg 1 00 0.977 1.00 218 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 329 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.3 mi/h mi/h Average travel speed, ATSd 47.5 Percent Free Flow Speed, PFFS 89.6 90

Phone: E-Mail

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 213 pc xe-4) BPTSFd	25.7 36.5 40.2	Opposing 1.1 1.0 0.994 1.00 324 %	(o) pc/h
Level of Service and C	ther Performa	ance Mea	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	C 0.12 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, L	0.0 u - 47.5 40.2 C	mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for aver Adi, factor for the effect of passing	within effect travel speed of effective trage travel s lane	ive d, Lde speed, L	- d -	mi mi
on average speed, fpl			-	
Average travel speed including passing Percent free flow speed including pass	f lane, ATSpl sing lane, PFF	Spl	0.0	00
Percent Time-Spent-Fol	lowing with E	Passing	Lane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect	ive len ng, Lde	gth	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followi lane	length .ng, Ld	oi _	mi
on percent time-spent-following, f Percent time-spent-following	ЪТ		-	0
including passing lane, PTSEpl			-	ž
Level of Service and Other Perfo	rmance Measur	es with	Passing	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	le, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	2		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	212.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	3.90
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour Agency/Co. Highway Hwy 137 Road 188/Road 180 From/To Jurisdiction County Analysis Year 2035 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 186 veh/h Opposing direction volume, Vo 302 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.4 1.5 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.971 Grade adj. factor, (note-1) fg 1.00 0.977 1.00 208 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 336 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.3 mi/h mi/h Average travel speed, ATSd 47.5

89.6

90

Fax:

Phone:

Percent Free Flow Speed, PFFS

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 203 pc ce-4) BPTSFd	c/h 24.5 % 35.5 38.0 %	pposing 1.1 1.0 0.994 1.00 330	(o) pc/h
Level of Service and C	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	C 0.12 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 47.5 38.0 C	mi mi mi/h
Average Travel Spee	ed with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective trage travel s	cive d, Lde speed, Ld	-	mi mi
on average speed, fpl	Talle		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFB	FSpl	- 0.0	00
Percent Time-Spent-Fol	lowing with F	- Passing T	ane	
		· · · · · · ·		
of passing lane for percent time-s Length of two-lane highway downstream	witnin effect pent-followir of effective	lve leng ng, Lde length o	- f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ing, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	bτ		-	0
including passing lane, PTSEpl			-	5
Level of Service and Other Perfo	ormance Measur	res with	Passing I	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	2		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	202.2
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	3.88
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Fax:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour + Project Agency/Co. Hwy 137 Highway Road 188/Road 180 From/To Jurisdiction County Analysis Year 2035 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak nour factor, rmr0.02Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 227 veh/h Opposing direction volume, Vo 349 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.3 1.5 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.971 Grade adj. factor (note-1) fg 1 00 0.982 1.00 254 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 386 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h 1.2 mi/h Adjustment for no-passing zones, fnp 46.8 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 88.3 9

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 248 pc ze-4) BPTSFd	c/h 29.4 % 35.3 43.3 %	pposing 1.1 1.0 0.994 1.00 382	(o) pc/h
Level of Service and C	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 '60	C 0.15 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 46.8 43.3 C	mi mi mi/h
Average Travel Spee	ed with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective trage travel s	cive d, Lde speed, Ld	-	mi mi
on average speed, fpl	lane		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFE	FSpl	- 0.0	00
Percent Time-Spent-Fol	lowing with F	Passing T.	ane	
of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir of effective	rive leng ng, Lde length o	f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ing, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	bΤ		-	0
including passing lane, PTSEpl				5
Level of Service and Other Perfo	ormance Measur	res with	Passing I	lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	246.7
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	3.98
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Fax:

Phone:

Percent Free Flow Speed, PFFS

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour Agency/Co. Highway Hwy 137 Road 188/Road 180 From/To Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 225 veh/h Opposing direction volume, Vo 364 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.3 1.5 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.971 Grade adj. factor, (note-1) fg 1.00 0.982 1.00 252 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 403 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h 1.2 mi/h 46.7 mi/h Adjustment for no-passing zones, fnp Average travel speed, ATSd

88.1

2

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 246 pc e-4) BPTSFd	c/h 30.0 % 34.0 43.0 %	pposing 1.1 1.0 0.994 1.00 398	pc/h
Level of Service and C	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	C 0.14 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 46.7 43.0 C	mi mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	live d, Lde speed, Ld	-	mi mi
on average speed, fpl	Talle		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFE	Spl	- 0.0	9
Percent Time-Spent-Fol	lowing with E	Passing L	ane	
Devent norm longth of two long highway		ine leng	+ h	
of passing lane for percent time-s Length of two-lane highway downstream	pent-followir of effective	ig, Lde length o	- f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	-	mi
Percent time-spent-following including passing land DTSED	Ът		_	Q.
Iowol of Commission and Other Device	rmanca Maaa		Dogoirr	0
Level of Service and Other Perio	rmance Measur	es with	rassing l	alle
Level of service including passing lan Peak 15-min total travel time, TT15	le, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	244.6
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	3.98
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Fax:

Phone:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/co.IAV consultingDate Performed3/28/2023Analysis Time PeriodAM Peak Hour + Project Hwy 137 Highway Road 188/Road 180 From/To Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 % - % Access point density 8 /mi Up/down Analysis direction volume, Vd 268 veh/h Opposing direction volume, Vo 411 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) 1.4 PCE for trucks, ET 1.3 1.0 PCE for RVs, ER 1.0 Heavy-vehicle adj. factor, (note-5) fHV 0.977 Grade adj. factor, (note-1) fg 1.00 0.982 1.00 298 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 455 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.1 mi/h 46.1 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 86.9 8

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 293 pc xe-4) BPTSFd	c/h 35.7 % 30.5 47.8 %	pposing 1.0 1.0 1.000 1.00 447	(o) pc/h
Level of Service and C	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	C 0.17 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 46.1 47.8 C	mi mi mi/h
Average Travel Spee	ed with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for average Adj factor for the effect of passing	within effect travel speed of effective trage travel s	cive d, Lde speed, Ld	-	mi mi
on average speed, fpl	Talle		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl sing lane, PFB	FSpl	- 0.0	010
Percent Time-Spent-Fol	lowing with E	Passing L	ane	
Devent norm longth of two long highway		-irra lana		
of passing lane for percent time-s Length of two-lane highway downstream	pent-followir of effective	ng, Lde length o	- f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	lng, Ld	_	mi
Percent time-spent-following including passing lane PTSED	ΡT		_	0
Lovel of Service and Other Ports	manco Moacur	cos with	Dagaina	220
	rmance Measur	.es willi	rassing 1	Jaile
Level of service including passing lar Peak 15-min total travel time, TT15	le, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	291.3
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.06
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Env concern Date Performed 3/28/2023 Analysis Time Period AM Peak Hour Agency/Co. Highway N Spruce Ave From/To Acacia Ave/Sycamore Ave Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Segment length Terrain type Grade: Length - mi % No-passing zones 20 % - % Access point density 8 /mi Up/down Analysis direction volume, Vd 452 veh/h Opposing direction volume, Vo 412 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.2 1.3 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.988 Grade adj. factor, (note-1) fg 1.00 0.982 1.00 497 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 456 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.1 mi/h 44.5 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 84.0 8

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 491 pc xe-4) BPTSFd	c/h 50.5 % 29.5 65.9 %	pposing 1.0 1.0 1.000 1.00 448	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	D 0.29 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 44.5 65.9 D	mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective trage travel s	tive l, Lde ppeed, Ld	-	mi mi
on average speed, fpl	Talle		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl	'Spl	- 0.0	00
Percent Time-Spent-Fol	lowing with P	assing T.	ane	
			. h	
of passing lane for percent time-s Length of two-lane highway downstream	pent-followin of effective	ig, Lde length o	f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	.ng, Ld	-	mi
Percent time-spent-following	рт		_	Q.
Including passing talle, FISEPI				-0
Level of Service and Other Perfo	rmance Measur	es with	rassing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	le, LOSpl	E	veh-h	
Bicycle Lev	vel of Service	<u> </u>		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	491.3
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.33
Bicycle LOS	D

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E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/co.LAV ConsultingDate Performed3/28/2023Analysis Time PeriodAM Peak Hour + ProjectHighwayN Spruce Ave Agency/Co. Acacia Ave/Sycamore Ave From/To Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 499 veh/h Opposing direction volume, Vo 458 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.2 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.988 Grade adj. factor (note-1) fg 1 00 0.988 1.00 549 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 504 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.0 mi/h mi/h Average travel speed, ATSd 43.8 Percent Free Flow Speed, PFFS 82.7 00

Phone:

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 542 pc xe-4) BPTSFd	c/h 53.5 % 27.5 67.8 %	ppposing 1.0 1.0 1.000 1.000 498	(o) pc/h
Level of Service and C	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	D 0.32 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 43.8 67.8 D	mi mi mi/h
Average Travel Spee	ed with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective trage travel s	cive d, Lde speed, Ld	- l -	mi mi
on average speed, fpl	Lane		_	
Average travel speed including passing	lane, ATSpl		-	0
Percent free flow speed including pass	ing iane, PFE	SDT	0.0	ð
Percent Time-Spent-Fol	lowing with B	Passing I	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followir	tive leng	rth -	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi	ing, Ld	_	mi
on percent time-spent-following, f Percent time-spent-following	ЪТ		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measur	res with	Passing 1	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	le, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	2		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	542.4
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.38
Bicycle LOS	D

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Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Env concern Date Performed 3/28/2023 Analysis Time Period AM Peak Hour Agency/Co. Highway N Spruce Ave From/To Acacia Ave/Sycamore Ave Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 469 veh/h Opposing direction volume, Vo 428 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.2 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.988 Grade adj. factor (note-1) fg 1 00 0.988 1.00 516 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 471 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.1 mi/h 44.3 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 83.5 8

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 510 pc e-4) BPTSFd	c/h 52.2 % 28.8 67.3 %	Opposing 1.0 1.0 1.000 1.000 465	(o) pc/h
Level of Service and C	ther Performa	ance Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.30 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 44.3 67.3 D	mi mi mi/h
Average Travel Spee	d with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	cive d, Lde speed, Ld	- 1 -	mi mi
on average speed, fpl	lane		-	
Average travel speed including passing	lane, ATSpl	anl	-	Q_
rescent tree from speed including pass	ing iane, rri	. obt	0.0	-0
Percent Time-Spent-Fol	lowing with H	assing I	lane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir of effective	tive leng ng, Lde length c	gth - of	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-follows lane	ing, Ld	-	mi
Percent time-spent-following	рт		-	0
including passing lane, PTSEpl			-	ŏ
Level of Service and Other Perfo	rmance Measu	res with	Passing I	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	509.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.35
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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% Access point density 8 /mi Up/down Analysis direction volume, Vd 516 veh/h Opposing direction volume, Vo 474 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.988 1.00 564 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 521 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h 1.0 mi/h Adjustment for no-passing zones, fnp 43.6 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 82.3 9

Phone:

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 561 pc/ ce-4) BPTSFd 5 2 6	Dp 5.0 % 6.7 8.9 %	posing 1.0 1.0 1.000 1.00 515	(o) pc/h
Level of Service and C	ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 0 760 0 1 1 1	.33 v .0v 700v 700v 700v 700v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	ane, Lu	0.0 - 43.6 68.9 D	mi mi mi/h
Average Travel Spee	ed with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti e travel speed, of effective erage travel sp lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl			-	
Average travel speed including passing Percent free flow speed including pass	ing lane, ATSpl	pl	0.0	90
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ve lengt , Lde	h _	
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective l spent-followin lane	ength of g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measure	s with P	assing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl E -	V	eh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	560.9
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.40
Bicycle LOS	D

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% Access point density 8 /mi Up/down Analysis direction volume, Vd 569 veh/h Opposing direction volume, Vo 519 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 622 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 568 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h Adjustment for no-passing zones, fnp 0.9 42.9 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 81.0 00

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 618 pc e-4) BPTSFd	C 58.8 % 24.4 71.6 %	pposing 1.0 1.00 1.000 1.00 564	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.36 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 42.9 71.6 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	ive l, Lde peed, Ld	-	mi mi
on average speed, fpl	1 une		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFE	'Spl	- 0.0	00
Percent Time-Spent-Fol	lowing with F	assing L	ane	
	·		. h	
of passing lane for percent time-s Length of two-lane highway downstream	pent-followin of effective	ig, Lde length o	f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	.ng, Ld	-	mi
Percent time-spent-following	Ът		_	0
including passing lane, PTSPpl			_	6
Level of Service and Other Perfo	rmance Measur	es with	Passing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E 	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	618.5
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.45
Bicycle LOS	D

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Phone:

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 670 pc/ e-4) BPTSFd 6 2 7	Op h 1.7 % 2.2 3.3 %	posing 1.0 1.00 1.000 1.00 614	(o) pc/h
Level of Service and C	ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 0 '60 0 1 1 1	.39 v .0 v 700 v 700 v 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing L	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing lass, Lpl s, Lpl from above)	ane, Lu	0.0 - 42.2 73.3 D	mi mi mi/h
Average Travel Spee	d with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effective of effective rage travel spe lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl Average travel speed including passing	lane. ATSpl		_	
Percent free flow speed including pass	ing lane, PFFS	pl	0.0	olo
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effection	ve lengt , Lde	h _	mi
the passing lane for percent time- Adj. factor for the effect of passing	of effective for spent-following lane	ength of g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	рı		-	
including passing lane, PTSFpl			-	0
Level of Service and Other Perfo	rmance Measure	s with P	assing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl E -	V	eh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	669.6
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.49
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Env concern Date Performed 3/28/2023 Analysis Time Period AM Peak Hour Agency/Co. Highway N Spruce Ave From/To Acacia Ave/Sycamore Ave Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 687 veh/h Opposing direction volume, Vo 626 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 751 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 685 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.6 mi/h 41.2 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 77.8 8

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 747 pc e-4) BPTSFd	0 66.3 % 19.5 76.5 %	pposing 1.0 1.00 1.000 1.00 680	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.44 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 41.2 76.5 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective rage travel s lane	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	20110		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFF	Spl	- 0.0	010
Percent Time-Spent-Fol	lowing with P	assing L	ane	
Devent room longth of two long highway	within offort	ine long		
of passing lane for percent time-s Length of two-lane highway downstream	pent-followin of effective	ig, Lde length o	- f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	-	mi
Percent time-spent-following including passing lane PTSED	ΡŢ		_	9
I and of Completered Other Deco	mmon oo Maaa			0
Level of Service and Other Perio	rmance Measur	es with	rassing .	Lalle
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E 	veh-h	
Bicycle Lev	el of Service			
Posted speed limit, Sp	55			
-----------------------------------------------------	-------			
Percent of segment with occupied on-highway parking	0			
Pavement rating, P	3			
Flow rate in outside lane, vOL	746.7			
Effective width of outside lane, We	24.00			
Effective speed factor, St	4.79			
Bicycle LOS Score, BLOS	4.54			
Bicycle LOS	Ε			

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/co.LAV ConsultingDate Performed3/28/2023Analysis Time PeriodAM Peak Hour + ProjectHighwayN Spruce Ave Agency/Co. Acacia Ave/Sycamore Ave From/To Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak nour factor, rmr0.02Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 734 veh/h Opposing direction volume, Vo 672 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 803 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 735 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.6 mi/h 40.5 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 76.4 8

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 798 pc e-4) BPTSFd	/h 68.9 % 18.4 78.5 %	pposing 1.0 1.00 1.000 1.00 730	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.47 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 40.5 78.5 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	Lane		_	
Average travel speed including passing	lane, ATSpl	(m)	-	0,
reicent free from speed including pass	ing iane, PPP	°Ът	0.0	70
Percent Time-Spent-Fol	lowing with P	assing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin	ive leng g, Lde length o	th - f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	_	mi
on percent time-spent-following, f Percent time-spent-following	рт		-	
including passing lane, PTSFpl			_	0
Level of Service and Other Perfo	rmance Measur	es with	Passing I	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E 	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	797.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.58
Bicycle LOS	E

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- 4. For the analysis direction only.
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E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour Agency/Co. Highway N Spruce Ave From/To Hwy 65/Acacia Ave Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 529 veh/h Opposing direction volume, Vo 385 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.3 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.982 1.00 578 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 426 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h

Adjustment for no-passing zones, fnp 1.2 mi/h 44.0 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 83.1 2

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 575 pc ce-4) BPTSFd	/h 54.4 % 26.1 69.5 %	Dpposing 1.0 1.0 1.000 1.00 418	(o) pc/h
Level of Service and C)ther Performa	nce Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	7MT15 760	D 0.34 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 44.0 69.5 D	mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective erage travel s lane	ive , Lde peed, Lo	- 1 -	mi mi
on average speed, fpl Average travel speed including passing	a lane. ATSpl		-	
Percent free flow speed including pass	sing lane, PFF	Spl	0.0	00
Percent Time-Spent-Fol	lowing with P	assing I	Lane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect	ive leng g, Lde	gth _	mi
the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followi lane	ng, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	ът		-	
including passing lane, PTSFpl			_	00
Level of Service and Other Perfo	ormance Measur	es with	Passing	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	575.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.41
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour + Project Agency/Co. Highway N Spruce Ave From/To Hwy 65/Acacia Ave Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Segment length Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 587 veh/h Opposing direction volume, Vo 438 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.988 1.00 642 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 482 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h 1.0 mi/h Adjustment for no-passing zones, fnp 43.2 mi/h Average travel speed, ATSd

81.6

00

Phone:

Percent Free Flow Speed, PFFS

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 638 pc/r ce-4) BPTSFd 58 24 72	Op 3.8 % 4.2 2.7 %	posing 1.0 1.00 1.000 1.00 476	(o) pc/h
Level of Service and C	ther Performanc	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 0. 0 0 0 0 17 17 17	38 v 0 v 200 v 200 v 200 v 200 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing lats, Lpl) from above)	ane, Lu	0.0 - 43.2 72.7 D	mi mi mi/h
Average Travel Spee	ed with Passing	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effective of effective erage travel spee lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl			-	
Percent free flow speed including passing	sing lane, PFFSp	pl	0.0	olo
Percent Time-Spent-Fol	lowing with Pas	sing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effectiv	ve lengt Lde	h _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective le spent-following lane	ength of g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	olo
Level of Service and Other Perfo	ormance Measures	with P	assing	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	e, LOSpl E -	V	eh-h	
Bicycle Lev	el of Service _			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	638.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.46
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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% Access point density 8 /mi Up/down Analysis direction volume, Vd 550 veh/h Opposing direction volume, Vo 399 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) 1.1 PCE for trucks, ET 1.3 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.982 1.00 601 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 442 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h

Adjustment for no-passing zones, fnp1.1mi/hAverage travel speed, ATSd43.8mi/hPercent Free Flow Speed, PFFS82.6%

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 598 pc e-4) BPTSFd	c/h 56.3 % 25.4 71.0 %	<pre>pposing 1.0 1.0 1.000 1.000 434 </pre>	(o) pc/h
Level of Service and C	ther Performa	ance Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.35 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 43.8 71.0 D	mi mi mi/h
Average Travel Spee	d with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	cive d, Lde speed, Ld	- 1 -	mi mi
on average speed, fpl	Talle		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl	rSpl	-	00
Dercent Time-Sport-Tol	lowing with	Dagging T	ane	-
rercent iime-spent-ror		. abbilly L		
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir of effective	tive leng ng, Lde length c	gth - of	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-follows lane	ing, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	ЪТ		_	0
including passing lane, PTSFpl			_	3
Level of Service and Other Perfo	rmance Measur	res with	Passing I	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	le, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	2		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	597.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.43
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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Fax:

Phone:

Percent Free Flow Speed, PFFS

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour + Project Agency/Co. Highway N Spruce Ave From/To Hwy 65/Acacia Ave Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 608 veh/h Opposing direction volume, Vo 452 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.988 1.00 665 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 497 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.0 mi/h 43.0 mi/h Average travel speed, ATSd

81.1

2

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 661 pc/ ce-4) BPTSFd 6	∩r 50.4 % 23.5 73.9 %	pposing 1.0 1.00 1.000 1.00 491	(o) pc/h
Level of Service and C	ther Performar	nce Measu	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	I (0 (MT15) (60) (0 1 1 1 1 1).39).39).0 1700 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	lane, Lu	0.0 - 43.0 73.9 D	mi mi mi/h
Average Travel Spee	ed with Passir	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti e travel speed, of effective erage travel sp lane	Lde Lde Deed, Ld	-	mi mi
on average speed, fpl			-	
Percent free flow speed including passing	sing lane, PFFS	Spl	0.0	010
Percent Time-Spent-Fol	lowing with Pa	assing La	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effection pent-following	lve lengt g, Lde	th _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective l spent-followir lane	length o: ng, Ld	E _	mi
on percent time-spent-following, f Percent time-spent-following	ът		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measure	es with 1	Passing 2	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl –	E	veh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	660.9
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.48
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour Agency/Co. Highway N Spruce Ave From/To Hwy 65/Acacia Ave Jurisdiction County Analysis Year 2035 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 665 veh/h Opposing direction volume, Vo 485 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.988 1.00 727 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 534 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h

Adjustment for no-passing zones, fnp0.9mi/hAverage travel speed, ATSd42.3mi/hPercent Free Flow Speed, PFFS79.8%

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 723 pc/ e-4) BPTSFd (/h 63.6 % 21.7 76.2 %	pposing 1.0 1.0 1.000 1.000 527	(o) pc/h
Level of Service and C	ther Performar	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	I MT15 60 1 1 1).43).0).0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing] s, Lpl) rom above)	lane, Lu	0.0 - 42.3 76.2 D	mi mi mi/h
Average Travel Spee	d with Passir	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effects travel speed, of effective rage travel sp lane	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	lano Amgni		-	
Percent free flow speed including passing	ing lane, PFFS	Spl	0.0	010
Percent Time-Spent-Fol	lowing with Pa	assing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effection pent-following	ive leng g, Lde	th	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followir lane	length o ng, Ld	± _	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measure	es with	Passing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl –	-	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	722.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.53
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
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Fax:

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Percent Free Flow Speed, PFFS

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period AM Peak Hour + Project Agency/Co. Highway N Spruce Ave From/To Hwy 65/Acacia Ave Jurisdiction County 2035 Analysis Year Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 724 veh/h Opposing direction volume, Vo 528 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 792 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 577 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h 53.0 mi/h Free-flow speed, FFSd Adjustment for no-passing zones, fnp 0.8 mi/h 41.5 mi/h Average travel speed, ATSd

78.4

8

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 787 pc/ e-4) BPTSFd 6	/h 67.0 % 19.8 78.4 %	pposing 1.0 1.0 1.000 1.00 574	(o) pc/h
Level of Service and C	ther Performar	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	I (0 (7MT15) (60) (0 (1 1 1 1 1 1 1).46).0 1700 1700 1700	veh-mi veh-mi veh/h veh/h veh/h veh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) rom above)	lane, Lu	0.0 - 41.5 78.4 D	mi mi mi/h
Average Travel Spee	d with Passir	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effects travel speed, of effective rage travel sp lane	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	lane ATSnl		_	
Percent free flow speed including passing	ing lane, PFFS	Spl	0.0	00
Percent Time-Spent-Fol	lowing with Pa	assing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effects	ive leng g, Lde	th	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective l spent-followir lane	length o ng, Ld	± _	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measure	es with	Passing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl –		veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	787.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.57
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.Inv constructDate Performed3/28/2023Analysis Time PeriodAM Peak HourAmalysis Time PeriodAm Peak Hour Highway N Spruce Ave From/To Hwy 65/Acacia Ave Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 805 veh/h Opposing direction volume, Vo 585 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor, (note-1) fg 1.00 Directional flow rate, (note-2) vi 875 pc/h 0.994 1.00 640 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h 53.0 mi/h Free-flow speed, FFSd

Adjustment for no-passing zones, fnp 0.7 mi/h 40.5 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 76.5 00

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 875 pc/ e-4) BPTSFd 7 1 8	Op 70.2 % .8.1 80.7 %	pposing 1.0 1.0 1.000 1.000 636	(o) pc/h
Level of Service and C	ther Performan	ice Measu	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	E 0 '60 0 1 1 1).51) v).0 v .700 v .700 v	reh-mi reh-mi reh-h reh/h reh/h reh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	.ane, Lu	0.0 - 40.5 80.7 E	mi mi mi/h
Average Travel Spee	d with Passin	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	.ve Lde beed, Ld	-	mi mi
on average speed, fpl			-	
Percent free flow speed including passing	ing lane, PFFS	Spl	0.0	010
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ve lengt , Lde	.h _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective l spent-followin lane	.ength of ng, Ld	_	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measure	es with P	assing 1	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl E -	- v	reh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	875.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.62
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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74.9

00

Phone:

Percent Free Flow Speed, PFFS

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 938 pc e-4) BPTSFd	c/h 73.8 % 17.0 83.6 %	pposing 1.0 1.0 1.000 1.00 693	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.55 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 39.7 83.6 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	tive d, Lde speed, Ld	-	mi mi
on average speed, fpl	lane		_	
Average travel speed including passing	lane, ATSpl	"Cnl	_	Q.
	ing talle, FFF		0.0	-0
Percent Time-Spent-Fol	Lowing with F	assing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin	ive leng ng, Lde length o	th _	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	.ng, Ld	_	mi
Percent time-spent-following	Ът		-	0
including passing lane, PTSFpl			-	Ъ,
Level of Service and Other Perfo	rmance Measur	es with	Passing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E _	veh-h	
Bicycle Lev	el of Service	è		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	938.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.66
Bicycle LOS	Ε

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Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 1227 pc e-4) BPTSFd	/h 80.6 원 12.7 88.7 원	0pposing 1.0 1.0 1.000 1.00 691	(o) pc/h
Level of Service and C	ther Performa	nce Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.72 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 37.5 88.7 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective rage travel s lane	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	lang ATSnl		-	
Percent free flow speed including passing	ing lane, PFF	Spl	0.0	00
Percent Time-Spent-Fol	lowing with P	assing I	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followin	ive leng g, Lde	th	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followi lane	length c ng, Ld	- _	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measur	es with	Passing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1227.2
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.79
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Agency/Co. Highway Hwy 65 Cedar Ave/N Spruce Ave From/To Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 1242 veh/h Opposing direction volume, Vo 757 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 0.994 Grade adj. factor,(note-1) fg 1.00 1.00 Directional flow rate,(note-2) vi 1350 pc/h 828 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h Adjustment for no-passing zones, fnp 0.5 35.6 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 67.2 9

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1350 pc e-4) BPTSFd	c/h 83.8 % 11.4 90.9 %	<pre>ppposing 1.0 1.0 1.000 1.000 823 </pre>	(o) pc/h
Level of Service and O	ther Performa	ance Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.79 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 35.6 90.9 E	mi mi mi/h
Average Travel Spee	d with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	cive d, Lde speed, Ld	- 1 -	mi mi
Adj. factor for the effect of passing on average speed, fpl	lane		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFB	FSpl	_ 0.0	00
Percent Time-Spent-Fol	lowing with F	- Passing T	lane	
Devent norm longth of two long highers	within offort			
of passing lane for percent time-s Length of two-lane highway downstream	pent-followir of effective	ng, Lde length c	ftn - of	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ing, Ld	-	mi
Percent time-spent-following including passing lane PTSEN	F_{+}		_	0
Level of Sorvice and Other Dorfe	rmance Moscur	ac tri+h	Dagaina	Jane
Hever of Service and Other Perio	imance Measur	LES WILLI	rassing l	Jalle
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1350.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.84
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.LAV ConstantDate Performed3/28/2023Analysis Time PeriodPM Peak Hour Highway Hwy 65 Cedar Ave/N Spruce Ave From/To Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 1173 veh/h Opposing direction volume, Vo 661 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 0.994 Grade adj. factor,(note-1) fg 1.00 1.00 Directional flow rate,(note-2) vi 1275 pc/h 723 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h 0.6 Adjustment for no-passing zones, fnp Average travel speed, ATSd 36.9 Percent Free Flow Speed, PFFS 69.6 90

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1275 pc e-4) BPTSFd	c/h 82.1 % 12.1 89.8 %	pposing 1.0 1.0 1.000 1.00 718	(o) pc/h
Level of Service and O	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.75 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 36.9 89.8 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	tive d, Lde speed, Ld	-	mi mi
Adj. factor for the effect of passing on average speed, fpl	lane		_	
Average travel speed including passing	lane, ATSpl		-	0
Percent free flow speed including pass	ing iane, PFE	SDT	0.0	ŏ
Percent Time-Spent-Fol	lowing with B	Passing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followir	tive leng ng, Lde	th _ f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi	.ng, Ld	_	mi
on percent time-spent-following, f Percent time-spent-following	р⊥		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measur	es with	Passing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	è		
Posted speed limit, Sp	55			
-----------------------------------------------------	--------			
Percent of segment with occupied on-highway parking	0			
Pavement rating, P	3			
Flow rate in outside lane, vOL	1275.0			
Effective width of outside lane, We	24.00			
Effective speed factor, St	4.79			
Bicycle LOS Score, BLOS	4.81			
Bicycle LOS	Ε			

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
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Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1398 pc e-4) BPTSFd	c/h 85.1 % 10.8 91.8 %	<pre>pposing 1.0 1.0 1.000 1.000 850 </pre>	(o) pc/h
Level of Service and C	ther Performa	ance Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.82 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 35.1 91.8 E	mi mi mi/h
Average Travel Spee	d with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	cive d, Lde speed, Ld	- 1 -	mi mi
Adj. factor for the effect of passing on average speed, fpl	lane		-	
Average travel speed including passing	lane, ATSpl		-	0
Percent free flow speed including pass	ing lane, PF	SPI	0.0	50 O
Percent Time-Spent-Fol	lowing with H	Passing I	lane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followir	tive leng	fth -	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi	ing, Ld	_	mi
on percent time-spent-following, f Percent time-spent-following	рl		_	
including passing lane, PTSFpl			_	00
Level of Service and Other Perfo	rmance Measur	res with	Passing 1	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	9		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1397.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.86
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
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Phone:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.Date ConstructionDate Performed3/28/2023Analysis Time PeriodPM Peak Hour Highway Hwy 65 Cedar Ave/N Spruce Ave From/To Jurisdiction County Analysis Year 2035 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 1423 veh/h Opposing direction volume, Vo 801 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 Grade adj. factor,(note-1) fg 1.00 1.00 1547 pc/h Directional flow rate,(note-2) vi 871 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h 33.8 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 63.7 00

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1547 pc e-4) BPTSFd	c/h 87.4 % 9.6 93.5 %	ppposing 1.0 1.0 1.000 1.000 871	(o) pc/h
Level of Service and O	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.91 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 33.8 93.5 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	tive d, Lde speed, Ld	- l -	mi mi
Adj. factor for the effect of passing on average speed, fpl	lane		_	
Average travel speed including passing	lane, ATSpl		-	0.
Percent free from speed including pass	ing lane, PF	spr	0.0	6
Percent Time-Spent-Fol	lowing with B	Passing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir	tive leng ng, Lde	rth -	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ing, Ld	_	mi
on percent time-spent-following, f Percent time-spent-following	рт		_	
including passing lane, PTSFpl			_	0
Level of Service and Other Perfo	rmance Measur	res with	Passing 1	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1546.7
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.91
Bicycle LOS	Е

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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Phone: E-Mail

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.000 1670 pc/ ce-4) BPTSFd 9	Op /h 30.0 % 3.2 95.1 %	pposing (1.0 1.0 1.000 1.000 1002	o) pc/h
Level of Service and C	ther Performan	nce Measu	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	E C MT15 C C C C 1 1 1 1 1	2).98) v).0 v .700 v .700 v	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	Lane, Lu	0.0 - 31.8 95.1 E	mi mi mi/h
Average Travel Spee	ed with Passin	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti e travel speed, of effective erage travel sp lane	Lde Lde Deed, Ld	-	mi mi
on average speed, fpl			-	
Average travel speed including passing Percent free flow speed including pass	g lane, ATSpl sing lane, PFFS	Spl	0.0	00
Percent Time-Spent-Fol	lowing with Pa	assing La	ine	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	lve lengt g, Lde	-	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective l spent-followin lane	length of ng, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	50
Level of Service and Other Perfo	ormance Measure	es with E	Passing L	ane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl E	- v	reh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1669.6
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.95
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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Phone:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.LAV ConstantDate Performed3/28/2023Analysis Time PeriodPM Peak Hour Highway Hwy 65 Cedar Ave/N Spruce Ave From/To Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 % - % Access point density 8 /mi Up/down Analysis direction volume, Vd 1716 veh/h Opposing direction volume, Vo 967 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 Grade adj. factor,(note-1) fg 1.00 1.00 1865 pc/h Directional flow rate,(note-2) vi 1051 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h 0.5 Adjustment for no-passing zones, fnp 29.9 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 56.4 00

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.000 1865 pc e-4) BPTSFd	c/h 92.2 १ 8.5 97.6 १	Dpposing 1.0 1.0 1.000 1.000 1051	(o) pc/h
Level of Service and C	ther Performa	nce Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	F 1.10 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 29.9 97.6 F	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective rage travel s lane	ive , Lde peed, Lo	- 1 -	mi mi
on average speed, fpl	lano Ameni		-	
Percent free flow speed including passing	ing lane, PFF	Spl	0.0	00
Percent Time-Spent-Fol	lowing with P	assing I	lane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followin	ive leng g, Lde	gth	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followi lane	length c .ng, Ld	- -	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measur	es with	Passing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	·		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1865.2
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	5.01
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

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Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1988 po te-4) BPTSFd	c/h 94.2 8.2 99.3	Opposing 1.0 1.0 1.000 1.00 1183 %	(o) pc/h
Level of Service and ()ther Performa	ance Mea	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	7MT15 60	F 1.17 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	Lane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing rs, Lpl) from above)	lane, L	0.0 u - 27.9 99.3 F	mi mi mi/h
Average Travel Spee	ed with Passi	ing Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect e travel speed of effective erage travel s lane	cive d, Lde speed, Lo	- d -	mi mi
on average speed, fpl Average travel speed including passing	r lane, ATSpl		-	
Percent free flow speed including passing	sing lane, PF	FSpl	0.0	olo
Percent Time-Spent-Fol	Llowing with H	Passing 1	Lane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect spent-followir	tive lend	gth _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective -spent-followi lane	length (ing, Ld	oi -	mi
on percent time-spent-following, f Percent time-spent-following	fpl		-	
including passing lane, PTSFpl			_	olo
Level of Service and Other Perfo	ormance Measu	res with	Passing	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1988.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	5.04
Bicycle LOS	E

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E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour Agency/Co. Highway Hwy 65 Cedar Ave/Tulare Rd From/To Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Segment length Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 600 veh/h Opposing direction volume, Vo 1232 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 1.000 1.00 656 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 1339 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h

Adjustment for no-passing zones, fnp 0.5 mi/h 37.1 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 69.9 8

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 652 pc/ ce-4) BPTSFd 6 1 7	Dp h 9.0 % 0.8 2.5 %	posing (1.0 1.00 1.000 1.00 1339	o) pc/h
Level of Service and C	ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	E 0 '60 0 1 1 1	.38 v v 700 700 700 700 v 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	ane, Lu	0.0 - 37.1 72.5 E	mi mi mi/h
Average Travel Spee	d with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl Average travel speed including passing	lane, ATSpl			
Percent free flow speed including pass	ing lane, PFFS	pl	0.0	0
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ve lengt , Lde	h _	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followin	g, Ld	-	mi
Percent time-spent-following	Ът		-	<u>,</u>
including passing lane, PTSFpl			-	90
Level of Service and Other Perfo	rmance Measure	s with P	assing I	ane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl E	v	eh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	652.2
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.47
Bicycle LOS	D

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66.6

90

Percent Free Flow Speed, PFFS

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 713 pc e-4) BPTSFd	/h 72.8 % 10.1 76.1 %	pposing 1.0 1.0 1.000 1.000 1502	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.42 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 35.3 76.1 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective rage travel s lane	ive , Lde peed, Ld	-	mi mi
on average speed, fpl Average travel speed including passing	lane. ATSpl		-	
Percent free flow speed including pass	ing lane, PFF	Spl	0.0	00
Percent Time-Spent-Fol	lowing with P	assing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followin	ive leng g, Lde	th	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followi lane	length o ng, Ld	- -	mi
on percent time-spent-following, f Percent time-spent-following	p⊥		-	
including passing lane, PTSFpl			-	010
Level of Service and Other Perfo	rmance Measur	es with	Passing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	713.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.52
Bicycle LOS	E

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% Access point density 8 /mi Up/down Analysis direction volume, Vd 623 veh/h Opposing direction volume, Vo 1301 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 1.000 1.00 681 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 1414 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h

36.3

68.5

mi/h

8

Fax:

Phone:

Average travel speed, ATSd

Percent Free Flow Speed, PFFS

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 677 pc/3 ce-4) BPTSFd 7 1 7	Op 0.6 % 0.4 4.0 %	posing 1.0 1.00 1.000 1.00 1414	(0) pc/h
Level of Service and C	ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	E 0 260 0 1 1 1	.40 v .0 v 700 v 700 v 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	ane, Lu	0.0 - 36.3 74.0 E	mi mi mi/h
Average Travel Spee	ed with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effection of effective erage travel spo lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl			_	
Percent free flow speed including passing	sing lane, PFFS	pl	0.0	00
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effections pent-following	ve lengt: , Lde	h _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective lessent-following lane	ength of g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	īpl		_	
including passing lane, PTSFpl			-	9
Level of Service and Other Perfo	ormance Measure	s with P	assing I	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl E -	V	eh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	677.2
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.49
Bicycle LOS	D

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% Access point density 8 /mi Up/down Analysis direction volume, Vd 679 veh/h Opposing direction volume, Vo 1431 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 1.000 1.00 742 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 1555 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h ... mi/h 34.7 ~ 65 Adjustment for no-passing zones, fnp 0.5 Average travel speed, ATSd

65.5

Percent Free Flow Speed, PFFS

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 738 pc e-4) BPTSFd	/h 74.2 % 9.9 77.4 %	pposing 1.0 1.0 1.000 1.00 1555	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	E 0.43 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl nom above)	lane, Lu	0.0 - 34.7 77.4 E	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective rage travel s lane	ive , Lde peed, Ld	-	mi mi
on average speed, fpl			-	
Percent free flow speed including passing	ing lane, PFF	Spl	0.0	00
Percent Time-Spent-Fol	lowing with P	assing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followin	ive leng g, Lde	 th -	
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followi lane	length o ng, Ld	f _	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measur	es with	Passing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	le, LOSpl	E -	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	738.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.54
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour Agency/Co. Highway Hwy 65 Cedar Ave/Tulare Rd From/To Jurisdiction County Analysis Year 2035 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Segment length Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 756 veh/h Opposing direction volume, Vo 1577 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 1.000 1.00 827 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 1714 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h

Adjustment for no-passing zones, fnp 0.5 mi/h 32.8 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 61.9 90

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 822 po se-4) BPTSFd	c/h 77.5 9.4 80.5	Opposing 1.0 1.0 1.000 1.00 1714 %	(o) pc/h
Level of Service and (Other Performa	ance Mea	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	/MT15 160	F 0.48 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	Lane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing rs, Lpl) from above)	lane, L	0.0 u - 32.8 80.5 F	mi mi mi/h
Average Travel Spee	ed with Pass:	ing Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective erage travel s lane	cive d, Lde speed, L	- d -	mi mi
on average speed, fpl			-	
Average travel speed including passing Percent free flow speed including pass	g lane, ATSpl sing lane, PFI	FSpl	0.0	010
Percent Time-Spent-Fol	llowing with 1	Passing	Lane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect spent-followin	tive len ng, Lde	gth -	mi
the passing lane for percent time- Adj. factor for the effect of passing	of effective -spent-follow: lane	ing, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	Epl		-	0.
including passing lane, PTSFpl				6
Level of Service and Other Perfo	ormance Measu	res with	Passing 1	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	821.7
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.59
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Agency/Co. Highway Hwy 65 Cedar Ave/Tulare Rd From/To Jurisdiction County Analysis Year 2035 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 812 veh/h Opposing direction volume, Vo 1727 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 Grade adj. factor,(note-1) fg 1.00 1.00 883 pc/h Directional flow rate,(note-2) vi 1877 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h mi/h Average travel speed, ATSd 31.1 Percent Free Flow Speed, PFFS 58.7 90

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 883 pc xe-4) BPTSFd	c/h 79.4 9.3 82.4	Opposing 1.0 1.0 1.000 1.000 1877 %	(o) pc/h
Level of Service and C	ther Performa	ance Mea	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	F 0.52 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, L	0.0 - 31.1 82.4 F	mi mi mi/h
Average Travel Spee	d with Passi	lng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective trage travel s lane	cive d, Lde speed, L	- .d -	mi mi
on average speed, fpl			_	
Average travel speed including passing Percent free flow speed including pass	f lane, ATSpl sing lane, PFE	Spl	0.0	00
Percent Time-Spent-Fol	lowing with E	Passing	Lane	
of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir of effective	lve len ng, Lde length	gth - of	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	lng, Ld	-	mi
Percent time-spent-following	Ът		-	Q
including passing lane, PISPPI			-	6
Level of Service and Other Perfo	ormance Measur	res with	Passing 1	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	le, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	2		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	882.6
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.63
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour Agency/Co. Highway Hwy 65 Cedar Ave/Tulare Rd From/To Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.87 Highway classClassIPeak hour factor, PHF0.87Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 912 veh/h Opposing direction volume, Vo 1903 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 Grade adj. factor,(note-1) fg 1.00 1.00 1048 pc/h Directional flow rate,(note-2) vi 2187 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h

mi/h

00

Adjustment for no-passing zones, Inp0.5Average travel speed, ATSd27.4Percent Free Flow Speed, PFFS51.8

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 1048 pc e-4) BPTSFd	c/h 83.8 % 9.2 86.8 %	Dpposing 1.0 1.0 1.000 1.000 2187	(o) pc/h
Level of Service and O	ther Performa	ance Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	F 0.62 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 27.4 86.8 F	mi mi mi/h
Average Travel Spee	d with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	cive d, Lde speed, Lo	- 1 -	mi mi
Adj. factor for the effect of passing on average speed, fpl	lane		_	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl	rsnl	-	0
Democrat mine Grand And	louine uith T			v
Percent Time-Spent-Fol	rowing with P	rassing l	Jane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir of effective	tive leng ng, Lde length c	gth - of	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ing, Ld	-	mi
Percent time-spent-following	pτ		-	0
including passing lane, PTSEpI		, -		6
Level of Service and Other Perfo	rmance Measu	res with	Passing 1	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	e		
Posted speed limit, Sp	55			
-----------------------------------------------------	--------			
Percent of segment with occupied on-highway parking	0			
Pavement rating, P	3			
Flow rate in outside lane, vOL	1048.3			
Effective width of outside lane, We	24.00			
Effective speed factor, St	4.79			
Bicycle LOS Score, BLOS	4.71			
Bicycle LOS	E			

Notes:

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Agency/Co. Highway Hwy 65 Cedar Ave/Tulare Rd From/To Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 968 veh/h Opposing direction volume, Vo 2033 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 Grade adj. factor,(note-1) fg 1.00 1.00 Directional flow rate,(note-2) vi 1052 pc/h 2210 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h 27.2 mi/h Average travel speed, ATSd

51.4

00

Phone:

Percent Free Flow Speed, PFFS

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 1052 pc e-4) BPTSFd	0 83.9 9.2 86.9 %	pposing 1.0 1.0 1.000 1.00 2210	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	F 0.62 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 27.2 86.9 F	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective rage travel s lane	ive , Lde peed, Ld	-	mi mi
on average speed, fpl			-	
Average travel speed including passing Percent free flow speed including pass	ing lane, ATSpl	Spl	0.0	90
Percent Time-Spent-Fol	lowing with P	assing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followin	ive leng g, Lde	th	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followi lane	length o .ng, Ld	f _	mi
on percent time-spent-following, f Percent time-spent-following	pl		_	<u>^</u>
including passing lane, PTSFpl			-	90
Level of Service and Other Perfo	rmance Measur	es with	Passing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	·		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	1052.2
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.72
Bicycle LOS	E

Notes:

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Project Information

Analyst	вмв	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2023
Jurisdiction	County	Time Analyzed	PM Peak Hour
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			
Direction 1	850		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-

Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	

Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 1 Speed and Density			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		
Direction 1 Bicycle LOS			
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data			
Direction 2	712		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.5		
Direction 2 Adjustment Factor	ors		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Cap	pacity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 2 Speed and Densi	ty		
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		
Direction 2 Bicycle LOS			
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A
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Hwy 65 - Hermosa St to Lindmore St - 2023 PM.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2023
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Coomptrie Data			

Direction 1 Geometric Data

Direction 1	960		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.5		
Direction 1 Adjustment Facto	rs		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 1 Demand and Capa	acity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 1 Speed and Densit	у		
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		
Direction 1 Bicycle LOS			
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wy), ft	36	Bicyle LOS Score (BLOS)	0.00

Bicycle Level of Service (LOS)

А

42

Average Effective Width (We), ft

Direction 2 Geometric Data			
Direction 2	685		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.5		
Direction 2 Adjustment Factor	ors		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Cap	acity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 2 Speed and Densi	ty		
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		
Direction 2 Bicycle LOS			
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A
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Project Information			
Analyst	ВМВ	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2025
Jurisdiction	County	Time Analyzed	PM Peak Hour
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			
Direction 1	883		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.5		
Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity

Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

-				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	740			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Fact	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Hermosa St to Lindmore St - 2025 PM.xuf

Project Information

Analyst	вмв	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2025
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			

Direction 1	974			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capa	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			

Flow Rate in Outside Lane (vol),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data				
Direction 2	826			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _P), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densit	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Hermosa St to Lindmore St - 2025 PM+Proj.xuf

Project Information				
Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2035	
Jurisdiction	County	Time Analyzed	PM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1071			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Deals Llour Factor	0.99	Flow Data ()() no/h/ln	0	

Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 1 Bicycle LOS				

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	1162			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Hermosa St to Lindmore St - 2035 PM.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2035	
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1162			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			

Direction 1 Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity

Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	

Direction 1 Speed and Density

Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	983			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hvy 65 - Hermosa St to Lindmore St - 2035 PM+Proj.xuf

nerated: 07/20/2

Project Information				
Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2045	
Jurisdiction	County	Time Analyzed	PM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1293			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft		Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Fact	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Car	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	

Direction 1 Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vol),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	912			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Hermosa St to Lindmore St - 2045 PM.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2045	
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1383			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	

Direction 1 Adjustment Factors

Divided

54.5

Median Type

Free-Flow Speed (FFS), mi/h

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Total Lateral Clearance (TLC), ft

12

Direction 1 Demand and Capacity

-	-		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	1168			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hvy 65 - Hermosa St to Lindmore St - 2045 PM+Proj.xuf

nerated: 07/20/2

Project Information

Measured or Base Free-Flow Speed

Base Free-Flow Speed (BFFS), mi/h

Free-Flow Speed (FFS), mi/h

Lane Width, ft

Median Type

Base

55.0

12

54.5

Divided

Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2023	
Jurisdiction	County	Time Analyzed	PM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	876			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	

Grade Length, mi

Access Point Density, pts/mi

Left-Side Lateral Clearance (LCR), ft

Total Lateral Clearance (TLC), ft

-

2.0

6

12

Direction 1 Adjustment Factors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity

Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

-			
Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	1012			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Lindmore St to Marigold St - 2023 PM.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2023
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			
	0.61		

Direction 1	961		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.5		
Direction 1 Adjustment Facto	rs		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 1 Demand and Capa	acity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data				
Direction 2	1088			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Lindmore St to Marigold St - 2023 PM+Proj.xuf

Project Information

Base Free-Flow Speed (BFFS), mi/h

Lane Width, ft

55.0

12

Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2025	
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	955			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	

Access Point Density, pts/mi

Left-Side Lateral Clearance (LCR), ft

2.0

6

Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Factors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	

Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А	
Access Point Density Adjustment (fA)	0.5			

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	1127			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (voL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Lindmore St to Marigold St - 2025 AM+Proj.xuf

Project Information				
Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2025	
Jurisdiction	County	Time Analyzed	PM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	910			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Factors				

Driver Population SAF 1.000 Final Capacity Adjustment Factor (CAF) 1.000	acity Adjustment Factor (CAF) 1.000
Driver Population CAF 1.000	

Direction 1 Demand and Capacity

	,		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

-			
Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	1051			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Facto	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densit	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Lindmore St to Marigold St - 2025 PM.xuf

Project Information					
Analyst	вмв	Date	3/28/2023		
Agency	LAV Consulting	Analysis Year	2035		
Jurisdiction	County	Time Analyzed	PM Peak Hour		
Project Description	TIS for Commercial Development	Units	U.S. Customary		
Direction 1 Geometric Data					
Direction 1	1103				
Number of Lanes (N), In	2	Terrain Type	Level		
Segment Length (L), ft	-	Percent Grade, %	-		
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-		
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0		
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6		
Median Type	Divided	Total Lateral Clearance (TLC), ft	12		
Free-Flow Speed (FFS), mi/h	54.5				
Direction 1 Adjustment Facto	rs				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000		
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000		
Driver Population CAF	1.000				
Direction 1 Demand and Capa	icity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000		
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0		
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090		
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090		
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00		
Direction 1 Speed and Density					
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5		
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0		
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A		
Access Point Density Adjustment (fA)	0.5				
Direction 1 Bicycle LOS					

Flow Rate in Outside Lane (vol),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data				
Direction 2	1275			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Lindmore St to Marigold St - 2035 PM.xuf

Project Information

Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2035	
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1188			

Direction	1100		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.5		
Direction 1 Adjustment Factor	ors		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 1 Demand and Cap	pacity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 1 Speed and Densi	ty		
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		
Direction 1 Bicycle LOS			
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data					
Direction 2	1351				
Number of Lanes (N), In	2	Terrain Type	Level		
Segment Length (L), ft	-	Percent Grade, %	-		
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-		
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0		
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6		
Median Type	Divided	Total Lateral Clearance (TLC), ft	12		
Free-Flow Speed (FFS), mi/h	54.5				
Direction 2 Adjustment Factor	ors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000		
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000		
Driver Population CAF	1.000				
Direction 2 Demand and Cap	acity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000		
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0		
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090		
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090		
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00		
Direction 2 Speed and Densi	ty				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5		
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0		
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A		
Access Point Density Adjustment (fA)	0.5				
Direction 2 Bicycle LOS	Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62		
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00		
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A		
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Hwy 65 - Lindmore St to Marigold St - 2035 PM+Proj.xuf

Project Information				
Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2045	
Jurisdiction	County	Time Analyzed	PM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1332			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	

	0.0	/weruge speed (s), mi, n	51.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.5		
Direction 1 Bicycle LOS			
Direction 1 Bicycle LOS Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62

Bicycle Level of Service (LOS)

А

Average Effective Width (We), ft

42

Direction 2 Geometric Data				
Direction 2	1538			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Lindmore St to Marigold St - 2045 AM.xuf

Project Information

Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2045	
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1417			
Number of Lanes (N), In	2	Terrain Type	Level	

Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Factors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 1 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	

Direction 2 Geometric Data				
Direction 2	1614			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Density				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Lindmore St to Marigold St - 2045 PM+Proj.xuf
Project Information				
Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2023	
Jurisdiction	County	Time Analyzed	PM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	828			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Factors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	

Direction 1 Demand and Capacity

1.000

Driver Population CAF

Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

-			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	796			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Marigold St to Ave 208 - 2023 PM.xuf

Project Information

Analyst	вмв	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2023
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			

Direction 1	905			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capa	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density				
Lane Width Adjustment (flw)	0.0	Average Speed (S) mi/h	54.5	

Direction 1 Bicycle LOS				
Access Point Density Adjustment (fA)	0.5			
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	864			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Marigold St to Ave 208 - 2023 PM+Proj.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2025	
Jurisdiction	County	Time Analyzed	PM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	860			

Direction	860		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.5		
Direction 1 Adjustment Factor	ors		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 1 Demand and Cap	pacity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 1 Speed and Densi	ty		
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		
Direction 1 Bicycle LOS			
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	Α

Direction 2 Geometric Data				
Direction 2	827			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Marigold St to Ave 208 - 2025 PM.xuf

Project Information

Average Effective Width (We), ft

42

Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2025	
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	937			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	

Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capa	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Density				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	

3		5 1 1	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		
		I	
Direction 1 Bicycle LOS	1	1	1
Direction 1 Bicycle LOS Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62

Bicycle Level of Service (LOS)

А

Direction 2 Geometric Data				
Direction 2	895			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Marigold St to Ave 208 - 2025 PM+Proj.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023		
Agency	LAV Consulting	Analysis Year	2035		
Jurisdiction	County	Time Analyzed	PM Peak Hour		
Project Description	TIS for Commercial Development	Units	U.S. Customary		
Direction 1 Geometric Data	Direction 1 Geometric Data				
Direction 1	1043				
Number of Lanes (N), In	2	Terrain Type	Level		
Segment Length (L), ft	-	Percent Grade, %	-		
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-		
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0		
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6		
Median Type	Divided	Total Lateral Clearance (TLC), ft	12		

Direction 1 Adjustment Factors

54.5

Free-Flow Speed (FFS), mi/h

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		

Direction 1 Demand and Capacity

-	-		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

-			
Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.5		

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	1003			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Marigold St to Ave 208 - 2035 PM.xuf

Project Information

Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2023	
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1119			
Number of Lanes (N), In	2	Terrain Type	Level	

Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capa	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Densit	у			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 1 Bicycle LOS				

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data				
Direction 2	1071			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Marigold St to Ave 208 - 2035 PM+Proj.xuf

Project Information					
Analyst	ВМВ	Date	3/28/2023		
Agency	LAV Consulting	Analysis Year	2045		
Jurisdiction	County	Time Analyzed	PM Peak Hour		
Project Description	TIS for Commercial Development	Units	U.S. Customary		
Direction 1 Geometric Data					
Direction 1	1259				
Number of Lanes (N), In	2	Terrain Type	Level		
Segment Length (L), ft	-	Percent Grade, %	-		
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-		
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0		
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6		
Median Type	Divided	Total Lateral Clearance (TLC), ft	12		
Free-Flow Speed (FFS), mi/h	54.5				
Direction 1 Adjustment Factors					

Driver Population Final Speed Adjustment Factor (SAF) All Familiar 1.000 **Driver Population SAF** 1.000 1.000 Final Capacity Adjustment Factor (CAF) Driver Population CAF 1.000

Direction 1 Demand and Capacity

Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

-			
Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data				
Direction 2	1209			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Facto	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densit	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Project Information

Effective Width of Volume (Wv), ft

Average Effective Width (We), ft

36

42

Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2045	
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1336			

Direction	1550		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.5		
Direction 1 Adjustment Facto	ors		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 1 Demand and Cap	acity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (V _P), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 1 Speed and Densit	ty		
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.5		
Direction 1 Bicycle LOS			
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62

Bicyle LOS Score (BLOS)

Bicycle Level of Service (LOS)

0.00

А

Direction 2 Geometric Data				
Direction 2	1277			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	2.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.5			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2090	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2090	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.5	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.5			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Fax:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.LAV ConstantDate Performed3/28/2023Analysis Time PeriodPM Peak Hour Highway Hwy 65 N Spruce Ave/Hwy 137 From/To Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 591 veh/h Opposing direction volume, Vo 668 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 646 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 730 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.6 mi/h 41.8 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 78.8 8

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 642 pc e-4) BPTSFd	c/h 62.4 % 20.3 71.9 %	ppposing 1.0 1.00 1.000 1.000 726	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.38 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 41.8 71.9 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective rage travel s lane	ive , Lde peed, Ld	-	mi mi
on average speed, fpl			-	
Percent free flow speed including passing	ing lane, PFF	Spl	0.0	010
Percent Time-Spent-Fol	lowing with P	assing L	ane	
Downstream length of two-lane highway	within effect	ive leng	th	
of passing lane for percent time-s	pent-followin	g, Lde	- .f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	_	mi
on percent time-spent-following, f Percent time-spent-following	рт		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measur	es with	Passing 1	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	·		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	642.4
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.47
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Fax:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Agency/Co. Highway Hwy 65 N Spruce Ave/Hwy 137 From/To Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20
% Access point density 8 00 Up/down /mi Analysis direction volume, Vd 653 veh/h Opposing direction volume, Vo 739 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 714 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 808 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h ... mi/h 40.7 ~ ~ Adjustment for no-passing zones, fnp 0.5 Average travel speed, ATSd Percent Free Flow Speed, PFFS 76.8 00

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 710 pc e-4) BPTSFd	c/h 65.6 % 18.5 74.3 %	pposing 1.0 1.0 1.000 1.00 803	(o) pc/h
Level of Service and O	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.42 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 40.7 74.3 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	l, Lde peed, Ld	-	mi mi
Adj. factor for the effect of passing on average speed, fpl	lane		_	
Average travel speed including passing	lane, ATSpl		-	0
Percent free flow speed including pass	ing iane, PFF	грт	0.0	ð
Percent Time-Spent-Fol	lowing with P	assing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin	ive leng g, Lde length o	th _ f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	.ng, Ld	_	mi
on percent time-spent-tollowing, f Percent time-spent-following	p⊥		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measur	es with	Passing I	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	709.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.52
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.Date ConstructionDate Performed3/28/2023Analysis Time PeriodPM Peak Hour Highway Hwy 65 N Spruce Ave/Hwy 137 From/To Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 614 veh/h Opposing direction volume, Vo 694 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 671 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 759 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h 41.4 mi/h Average travel speed, ATSd

78.1

2

Phone: E-Mail:

Percent Free Flow Speed, PFFS

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 667 pc/ ce-4) BPTSFd 6 1 7	0r 1.3% 9.5 2.5%	pposing 1.0 1.0 1.000 1.00 754	(o) pc/h
Level of Service and C)ther Performan	ce Meası	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 0 7MT15 0 260 0 1 1 1 1	. 39 . 0 700 700 700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	ane, Lu	0.0 - 41.4 72.5 D	mi mi mi/h
Average Travel Spee	ed with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective arage travel sp lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl Average travel speed including passing	lane. ATSpl		_	
Percent free flow speed including pass	sing lane, PFFS	pl	0.0	00
Percent Time-Spent-Fol	lowing with Pa	ssing La	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ve lengt , Lde	ch 	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective 1 spent-followin lane	ength of g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	010
Level of Service and Other Perfo	ormance Measure	s with H	Passing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	ne, LOSpl E -	7	veh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	667.4
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.48
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Fax:

Phone:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Agency/Co. Highway Hwy 65 N Spruce Ave/Hwy 137 From/To Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20
% Access point density 8 00 Up/down /mi Analysis direction volume, Vd 676 veh/h Opposing direction volume, Vo 765 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 739 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 837 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h 40.3 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 76.1 2

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 735 pc e-4) BPTSFd	c/h 67.2 % 18.0 75.6 %	pposing 1.0 1.00 1.000 1.00 832	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT1560	D 0.43 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 40.3 75.6 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	ive l, Lde peed, Ld	-	mi mi
on average speed, fpl	1 dire		_	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFF	'Spl	- 0.0	00
Percent Time-Spent-Fol	lowing with P	assing L	ane	
	·		. h	
of passing lane for percent time-s Length of two-lane highway downstream	pent-followin of effective	ig, Lde length o	f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	.ng, Ld	-	mi
Percent time-spent-following			_	ç
Including passing lane, Fistpl				-0
Level of Service and Other Perfo	rmance Measur	es with	rassing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E	veh-h	
Bicycle Lev	el of Service	<u> </u>		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	734.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.53
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
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Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.Date ConstructionDate Performed3/28/2023Analysis Time PeriodPM Peak Hour Highway Hwy 65 N Spruce Ave/Hwy 137 From/To Jurisdiction County Analysis Year 2035 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 745 veh/h Opposing direction volume, Vo 842 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 1.000 1.00 815 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 915 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h 39.1 mi/h Average travel speed, ATSd

73.8

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Phone: E-Mail:

Percent Free Flow Speed, PFFS

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 810 pc/ .e-4) BPTSFd 7 1 7	Or 70.7 % 26.4 78.4 %	pposing 1.0 1.0 1.000 1.00 915	(o) pc/h
Level of Service and C	ther Performan	nce Measu	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	E C MT15 C '60 C 1 1 1 1	E).48)).0 .700 .700 .700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) rom above)	ane, Lu	0.0 - 39.1 78.4 E	mi mi mi/h
Average Travel Spee	d with Passir	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	Lde Deed, Ld	-	mi mi
on average speed, fpl			-	
Average travel speed including passing Percent free flow speed including pass	ing lane, ATSpl	Spl	-0.0	00
Percent Time-Spent-Fol	lowing with Pa	assing La	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	lve lengt g, Lde	- _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective l spent-followin lane	length o: ng, Ld	E _	mi
on percent time-spent-following, f	pl		-	
including passing lane, PTSFpl			-	0
Level of Service and Other Perfo	rmance Measure	es with 1	Passing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl –		zeh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	809.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.58
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
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Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Highway Hwy 65 N Spruce Ave/Hwy 137 From/To Jurisdiction County Analysis Year 2035 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway class Class Ireak nour factor, fintc.s.Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 807 veh/h Opposing direction volume, Vo 913 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 1.00 877 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 992 pc/h Free-Flow Speed from Field Measurement: Field measured speed, (note-3) S FM mi/h Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h Adjustment for no-passing zones, fnp 0.5 mi/h Average travel speed, ATSd 38.0 Percent Free Flow Speed, PFFS 71.8 00

Phone: E-Mail: Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 877 pc/ e-4) BPTSFd 7 1 8	Op 4.0 % 4.9 1.0 %	pposing 1.0 1.0 1.000 1.000 992	(o) pc/h
Level of Service and C	ther Performan	ice Measu	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	E 0 MT15 0 60 0 1 1 1	52 50 50 50 700 50 50 50 50 50 50 50 50 50 50 50 50 5	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) rom above)	ane, Lu	0.0 - 38.0 81.0 E	mi mi mi/h
Average Travel Spee	d with Passin	ig Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	Lde Deed, Ld	-	mi mi
on average speed, fpl Average travel speed including passing	lane. ATSpl			
Percent free flow speed including pass	ing lane, PFFS	pl	0.0	010
Percent Time-Spent-Fol	lowing with Pa	ssing La	ine	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ve lengt , Lde	.h _	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followin	ig, Ld	-	mi
Percent time-spent-following	Ът		-	
including passing lane, PTSFpl			_	0
Level of Service and Other Perfo	rmance Measure	es with P	assing 1	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl E -	. v	reh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	877.2
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.62
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.Date ConstructionDate Performed3/28/2023Analysis Time PeriodPM Peak Hour Highway Hwy 65 N Spruce Ave/Hwy 137 From/To Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 899 veh/h Opposing direction volume, Vo 1016 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.0 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 1.000 Grade adj. factor (note-1) fg 1.00 1.000 1.00 977 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 1104 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h mi/h Average travel speed, ATSd 36.4

68.7

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Fax:

Phone:

Percent Free Flow Speed, PFFS

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 977 pc/ ce-4) BPTSFd 7 1 8	Dp h 8.6 % 2.8 4.6 %	posing 1.0 1.00 1.000 1.00 1104	(0) pc/h
Level of Service and C)ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	E 0 7MT15 0 260 0 1 1 1	.57 v v 0 v 700 v 700 v 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	ane, Lu	0.0 - 36.4 84.6 E	mi mi mi/h
Average Travel Spee	ed with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti e travel speed, of effective erage travel sp lane	ve Lde beed, Ld	-	mi mi
on average speed, fpl			_	
Percent free flow speed including passing	sing lane, PFFS	pl	0.0	00
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti spent-following	ve lengt , Lde	h _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective l spent-followin lane	ength of .g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measure	s with P	assing 1	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl E -	v	eh-h	
Bicycle Lev	vel of Service			
Posted speed limit, Sp	55			
-----------------------------------------------------	-------			
Percent of segment with occupied on-highway parking	0			
Pavement rating, P	3			
Flow rate in outside lane, vOL	977.2			
Effective width of outside lane, We	24.00			
Effective speed factor, St	4.79			
Bicycle LOS Score, BLOS	4.68			
Bicycle LOS	Ε			

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Agency/Co. Highway Hwy 65 N Spruce Ave/Hwy 137 From/To Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak nour factor, rmr0.02Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 772 veh/h Opposing direction volume, Vo 1087 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 1.000 1.00 844 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 1182 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h Adjustment for no-passing zones, fnp 0.5 36.8 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 69.5

8

Phone:

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 839 pc xe-4) BPTSFd	c/h 75.2 % 13.3 80.7 %	pposing 1.0 1.00 1.000 1.00 1182	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	E 0.49 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 36.8 80.7 E	mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	l, Lde peed, Ld	-	mi mi
Adj. factor for the effect of passing on average speed, fpl	Lane		-	
Average travel speed including passing	lane, ATSpl		-	<u>_</u>
Percent free flow speed including pass	ing lane, PFF	Spl	0.0	or
Percent Time-Spent-Fol	lowing with F	assing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect	ive leng	th _	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi	.ng, Ld	± _	mi
on percent time-spent-following, f Percent time-spent-following	ЪТ		_	
including passing lane, PTSFpl			_	00
Level of Service and Other Perfo	ormance Measur	es with	Passing I	lane
Level of service including passing lar Peak 15-min total travel time, TT15	le, LOSpl	E 	veh-h	
Bicycle Lev	vel of Service	<u> </u>		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	839.1
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.60
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Project Information

Measured or Base Free-Flow Speed

Base Free-Flow Speed (BFFS), mi/h

Lane Width, ft

Base

55.0

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Analyst	вмв	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2023
Jurisdiction	County	Time Analyzed	PM Peak Hour
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			
Direction 1	1092		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Number of Lanes (N), In Segment Length (L), ft	2	Terrain Type Percent Grade, %	Level

Grade Length, mi

Access Point Density, pts/mi

Left-Side Lateral Clearance (LCR), ft

-

1.0

6

Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 1 Adjustment Factors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			

Direction 1 Demand and Capacity

Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

-			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.3		

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data			
Direction 2	844		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.8		
Direction 2 Adjustment Factor	ors		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Cap	acity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 2 Speed and Densit	ty		
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.3		
Direction 2 Bicycle LOS			
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A
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Hwy 65 - Tulare Rd to Hermosa St - 2023 PM.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2023
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			

Direction 1	1208		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.8		
Direction 1 Adjustment Factor	ors		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 1 Demand and Cap	pacity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 1 Speed and Densi	ty		
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.3		
Direction 1 Bicycle LOS			
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A

Direction 2 Geometric Data			
Direction 2	952		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.8		
Direction 2 Adjustment Factor	ors		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 2 Demand and Cap	pacity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 2 Speed and Densi	ty		
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.3		
Direction 2 Bicycle LOS			
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A
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Hwy 65 - Tulare Rd to Hermosa St - 2023 PM+Proj.xuf

Project Information			
Analyst	ВМВ	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2025
Jurisdiction	County	Time Analyzed	PM Peak Hour
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			
Direction 1	1135		
Number of Lanes (N), In	2	Terrain Type	Level
Segment Length (L), ft	-	Percent Grade, %	-
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6
Median Type	Divided	Total Lateral Clearance (TLC), ft	12
Free-Flow Speed (FFS), mi/h	54.8		
Direction 1 Adjustment Facto	ors		
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000
Driver Population CAF	1.000		
Direction 1 Demand and Capa	acity		
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00
Direction 1 Speed and Densit	у		
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.3		
Direction 1 Bicycle LOS			
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00

Average Effective Width (We), ft

42

А

Bicycle Level of Service (LOS)

Direction 2 Geometric Data				
Direction 2	877			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.3			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vol),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Tulare Rd to Hermosa St - 2025 PM.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2025
Jurisdiction	County	Time Analyzed	AM Peak Hour + Project
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			

Direction 1 1249 2 Number of Lanes (N), In Terrain Type Level Segment Length (L), ft Percent Grade, % _ _ Measured or Base Free-Flow Speed Grade Length, mi Base _ 55.0 1.0 Base Free-Flow Speed (BFFS), mi/h Access Point Density, pts/mi 12 6 Lane Width, ft Left-Side Lateral Clearance (LCR), ft Median Type Divided Total Lateral Clearance (TLC), ft 12 Free-Flow Speed (FFS), mi/h 54.8 **Direction 1 Adjustment Factors Driver Population** All Familiar Final Speed Adjustment Factor (SAF) 1.000 1.000 **Driver Population SAF** 1.000 Final Capacity Adjustment Factor (CAF) **Driver Population CAF** 1.000 **Direction 1 Demand and Capacity** Volume(V) veh/h 0 Heavy Vehicle Adjustment Factor (fHV) 1.000 Peak Hour Factor 88.0 Flow Rate (Vp), pc/h/ln 0 Total Trucks, % 0.00 Capacity (c), pc/h/ln 2096 Single-Unit Trucks (SUT), % Adjusted Capacity (cadj), pc/h/ln 2096 _ Tractor-Trailers (TT), % Volume-to-Capacity Ratio (v/c) 0.00 _

Direction 1 Speed and Density

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.3		

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data				
Direction 2	985			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.3			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Tulare Rd to Hermosa St - 2025 PM+Proj.xuf

Project Information				
Analyst	ВМВ	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2035	
Jurisdiction	County	Time Analyzed	PM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1376			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 1 Adjustment Factors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	

Direction 1 Demand and Capacity

1.000

Driver Population CAF

Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00

Direction 1 Speed and Density

Lane Width Adjustment (fLw)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	А
Access Point Density Adjustment (fA)	0.3		

Direction 1 Bicycle LOS

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data				
Direction 2	1064			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	acity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.3			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Tulare Rd to Hermosa St - 2035 PM.xuf

Project Information

Analyst	ВМВ	Date	3/28/2023
Agency	LAV Consulting	Analysis Year	2035
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project
Project Description	TIS for Commercial Development	Units	U.S. Customary
Direction 1 Geometric Data			

Direction 1 1492 2 Number of Lanes (N), In Terrain Type Level Segment Length (L), ft Percent Grade, % _ _ Measured or Base Free-Flow Speed Grade Length, mi Base _ 55.0 1.0 Base Free-Flow Speed (BFFS), mi/h Access Point Density, pts/mi 12 6 Lane Width, ft Left-Side Lateral Clearance (LCR), ft Median Type Divided Total Lateral Clearance (TLC), ft 12 Free-Flow Speed (FFS), mi/h 54.8 **Direction 1 Adjustment Factors Driver Population** All Familiar Final Speed Adjustment Factor (SAF) 1.000 1.000 **Driver Population SAF** 1.000 Final Capacity Adjustment Factor (CAF) **Driver Population CAF** 1.000 **Direction 1 Demand and Capacity** Volume(V) veh/h 0 Heavy Vehicle Adjustment Factor (fHV) 1.000 Peak Hour Factor 88.0 Flow Rate (Vp), pc/h/ln 0 Total Trucks, % 0.00 Capacity (c), pc/h/ln 2096 Single-Unit Trucks (SUT), % Adjusted Capacity (cadj), pc/h/ln 2096 _

Direction 1 Speed and Density

_

Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A
Access Point Density Adjustment (fA)	0.3		

Volume-to-Capacity Ratio (v/c)

0.00

Direction 1 Bicycle LOS

Tractor-Trailers (TT), %

Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	А

Direction 2 Geometric Data					
Direction 2	1172				
Number of Lanes (N), In	2	Terrain Type	Level		
Segment Length (L), ft	-	Percent Grade, %	-		
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-		
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0		
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6		
Median Type	Divided	Total Lateral Clearance (TLC), ft	12		
Free-Flow Speed (FFS), mi/h	54.8				
Direction 2 Adjustment Factor	ors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000		
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000		
Driver Population CAF	1.000				
Direction 2 Demand and Cap	Direction 2 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000		
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0		
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096		
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096		
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00		
Direction 2 Speed and Densi	ty				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8		
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0		
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A		
Access Point Density Adjustment (fA)	0.3				
Direction 2 Bicycle LOS					
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62		
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00		
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A		
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Project Information

Effective Width of Volume (Wv), ft

Average Effective Width (We), ft

36

42

Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2045	
Jurisdiction	County	Time Analyzed	PM Peak Hour	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1660			

1000		
2	Terrain Type	Level
-	Percent Grade, %	-
Base	Grade Length, mi	-
55.0	Access Point Density, pts/mi	1.0
12	Left-Side Lateral Clearance (LCR), ft	6
Divided	Total Lateral Clearance (TLC), ft	12
54.8		
ors		
All Familiar	Final Speed Adjustment Factor (SAF)	1.000
1.000	Final Capacity Adjustment Factor (CAF)	1.000
1.000		
acity		
0	Heavy Vehicle Adjustment Factor (fHV)	1.000
0.88	Flow Rate (Vp), pc/h/ln	0
0.00	Capacity (c), pc/h/ln	2096
-	Adjusted Capacity (cadj), pc/h/ln	2096
-	Volume-to-Capacity Ratio (v/c)	0.00
у		
0.0	Average Speed (S), mi/h	54.8
0.0	Density (D), pc/mi/ln	0.0
0.0	Level of Service (LOS)	A
0.3		
0	Effective Speed Factor (St)	4.62
	1000 2 - Base 55.0 12 Divided 54.8 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	2 Terrain Type - Percent Grade, % Base Grade Length, mi 55.0 Access Point Density, pts/mi 12 Left-Side Lateral Clearance (LCR), ft Divided Total Lateral Clearance (TLC), ft 54.8 Present Clearance (TLC) , ft All Familiar Final Speed Adjustment Factor (SAF) 1.000 Final Capacity Adjustment Factor (CAF) 1.000 Envertex 0 Heavy Vehicle Adjustment Factor (FHV) 0.88 Flow Rate (Vp), pc/h/ln 0.00 Capacity (c), pc/h/ln - Adjusted Capacity (cadj), pc/h/ln - Volume-to-Capacity Ratio (v/c) Y 0.0 Average Speed (S), mi/h 0.0 Level of Service (LOS) 0.3

Bicyle LOS Score (BLOS)

Bicycle Level of Service (LOS)

0.00

А

Direction 2 Geometric Data					
Direction 2	1283				
Number of Lanes (N), In	2	Terrain Type	Level		
Segment Length (L), ft	-	Percent Grade, %	-		
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-		
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0		
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6		
Median Type	Divided	Total Lateral Clearance (TLC), ft	12		
Free-Flow Speed (FFS), mi/h	54.8				
Direction 2 Adjustment Factor	ors				
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000		
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000		
Driver Population CAF	1.000				
Direction 2 Demand and Cap	Direction 2 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000		
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0		
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096		
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096		
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00		
Direction 2 Speed and Densi	ty				
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8		
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0		
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A		
Access Point Density Adjustment (fA)	0.3				
Direction 2 Bicycle LOS					
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62		
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00		
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A		
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Project Information

Analyst	вмв	Date	3/28/2023	
Agency	LAV Consulting	Analysis Year	2045	
Jurisdiction	County	Time Analyzed	PM Peak Hour + Project	
Project Description	TIS for Commercial Development	Units	U.S. Customary	
Direction 1 Geometric Data				
Direction 1	1776			
Number of Lanes (N). In	2	Terrain Type	level	

Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 1 Adjustment Facto	rs			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 1 Demand and Capacity				
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (V _p), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 1 Speed and Densit	y			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.3			
Direction 1 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	

Direction 2 Geometric Data				
Direction 2	1391			
Number of Lanes (N), In	2	Terrain Type	Level	
Segment Length (L), ft	-	Percent Grade, %	-	
Measured or Base Free-Flow Speed	Base	Grade Length, mi	-	
Base Free-Flow Speed (BFFS), mi/h	55.0	Access Point Density, pts/mi	1.0	
Lane Width, ft	12	Left-Side Lateral Clearance (LCR), ft	6	
Median Type	Divided	Total Lateral Clearance (TLC), ft	12	
Free-Flow Speed (FFS), mi/h	54.8			
Direction 2 Adjustment Factor	ors			
Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000	
Driver Population SAF	1.000	Final Capacity Adjustment Factor (CAF)	1.000	
Driver Population CAF	1.000			
Direction 2 Demand and Cap	pacity			
Volume(V) veh/h	0	Heavy Vehicle Adjustment Factor (fHV)	1.000	
Peak Hour Factor	0.88	Flow Rate (Vp), pc/h/ln	0	
Total Trucks, %	0.00	Capacity (c), pc/h/ln	2096	
Single-Unit Trucks (SUT), %	-	Adjusted Capacity (cadj), pc/h/ln	2096	
Tractor-Trailers (TT), %	-	Volume-to-Capacity Ratio (v/c)	0.00	
Direction 2 Speed and Densi	ty			
Lane Width Adjustment (fLW)	0.0	Average Speed (S), mi/h	54.8	
Total Lateral Clearance Adj. (fLLC)	0.0	Density (D), pc/mi/ln	0.0	
Median Type Adjustment (fM)	0.0	Level of Service (LOS)	A	
Access Point Density Adjustment (fA)	0.3			
Direction 2 Bicycle LOS				
Flow Rate in Outside Lane (vOL),veh/h	0	Effective Speed Factor (St)	4.62	
Effective Width of Volume (Wv), ft	36	Bicyle LOS Score (BLOS)	0.00	
Average Effective Width (We), ft	42	Bicycle Level of Service (LOS)	A	
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Hwy 65 - Tulare Rd to Hermosa St - 2045 PM+Proj.xuf

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.LAV ConstructDate Performed3/28/2023Analysis Time PeriodPM Peak HourTarget127 Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 416 veh/h Opposing direction volume, Vo 453 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.2 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.988 Grade adj. factor, (note-1) fg 1.00 0.988 1.00 458 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 498 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.0 mi/h 44.6 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 84.1 00

Phone:

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 452 pc/2 e-4) BPTSFd 4 2 6	Op 8.2 % 9.5 2.3 %	posing 1.0 1.00 1.000 1.00 492	(o) pc/h
Level of Service and C	ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 0 60 0 1 1 1	.27 v .0 v 700 v 700 v 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing L	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing lass, Lpl) rom above)	ane, Lu	0.0 - 44.6 62.3 D	mi mi mi/h
Average Travel Spee	d with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effection travel speed, of effective rage travel spe lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl	lane Amgnl		-	
Percent free flow speed including passing	ing lane, PFFS	pl	0.0	0
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effection	ve lengt , Lde	h	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective lo spent-following lane	ength of g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	Ът		_	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measure	s with P	assing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl E -	V	eh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	452.2
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.29
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction Analysis Year 2023 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 759 veh/h Opposing direction volume, Vo 547 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 830 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 598 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h 53.0 mi/h Free-flow speed, FFSd Adjustment for no-passing zones, fnp 0.8 mi/h mi/h Average travel speed, ATSd 41.1 Percent Free Flow Speed, PFFS 77.6 00

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 825 pc e-4) BPTSFd	c/h 68.2 18.9 79.2	Dpposing 1.0 1.0 1.000 1.000 595	(o) pc/h
Level of Service and C	ther Performa	ance Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.49 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 41.1 79.2 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	cive d, Lde speed, Lo	- 1 -	mi mi
on average speed, fpl	Lanc		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFB	Spl	- 0.0	00
Percent Time-Spent-Fol	lowing with F	- Passing T	lane	
of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir of effective	cive leng ng, Lde length d	gth - of	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	-	mi
Percent time-spent-following	Ът		-	0
including passing lane, PTSEPI			-	5
Level of Service and Other Perfo	rmance Measur	res with	Passing 1	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	825.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.59
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Fax:

Phone:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.Inv constructDate Performed3/28/2023Analysis Time PeriodPM Peak HourTotal127 Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction Analysis Year 2025 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 431 veh/h Opposing direction volume, Vo 526 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.2 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.988 Grade adj. factor (note-1) fg 1 00 0.994 1.00 474 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 575 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.8 mi/h 44.0 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 83.1 2

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 468 pc xe-4) BPTSFd	/h 49.4 % 26.4 61.3 %	pposing 1.0 1.0 1.000 1.00 572	(o) pc/h
Level of Service and C	ther Performa	nce Meası	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	D 0.28 0 7 0.0 7 1700 7 1700 7 1700 7	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 44.0 61.3 D	mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	lane		_	
Average travel speed including passing	lane, ATSpl	(m)	-	0,
reicent free from speed including pass	, ing talle, PFF	рЪт	0.0	6
Percent Time-Spent-Fol	lowing with P.	assing La	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin	ive lengt g, Lde length of	ch 	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi	ng, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	ЪТ		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measur	es with H	Passing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	le, LOSpl	E - \	/eh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	468.5
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.31
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Agency/Co. Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction Analysis Year 2025 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 475 veh/h Opposing direction volume, Vo 565 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.2 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.988 Grade adj. factor (note-1) fg 1 00 0.994 1.00 523 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 618 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.8 mi/h 43.4 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 81.9 9

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.000 516 pc ce-4) BPTSFd	c/h 53.4 24.9 64.8	Opposing 1.0 1.0 1.000 1.00 614 %	(o) pc/h
Level of Service and C	ther Performa	ance Mea	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 960	D 0.30 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl mom above)	lane, L	0.0 u - 43.4 64.8 D	mi mi mi/h
Average Travel Spee	ed with Passi	ing Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective trage travel s lane	tive d, Lde speed, L	- d -	mi mi
on average speed, fpl			-	
Average travel speed including passing Percent free flow speed including pass	ing lane, ATSpl	FSpl	-0.0	00
Percent Time-Spent-Fol	lowing with H	Passing	Lane	
Downstroom longth of two-long highway	within offort	tive lon		
of passing lane for percent time-s Length of two-lane highway downstream	spent-followir of effective	ng, Lde length	of	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ing, Ld	-	mi
Percent time-spent-following including passing lare PTSED	Ρτ		_	0
Inclusing passing lane, riorpi				
Level of Service and Other Perio	rmance Measur	res with	rassing .	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	le, LOSpl	E 	veh-h	
Bicycle Lev	vel of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	516.3
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.35
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Fax:

Phone:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.LAV ConstructDate Performed3/28/2023Analysis Time PeriodPM Peak HourTarget127 Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction 2035 Analysis Year Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Segment length Terrain type Grade: Length - mi % No-passing zones 20 % - % Access point density 8 /mi Up/down Analysis direction volume, Vd 524 veh/h Opposing direction volume, Vo 637 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 573 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 697 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.6 mi/h 42.5 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 80.2 9

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 570 pc/2 ce-4) BPTSFd 5 2 6	Op 8.3 % 2.1 8.3 %	posing 1.0 1.0 1.000 1.00 692	(o) pc/h
Level of Service and C	ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 0 0 0 0 0 1 1 1 1	.34 v .0v 700v 700v 700v 700v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing lass, Lpl s, Lpl) from above)	ane, Lu	0.0 - 42.5 68.3 D	mi mi mi/h
Average Travel Spee	d with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effection travel speed, of effective erage travel spe lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl			-	
Average travel speed including passing Percent free flow speed including pass	ing lane, ATSpl	pl	- 0.0	90
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effections of the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon	ve lengt , Lde	h _	
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective le spent-followine lane	ength of g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measure	s with P	assing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl E -	V	eh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	569.6
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.40
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Agency/Co. Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction 2035 Analysis Year Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 567 veh/h Opposing direction volume, Vo 639 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 620 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 699 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.6 mi/h 42.1 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 79.5 9
Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 616 pc e-4) BPTSFd	/h 60.5 % 21.5 70.6 %	pposing 1.0 1.00 1.000 1.00 695	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.36 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 42.1 70.6 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adi, factor for the effect of passing	within effect travel speed of effective rage travel s lane	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	20110		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFF	Spl	- 0.0	00
Percent Time-Spent-Fol	lowing with P	assing L	ane	
Devent room longth of two long highway	within offort	ive long		
of passing lane for percent time-s Length of two-lane highway downstream	pent-followin of effective	g, Lde length o	_ f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	_	mi
Percent time-spent-following including passing lane PTSED	Ľ ∸		_	0
Louol of Corvice and Other Derfe	rmango Maagur	og uith	Daging	
Lever of Service and Other Perio	rmance measur	es with	rassing l	Jalle
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E 	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	616.3
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.44
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co.Inv constructDate Performed3/28/2023Analysis Time PeriodPM Peak HourTotal127 Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction Analysis Year 2045 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 633 veh/h Opposing direction volume, Vo 769 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 692 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 841 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h mi/h Average travel speed, ATSd 40.6 Percent Free Flow Speed, PFFS 76.7 00

Phone: E-Mail:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 688 pc/ ce-4) BPTSFd 6 1 7	Dp b 5.2 % 8.2 3.4 %	pposing 1.0 1.00 1.000 1.00 836	(o) pc/h
Level of Service and C	ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 0 7MT15 0 760 0 1 1 1	.40 vv .0 vv 700 vv 700 vv 700 vv	reh-mi reh-mi reh-h reh/h reh/h reh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	ane, Lu	0.0 - 40.6 73.4 D	mi mi mi/h
Average Travel Spee	ed with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl	lano Amgol		-	
Percent free flow speed including passing	sing lane, PFFS	pl	0.0	00
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ve lengt , Lde	.h _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective 1 spent-followin lane	ength of .g, Ld	_	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measure	s with P	assing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	ne, LOSpl E -	v	reh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	688.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.50
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Highway Hwy 137 Hwy 65/Road 188 From/To County Jurisdiction Analysis Year 2045 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 676 veh/h Opposing direction volume, Vo 808 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.0 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 1.000 1.00 739 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 878 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 60.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 58.0 mi/h Adjustment for no-passing zones, fnp 0.6 mi/h 44.9 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 77.4 00

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 735 pc e-4) BPTSFd	/h 67.8 % 17.4 75.7 %	pposing (1.0 1.00 1.000 1.00 878	pc/h
Level of Service and O	ther Performa	nce Meası	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.43 0 7 0.0 7 1700 7 1700 7 1700 7	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 44.9 75.7 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	lane		_	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl	Spl	-	Q
Terester itee item speed including pass	ing rane, fff	~~~	0.0	U
Percent Time-Spent-Fol	lowing with P	assing La	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin of effective	ive lengt g, Lde length of	- -	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		_	
including passing lane, PTSFpl			-	S
Level of Service and Other Perfo	rmance Measur	es with H	Passing I	ane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E - \	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	734.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.53
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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Fax:

Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co.Lit concernDate Performed3/28/2023Analysis Time PeriodPM Peak HourUniversity 137 Agency/Co. Highway Hwy 137 Road 188/Road 180 From/To Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 196 veh/h Opposing direction volume, Vo 312 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.4 1.5 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.971 Grade adj. factor, (note-1) fg 1.00 0.977 1.00 219 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 347 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.3 mi/h mi/h Average travel speed, ATSd 47.3

89.3

90

Percent Free Flow Speed, PFFS

Phone: E-Mail:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 214 pc xe-4) BPTSFd	c/h 26.4 % 35.9 40.2 %	pposing 1.1 1.0 0.994 1.00 341	(o) pc/h
Level of Service and C	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	C 0.13 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 47.3 40.2 C	mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective trage travel s	tive d, Lde speed, Ld	-	mi mi
on average speed, fpl	Talle		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFB	Spl	- 0.0	0
Percent Time-Spent-Fol	lowing with F	- Passing T.	ane	
		, ,		
of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir of effective	ive leng ng, Lde length o	- f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	-	mi
Percent time-spent-following	ЪΤ		-	0
including passing lane, PTSEpl			-	5
Level of Service and Other Perfo	ormance Measur	res with	Passing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	ne, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	è		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	213.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	3.91
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Univ 137 Agency/Co. Highway Hwy 137 Road 188/Road 180 From/To Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 % - % Access point density 8 /mi Up/down Analysis direction volume, Vd 233 veh/h Opposing direction volume, Vo 345 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) 1.4 PCE for trucks, ET 1.3 1.0 PCE for RVs, ER 1.0 Heavy-vehicle adj. factor, (note-5) fHV 0.977 Grade adj. factor, (note-1) fg 1.00 0.982 1.00 259 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 382 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h 1.2 mi/h Adjustment for no-passing zones, fnp 46.8 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 88.3 9

Phone: E-Mail·

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 255 pc xe-4) BPTSFd	c/h 30.3 % 35.6 44.7 %	pposing (1.1 1.0 0.994 1.00 377	pc/h
Level of Service and C)ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	7MT15 260	C 0.15 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 46.8 44.7 C	mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect e travel speed of effective erage travel s	cive d, Lde speed, Ld	-	mi mi
on average speed, fpl	Tanc		-	
Average travel speed including passing Percent free flow speed including pass	g lane, ATSpl sing lane, PFB	Spl	- 0.0	00
Percent Time-Spent-Fol	lowing with F	Passing L	ane	
Development in the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second seco		1		
of passing lane for percent time-s Length of two-lane highway downstream	spent-followir of effective	ng, Lde length o	_ f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	lng, Ld	-	mi
Percent time-spent-following	.Ът		_	Q.
Including passing lane, rispi			Dession	-o
Level of Service and Other Perfo	ormance Measur	res with	rassing I	ane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E _	veh-h	
Bicycle Lev	vel of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	253.3
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	3.99
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co.Lit concernDate Performed3/28/2023Analysis Time PeriodPM Peak HourUniversity 137 Agency/Co. Highway Hwy 137 Road 188/Road 180 From/To Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak nour factor, rmr0.02Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 204 veh/h Opposing direction volume, Vo 322 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.3 1.5 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.971 Grade adj. factor, (note-1) fg 1.00 0.982 1.00 228 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 356 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.3 mi/h mi/h Average travel speed, ATSd 47.2

89.1

2

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Percent Free Flow Speed, PFFS

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 223 pc xe-4) BPTSFd	Or 26.9 % 36.1 40.9 %	pposing (1.1 1.0 0.994 1.00 352	o) pc/h
Level of Service and C	ther Performa	ince Measi	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	C 0.13 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 47.2 40.9 C	mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	l, Lde peed, Ld	-	mi mi
Adj. factor for the effect of passing on average speed, fpl	lane		_	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl sing lane, PFF	Spl	- 0.0	00
Percent Time-Spent-Fol	lowing with F	assing La	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect	tive lengt	 _	
Length of two-lane highway downstream the passing lane for percent time-	of effective spent-followi	length o: .ng, Ld	f _	mi
on percent time-spent-following, f	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measur	es with 1	Passing L	ane
Level of service including passing lan Peak 15-min total travel time, TT15	le, LOSpl	E 	veh-h	
Bicycle Lev	vel of Service	2		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	221.7
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	3.93
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Fax:

Phone:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Univ 137 Agency/Co. Highway Hwy 137 Road 188/Road 180 From/To Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data_____ Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak nour factor, rmr0.02Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 241 veh/h Opposing direction volume, Vo 357 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.4 1.3 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.977 Grade adj. factor, (note-1) fg 1.00 0.982 1.00 268 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 395 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h 1.2 mi/h 46.6 mi/h Adjustment for no-passing zones, fnp mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 88.0 90

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 264 pc ze-4) BPTSFd	C/h 31.8 % 34.6 45.8 %	pposing 1.1 1.0 0.994 1.00 390	(o) pc/h
Level of Service and C	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	C 0.15 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 46.6 45.8 C	mi mi mi/h
Average Travel Spee	ed with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for average Adj factor for the effect of passing	within effect travel speed of effective trage travel s	cive d, Lde speed, Ld	-	mi mi
on average speed, fpl	Tune		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl sing lane, PFB	TSpl	- 0.0	00
Percent Time-Spent-Fol	lowing with B	Passing L	ane	
Devestroom longth of two-long highway	within offort	ivo long		
of passing lane for percent time-s Length of two-lane highway downstream	pent-followir	ng, Lde length o	- f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ing, Ld	_	mi
Percent time-spent-following	.μτ		-	٥.
including passing lane, PTSEpl				5
Level of Service and Other Perfo	ormance Measur	res with	Passing I	lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	2		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	262.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.01
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
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E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co.Lit concernDate Performed3/28/2023Analysis Time PeriodPM Peak HourUniversity 137 Agency/Co. Highway Hwy 137 Road 188/Road 180 From/To Jurisdiction County Analysis Year 2035 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 247 veh/h Opposing direction volume, Vo 393 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) 1.4 PCE for trucks, ET 1.3 1.0 PCE for RVs, ER 1.0 Heavy-vehicle adj. factor, (note-5) fHV 0.977 Grade adj. factor, (note-1) fg 1.00 0.982 1.00 Grade adj. factor,(note-1) fg 1.00 275 pc/h Directional flow rate,(note-2) vi 435 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.1 mi/h 46.3 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 87.4

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Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 270 pc ce-4) BPTSFd	/h 32.2 % 31.9 44.6 %	pposing 1.0 1.00 1.000 1.00 427	(o) pc/h
Level of Service and C	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	7MT15 760	C 0.16 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 46.3 44.6 C	mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream	within effect travel speed of effective	ive , Lde	-	mi
Adj. factor for the effect of passing on average speed, fpl	lane	реец, па	_	1111
Average travel speed including passing	lane, ATSpl		-	<u>_</u>
Percent free flow speed including pass	sing lane, PFF	Spl	0.0	90
Percent Time-Spent-Fol	lowing with P	assing La	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect spent-followin	ive lengt g, Lde	th _ f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi	ng, Ld		mi
on percent time-spent-following, f Percent time-spent-following	трі		-	0
including passing lane, PTSFpl			_	No.
Level of Service and Other Perfo	ormance Measur	es with 1	Passing I	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E	veh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	268.5
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.02
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
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% Access point density 8 /mi Up/down Analysis direction volume, Vd 284 veh/h Opposing direction volume, Vo 426 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) 1.4 PCE for trucks, ET 1.2 1.0 PCE for RVs, ER 1.0 Heavy-vehicle adj. factor, (note-5) fHV 0.977 Grade adj. factor, (note-1) fg 1.00 0.988 1.00 316 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 469 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.1 mi/h 45.8 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 86.5 9

Phone: E-Mail·

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 311 pc xe-4) BPTSFd	c/h 36.4 % 29.3 48.2 %	pposing 1.0 1.0 1.000 1.00 463	(o) pc/h
Level of Service and C	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	C 0.18 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 45.8 48.2 C	mi mi mi/h
Average Travel Spee	ed with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective trage travel s	cive d, Lde speed, Ld	-	mi mi
on average speed, fpl	Talle		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl sing lane, PFE	FSpl	- 0.0	9
Percent Time-Spent-Fol	lowing with B	Passing L	ane	
		· ·] · · ·	· .	
of passing lane for percent time-s Length of two-lane highway downstream	pent-followir of effective	ng, Lde length o	f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ing, Ld	-	mi
Percent time-spent-following	Ът		_	Q.
Iowol of Commission and Other Device	manca Mara		Dogging T	0
Level of Service and Other Perio	rmance Measur	les with	rassing l	Jalle
Level of service including passing lan Peak 15-min total travel time, TT15	le, LOSpl	E _	veh-h	
Bicycle Lev	vel of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	308.7
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.09
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co.Live constantDate Performed3/28/2023Analysis Time PeriodPM Peak HourUniversity 137 Agency/Co. Highway Hwy 137 Road 188/Road 180 From/To Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak nour factor, rmr0.02Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 298 veh/h Opposing direction volume, Vo 474 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) 1.4 PCE for trucks, ET 1.2 1.0 PCE for RVs, ER 1.0 Heavy-vehicle adj. factor, (note-5) fHV 0.977 Grade adj. factor, (note-1) fg 1.00 0.988 1.00 332 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 521 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.0 mi/h mi/h Average travel speed, ATSd 45.4

85.7

00

Phone:

Percent Free Flow Speed, PFFS

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 326 pc xe-4) BPTSFd	C/h 38.8 % 26.9 49.2 %	pposing 1.0 1.0 1.000 1.00 515	(o) pc/h
Level of Service and C	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 '60	C 0.19 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 45.4 49.2 C	mi mi mi/h
Average Travel Spee	ed with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	live d, Lde speed, Ld	-	mi mi
Adj. factor for the effect of passing on average speed, fpl	lane		_	
Average travel speed including passing	lane, ATSpl		-	0
Percent free flow speed including pass	ing iane, PFE	SDT	0.0	ð
Percent Time-Spent-Fol	lowing with B	Passing L	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followir	tive leng ng, Lde	th _ f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi	ing, Ld	_	mi
on percent time-spent-following, f Percent time-spent-following	ЪΤ		-	
including passing lane, PTSFpl			-	010
Level of Service and Other Perfo	ormance Measur	res with	Passing I	ane
Level of service including passing lan Peak 15-min total travel time, TT15	ne, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	323.9
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.12
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Agency/Co. Highway Hwy 137 Road 188/Road 180 From/To Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data____ Highway class Class 1 Peak hour factor, PHF 0.94 Highway classClassIPeak hour factor, PHF0.94Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 335 veh/h Opposing direction volume, Vo 507 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) 1.3 PCE for trucks, ET 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.982 Grade adj. factor, (note-1) fg 1.00 0.988 1.00 363 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 546 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h 0.9 Adjustment for no-passing zones, fnp mi/h 45.0 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 85.0 00

Phone: E-Mail·

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.1 1.0 0.994 1.00 359 pc xe-4) BPTSFd	C/h 42.3 % 26.6 52.9 %	pposing 1.0 1.00 1.000 1.00 539	(o) pc/h
Level of Service and C	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	C 0.21 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 45.0 52.9 C	mi mi mi/h
Average Travel Spee	ed with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective trage travel s	cive d, Lde speed, Ld	-	mi mi
on average speed, fpl	Tanc		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFB	FSpl	- 0.0	00
Percent Time-Spent-Fol	lowing with F	- Passing T	ane	
of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir of effective	tive leng ng, Lde length o	th - f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-follows lane	ing, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	рΤ		_	0
including passing lane, PTSFpl			-	5
Level of Service and Other Perfo	ormance Measur	res with	Passing I	lane
Level of service including passing lar Peak 15-min total travel time, TT15	le, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	2		

Posted speed limit, Sp	
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	356.4
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.18
Bicycle LOS	D

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- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour Highway N Spruce Ave LAV Consulting From/To Acacia Ave/Sycamore Ave Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Segment length Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 480 veh/h Opposing direction volume, Vo 441 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.2 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.988 Grade adj. factor (note-1) fg 1 00 0.988 1.00 528 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 485 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.0 mi/h 44.1 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 83.2 2

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 522 pc e-4) BPTSFd	c/h 52.1 १ 28.3 66.9 १	Opposing 1.0 1.0 1.000 1.000 479	(o) pc/h
Level of Service and C	ther Performa	ance Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.31 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 44.1 66.9 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	cive d, Lde speed, Lo	- 1 -	mi mi
Adj. factor for the effect of passing on average speed, fpl	Lane		-	
Average travel speed including passing	lane, ATSpl	- Crol	-	0,
Percent free from speed including pass	ing iane, Fr	гэрт	0.0	6
Percent Time-Spent-Fol	lowing with H	Passing I	lane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir	ive leng ng, Lde length c	yth -	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	_	mi
Percent time-spent-following	bτ		-	0
including passing lane, PTSFpl			-	ŏ
Level of Service and Other Perfo	rmance Measur	res with	Passing 1	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	521.7
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.36
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Ingency/co.LAV ConsultingDate Performed3/28/2023Analysis Time PeriodPM Peak Hour + ProjectHighwayN Spruce AveFrom/To-Agency/Co. Acacia Ave/Sycamore Ave From/To Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Segment length Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 512 veh/h Opposing direction volume, Vo 481 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.988 1.00 560 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 529 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h Adjustment for no-passing zones, fnp 0.9 43.6 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 82.3 90

Phone:
Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 557 pc e-4) BPTSFd	c/h 55.3 % 26.8 69.1 %	Dpposing 1.0 1.0 1.000 1.000 523	(o) pc/h
Level of Service and C	ther Performa	ance Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.33 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 1 - 43.6 69.1 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	cive d, Lde speed, Lo	- 1 -	mi mi
on average speed, fpl	Lalle		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl ing lane, PFE	Spl	_ 0.0	00
Dercent Time-Sport-Fol	lowing with	accina T	lane	-
	LUWIII WILII E	assing 1		
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followir of effective	ive leng ng, Lde length d	yth - of	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	bτ		_	0
including passing lane, PTSFpl			_	No.
Level of Service and Other Perfo	rmance Measur	res with	Passing I	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	556.5
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.39
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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% Access point density 8 /mi Up/down Analysis direction volume, Vd 499 veh/h Opposing direction volume, Vo 458 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.2 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.988 Grade adj. factor (note-1) fg 1 00 0.988 1.00 549 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 504 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 1.0 mi/h mi/h Average travel speed, ATSd 43.8 Percent Free Flow Speed, PFFS 82.7 00

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 542 pc xe-4) BPTSFd	c/h 53.5 % 27.5 67.8 %	ppposing 1.0 1.0 1.000 1.000 498	(o) pc/h
Level of Service and C	ther Performa	ance Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	D 0.32 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 43.8 67.8 D	mi mi mi/h
Average Travel Spee	ed with Passi	ing Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective trage travel s	cive d, Lde speed, Ld	- l -	mi mi
on average speed, fpl	Lane		_	
Average travel speed including passing	lane, ATSpl		-	0
Percent free flow speed including pass	ing iane, PFE	SDT	0.0	ð
Percent Time-Spent-Fol	lowing with B	Passing I	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followir	tive leng	rth -	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi	ing, Ld	_	mi
on percent time-spent-following, f Percent time-spent-following	ЪТ		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measur	res with	Passing 1	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	le, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	2		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	542.4
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.38
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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Fax:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Ingency/co.LAV ConsultingDate Performed3/28/2023Analysis Time PeriodPM Peak Hour + ProjectHighwayN Spruce AveFrom/To-Agency/Co. Acacia Ave/Sycamore Ave From/To Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Segment length Terrain type Grade: Length - mi % No-passing zones 20 % - % Access point density 8 /mi Up/down Analysis direction volume, Vd 531 veh/h Opposing direction volume, Vo 498 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.988 1.00 581 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 548 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.9 mi/h 43.3 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 81.8 00

Phone:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 577 pc/ ce-4) BPTSFd 5 2 7	Op 6.8 % 6.0 0.2 %	posing (1.0 1.00 1.000 1.00 541	o) pc/h
Level of Service and C	ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 0 '60 0 1 1 1	.34 v .0 v 700 v 700 v 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) From above)	ane, Lu	0.0 - 43.3 70.2 D	mi mi mi/h
Average Travel Spee	d with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl Average travel speed including passing	lane, ATSpl		-	
Percent free flow speed including pass	ing lane, PFFS	pl	0.0	00
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ve lengt , Lde	h _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing on percent time-spent-following, f	of effective 1 spent-followin lane	ength of g, Ld	-	mi
Percent time-spent-following including passing lane, PTSFpl	1		_	90
Level of Service and Other Perfo	ermance Measure	s with P	assing T	ane
Level of service including passing lan Peak 15-min total travel time, TT15	ne, LOSpl E	V	eh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	577.2
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.41
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Ingency/co.LAV ConsultinDate Performed3/28/2023Analysis Time PeriodPM Peak HourHighwayN Spruce AveFrom/To-Agency/Co. From/To Acacia Ave/Sycamore Ave Jurisdiction County Analysis Year 2035 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Segment length Terrain type Grade: Length - mi % No-passing zones 20 % - % Access point density 8 /mi Up/down Analysis direction volume, Vd 605 veh/h Opposing direction volume, Vo 556 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 662 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 608 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.8 mi/h 42.4 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 80.0 00

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 658 pc e-4) BPTSFd	c/h 60.5 22.7 72.3	Opposing (1.0 1.0 1.000 1.000 604 %	pc/h
Level of Service and C	ther Performa	ance Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.39 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 42.4 72.3 D	mi mi mi/h
Average Travel Spee	d with Pass	ing Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective rage travel s lane	cive d, Lde speed, Lo	- d -	mi mi
on average speed, fpl			-	
Percent free flow speed including passing	ing lane, PF	FSpl	0.0	00
Percent Time-Spent-Fol	lowing with H	Passing 1	Lane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect	tive leng	gth _	mi
the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-follow: lane	ing, Ld	- -	mi
Percent time-spent-following including passing lane. PTSFpl	Б т		_	8
Level of Service and Other Perfo	rmance Measur	res with	Passing T	ane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	657.6
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.48
Bicycle LOS	D

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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Fax:

Phone:

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/co.LAV ConsultingDate Performed3/28/2023Analysis Time PeriodPM Peak Hour + ProjectHighwayN Spruce Ave Agency/Co. Acacia Ave/Sycamore Ave From/To Jurisdiction County Analysis Year 2035 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 640 veh/h Opposing direction volume, Vo 596 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 700 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 652 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h 53.0 mi/h Free-flow speed, FFSd Adjustment for no-passing zones, fnp 0.7 mi/h 41.8 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 78.9 90

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 696 pc/H ce-4) BPTSFd 63 21 74	0p] 3.5 % 1.0 4.4 %	posing 1.0 1.00 1.000 1.00 648	(o) pc/h
Level of Service and C	ther Performanc	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 0. 00 00 00 11 17 17	. 41 v .0 v 700 v 700 v 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing lass, Lpl) From above)	ane, Lu	0.0 - 41.8 74.4 D	mi mi mi/h
Average Travel Spee	ed with Passing	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effective e travel speed, of effective erage travel spe lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl			-	
Percent free flow speed including passing	sing lane, PFFSp	ol	0.0	00
Percent Time-Spent-Fol	lowing with Pas	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effective pent-following,	ve lengtl Lde	n _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective le spent-following lane	ength of g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measures	s with Pa	assing :	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl E -	V	eh-h	
Bicycle Lev	el of Service _			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	695.7
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.51
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour Highway N Spruce Ave LAV Consulting From/To Acacia Ave/Sycamore Ave Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Segment length Terrain type Grade: Length - mi % No-passing zones 20 % - % Access point density 8 /mi Up/down Analysis direction volume, Vd 726 veh/h Opposing direction volume, Vo 670 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 794 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 733 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.6 mi/h 40.6 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 76.6 90

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 789 pc e-4) BPTSFd	/h 68.6 % 18.6 78.3 %	pposing 1.0 1.0 1.000 1.00 728	(o) pc/h
Level of Service and C	ther Performa	nce Meası	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.46 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 40.6 78.3 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective trage travel s	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	rane		-	
Average travel speed including passing Percent free flow speed including pass	lane, ATSpl	Spl	- 0.0	8
Dercent Time-Spent-Fol	lowing with P	assing T	ane	-
	Lowing with F			
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin of effective	ive lengt g, Lde length o:	th _ f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	ЪТ		_	
including passing lane, PTSFpl			-	50
Level of Service and Other Perfo	rmance Measur	es with 1	Passing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E 	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	789.1
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.57
Bicycle LOS	E

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/co.LAV ConsultingDate Performed3/28/2023Analysis Time PeriodPM Peak Hour + ProjectHighwayN Spruce Ave Agency/Co. Acacia Ave/Sycamore Ave From/To Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 748 veh/h Opposing direction volume, Vo 710 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 818 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 776 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.5 mi/h 40.1 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 75.7 00

Phone:

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.000 813 pc xe-4) BPTSFd	/h 69.3 % 17.9 78.5 %	pposing (1.0 1.0 1.000 1.00 772	pc/h
Level of Service and C	ther Performa	nce Measu	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	D 0.48 0 v 0.0 v 1700 v 1700 v 1700 v	reh-mi reh-mi reh-h reh/h reh/h reh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 40.1 78.5 D	mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream	within effect travel speed of effective	ive , Lde	-	mi
Adj. factor for the effect of passing	lane	peed, na		
Average travel speed including passing	lane, ATSpl		-	
Percent free flow speed including pass	ing lane, PFF	Spl	0.0	00
Percent Time-Spent-Fol	lowing with P	assing La	ine	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followin	ive lengt g, Lde	.h 	mi
the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followi lane	ng, Ld	_	mi
on percent time-spent-following, f Percent time-spent-following	pl		_	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measur	es with P	assing I	ane
Level of service including passing lar Peak 15-min total travel time, TT15	le, LOSpl	E - V	reh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	813.0
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.59
Bicycle LOS	Ε

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 4. For the analysis direction only.
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Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour Agency/Co. Highway N Spruce Ave From/To Hwy 65/Acacia Ave Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 407 veh/h Opposing direction volume, Vo 440 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) 1.3 PCE for trucks, ET 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.982 Grade adj. factor (note-1) fg 1 00 0.988 1.00 451 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 484 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h

Adjustment for no-passing zones, fnp1.0mi/hAverage travel speed, ATSd44.7mi/hPercent Free Flow Speed, PFFS84.4%

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.000 442 pc te-4) BPTSFd	c/h 46.9 १ 30.1 61.4 १	Dpposing 1.0 1.0 1.000 1.000 478	(o) pc/h
Level of Service and C)ther Performa	ance Meas	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	VMT15 260	D 0.26 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 44.7 61.4 D	mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane_		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective erage travel s lane	cive d, Lde speed, Lo	- 1 -	mi mi
on average speed, fpl Average travel speed including passing	lane, ATSpl		-	
Percent free flow speed including pass	sing lane, PFF	Spl	0.0	90
Percent Time-Spent-Fol	lowing with F	Passing I	lane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect pent-followin	tive leng ng, Lde	gth -	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective spent-followi lane	length c .ng, Ld	of _	mi
on percent time-spent-following, f	fpl		-	
including passing lane, PTSFpl			_	010
Level of Service and Other Perfo	ormance Measur	es with	Passing	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E -	veh-h	
Bicycle Lev	vel of Service	2		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	442.4
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.28
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Highway N Spruce Ave From/To Hwy 65/Acacia Ave Jurisdiction County Analysis Year 2023 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak nour factor, rmr0.02Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 445 veh/h Opposing direction volume, Vo 489 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.2 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.988 Grade adj. factor, (note-1) fg 1.00 0.988 1.00 490 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 538 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h Adjustment for no-passing zones, fnp 0.9 mi/h 44.1 mi/h Average travel speed, ATSd

83.2

2

Fax:

Phone:

Percent Free Flow Speed, PFFS

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 484 pc/ .e-4) BPTSFd 5 2 6	0.5 % 7.9 3.8 %	pposing 1.0 1.0 1.000 1.000 532	(o) pc/h
Level of Service and C	ther Performan	ce Measu	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 0 0 0 0 0 0 1 1 1	28 20 10 10 10 10 10 10 10 10 10 1	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) rom above)	ane, Lu	0.0 - 44.1 63.8 D	mi mi mi/h
Average Travel Spee	d with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	Lde Lde Deed, Ld	-	mi mi
on average speed, fpl			-	
Percent free flow speed including passing	ing lane, PFFS	pl	0.0	90
Percent Time-Spent-Fol	lowing with Pa	ssing La	ine	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ve lengt , Lde	:h _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective l spent-followin lane	ength of g, Ld	_	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measure	s with B	Passing	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl E -		veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	483.7
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.32
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour Agency/Co. Highway N Spruce Ave From/To Hwy 65/Acacia Ave Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 423 veh/h Opposing direction volume, Vo 457 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.2 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.988 Grade adj. factor (note-1) fg 1 00 0.988 1.00 465 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 503 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h

Adjustment for no-passing zones, fnp 1.0 mi/h mi/h Average travel speed, ATSd 44.5 Percent Free Flow Speed, PFFS 84.0 90

Phone:

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 460 pc xe-4) BPTSFd	/h 48.3 % 29.3 62.4 %	pposing 1.0 1.0 1.000 1.00 497	pc/h
Level of Service and C	ther Performa	nce Measu	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	D 0.27 0 v 0.0 v 1700 v 1700 v 1700 v	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) from above)	lane, Lu	0.0 - 44.5 62.4 D	mi mi mi mi/h
Average Travel Spee	ed with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective trage travel s	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	lane		_	
Average travel speed including passing	lane, ATSpl	Cm 1	-	Ο.
rescent free from speed including pass	, ref	гда	0.0	6
Percent Time-Spent-Fol	lowing with P.	assing La	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin	ive lengt g, Lde length of	2h 	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi	ng, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	ЪТ		-	
including passing lane, PTSFpl			-	010
Level of Service and Other Perfo	ormance Measur	es with B	Passing I	ane
Level of service including passing lan Peak 15-min total travel time, TT15	le, LOSpl	E - \	veh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	459.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.30
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
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- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Directional Two-Lane Highway Segment Analysis Analyst BMB Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Highway N Spruce Ave From/To Hwy 65/Acacia Ave Jurisdiction County Analysis Year 2025 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak nour factor, rmr0.02Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 461 veh/h Opposing direction volume, Vo 506 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.2 1.2 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.988 Grade adj. factor (note-1) fg 1 00 0.988 1.00 507 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 557 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h 0.9 Adjustment for no-passing zones, fnp 43.9 mi/h Average travel speed, ATSd

82.8

9

Phone: E-Mail:

Percent Free Flow Speed, PFFS

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 501 pc/ ce-4) BPTSFd 5 2 6	Or 61.6 % 27.2 54.6 %	pposing 1.0 1.00 1.000 1.00 550	(o) pc/h
Level of Service and C	ther Performan	ice Measi	ires	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	E 0 'MT15 0 '60 0 C 1 1 1 1).29).0 .700 .700 .700 .700 .700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	.ane, Lu	0.0 - 43.9 64.6 D	mi mi mi/h
Average Travel Spee	d with Passin	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	Lde Lde Deed, Ld	-	mi mi
on average speed, fpl	lane ATSol		-	
Percent free flow speed including passing	ing lane, PFFS	Spl	0.0	00
Percent Time-Spent-Fol	lowing with Pa	issing La	ane	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti	ve lengt , Lde	th _	mi
the passing lane for percent time- Adj. factor for the effect of passing	of effective f spent-followin lane	ig, Ld	_ _	mi
on percent time-spent-following, f Percent time-spent-following	рГ		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	rmance Measure	es with B	Passing 1	Lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl E -	- 7	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	501.1
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.34
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Env concern Date Performed 3/28/2023 Analysis Time Period PM Peak Hour Agency/Co. Highway N Spruce Ave From/To Hwy 65/Acacia Ave Jurisdiction County Analysis Year 2035 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Segment length Terrain type Grade: Length - mi % No-passing zones 20 % - % Access point density 8 /mi Up/down Analysis direction volume, Vd 512 veh/h Opposing direction volume, Vo 555 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 560 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 607 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM Observed total demand, (note-3) V veh/h Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h

Adjustment for no-passing zones, fnp 0.8 mi/h 43.2 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 81.5 8

Phone:

Fax:

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 557 pc/ ce-4) BPTSFd 5 2 6	Op h 5.2 % 4.9 7.2 %	posing 1.0 1.0 1.000 1.00 603	(o) pc/h
Level of Service and C	ther Performan	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 0 0 0 0 0 0 1 1 1 1	.33 v v .0 v 700 v 700 v 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing l s, Lpl) from above)	ane, Lu	0.0 - 43.2 67.2 D	mi mi mi/h
Average Travel Spee	ed with Passin	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effecti travel speed, of effective rage travel sp lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl			-	
Average travel speed including passing Percent free flow speed including pass	ing lane, ATSpl	pl	- 0.0	00
Percent Time-Spent-Fol	lowing with Pa	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effecti pent-following	ve lengt , Lde	h _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective l spent-followin lane	ength of g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	00
Level of Service and Other Perfo	ormance Measure	s with P	assing 1	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl E -	V	eh-h	
Bicycle Lev	vel of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	556.5
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.39
Bicycle LOS	D

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Highway N Spruce Ave From/To Hwy 65/Acacia Ave Jurisdiction County 2035 Analysis Year Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClass1Peak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length mi % No-passing zones 20 %
% Access point density 8 /mi Up/down Analysis direction volume, Vd 550 veh/h Opposing direction volume, Vo 604 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 601 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 660 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h 53.0 mi/h Free-flow speed, FFSd Adjustment for no-passing zones, fnp 0.7 mi/h 42.5 mi/h Average travel speed, ATSd

80.2

00

Fax:

Phone:

Percent Free Flow Speed, PFFS
Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 598 pc ce-4) BPTSFd	c/h 58.3 22.8 69.2	Opposing 1.0 1.00 1.000 1.000 657 %	(o) pc/h
Level of Service and C	ther Performa	ance Mea	sures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	YMT15 '60	D 0.35 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing I	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl mom above)	lane, L	0.0 - 42.5 69.2 D	mi mi mi/h
Average Travel Spee	ed with Pass	ing Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effect travel speed of effective rage travel s lane	tive d, Lde speed, L	- .d -	mi mi
on average speed, fpl	lano Amgni		-	
Percent free flow speed including passing	sing lane, PFI	FSpl	0.0	00
Percent Time-Spent-Fol	lowing with H	Passing	Lane	
Downstream length of two-lane highway of passing lane for percent time-s	within effect	tive len ng, Lde	 gth _	
Length of two-lane highway downstream	of effective	length	of	
Adj. factor for the effect of passing on percent time-spent-following, f	lane pl	ING, La	-	ΠL
Percent time-spent-following including passing lane, PTSFpl			_	010
Level of Service and Other Perfo	ormance Measu	res with	Passing 1	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl	E -	veh-h	
Bicycle Lev	el of Service	e		

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	597.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.43
Bicycle LOS	D

Notes:

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
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Phone: Fax: E-Mail: Directional Two-Lane Highway Segment Analysis Analyst BMB LAV Consulting Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour Agency/Co. Highway N Spruce Ave From/To Hwy 65/Acacia Ave Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 619 veh/h Opposing direction volume, Vo 668 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 677 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 730 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h

Adjustment for no-passing zones, fnp0.6mi/hAverage travel speed, ATSd41.5mi/hPercent Free Flow Speed, PFFS78.3%

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.00 1.000 1.00 673 pc/H ce-4) BPTSFd 63 19 73	0p 3.9 % 9.8 3.4 %	posing 1.0 1.0 1.000 1.00 726	(o) pc/h
Level of Service and C	ther Performanc	ce Measu	res	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, W Peak-hour vehicle-miles of travel, VM Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	D 01 060 0 0 1 1 1 1 1	.40 v v .0 v 700 v 700 v 700 v	eh-mi eh-mi eh-h eh/h eh/h eh/h	
Passing I	ane Analysis			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing lats, Lpl) From above)	ane, Lu	0.0 - 41.5 73.4 D	mi mi mi/h
Average Travel Spee	ed with Passing	g Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave Adj. factor for the effect of passing	within effective of effective erage travel spe lane	ve Lde eed, Ld	-	mi mi
on average speed, fpl	lana Ameni		_	
Percent free flow speed including passing	sing lane, PFFS	pl	0.0	00
Percent Time-Spent-Fol	lowing with Pas	ssing La	ne	
Downstream length of two-lane highway of passing lane for percent time-s	within effective pent-following,	ve lengt , Lde	h _	mi
Length of two-lane highway downstream the passing lane for percent time- Adj. factor for the effect of passing	of effective le spent-following lane	ength of g, Ld	-	mi
on percent time-spent-following, f Percent time-spent-following	pl		-	
including passing lane, PTSFpl			-	010
Level of Service and Other Perfo	ormance Measures	s with P	assing	Lane
Level of service including passing lar Peak 15-min total travel time, TT15	ne, LOSpl E -	V	eh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	672.8
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.49
Bicycle LOS	D

Notes:

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Phone: E-Mail:

Fax:

Directional Two-Lane Highway Segment Analysis Analyst BMB Agency/Co. Date Performed 3/28/2023 Analysis Time Period PM Peak Hour + Project Highway N Spruce Ave LAV Consulting From/To Hwy 65/Acacia Ave Jurisdiction County Analysis Year 2045 Description TIS for Commercia Development Input Data Highway class Class 1 Peak hour factor, PHF 0.92 Highway classClassIPeak hour factor, PHF0.92Shoulder width6.0ft% Trucks and buses6%Lane width12.0ft% Trucks crawling0.0%Segment length0.0miTruck crawl speed0.0mi/hrTerrain typeLevel% Recreational vehicles4% Terrain type Grade: Length - mi % No-passing zones 20 - % Access point density 8 00 Up/down /mi Analysis direction volume, Vd 657 veh/h Opposing direction volume, Vo 717 veh/h Average Travel Speed Direction Analysis(d) Opposing (o) PCE for trucks, ET 1.1 1.1 1.0 1.0 PCE for RVs, ER Heavy-vehicle adj. factor, (note-5) fHV 0.994 Grade adj factor (note-1) fg 1 00 0.994 1.00 718 pc/h Grade adj. factor,(note-1) fg 1.00 Directional flow rate,(note-2) vi 784 pc/h Free-Flow Speed from Field Measurement: mi/h Field measured speed, (note-3) S FM veh/h Observed total demand, (note-3) V Estimated Free-Flow Speed: Base free-flow speed, (note-3) BFFS 55.0 mi/h Adj. for lane and shoulder width, (note-3) fLS 0.0 mi/h Adj. for access point density, (note-3) fA 2.0 mi/h Free-flow speed, FFSd 53.0 mi/h mi/h Adjustment for no-passing zones, fnp 0.5 40.9 mi/h Average travel speed, ATSd Percent Free Flow Speed, PFFS 77.1 2

Direction PCE for trucks, ET PCE for RVs, ER Heavy-vehicle adjustment factor, fHV Grade adjustment factor, (note-1) fg Directional flow rate, (note-2) vi Base percent time-spent-following, (not Adjustment for no-passing zones, fnp Percent time-spent-following, PTSFd	Analysis(d) 1.0 1.0 1.000 1.00 714 pc e-4) BPTSFd	Op 65.9 % 18.8 74.9 %	pposing 1.0 1.0 1.000 1.00 779	(o) pc/h
Level of Service and O	ther Performa	nce Meas	ures	
Level of service, LOS Volume to capacity ratio, v/c Peak 15-min vehicle-miles of travel, V Peak-hour vehicle-miles of travel, VMT Peak 15-min total travel time, TT15 Capacity from ATS, CdATS Capacity from PTSF, CdPTSF Directional Capacity	MT15 60	D 0.42 0 0.0 1700 1700 1700	veh-mi veh-mi veh-h veh/h veh/h veh/h	
Passing L	ane Analysis_			
Total length of analysis segment, Lt Length of two-lane highway upstream of Length of passing lane including taper Average travel speed, ATSd (from above Percent time-spent-following, PTSFd (f Level of service, LOSd (from above)	the passing s, Lpl) rom above)	lane, Lu	0.0 - 40.9 74.9 D	mi mi mi/h
Average Travel Spee	d with Passi	ng Lane		
Downstream length of two-lane highway length of passing lane for average Length of two-lane highway downstream length of the passing lane for ave	within effect travel speed of effective rage travel s	ive , Lde peed, Ld	-	mi mi
on average speed, fpl	Talle		-	
Average travel speed including passing	lane, ATSpl	'Cnl	-	0,
	ing iane, PFF	°Ът	0.0	-0
Percent Time-Spent-Fol	lowing with P	assing La	ane	
Downstream length of two-lane highway of passing lane for percent time-s Length of two-lane highway downstream	within effect pent-followin of effective	ive lengt g, Lde length o	th - f	mi
the passing lane for percent time- Adj. factor for the effect of passing	spent-followi lane	ng, Ld	-	mi
Percent time-spent-following	bτ		-	0
including passing lane, PTSFpl			-	5
Level of Service and Other Perfo	rmance Measur	es with 1	Passing I	lane
Level of service including passing lan Peak 15-min total travel time, TT15	e, LOSpl	E 	veh-h	
Bicycle Lev	el of Service			

Posted speed limit, Sp	55
Percent of segment with occupied on-highway parking	0
Pavement rating, P	3
Flow rate in outside lane, vOL	714.1
Effective width of outside lane, We	24.00
Effective speed factor, St	4.79
Bicycle LOS Score, BLOS	4.52
Bicycle LOS	Ε

Notes:

- 1. Note that the adjustment factor for level terrain is 1.00, as level terrain is one of the base conditions. For the purpose of grade adjustment, specific dewngrade segments are treated as level terrain.
- 2. If vi (vd or vo) >= 1,700 pc/h, terminate analysis-the LOS is F.
- 3. For the analysis direction only and for v>200 veh/h.
- 4. For the analysis direction only.
- 5. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

Appendix "C" Additional Documents

California Department of Transportation

DISTRICT 6 OFFICE 1352 WEST OLIVE AVENUE | P.O. BOX 12616 | FRESNO, CA 93778-2616 (559) 840-6066 | FAX (559) 488-4195 | TTY 711 www.dot.ca.gov

June 15, 2023



TUL-65-30.30 TIS TRAVEL CENTER (5) CEDAR AVENUE, LINDSAY, CA GTS #: <u>36146</u>

SENT VIA EMAIL: brent@lavpinnacle.com

Mr. Brent Barenberg LAV // Pinnacle Consulting & Engineering Services 12418 Rosedale Highway, Suite B Bakersfield, CA 93312

Dear Mr. Barenberg:

Caltrans has completed review the Traffic Impact Study (TIS) dated April 20, 2023, for a Travel Center which proposes a convenience store, 2 quick serve restaurants (QSR) with drive-thru, a gas fueling canopy with 8 pumps (16 dispensers), and a diesel fueling area with 6 pumps (12 dispensers) (Project). The Project site is located on northeast corner of the State Route (SR) 65 intersection with Cedar Avenue in the City of Lindsay, Tulare County.

Caltrans provides the following comments consistent with the State's smart mobility goals that support a vibrant economy and sustainable communities:

- 1. On page 13, of the TIS, the last paragraph states "Caltrans' policy sets a limit ...pass-by and captured to 25 percent." The Caltrans Guide for the Preparation of Traffic Impact Studies states that a reduction of more than 15% for "pass-by" as well as 5% for "internal capture" trips shall be justified and must be discussed in the TIS. Please provide examples and discussion in the TIS, of similar development sites, as a part of the justification for a reduction of more than 15%.
- Table 2, on page 14, under the calculated trips generation, indicates reduction for "pass-by" trips was computed at 20% which exceeds the limits for "pass-by" trips set by Caltrans in the Traffic Impact Study Guide (This is also stated at the top of page 41). Please provide examples/discussion of similar development sites, as justification for a reduction of more than 15%.
- 3. Please correct, page 15, second paragraph under "Trip Simulation", where it states, "Based on information provided by Kern Council of Government ...". This project is in Tulare County and should be changed to "Tulare County Council of Government...".

Mr. Brent Barenberg - TIS June 15, 2023 Page 2

- 4. Please correct, page 32, second paragraph, where it states "...including the City of Bakersfield and the County of Kern." This project is in Tulare County and should indicate "...including the City of Lindsay and the County of Tulare."
- 5. Please verify and correct, Table 9: Project Pro-Rata Share, on page 38. The year of the Pro-Rata Share is listed as year 2042, however the analysis year (future life cycle of the project) in the report is shown as year 2045.
- 6. Caltrans does not disagree with the calculated Pro-Rata Share in the Table 9. However, Caltrans has partnered with the County of Tulare to design and construct the re-alignment of SR 65, which is west of the current existing SR 65 alignment and is tentatively scheduled to start construction in 2034.
- 7. As a point of information, the new SR 65 re-alignment project will include the construction of a Roundabout at the SR 65 and Cedar Avenue intersection. As part of the SR 65 re-alignment project, Cedar Avenue would be terminated north of SR 65 and realigned to the East to connect with the new alignment of Oak Avenue. The existing W. Tulare Road will be closed or re-aligned when the roundabout is constructed. For further information, it is <u>recommended to contact</u> Caltrans Project Manager, Mohamad Annan at (559) 270-4448 or <u>mohamad.annan@dot.ca.gov</u>
- 8. Caltrans anticipates that the recommended signalization of the SR 65 / Cedar Avenue intersection may need to be <u>re-evaluated</u> in the future. Caltrans Traffic Operations Directive 13-02 requires the analysis of any new intersection control, to evaluate the most effective traffic control strategies (whether signal, multi-stop or yield or roundabout control) for an intersection within the State's right-of-way.
- 9. Regarding the site plan for the proposed development, Layout A-1, on page 43:
 - a) It is we request that structures (above-ground or underground) like underground storage fuel tanks or monument signage be installed outside of the footprint of the future roundabout at the Cedar Avenue intersection. The Project developer understands that any improvements, upon, over, and across said real property within the roundabout footprint shall be removed at Project developer's expense, when construction of the roundabout starts.
 - b) It is requests that all truck traffic to enter/exit the Project site via the Cedar Avenue driveway which should be designed for truck traffic movements. Therefore, it is recommended that the SR 65 / Cedar intersection be re-evaluated by the TIS for truck turning movements.
 - c) Please be advised that the westbound to northbound right turn lane shall be designed to meet the Caltrans standards specified in the Highway Design Manual (HDM Index 405.3).

- d) A 6-foot bike lane shall also be installed between the thru-lane and the right-turn lane as required by the Caltrans HDM Index 403.6.(1). Additional safety measures must be considered, during the design phase, to facilitate safe operations for motoring public, especially at the proposed access point (driveway) on SR 65.
- 10. On page 45, Figure 2: 2023 traffic volume/count, please verify there is no turning volumes (in/out to/from SR 65) at Cedar Avenue during peak hours. This is the same for all future year analysis (without project scenario).
- 11. Please provide the traffic signal warrant sheets (calculations) for the unsignalized intersections listed in Table 8.
- 12. For Appendix B, regarding printouts/outputs for the LOS calculations:
 - a) For the signalized analysis, the peak hour factor (PHF) is set at 1.0. Please verify that the PHF calculation is correct.
 - b) For the multi-lane highway analysis, the access point density is set at zero. Please verify that the correct value for access density is being used.
- 13. Caltrans requires the Project to construct highway frontage improvements along SR 65 including but not limited to roadway pavement improvements, curb, gutter, sidewalks, streetlights and drainage facilities.
- 14. Caltrans requires a minimum of a 6-foot sidewalk (10-foot preferred), measured from the back of the curb.
- 15. Dust control measures shall be implemented on the site in a manner to prevent dust from entering the State right-of-way.
- 16. No water from the proposed project shall flow into the State right-of-way without approval from the District Hydraulic Engineer.
- 17. Caltrans recommends the Project install sidewalks and streetlights at the SR 65 and Cedar Avenue intersection and along Cedar Avenue for pedestrian security and safe operations of the intersection.
- 18. All proposed landscaping plans shall meet current standards as determined by the District Landscape Architect. Proposed landscaping adjacent to driveways needs to be low growing, less than two feet in height, due to sight distance concerns. All features of landscaping shall be evaluated for type, location and site visibility conflicts during the encroachment review process. All permits for landscaping in conventional highway right-of-way must be accompanied by a "District" approved maintenance agreement obligating a local agency or the permittee to maintaining the

landscaping. Said maintenance agreement must accompany and be approved prior to issuance of the landscape permit. Proposed landscape projects in access control rights-of-way require an exception process, and approval is subject to the Headquarters Departmental approval process.

- 19. The sidewalk, streetlights and any landscaping shall be maintained per a "District 6" approved maintenance agreement.
- 20. As a point of information, any work completed in the State's right-of-way will require a Caltrans encroachment permit. An encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the State highway rights-of-way. Activity and work planned in the State right-of-way shall be performed to State standards and specifications, at no cost to the State. Engineering plans, calculations, specifications, and reports (documents) shall be stamped and signed by a licensed Engineer or Architect. Engineering documents for encroachment permit activity and work in the State right-of-way may be submitted using English Units. The Permit Department and the Environmental Planning Branch will review and approve the activity and work in the State right-of-way before an encroachment permit is issued. The Streets and Highways Code Section 670 provides Caltrans discretionary approval authority for projects that encroach on the State Highway System. Encroachment permits will be issued in accordance with Streets and Highway Codes, Section 671.5, "Time Limitations." Encroachment permits do not run with the land. A change of ownership requires a new permit application. Only the legal property owner or his/her authorized agent can pursue obtaining an encroachment permit.
- 21. Prior to an encroachment permit application submittal, the project proponent is required to schedule a "Pre-Submittal" meeting with District 6 Encroachment Permit Office. To schedule this meeting, please call the Caltrans Encroachment Permit Office District 6: 1352 W. Olive, Fresno, CA 93778, **at (559) 383-5047 or (559) 383-5235**.
- 22. Please review the encroachment permit application required document checklist at: <u>https://forms.dot.ca.gov/v2Forms/servlet/FormRenderer?frmid=TR0402&distpath=MAOT</u> <u>O&brapath=PERM</u>.
- 23. Please also review the encroachment permit application processing checklist at: <u>https://dot.ca.gov/-/media/dot-media/programs/traffic-</u> <u>operations/documents/encroachment-permits/tr-0416-applicable-review-process-</u> <u>checklist.pdf</u>.
- 24. Any advertising signs within the immediate area outside the State right-of-way need to be cleared through the Caltrans Division of Traffic Operations, Office of Outdoor Advertising. The project proponent must construct and maintain the advertising signs without access to the State Routes. Please contact the Outdoor Advertising Program, P.O. Box 942874, MS-36, Sacramento, CA 94274-001, by email at <u>ODA@dot.ca.gov</u> or at

Mr. Brent Barenberg - TIS June 15, 2023 Page 5

> (916) 654-6473 for additional information or to obtain a sign permit application. Additional information on Caltrans Outdoor Advertising Permit requirement may also be found on the Internet at <u>http://dot.ca.gov/programs/traffic-operations/oda</u>.

If you have any other questions, please call David Deel, Associate Transportation Planner at (559) 981-1041.

Sincerely,

Lorena Mendibles

Ms. Lorena Mendibles, Branch Chief, Transportation Planning – South

LAV//PINNACLE *Consulting & Engineering Services Planning – Engineering – Surveying – Project Management*

August 14, 2023

Ms. Lorena Medibles, Branch Chief Transportation Planning, - South California Department of Transportation – District 6 Office 1352 West Olive Avenue, P.O. Box 12616 Fresno, California 93778-2316

RE: Travel Center TUL-6.5-30.30, Cedar Avenue, Lindsay – Response to Traffic Impact Study Review – Caltrans Letter of 6-15-23

Dear Ms. Mendibles:

This letter is in response to your letter of June 15, 2023, to Mr. Brent Barenberg, LAV/Pinnacle Engineering, in which you provided a review and comments for the referenced traffic impact study (TIS). Thank you for your prompt review of the TIS.

In addition to review of the TIS, your letter of June 15th included numerous Caltrans design, construction, and landscaping requirements. This letter and the attached revised TIS can only address comments related to the TIS. Compliance with Caltrans' site design, landscaping, erosion, dust control, and drainage criteria can only be demonstrated with submission of improvement plans. However, the full range of improvements can only be determined once the TIS is approved. With this submittal, we are seeking approval of the TIS from your office.

In the following, I have reiterated each comment from your letter of June 15th, and provided our responses:

Comment 1: On page 13, of the TIS, the last paragraph states "Caltrans' policy sets a limit ...pass-by and captured to 25 percent." The Caltrans Guide for the Preparation of Traffic Impact Studies states that a reduction of more than 15% for "pass-by" as well as 5% for "internal capture" trips shall be justified and must be discussed in the TIS. Please provide examples and discussion in the TIS, of similar development sites, as a part of the justification for a reduction of more than 15%.

Response to Comment No. 1: Given comments no. 1 and 2 are of a similar nature, we have provided a combined response to both comments: Please see our response that follows Comment No. 2.

Comment 2: Table 2, on page 14, under the calculated trips generation, indicates reduction for "pass-by" trips was computed at 20% which exceeds the limits for "pass-by" trips set by Caltrans in the Traffic Impact Study Guide (This is also stated at the top of page 41). Please provide examples/discussion of similar development sites, as justification for a reduction of more than 15%.

Consulting & Engineering Services Planning – Engineering – Surveying – Project Management

Response to Comment No. 1 and 2: Our office has specialized in the development of truck stops, gas stations with convenience markets and quick serve restaurants. These sites also often include specialty retail stores. As in the referenced project, these facilities are typically located along major arterials, thoroughfares, expressways, and freeways. The Project itself is located at the intersection of State Route (SR) 65. South of the Project, much of SR 65 is classified as an expressway, but it downgrades to a rural two-lane highway in the vicinity of Lindsay. Nevertheless, SR 65 carries a significant amount of traffic bound for central valley locations.

Having been involved in so many similar projects, including preparation of traffic impact studies (TIS), we have performed numerous driveway surveys of like projects. These surveys have been performed at all hours to include peak and non-peak periods. As in the case of every project, we perform a driveway survey at the nearest similar facility. As discussed in page 8 of the Project TIS, without exception, these surveys all indicated well over 90 percent of trips to these facilities are "side trips", being part of the principal trip to a destination other than the project. If the project was "sited" along a major thoroughfare, our surveys revealed over 90 percent of trips were "passbys". If the project was at or near a freeway interchange, our surveys revealed the majority of trips were "diverted link" trips. In either scenario, again without exception, less than 2 percent of trips to these projects were primary trips, being mostly employees.

As I am sure you are aware, current editions of the ITE Manual do not include data or case studies for "pass-by" and "capture". However, past editions provided numerous studies for similar projects and resulting rates ranging from 58% to 90%, and 15% to 38% for "pass-by" and "capture", respectively.

Given our own research, as well as that by other reputable sources, we have no doubt that the 20 percent used in this study for the combined effects of "pass-by" and "capture", is extremely conservative.

Comment 3: Please correct, page 15, second paragraph under "Trip Simulation", where it states, "Based on information provided by Kern Council of Government ...". This project is in Tulare County and should be changed to "Tulare County Council of Government...".

Response to Comment No. 3: The information in the report was in fact provided by the Kern Council of Governments (KernCOG). Said information only relates to average trip length. KernCOG maintains a traffic simulation model for Kern County, and we have not found an agency in Tulare County providing same. Since central Lindsay is about 1.5 miles from the Project, and the majority of the trips are "pass-bys", using 4 miles for an average trip assimilation length is considered conservative. Actual average trip lengths for gas or convenience items are likely less than the 4 miles used in the study.

Comment 4: Please correct, page 32, second paragraph, where it states "...including the City of Bakersfield and the County of Kern." This project is in Tulare

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County and should indicate "...including the City of Lindsay and the County of Tulare."

Response to Comment No. 4: The correction has been made in the revised copy, attached and dated August 14, 2023.

Comment 5: Please verify and correct, Table 9: Project Pro-Rata Share, on page 38. The year of the Pro-Rata Share is listed as year 2042, however the analysis year (future life cycle of the project) in the report is shown as year 2045.

Response to Comment No. 5: The correction has been made in the revised copy, attached, and dated August 14, 2023.

Comment 6: Caltrans does not disagree with the calculated Pro-Rata Share in the Table 9. However, Caltrans has partnered with the County of Tulare to design and construct the re-alignment of SR 65, which is west of the current existing SR 65 alignment and is tentatively scheduled to start construction in 2034.

Response to Comment No. 6: Comment noted.

Comment 7: As a point of information, the new SR 65 re-alignment project will include the construction of a Roundabout at the SR 65 and Cedar Avenue intersection. As part of the SR 65 re-alignment project, Cedar Avenue would be terminated north of SR 65 and realigned to the East to connect with the new alignment of Oak Avenue. The existing W. Tulare Road will be closed or re-aligned when the roundabout is constructed. For further information, it is *recommended to contact* Caltrans Project Manager, Mohamad Annan at (559) 270-4448 or mohamad.annan@dot.ca.gov

Response to Comment No. 7: As recommended I spoke with Mr. Annan, who participated in our conference call months ago, and he has seen the site plan for the Project. Mr. Annan indicated that the Project Report for the SR 65 realignment would be completed in about 6 weeks, at which time a more "final" drawing of the realignment will be available. However, Mr. Annan did not indicate any substantial changes that would affect the Project. In our discussion, I indicated the Project's current site layout is compatible with Caltrans' realignment of SR 65, including the roundabout.

Your comment indicated that Cedar Avenue would be closed north of SR 65 and realigned to tie into Oak Avenue. Since it will be tying into Oak Avenue, I have assumed that a short segment of Cedar Avenue will still connect to SR 65, rather than its complete removal. Either way will be compatible with the Project. We are also in agreement with the realignment of W. Tulare Road such that it does not intersect with SR 65. Certainly realignment of W. Tulare Road as a first order of work would simplify construction and traffic control for the SR 65 project.

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As you know, the TIS recommends a traffic signal at the intersection of Cedar Avenue and SR 65. This signal will simply be removed and salvaged when the SR 65 realignment project commences work on the roundabout in 2034.

Comment 8: Caltrans anticipates that the recommended signalization of the SR 65 / Cedar Avenue intersection may need to be **re-evaluated** in the future. Caltrans Traffic Operations Directive 13-02 requires the analysis of any new intersection control, to evaluate the most effective traffic control strategies (whether signal, multi-stop or yield or roundabout control) for an intersection within the State's right-of-way.

Response to Comment No. 8: We do not disagree that the proposed traffic signal at the intersection SR 65 and Cedar may need reevaluation in the future. Please be aware that the TIS for the Project, in addition to a signal analysis of Cedar Avenue and SR 65, evaluated the intersection for a two-way stop and a multi-stop, both with additional dedicated turn lanes; however, the "finding" was that a traffic signal was the only mitigation resulting in a satisfactory Level of Service. As I discussed in my response to Comments 1 and 2, the TIS calculations are overly conservative given Caltrans' limitations on "pass-by" and "capture" rates. We are happy to reanalyze the intersection of Cedar Avenue and SR 65 using realistic values for "pass-by" and "capture." I should also mention that the TIS used growth factors of 1.9 percent, compounded annually to estimate future traffic. Even though the last few years of data indicate decreasing traffic, lesser or negative growth factors have been rejected by Caltrans and local agencies in past studies.

Decreasing traffic is largely attributed to California's decreasing population, and the continued post-pandemic trend in working remotely. Please let me know if we should reanalyze the intersection of Cedar Avenue and SR 65 using "pass-by" and "capture" rates consistent with our driveway surveys and other data.

Comment 9: Regarding the site plan for the proposed development, Layout A-1, on page 43:

a) It is we request that structures (above-ground or underground) like underground storage fuel tanks or monument signage be installed outside of the footprint of the future roundabout at the Cedar Avenue intersection. The Project developer understands that any improvements, upon, over, and across said real property within the roundabout footprint shall be removed at Project developer's expense, when construction of the roundabout starts.

Response to Comment No. 9a: Comment noted. Please understand that following this recommendation can only be demonstrated with submission of improvement plans. At this time, we are only seeking approval of the TIS; but the current site plan has located underground tanks and structures outside of the future footprint of said roundabout.



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b) It is requests that all truck traffic to enter/exit the Project site via the Cedar Avenue driveway which should be designed for truck traffic movements. Therefore, it is recommended that the SR 65 / Cedar intersection be re-evaluated by the TIS for truck turning movements.

Response to Comment No. 9b: The intersection of Cedar Avenue and SR 65 has been reanalyzed routing all anticipated project-related truck traffic through the intersection. Calculations have been attached herewith and are included in the attached revised TIS. The analysis has indicated that the intersection will operate at a satisfactory Level of Service with proposed mitigation in place.

c)Please be advised that the westbound to northbound right turn lane shall be designed to meet the Caltrans standards specified in the Highway Design Manual (HDM Index 405.3).

Response to Comment No. 9c: Comment noted; however, given the presence of W. Tulare Road, the length of a west bound right-turn lane is limited. Once W. Tulare Road is realigned and does not intersect with SR 65, the right turn lane could be lengthened.

d) A 6-foot bike lane shall also be installed between the thru-lane and the right-turn lane as required by the Caltrans HDM Index 403.6.(1). Additional safety measures must be considered, during the design phase, to facilitate safe operations for motoring public, especially at the proposed access point (driveway) on SR 65.

Response to Comment No. 9d: We request that Caltrans reconsider the requirement for a striped 6-foot bike lane for the following reasons: 1) There is currently no bike lane striping on either side of the Project, nor anywhere in its vicinity. 2) There is not a planned bike route along SR 65 or any other side street. 3) Five hundred feet of striped bike lane with no connectivity at either end would obviously not be utilized by bicyclists and would only confuse motorists.

Comment 10: On page 45, Figure 2: 2023 traffic volume/count, please verify there is no turning volumes (in/out to/from SR 65) at Cedar Avenue during peak hours. This is the same for all future year analysis (without project scenario).

Response to Comment No. 10: The volumes indicated in the original report reflect our actual counts. However, we have reanalyzed the intersection, adding a small volume of traffic, including turning movements. The Level of Service calculations under this scenario did not yield different results.

Comment 11: Please provide the traffic signal warrant sheets (calculations) for the unsignalized intersections listed in Table 8.

Response to Comment No. 11: Warrant sheets are included in Appendix "C" of the original TIS. Additional copies are attached herewith.



Consulting & Engineering Services Planning – Engineering – Surveying – Project Management

Comment 12: For Appendix B, regarding printouts/outputs for the LOS calculations:

a) For the signalized analysis, the peak hour factor (PHF) is set at 1.0. Please verify that the PHF calculation is correct.

Response to Comment No. 12a: A calculation of the PHF was prepared and yielded a value of 0.88. The intersection has been recalculated; however, the Level of Service did not change. The overall average delay did increase from 38.3 to 38.9 seconds.

b) For the multi-lane highway analysis, the access point density is set at zero. Please verify that the correct value for access density is being used.

Response to Comment No. 12b: The muli-lane access point densities have been adjusted, ranging from 1.0 to 2.0 where appropriate, but the Level of Service results did not change.

Comment 13: Caltrans requires the Project to construct highway frontage improvements along SR 65 including but not limited to roadway pavement improvements, curb, gutter, sidewalks, streetlights and drainage facilities.

Response to Comment No. 13: The current site plan shows said required improvements. These improvements will also be verified by Caltrans when plans are submitted as part of the encroachment permit process.

Comment 14: Caltrans requires a minimum of a 6-foot sidewalk (10-foot preferred), measured from the back of the curb.

Response to Comment No. 14: The current site plan shows a sidewalk width of 6-feet.

Comment No. 15: Dust control measures shall be implemented on the site in a manner to prevent dust from entering the State right-of-way.

Response to Comment No. 15: The Grading Plan, yet unsubmitted, includes both erosion control and dust control measures. Fugitive dust will not leave the Project site.

Comment 16: No water from the proposed project shall flow into the State right-ofway without approval from the District Hydraulic Engineer.

Response to Comment No. 16: The Grading Plan, yet unsubmitted, includes erosion control measures. The site is not large enough to "trigger" a Storm Water Pollution Control Plan (SWPPP), yet a comprehensive plan of appropriate BMPs for erosion control is included. This plan is as comprehensive as any SWPPP.

Consulting & Engineering Services Planning – Engineering – Surveying – Project Management

Comment 17: Caltrans recommends the Project install sidewalks and streetlights at the SR 65 and Cedar Avenue intersection and along Cedar Avenue for pedestrian security and safe operations of the intersection.

Response to Comment No. 17: The Grading Plan, yet unsubmitted, includes sidewalks and street lights. These improvements will be verified by Caltrans during the encroachment permit process.

Comment 18: All proposed landscaping plans shall meet current standards as determined by the District Landscape Architect. Proposed landscaping adjacent to driveways needs to be low growing, less than two feet in height, due to sight distance concerns. All features of landscaping shall be evaluated for type, location and site visibility conflicts during the encroachment review process. All permits for landscaping in conventional highway right-of-way must be accompanied by a "District" approved maintenance agreement obligating a local agency or the permittee to maintaining the landscaping. Said maintenance agreement must accompany and be approved prior to issuance of the landscape permit. Proposed landscape projects in access control rights-of-way require an exception process, and approval is subject to the Headquarters Departmental approval process.

Response to Comment No. 18: Comment noted. We also are especially concerned with maintaining safe site distance at all intersections and project entrances.

Comment 19: The sidewalk, streetlights and any landscaping shall be maintained per a "District 6" approved maintenance agreement.

Response to Comment No. 19: Comment noted.

Comment 20: As a point of information, any work completed in the State's right-ofway will require a Caltrans encroachment permit. An encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the State highway rights-of-way. Activity and work planned in the State right-ofway shall be performed to State standards and specifications, at no cost to the State. Engineering plans, calculations, specifications, and reports (documents) shall be stamped and signed by a licensed Engineer or Architect. Engineering documents for encroachment permit activity and work in the State right-of-way may be submitted using English Units. The Permit Department and the Environmental Planning Branch will review and approve the activity and work in the State right-of-way before an encroachment permit is issued. The Streets and Highways Code Section 670 provides Caltrans discretionary approval authority for projects that encroach on the State Highway System. Encroachment permits will be issued in accordance with Streets and Highway Codes, Section 671.5, "Time Limitations." Encroachment permits do not run with the land. A change of ownership requires a new permit application. Only the



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legal property owner or his/her authorized agent can pursue obtaining an encroachment permit.

Response to Comment No. 20: Comment noted. The Owner's intent is to pursue the encroachment as soon as possible. Engineered plans must be comprehensive and include all requirements of an approved TIS.

Comment 21: Prior to an encroachment permit application submittal, the project proponent is required to schedule a "Pre-Submittal" meeting with District 6 Encroachment Permit Office. To schedule this meeting, please call the Caltrans Encroachment Permit Office - District 6: 1352 W. Olive, Fresno, CA 93778, at (559) 383-5047 or (559) 383-5235.

Response to Comment No. 21: Comment noted.

Comment 22. Please review the encroachment permit application - required document checklist at: https://forms.dot.ca.gov/v2Forms/servlet/FormRenderer?frmid=TR0402&distpath=M AOTO&brapath=PERM.

Response to Comment No. 22: Comment noted.

Comment 23: Please also review the encroachment permit application - processing checklist at: https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/encroachment-permits/tr-0416-applicable-review-process-checklist.pdf.

Response to Comment No. 23: Comment noted.

Comment 24: Any advertising signs within the immediate area outside the State rightof-way need to be cleared through the Caltrans Division of Traffic Operations, Office of Outdoor Advertising. The project proponent must construct and maintain the advertising signs without access to the State Routes. Please contact the Outdoor Advertising Program, P.O. Box 942874, MS-36, Sacramento, CA 94274-001, by email at ODA@dot.ca.gov or at

(916)654-6473 for additional information or to obtain a sign permit application. Additional information on Caltrans Outdoor Advertising Permit requirement may also be found on the Internet at<u>http://dot.ca.gov/programs/traffic-operations/oda</u>.

Response to Comment No. 24: Comment noted.



Consulting & Engineering Services Planning – Engineering – Surveying – Project Management

Thank you again for your review and comments. Again, all comments related to the TIS have been addressed with this letter, the revised TIS, and attachments. Please let me know if you need any further information. We hereby request approval of the attached TIS, dated August 14, 2023.

Sincerely,

Matt VoVilla, P.E.

Attachments

From:	Deel, David@DOT
To:	Brent Barenberg
Cc:	Scott Quintana; Alyssa Allen; Mendibles, Lorena@DOT
Subject:	RE: TIS Lindsay Gas Station Route 65 [21-992]
Date:	Friday, July 14, 2023 1:38:47 PM

Brent,

Got a quick reply and both questions are YES. Q1 = Yes, granted a section of the study was devoted to justifying the reasoning Q2 = Yes, Given the findings of the surveys, would Caltrans find the 20% reduction to be acceptable for the basis of our study?

Respectfully, DAVID DEEL | CALTRANS D6 | Office: 559.981.1041

From: Brent Barenberg <bre>brent@lavpinnacle.com>
Sent: Thursday, July 13, 2023 9:04 AM
To: Deel, David@DOT <david.deel@dot.ca.gov>
Cc: Scott Quintana <scott@lavpinnacle.com>; Alyssa Allen <alyssa@lavpinnacle.com>
Subject: RE: TIS Lindsay Gas Station Route 65 [21-992]

EXTERNAL EMAIL. Links/attachments may not be safe.

Hello David,

I am addressing the comment letter you provided for the Lindsay Traffic Study. I had a question regarding comments 1 & 2.

Both comments regard justifying a pass-by percentage of 20%. Based on how the comments are written, it seems that the 20% reduction could be considered acceptable, granted a section of the study was devoted to justifying the reasoning. Am I correct in this assessment?

In regard to pass-by, we determined a 20% reduction is conservative based on a driveway survey done at a travel center near the Project site. Additionally, several driveway surveys of travel centers in the region were looked at as a basis of comparison. For the Lindsay driveway survey, it was found that 100% of trips are pass-by trips. In all other surveys, the pass-by percentage was a minimum of 30% of surveyed trips, with several surveys exceeding 90% pass-by. Several such surveys, including the Lindsay survey, have been attached to this email. Given the findings of the surveys, would Caltrans find the 20% reduction to be acceptable for the basis of our study?

Thank you for your help. Please let me know if you have any questions or need any additional information.

Brent Barenberg LAV // Pinnacle Consulting & Engineering Services brent@lavpinnacle.com

From: Deel, David@DOT <<u>david.deel@dot.ca.gov</u>>
Sent: Thursday, June 15, 2023 4:08 PM
To: Brent Barenberg <<u>brent@lavpinnacle.com</u>>
Cc: logananthonycouch@gmail.com; Scott Quintana <<u>scott@lavpinnacle.com</u>>; Alyssa Allen
<alyssa@lavpinnacle.com>; Matt Vovilla <<u>matt@lavpinnacle.com</u>>; Mendibles, Lorena@DOT
<lorena.mendibles@dot.ca.gov>
Subject: RE: TIS Lindsay Gas Station Route 65 [21-992]

Brent,

Caltrans comment letter is attached for the TIS review for the proposed Travel Center on SR 65 in Lindsay.

If you have further questions, please contact me.

Respectfully,

DAVID DEEL | Associate Transportation Planner | Desk & Mobile: 559.981.1041 Planning, Local Programs & Environmental Analysis Division CALTRANS - District 6 1352 W. Olive Avenue (P.O. Box 12616) Fresno, CA 93778-2616

For real-time highway conditions: http://quickmap.dot.ca.gov/

From: Brent Barenberg <<u>brent@lavpinnacle.com</u>>
Sent: Tuesday, May 23, 2023 3:58 PM
To: Deel, David@DOT <<u>david.deel@dot.ca.gov</u>>
Cc: logananthonycouch@gmail.com; Scott Quintana <<u>scott@lavpinnacle.com</u>>; Alyssa Allen
<<u>alyssa@lavpinnacle.com</u>>; Matt Vovilla <<u>matt@lavpinnacle.com</u>>; Subject: TIS Lindsay Gas Station Route 65 [21-992]

EXTERNAL EMAIL. Links/attachments may not be safe.

Hello David,

Please find in the link below the Traffic Impact Study for the proposed Gas Station/C-Store located on Route 65 in Lindsay.

https://lavpinnacle.sharefile.com/d-s84d0dce2e5754568828c523bdc5c1640

Please let me know if you have any questions or need any additional information.

Brent Barenberg LAV // Pinnacle Consulting & Engineering Services 12418 Rosedale Highway, Suite B Bakersfield, CA 93312 brent@lavpinnacle.com Office: (661) 869-0184

From:	Deel, David@DOT
To:	Brent Barenberg
Cc:	Scott Quintana; "Matt Vovilla"; "Nashwan Obad"; najimoh09@gmail.com; "Kari Rivera"; Ly. Duc Ken K@DOT; Lee. Albert M@DOT; Mendibles. Lorena@DOT; Olson, Eric@DOT; Annan, Mohamad@DOT; Navarro, Michael@DOT; logananthonycouch@gmail.com
Subject:	RE: TIS Scope for Lindsay Route 65 and Route 198/245 [21-992]
Date:	Wednesday, January 04, 2023 10:54:31 AM
Attachments:	image001.png image002.png

Brent,

The following is what the Traffic study and analysis should include:

- 1. Existing condition (current year 2023 in this case)
- 2. Opening day condition {with project and without project; approximately year 2025 in this case}.
- 3. Future condition with cumulative traffic in the in area, approximate year 2045 {with project and without project}.
- 4. If viable, include the near term or mid-term analysis (10 years after the opening day, approximately year 2035 in this case).

Also, the following was emailed to Logan Couch on 12/20/22:

From: Deel, David@DOT

Sent: Tuesday, December 20, 2022 1:22 PM

To: logananthonycouch@gmail.com; Mendibles, Lorena@DOT logananthonycouch@gmail.com; Mendibles, Lorena@DOT logananthonycouch@gmail.com; Mendibles, Lorena@DOT logananthonycouch@gmail.com; Mendibles, Lorena@DOT logananthonycouch@gmail.com; Mendibles, Lorena@DOT logananthonycouch@gmail.com; Mendibles, Lorena@DOT logananthonycouch@gmail.com; Mendibles, Lorena@DOT logananthonycouch@gmail.com; Mendibles, Lorena@DOT logananthonycouch@gmail.com; Mendibles, Lorena@DOT logananthonycouch@gmail.com; Mendibles, Lorena@DOT logananthonycouch@gmail.com; Mendibles, Lorena@DOT logananthonycouch@gmail.com; Mendibles, Lorena@DOT logananthonycouch@gmail.com; Mendibles, Lorena@DOT loganathonycouch@gmail.com; Mendibles, Lorena@DOT loganathonycouch@gmailto:loganathonycouch@gmailto:)

Cc: 'Scott Quintana' <u>scott@lavpinnacle.com;</u> 'Matt Vovilla' <u>matt@pinnaclex2.com;</u> 'Nashwan Obad' <u>nashwanobad@gmail.com;</u> <u>najimoh09@gmail.com;</u> 'Kari Rivera' <u>krivera@cmconstructionservices.com;</u> Ly, Duc Ken K@DOT <u>duc.ken.ly@dot.ca.gov;</u> Lee, Albert M@DOT <u>albert.lee@dot.ca.gov;</u> Olson, Eric@DOT <u>eric.olson@dot.ca.gov;</u> Annan, Mohamad@DOT <u>mohamad.annan@dot.ca.gov;</u> Navarro, Michael@DOT <u>michael.navarro@dot.ca.gov</u>

Subject: RE: TUL-65-30.30 Lindsay update - Lindsay Route 65 and Route 198/245 Operational Improvements Project

Logan,

See my responses below in bold that correspond to the imbedded map from the Caltrans website for the Lindsay Route 65 and Route 198/245 Operational Improvements Project (<u>https://dot.ca.gov/caltrans-near-me/district-6/district-6-projects/06-43080</u>):

- Anticipated construction date for the large 2 lane roundabout south of our site. (Location #3 and the Roundabouts at Cedar Avenue and Hermosa Street do not have an estimated construction date, at this time.)
- Anticipated construction date for the smaller roundabout to the east of our site. (Location #1 and the Roundabout at Oak Avenue has an approximate construction start date in Mid-2027.)
- Confirm our development will <u>not</u> need to provide LOS analysis for the 'post roundabout' condition. Our TIS <u>will</u> only include the 'pre roundabout condition'. (Correct, no LOS analysis for Post-Roundabout, analysis is only for Pre-Roundabout)
- Advise on SCE easement for new power poles on the south side of our site, adjacent to HWY 65 ROW, pre and post roundabout conditions. (Please contact Caltrans Project Manager, Mohamad Annan at (559) 270-4448 or mohamad.annan@dot.ca.gov)

If you have further questions, please contact me.

Respectfully, **DAVID DEEL** | Associate Transportation Planner | Desk & Mobile: 559.981.1041 Planning, Local Programs & Environmental Analysis Division Local Development Review (LDR) – Tulare & Kern Regional Planning – Tulare FTA 5311 Transit – Tulare

?

CALTRANS - District 6 1352 W. Olive Avenue (P.O. Box 12616) Fresno, CA 93778-2616

For real-time highway conditions: http://quickmap.dot.ca.gov/



From: Brent Barenberg <brent@lavpinnacle.com> Sent: Wednesday, December 21, 2022 11:33 AM To: Deel, David@DOT <david.deel@dot.ca.gov> Cc: Scott Quintana <scott@lavpinnacle.com>; 'Matt Vovilla' <matt@pinnaclex2.com>; 'Nashwan Obad' <nashwanobad@gmail.com>; najimoh09@gmail.com; 'Kari Rivera' <krivera@cmconstructionservices.com>; Ly, Duc Ken K@DOT <duc.ken.ly@dot.ca.gov>; Lee, Albert M@DOT <albert.lee@dot.ca.gov>; Mendibles, Lorena@DOT <lorena.mendibles@dot.ca.gov>; Olson, Eric@DOT <eric.olson@dot.ca.gov>; Annan, Mohamad@DOT <mohamad.annan@dot.ca.gov>; Navarro, Michael@DOT <michael.navarro@dot.ca.gov>; logananthonycouch@gmail.com Subject: TIS Scope for Lindsay Route 65 and Route 198/245 [21-992]

EXTERNAL EMAIL. Links/attachments may not be safe.

Hello David,

Thank you for your help with clarifying the scope of this Project. Based on the previous correspondence, the following is, as we understand it, a summary of the scope for the Traffic Impact Study:

The Traffic Impact Study will determine the potential impact of the Project on local traffic. Impact will be determined through Level of Service (LOS) calculations and Vehicle Miles Travelled (VMT) calculations. Calculations will be performed for current conditions (2023), opening day conditions (~2025), and future conditions (~2043). The analysis for all conditions will be performed based on *current improvements only*. The construction of the roundabout by Caltrans will *not* be a factor in any analysis.

Please let us know if this is an accurate summary of the scope, or if you have any clarifications.

Brent Barenberg LAV // Pinnacle Consulting & Engineering Services 12418 Rosedale Highway, Suite B Bakersfield, CA 93312 brent@lavpinnacle.com Office: (661) 869-0184

Table 8: Peak Hour Warrant Analysis

				Year 202	3 Vo	lumes					Year 202	5١	Volumes	lumes				
		Exi (F	sting Volum igures 2 & 3	es)		Existing V	olumes Plus (Figure 5)	s Project	Open	ing Day Volu (Figure 6)	imes		Opening Proj	nes pening Day Volumes Pl Project (Figure 7) hest Total Major 'oach Approach Volume ph) (vph) D6 1,813 Y 86 1,461 Y 49 2,347 Y 32 2,682 Y 0 1,480 N 8 1,821 N 8 1,022 N 2 2,064 N				
No.	Existing Non-Signalized Intersection	Highest Minor Approach Volume (vph)	Total Major Approach Volume (vph)	Peak Hour Warrant Satisfied	A	Highest Minor Approach Volume (vph)	Total Major Approach Volume (vph)	Peak Hour Warrant Satisfied	Highest Minor Approach Volume (vph)	Total Major Approach Volume (vph)	Peak Hour Warrant Satisfied		Highest Minor Approach Volume (vph)	Total Major Approach Volume (vph)	Peak Hour Warrant Satisfied			
1)	Hwy 65 & Cedar Ave AM	0	1,520	No		206	1,753	Yes	0	1,600	No		206	1,813	Yes			
1)	Hwy 65 & Cedar Ave PM	0	1,236	No		186	1,413	Yes	0	1,284	No		186	1,461	Yes			
2)	Hwy 65 & W Tulare Rd AM	128	1,998	Yes	Γ	144	2,270	Yes	133	2,075	Yes	Ī	149	2,347	Yes			
2)	Hwy 65 & W Tulare Rd PM	115	2,344	Yes		127	2,590	Yes	120	2,436	Yes		132	2,682	Yes			
3)	Hwy 65 & W Lindmore St AM	44	1,248	No		49	1,432	No	45	1,296	No		50	1,480	No			
3)	Hwy 65 & W Lindmore St PM	36	1,588	No		36	1,759	No	38	1,650	No		38	1,821	No			
	Hwy 65 & Marigold St AM	16	824	No		18	990	No	16	856	No		18	1,022	No			
4)	Hwy 65 & Marigold St PM	40	1,839	No		41	1,992	No	41	1,911	No		42	2,064	No			
5)	Hwy 65 & Ave 208 AM	36	1,152	No		38	1,099	No	38	1,197	No		40	1,344	No			
5)	Hwy 65 & Ave 208 PM	24	1,670	No		24	1,807	No	25	1,735	No		25	1,892	No			
6)	Hwy 137 & Road 188 AM	20	592	No		23	687	No	21	615	No		24	710	No			
0)	Hwy 137 & Road 188 PM	24	728	No		26	804	No	25	756	No		27	832	No			
7)	Hwy 137 & Road 180 AM	12	304	No		12	388	No	12	316	No		12	400	No			
/)	Hwy 137 & Road 180 PM	0	384	No		0	451	No	0	399	No		0	466	No			
0)	N Spruce Ave & Acacia Ave AM	10	941	No	Γ	11	1,045	No	10	978	No	ſ	11	1,082	No			
8)	N Spruce Ave & Acacia Ave PM	19	847	No		21	926	No	20	881	No		22	959	No			
0)	N Spruce Ave & Sycamore Ave AM	236	900	No		243	979	No	246	935	Yes		253	1,014	Yes			
9)	N Spruce Ave & Sycamore Ave PM	208	728	No		214	784	No	216	831	No		222	892	No			

Table 8: Peak Hour Warrant Analysis

				Year 2035	Volumes					Year 204	I5 \	/olumes					
		Future	/olumes (Fig	ures 8)	Future V	olumes Plu: (Figures 9)	s Project	Future V	'olumes (Figu	ires 10)		Future Vo	Future Volumes Plus Proje (Figures 11)				
No.	Existing Non-Signalized Intersection	Highest Minor Approach Volume (vph)	Total Major Approach Volume (vph)	Peak Hour Warrant Satisfied	Highest Minor Approach Volume (vph)	Total Major Approach Volume (vph)	Peak Hour Warrant Satisfied	Highest Minor Approach Volume (vph)	Total Major Approach Volume (vph)	Peak Hour Warrant Satisfied		Highest Minor Approach Volume (vph)	Total Major Approach Volume (vph)	Peak Hour Warrant Satisfied			
1)	Hwy 65 & Cedar Ave AM	0	1,941	No	206	2,154	Yes	0	2,341	No		206	2,415	Yes			
1)	Hwy 65 & Cedar Ave PM	0	1,557	No	186	1,734	Yes	0	1,879	No		186	2,056	Yes			
2)	Hwy 65 & W Tulare Rd AM	162	2,518	Yes	178	2,790	Yes	194	3,037	Yes		210	3,309	Yes			
2)	Hwy 65 & W Tulare Rd PM	145	2,953	Yes	157	3,199	Yes	175	3,563	Yes		187	3,809	Yes			
2)	Hwy 65 & W Lindmore St AM	55	1,557	No	60	1,741	No	67	1,897	No		72	2,081	No			
3)	Hwy 65 & W Lindmore St PM	45	2,020	No	45	2,171	No	54	2,414	No		54	2,585	No			
	Hwy 65 & Marigold St AM	20	1,038	No	22	1,204	No	24	1,252	No		26	1,418	No			
4)	Hwy 65 & Marigold St PM	50	2,318	No	51	2,471	No	61	2,797	No		62	2,944	No			
E)	Hwy 65 & Ave 208 AM	45	1,451	No	47	1,234	No	54	1,750	No		56	1,908	No			
5)	Hwy 65 & Ave 208 PM	30	2,105	No	30	2,242	No	36	2,537	No		36	2,674	No			
()	Hwy 137 & Road 188 AM	25	745	No	28	830	No	30	899	No		33	994	No			
0)	Hwy 137 & Road 188 PM	30	917	No	32	993	No	36	1,107	No		38	1,183	No			
7)	Hwy 137 & Road 180 AM	15	383	No	15	467	No	18	462	No		18	548	No			
')	Hwy 137 & Road 180 PM	0	484	No	0	551	No	0	584	No		0	651	No			
0)	N Spruce Ave & Acacia Ave AM	12	1,185	No	13	1,292	No	16	1,431	No		17	1,535	No			
8)	N Spruce Ave & Acacia Ave PM	24	1,068	No	26	1,146	No	29	1,289	No		31	1,367	No			
0)	N Spruce Ave & Sycamore Ave AM	297	1,133	Yes	304	1,212	Yes	359	1,368	Yes		366	1,447	Yes			
3)	N Spruce Ave & Sycamore Ave PM	263	1,008	Yes	269	1,072	Yes	316	1,212	Yes		322	1,263	Yes			

Pass-By and Diverted Link Study

	Location: N&	S TRAVEL	CENTER (und a	SE AVE	128)	_	Date	e: 3 0	1	
No	Purpose of your trip		Trin Doctingtion	Ro	ute In	Rou	te Out			Trip Type	e .
	, alpose of your trip	mp ongin	The Destination	Street	Direction	Street	Direction	Time	Primary	Pass-By	Diverted Link
1)	GAS			128	EAST	5	17	6:02		~	
2)	645			123	EAST	65	2	6.05		~	
3)	FOOD			128	EAST	105	S	6:12		1	
4)	GASSMOKES			128	EAST	65	N	6:19		1	
5)	BEER			128	EAST	105	2	6:23		\checkmark	
6)	BEER SNAULS			128	EAST	65	2	6:36		~	
7)	GAS/FOOD			128	EAST	K	0	6:43		1	
8)	GAS			128	EAST	65	1	6:51		~	
9)											
10)											
11)											
12)											

Pass-By and Diverted Link Study

	Purpose of your trip		Trip Destination	Route In		Rou	te Out	1.5	Trip Type		
No.		Trip Origin		Street	Direction	Street	Direction	Fime PM	Primary	Pass-By	Diverted Link
1)	GAS			128	EAST	5	2	6:10		~	
2)	GAS FOOD			128	EAST	65	2	6.14		~	
3)	BEERZ			128	EAST	65	2	6:18		~	
4)	BRE12			128	EAST	65	5	6:25		\checkmark	
5)	FOOD BEER			123	EAST	45	5	6:32		~	
6)	GAS BEER			128	WEST	95	2	6:35		~	
7)	GAS SNACKS			123	EAST	65	2	6:42		1	
8)	BEER			123	EAST	65	5	6:50		~	
9)											
10)										i i	
11)											
12)											

6:15-8:00am

_	58:						Pass-Bys		
No.	Purpose of your trip:	Trip Origin:	Trip Destination:	Edison	Comanche	Hwy. 58	Time:	Yes	No
25)	work K	Bakersfield	Barstan	1		V	6:18	1	
26)	Work	Bakershold	Arvin	6	1		6:20	~	
27)	Work	Caliente	Bakersfield	/			6:21	~	
28)	Work	Laslegas	Bakersfield			~	6:22	V	
29)	6DOV K	Goshen	Barstau			~	6:24	~	
30)	LOOVK	Arvin	Bakersfild			~	6.27	~	
31)	WOYK	Calientu	Bakersfield			~	6:30	~	
32)	WOYK	Bakersfield	Tehachapi			V	6:31	~	
33)	Work	Bakersfield	Arvin		\checkmark		6:38	1	
34)	WOYK	Arvin	Edison		\checkmark	2	6:41	\checkmark	
35)	WOYK	Arvin	Bakersfield	1			6:42	~	
36)	Mag No	DI	Lasyland	1		V	WIE	./	-

6:15-8:00am

	58:						Pass	Pass-Bys	
No.	Purpose of your trip:	Trip Origin:	Trip Destination:	Edison	Comanche	Hwy. 58	Time:	Yes	No
37)	Work	Bakersfield	Caliente			~	6:49	~	
38)	WORK	Bakersfield	Apple valley			V	6:51	2	
39)	WOYK	Batersfield	Tehachapi	0		V	6:53	~	
40)	WORK	Bakersfield	Arvin	~			6:50	~	
41)	(shooting) Recreational	Bakersfield	Bakersfield		~		7:02	\checkmark	
42)	work	Tehachapi	Bakersfield	18 - A		V	7:00	~	
43)	Work	Batersfield	Bakensfield			~	7:10	~	
44)	WORK	Bakersfield	Mojave			V	7:14	~	
45)	Play Golf	Bakersfield	Bakersfield		~		7:30	~	
46)	WORK	Bakersfield	Tehachapi			\checkmark	1:41	\checkmark	
47)	Home	Bakersfield	Bakersfield	~			7:44	~	
48)	Vacation	Baversfield	House			V	7.49	1	

6:15-8:00am

r a	ss-by and Diverted	58:						Pass-Bys	
No.	Purpose of your trip:	Trip Origin:	Trip Destination:	Edison	Comanche	Hwy. 58	Time:	Yes	No
49)	Basiness	Boren	Portland			V	7:53	V	
50)	Work	Bakersfield	Arvin		V		7:54	V	
51)	WORK	Bakersfield	Arvin		V		7:57	1	
52)									
53)									
54)									
55)									
56)									
57)									
58)	2								
59)									
60)									
4:00-5:30pm

Pa	ss-By and Diverted L	58:							
No.	Purpose of your trip:	Trip Origin:	Trip Destination:	Edison	Comanche	Hwy. 58	Time:	Yes	No
1)	Sales Rep	Bakersfield Shelt	Store			~	4:16		~
2)	WOYK	Bakersfield	Arvin		1		4:19	~	
3)	Dinner/Home	Bakersfield	Caliente			~	4:23	~	
4)	WORK	Bakersfield	Bakersfield			V	4:25	/	
5)	Home	Tehachapi	Bakersfield	/			4:24	1	
6)	Work	Shafter	Bakersfield		~		4:27	~	
7)	Vacation	Morro Bay	Lake Parel			~	4:30	~	
8)	WOrk	Arvin	Arvin	T. T	V		4:40		1
9)	Home	Bakersfield	Tehachapi			~	4:44	V	
10)	Home	Keene	Bakersfield			V	4:52	~	
11)	Work	Vegas	Porterville			~	4:59	/	
12)	Home	Delano	Prvin	\checkmark			5:02	1	

4:30-5:30pm Date: 9/2/2020

Pas	Pass-By and Diverted Link Study for Gas Station/C-Store at Comanche Drive & Hwy Date: Pass- 58: Pass-									
No.	Purpose of your trip:	Trip Origin:	Trip Destination:	Edison	Comanche	Hwy. 58	Time:	Yes	No	
13)	Vacation	Redding	Phaenix			~	5:03	/		
14)	Home	Bakersfield	Tehachapi			V	5:08	~		
15)	WOYK	Arvin	Baversfield			V	5:10	\checkmark		
16)	WORK	Arvin	Bakersfield			~	5:13	1		
17)	Home	Baztreg	Tehachapi			~	9 :15	1		
18)	Home	Bakersfield	Tehachapi			~	5:20	~		
19)	Work	Arvin	Barkersfield			V	5:27	~		
20)										
21)										
22)										
23)										
24)										

	Drive	for Stockdale	Hwy	& I5:			Date:			
				Prima	ry Route -	Prima	ary Route -	Sur	vev Bv:	CE
				A	rrival	De	parture	501	vcy by.	C
No	Purnose of your trip:	Trin Origin:	Trin Destination:	15	Stockdale	15	Stockdale	Pass-	Diverted	Time
NO.	Fulpose of your trip.	mp ongin.	The Destination.	15	Hwy	15	Hwy	Bys	Link	Time.
1)	Home	Lost Hills	Bakersfield	s			E	х		4:06
2)	Visit Family	San Jose	Ventura	S		S			х	4:10
3)	Vacation	Bakersfield	San Diego		w	S		х		4:13
4)	Home	Oregon	Los Angeles	S		S			х	4:17
5)	Home	Taft	Bakersfield		E		E	х		4:29
6)	Vacation	Los Angeles	San Francisco	S		N			х	4:32
7)	Home	Atascadero	Bakerfield	S			E	х		4:35
8)	Moving	San Diego	Eugene, OR	N		N			х	4:41
9)	Home	Los Angeles	Sacramento	N		N			х	4:47
10)	Work	Bakersfield	Paramount Farms		w	N		х		4:53
11)	Home	Los Angeles	Bakersfield	N			E	х		4:57

	Drive	for Stockdale	dale Hwy & 15:							
				Prima	ry Route -	Prima	ry Route -	Sur	vev Bv:	CE
				A	rrival	De	parture	541	icy by.	CI
No.	Purpose of your trip:	Trip Origin:	Trip Destination:	15	Stockdale	15	Stockdale	Pass-	Diverted	Time:
	·				Hwy		Hwy	Bys	Link	
1)	Moving	San Diego	Oregon	N					х	10:28
2)	Dog Show	San Francisco	Palm Springs	S					х	10:30
3)	Vacation	Oakland	Palm Springs	S					х	10:35
4)	Take Daughter Home	Los Angeles	San Jose	Ν					х	10:35
5)	Visit Sister	Lahaba	Yuba	Ν					х	10:38
6)	Deliver Furniture	Bakersfield	Oregon		E	N		х		10:43
7)	Visiting Friends	Bakersfield	San Francisco		E	N		х		10:54
8)	Work	Lebec	Bakersfield		E	N		х		10:54
9)	Vacation	Santa Rosa	Texas	Ν		S			х	10:55
10)	Work	McFarland	Avenall	S		N			х	11:00
11)	Vacation	Prescott AZ	Napa	S		Ν			х	11:01
12)	Vacation	Los Angeles	San Francisco	S		N			х	11:03

	Drive	way Survey	for Stockdale	ale Hwy & I5:						
				Prima	ry Route -	Prima	ry Route -	Sur	vev Bv:	CF
			1	A	rrival	De	parture	041	,	
No.	Purpose of your trip:	Trip Origin:	Trip Destination:	15	Stockdale Hwy	15	Stockdale Hwy	Pass- Bys	Diverted Link	Time:
13)	Golf	Sacramento	Palm Springs	N		S			х	11:09
14)	Vacation	Los Angeles	San Francisco	S		Ν			х	11:11
15)	Visit Friends	San Jose	Los Angeles	Ν		S			х	11:12
16)	Business	Los Angeles	San Francisco	S		Ν			х	11:14
17)	Church Revival	Los Angeles	San Francisco	S		Ν			х	11:20
18)	Vacation	Carson	Eureka	S		Ν			х	11:20
19)	Moving	Paso Robles	Burbank	N		S			х	11:26
20)	Visit Friends	Los Angeles	Livermore	S		Ν			х	11:30
21)	Work	Chino	Redding	S		Ν			х	11:36
22)	Universal Studios	San Francisco	Universal Studios	Ν		S			х	11:36
23)	Visit Friends	Los Angeles	Sacramento	S		Ν			х	11:38
24)	Visit Friends	Burbank	San Francisco	S		N			х	11:43

	Drive	for Stockdale	lale Hwy & I5:							
				Prima	ry Route -	Prima	ary Route -	Sur	vev Bv·	CE
				A	rrival	De	parture	Jui	vey by.	Cr
No	Purnose of your trin:	Trin Origin:	Trin Destination:	15	Stockdale	15	Stockdale	Pass-	Diverted	Time
140.	rupose of your trip.	inp ongin.	The Destination.	2	Hwy	5	Hwy	Bys	Link	mile.
25)	Moving	Las Vegas	San Francisco	S		N			х	11:52
26)	Take child to school	Los Angeles	San Francisco	S		N			х	11:53
27)	Take family home	Firebough	Los Angeles	Ν		S			х	11:53
28)	Work	Oakland	San Diego	N		S			х	11:54
29)	Disneyland	San Bruno	Anaheim	Ν		S			х	11:55
30)	Visit Friends	Fresno	Los Angeles	N		S			х	11:55
31)	Moving	Phoenix	Menlo Park	S		N			х	11:56
32)	Business	Los Angeles	San Jose	S		N			х	12:03
33)	Vacation	Ensenada	San Francisco	S		N			х	12:03
34)	Work	Buttonwillow	Bakersfield		E		W	х		12:04
35)	Vacation	San Ramon	San Francisco	S		N			х	12:05
36)	College Tour	Los Angeles	Davis	S		N			х	12:10

	Drive	for Stockdale	Hwy	& I5:			Date:			
				Prima A	ry Route -	Prima De	ary Route -	Sur	vey By:	CF
No.	Purpose of your trip:	Trip Origin:	Trip Destination:	15	Stockdale Hwy	15	Stockdale Hwy	Pass- Bys	Diverted Link	Time:
37)	Business	Bakersfield	Maricopa		w		Е	х		12:13
38)	Vacation	San Francisco	Los Angeles	N		S			х	12:14
39)	Work	Lindsey	Long Beach	N		S			х	12:17
40)	Visiting Family	Los Angeles	Sacramento	S		N			х	12:18
41)	Visiting Family	Bakersfield	San Francisco		w	N		х		12:20
42)	Work	Los Angeles	San Francisco	S		N			х	12:21
43)	Vacation	Bakersfield	Napa		w	N		х		12:21
44)	Work	Buttonwillow	Bakersfield		E		W	х		12:22
45)	Work	Bakersfield	Paso Robles		w	N		х		12:24
46)	Visit Family	Los Angeles	Oakland	S		N			х	12:25
47)	Visit Family	Bakersfield	Pismo Beach		E		w	х		12:29
48)	Visit Family	Los Angeles	San Francisco	S		N			х	12:30
49)	Vacation	Burbank	San Jose	S		N			х	12:30

	Drive	way Survey	for Stockdale	lale Hwy & I5:						
				Prima	ry Route -	Prima	ry Route -	Sur	vev Bv:	CE
		1		A	rrival	De	parture	541	, cy by.	CI
No.	Purpose of your trip:	Trip Origin:	Trip Destination:	15	Stockdale	15	Stockdale	Pass-	Diverted	Time:
					Hwy		Hwy	Bys	Link	
1)	Vacation	Ventura	Dublin	S		Ν			х	4:20
2)	Work	Bakersfield	Sacramento		W	Ν		х		4:24
3)	Work	Mississippi	Eureka	S		N			х	4:25
4)	Go back to School	San Francisco	San Diego	Ν		S			х	4:26
5)	Work	Los Angeles	Sacramento	S		N			х	4:41
6)	Work	Concord	Burbank	N		S			х	4:42
7)	Work	Bakersfield	Mckitrick		w		E	х		4:46
8)	Work	Paso Robles	Bakersfield	Ν			E	х		4:47
9)	Work	Orange County	Cupertino	S		Ν			х	4:53
10)	Visit Friends	Sacramento	Los Angeles	N		S			х	4:54
11)	Work	Bakersfield	Lost Hills		W		E	х		4:59
12)	Work	BelRidge	Bakersfield		E		W	х		4:59

	Drive	for Stockdale	ale Hwy & I5:							
				Prima	ry Route -	Prima	ry Route -	Sur	vev Bv:	CF
			1	A	rrival	De	parture			CI
No.	Purpose of your trip:	Trip Origin:	Trip Destination:	15	Stockdale	15	Stockdale	Pass-	Diverted	Time:
	. , .				Hwy		Hwy	Bys	Link	
13)	Work	Oxnard	Salinas	Ν		S			х	5:00
14)	Work	Long Beach	San Jose	S		Ν			х	5:01
15)	Visit Family	Seaside	Oakland	S		N			х	5:10
16)	Funeral	Stockton	Bakersfield	N			E	х		5:23
17)	Work	Santabarbara	San Francisco	S		Ν			х	5:24
18)	Work	San Jose	Los Angeles	N		S			х	5:29
19)	Vacation	Mexico	Woodland	S		N			х	5:30
20)	Vacation	Los Angeles	Stockton	S		Ν			х	5:31
21)	Work	San Francisco	San Diego	Ν		S			х	5:35
22)	Funeral	Los Angeles	Monteca	S		Ν			х	5:36
23)	Work	San Francisco	Bakersfield	N			E	х		5:39
24)	Work	Los Angeles	Paso Robles	S		N			х	5:43

	Drive	way Survey	Dat			5/25/	2021			
				Prima A	ry Route - Arrival	Prima De	ary Route - parture	Survey By:		CF
No.	Purpose of your trip:	Trip Origin:	Trip Destination:	15	Stockdale Hwy	15	Stockdale Hwy	Pass- Bys	Diverted Link	Time:
25)	Vacation	Stockton	San Diego	N		S			х	5:49
26)	Work	Los Angeles	San Francisco	S		Ν			х	5:54
27)	Work	Bakersfield	Redwood City		w	N		х		5:56
28)	Work	Tracy	Bakersfield	N			E	х		5:58

Totals	5:
Pass-By	29%
Diverted Link	71%

Pass-By and Diverted Link Study: 1:30-8:30 Date:										
				Ro	ute In	Rou	te Out	AM	Pass	-Bys
No.	Purpose of your trip:	Trip Origin:	Trip Destination:	99	119	99	119	Time:	Yes	No
1)	work	Taff-	Bakersfield		E	N		7:39	~	
2)	Dr. Appt.	Bakersfield	LA	5		S		7:42	1	
3)	work	Bakersfield	Baker sfield		E	N		7:44	\checkmark	
4)	visit family	Bakersfield	Anaheim		E	5		7:48	~	
5)	WORK	Bakersfield	Batersfield		W	N		7:50	1	
6)	usork	Batersfield	Bakersfield		E	N		7:52	~	
7)	WORK	Bakersfield	Taft	S			W	7:53	V	
8)	Shopping	Bakersfield	LA	S		S		7:57	V	
9)	Work	Bakersfield	Fresno		e	N		8:01	V	
10)	Dr Appt.	Bakersfield	Madera		E	N		8:03	~	
11)	work	Batersfield	Bakersfield	1	w		ω	8:04	V	
12)	LOOVE	Baxersfield	Batersfield		E	N		8:07	\checkmark	

Pass-By and Diverted Link Study:								Date:		
				Route In		Route Out		AM	Pass-Bys	
No.	Purpose of your trip:	Trip Origin:	Trip Destination:	99	119	99	119	Time:	Yes	No
13)	work	Bakersfield	Taft	S			w	8:10	~	
14)	Vacation	Bakersfield	Yosemite		E	N		8:13	~	
15)	WORK	Bakersfield	Bakersfield	S			S	8:14	r	
16)	work	Bakershield	Bakersfield		E	S		8:15	~	
17)	work	Bakersfield	Taft	S			w	8:18	~	
18)	WORK	Bakersfield	Bakersfield		S		w	8:19	~	
19)	work	Fresno	Bakurshield	S			w	8:23	r	
20)	work	Bakersfield	Bakersfield		E	N		8:28	V	
21)	work	Bacersfield	Bacersfield	S			cu	8:31	V	
22)										
23)										
24)										

Pass-By and Diverted Link Study: 4:30-5:30 Date:										
				Route In		Route Out		PM	Pass-Bys	
No.	Purpose of your trip:	Trip Origin:	Trip Destination:	99	119	99	119	Time:	Yes	No
1)	Medical	Modesto	Lompoc	5		[r= =	W	4:35	~	
2)	Home	Bakersfield	Batersfield		E	N		4:39	1	
3)	Home	Taff	Arvin		E		E	4:45	~	
4)	WOYK	Bakersfield	LA	5		5		4:49	~	
5)	to serve papers	Bakersfield	Taft	5			W	4:51	\checkmark	
6)	Home	LA	Fresno	N		N		4:54	~	
7)	Home	Bakersfield	Bakersfield		E	N		5:04	\checkmark	
8)	Home	Taff	Bakersfield		E	N		5:09	~	
9)	To visit family	Baturshield	LA		W	S		5:11	/	
10)	Home	Bakersfield	Bakersfield	8			E	5:14	~	
11)	Home	Bakersfield	Bakersfield		E	N		5:17	\checkmark	
12)										