

SR-60/World Logistics Center Parkway Interchange Project



Interchange Closure Study

Riverside County, California

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SR-60/WORLD LOGISTICS CENTER PARKWAY INTERCHANGE CLOSURE STUDY

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1. INTRODUCTION

This report presents the interchange closure study for the Project Approval and Environmental Document (PAVED) for improvements to the SR-60/World Logistics Center Parkway (WLC Pkwy) Interchange (IC) in the City of Moreno Valley, California. During construction of the project, the SR-60/WLC Pkwy ramps, WLC Pkwy overcrossing and the entire interchange would be closed at various stages of the construction. According to the Caltrans' Project Development Procedures Manual's policy, a study is required whenever a freeway ramp is to be closed for more than ten consecutive days.

The goals and objectives of the interchange closure are to enhance safety to the work environment for both the labor work force and motoring/non-motoring public as well as to minimize delays for motorists. The analysis in this study revealed that the intersections along the detour routes would operate at an acceptable Level of Service (LOS) and thus the impacts on motorists would not be significant. In addition, having complete closure of the interchange for 4 months during construction would reduce the construction duration when compared to having partial closure of the WLC Pkwy bridge. A complete interchange closure would reduce the overall construction duration by approximately 11 months. This time savings is approximately 35% of the time for the full construction of 30 months with no complete interchange closure, therefore it is estimated that there will be a savings of 25% to 35% on the overall construction costs. In general, construction costs are reduced due to multiple contractor mobilizations for various construction trades, a reduction in the traffic control needed for multiple stages, and more efficient delivery of construction activities.

Background of the SR-60/WLC Pkwy Interchange Improvement Project

The SR-60/WLC Pkwy IC is currently a two-quadrant cloverleaf with side-street stop-controlled ramp intersections. The bridge crossing SR-60 has been deemed as functionally obsolete and structurally deficient. This current configuration for the interchange is sufficient to handle the current traffic demand because the interchange's catchment area is sparsely developed, except at the 1.8 million square-foot Skechers high-cube warehouse. The area within the City of Moreno Valley immediately to the south of the proposed WLC Pkwy IC project is planned through the City's General Plan and the approved Specific Plans. One plan currently under development is represented in the World Logistics Center (WLC) Specific Plan. The WLC would consist primarily of approximately 40.6 million square feet of high-cube logistics warehouse buildings. Development allowable in the General Plan and Specific Plan includes a mix of office space buildings, high-cube logistics warehouse buildings, and single-family dwellings.

With the development of the WLC and other future allowable developments, the traffic demand at the SR-60/WLC Pkwy IC will be much greater than at present. The proposed project is to improve the capacity of the interchange to accommodate the anticipated increase in demand. The project analyzed two build alternatives, Alternative 2 (Modified Partial Cloverleaf) and Alternative 6 (Modified Partial Cloverleaf with Roundabouts) in addition to a No-Build Alternative. Alternative 2 was studied in this report as it would have the longest construction duration because of the widening of the bridge and additional ramp installations. Both build alternatives considered a design variation: Alternative 2a and Alternative 6a, respectively, are associated with a potential realignment of Eucalyptus Avenue. The design variations would not alter the proposed phasing plan identified in this report. Should a design variation be selected for the project, the realignment of Eucalyptus Avenue would occur during the same phase and duration as the proposed Eucalyptus Avenue improvements for Alternative 2 and Alternative 6.

In September 2012, Caltrans District 8 issued a new Transportation Concept Report for SR-60 from the Los Angeles/San Bernardino County Line to the I-10 interchange. This report found that although no mainline capacity improvements are currently being planned or programmed, there will be a need for additional general purpose lanes between Redlands Boulevard and Gilman Springs Road (i.e. the freeway sections on either east or west side of the WLC Pkwy IC), in the long term. Therefore, there is a need for capacity improvements to both the WLC Pkwy IC and the SR-60 main line in the vicinity of the WLC Pkwy IC.

2. METHODOLOGY

Geographic Scope of Study

The geography scope of the study is shown in Exhibit 1. The study area includes the ramp intersections of the WLC Pkwy IC, the intersections directly up or down stream of them, and the corresponding intersections at the most likely diversion route (the Redlands Boulevard IC). The eight study intersections are (see Exhibit 1):

- 1) WLC Pkwy/ Eucalyptus Avenue
- 2) WLC Pkwy/Eastbound SR-60 Ramps
- 3) WLC Pkwy/Westbound SR-60 Ramps
- 4) Theodore Street/Ironwood Avenue
- 5) Redlands Boulevard/Eucalyptus Avenue
- 6) Redlands Boulevard/Eastbound SR-60 Ramps
- 7) Redlands Boulevard/Westbound SR-60 Ramps
- 8) Redlands Boulevard/Ironwood Avenue

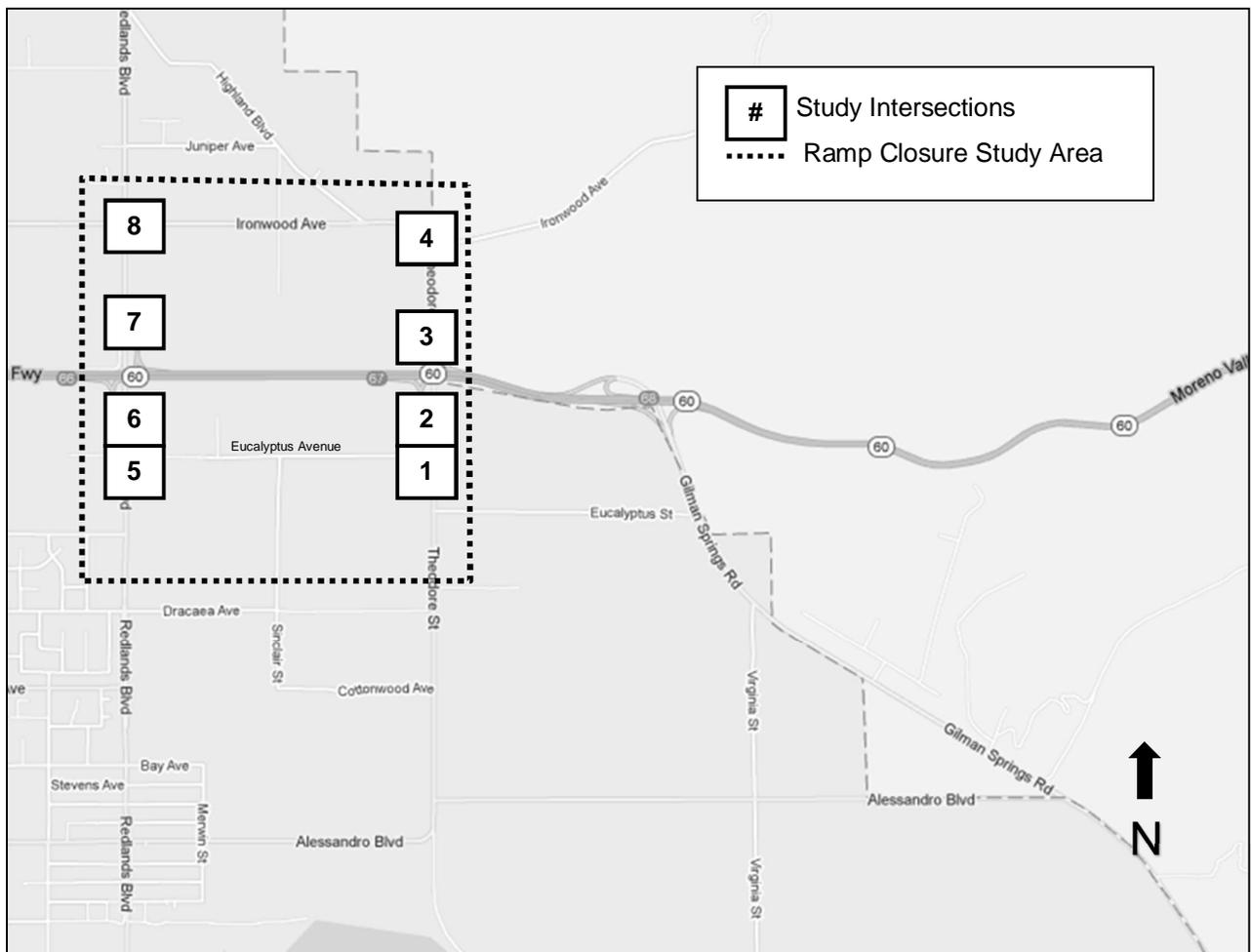


Exhibit 1: Study Area

3. BASE CONDITIONS

This section reports traffic conditions under Base Conditions for the year 2022. Traffic counts were collected in 2017 and reviewed in the year 2018; therefore, the year 2018 is used as the volumes to derive the year 2022 conditions for analysis, since construction is anticipated to begin in 2022.

Land Use

Land uses in the area were reviewed in September 2018 to identify the type of land use, location, and access to the roadway network. Specific attention was given to those land uses that rely on WLC Pkwy to access the local and regional roadway network. The land uses in the area of WLC Pkwy consist primarily of dry-land agriculture, with a few residences, a landfill, and one large distribution center (see Exhibit 3). The large distribution center is the 1.8 million square-foot Skechers facility, which includes a factory outlet store, and is the largest trip generator along WLC Pkwy. Vehicle trips from Skechers account for approximately half of existing peak hour traffic at the SR-60 Eastbound ramp intersection with WLC Pkwy.

In addition to the Skechers distribution facility, the other large traffic generating land use in the vicinity of the WLC Pkwy IC is the Badlands Landfill located northeast of the Theodore Street/Ironwood Avenue intersection. The landfill site is currently (2018) permitted to receive up to 612 vehicles per day. Based on data from 2014, on a typical day when the landfill site is open, 10 to 15 department employees travel to and from the site and on average 217 customers access the landfill per day. Vehicle trips accessing both land uses primarily travel to/from SR-60, although several trips for the Badlands Landfill were observed using local streets parallel to SR-60. Detour routing for the interchange closure has specifically considered the travel patterns of the two large land uses.

In addition to the Skechers distribution facility and the Badlands Landfill, the following are potentially affected land uses located on WLC Pkwy that use the interchange to access SR-60:

- One residence on the west side of WLC Pkwy near the Dracaea Avenue intersection.
- Four residences on the east side of WLC Pkwy between Eucalyptus Avenue and Dracaea Avenue.
- Seven residences on the east side of WLC Pkwy and north of SR-60.

It was noted during field visits that the only other active non-residential land use along WLC Pkwy was the sale of hay at one WLC Pkwy residence north of SR-60. However, it is assumed that the sales are private and that the trip generating characteristics of the site would not differ substantially from a standard residential parcel.

Land uses along Redlands Boulevard were reviewed to determine if the WLC Pkwy IC closure and detour routes would significantly affect the land uses. Land uses along, and in the vicinity of, Redlands Boulevard include residential, a nursery, a church, and a mini-market. During the development of this report, in summer 2015, the ALDI warehouse was constructed and opened at the northwest quadrant of the intersection of Redlands Boulevard and Eucalyptus Avenue.

The Prologis development has been built and Eucalyptus Avenue from Redlands Boulevard to Moreno Beach Drive is now open.

Roadway Network

World Logistics Center Parkway Interchange

The existing ramp system provides direct access to WLC Pkwy from SR-60. The existing interchange is a two-quadrant cloverleaf in which westbound SR-60 on- and off-ramp traffic connects to WLC Pkwy at a side-street stop-controlled intersection on the northern side of the interchange. Eastbound SR-60 on- and off-ramp traffic connects at a side-street stop-controlled intersection on the southern side of the interchange. Through-traffic on WLC Pkwy passes over SR-60 on a two-lane overpass.

The proposed WLC Pkwy IC does not have bicycle lanes but has hard shoulders and a sidewalk on the west side of the bridge.

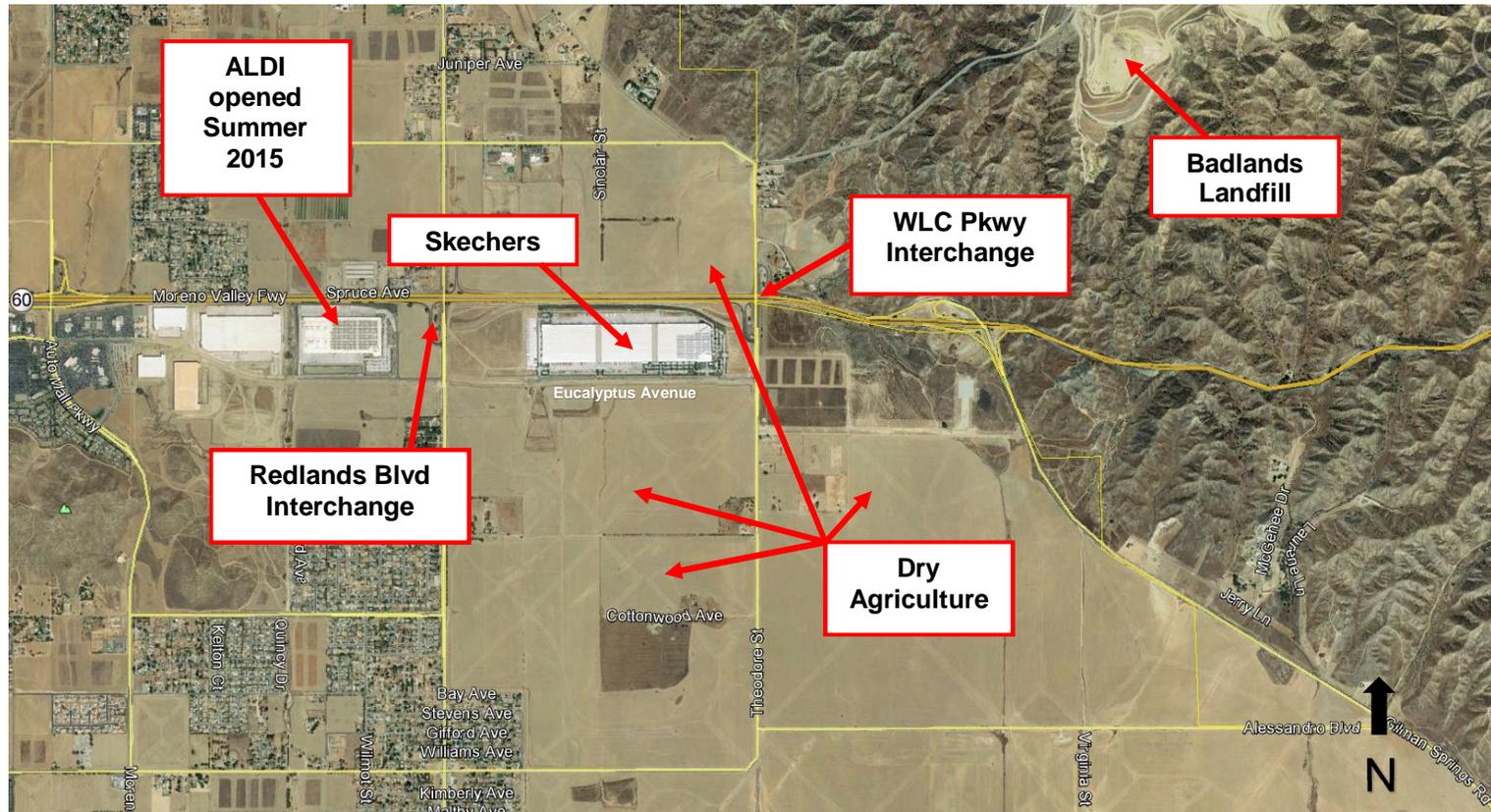


Exhibit 3: Base Conditions of the Study Area

Eucalyptus Avenue

Eucalyptus Avenue currently extends approximately 3,800 feet, from WLC Pkwy to the western edge of the Skechers distribution facility. The existing configuration of the roadway is two lanes westbound and one lane eastbound with a raised median. Access to the Skechers distribution facility is provided via five driveways on Eucalyptus Avenue, two of which are right-in and right-out only. On-street bike lanes exist along Eucalyptus Avenue in both directions of travel. A sidewalk is provided only on the portion of roadway adjacent to the Skechers site. Currently, the segment between the Skechers frontage and Redlands Boulevard is paved for emergency access. The emergency access allowed traffic during closure of the WLC Pkwy overcrossing in 2015 and continues to be open for one-way traffic.

The General Plan calls for Eucalyptus Avenue to be extended west through an intersection with Redlands Boulevard as a four-lane divided roadway. In summer 2015, the ALDI warehouse project constructed a segment of Eucalyptus Avenue to the west to connect to the ALDI project site. The intersection of Eucalyptus Avenue/Redlands Boulevard has been constructed and a traffic signal was installed as part of the project as well (see Exhibit 5). Eucalyptus Avenue has been extended to Moreno Beach Drive as part of a large scale industrial development project.

Redlands Boulevard Interchange

Redlands Boulevard/SR-60 IC is the adjacent interchange west of WLC Pkwy IC. Redlands Boulevard is a two-lane north-south arterial road that accesses the land both north and south of SR-60 which WLC Pkwy IC serves.

Ironwood Avenue

Ironwood Avenue is a two-lane east-west arterial road parallel to the SR-60. It terminates at Theodore Street at the Badlands Landfill access.

Intersection LOS

Traffic counts for turning movements in the AM and PM peak hours were collected for the study intersections during typical workdays in 2017. A growth factor of 2% per year (consistent with the *City of Moreno Valley Traffic Impact Analysis Preparation Guide*¹) was used to estimate the traffic volumes for the 2022 Base Conditions at the study locations. Exhibit 6 shows the turning movement volumes under the Base Conditions. Existing traffic counts are reported in detail in Appendix A. It is noted that the traffic volumes at the intersection of Redlands Boulevard and Eucalyptus Avenue were obtained from the SR-60/WLC Pkwy IC PA/ED Traffic Study Report². The 2022 No-build scenario volumes were used.

Exhibit 4 summarizes the intersection LOS for the existing conditions. Detailed worksheets are presented in Appendix B. The LOS for all study intersections is LOS C or better in both the AM and PM peak hours.

¹ *Traffic Impact Analysis Preparation Guide*, City of Moreno Valley Transportation Engineering Division, August 2007.

² *SR-60/World Logistics Center Parkway PA/ED Traffic Study Report*, WSP, October 2018.

Exhibit 4: Intersection LOS for Base Conditions (2022)

ID	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	WLC Pkwy & Eucalyptus Avenue	SSSC ²	15.4	C	13.3	B
2	WLC Pkwy & SR-60 EB Ramps	SSSC ²	12.7	B	9.9	A
3	WLC Pkwy & SR-60 WB Ramps	SSSC ²	10.6	B	11.4	B
4	Theodore Street & Ironwood Avenue	SSSC ²	8.9	A	8.9	A
5	Redlands Boulevard & Eucalyptus Avenue	SIGNAL ¹	9.8	A	6.7	A
6	Redlands Boulevard & SR-60 EB Ramps	SIGNAL ¹	12.3	B	24.7	C
7	Redlands Boulevard & SR-60 WB Ramps	SIGNAL ¹	22.5	C	33.2	C
8	Redlands Boulevard & Ironwood Avenue	SIGNAL ¹	12.4	B	12.8	B

Notes:

1. For signalized intersections, average delay and LOS for all approaches are reported.
2. "SSSC" means "side-street stop controlled." For SSSC intersections, delay and LOS for the worst performing approaches are reported.

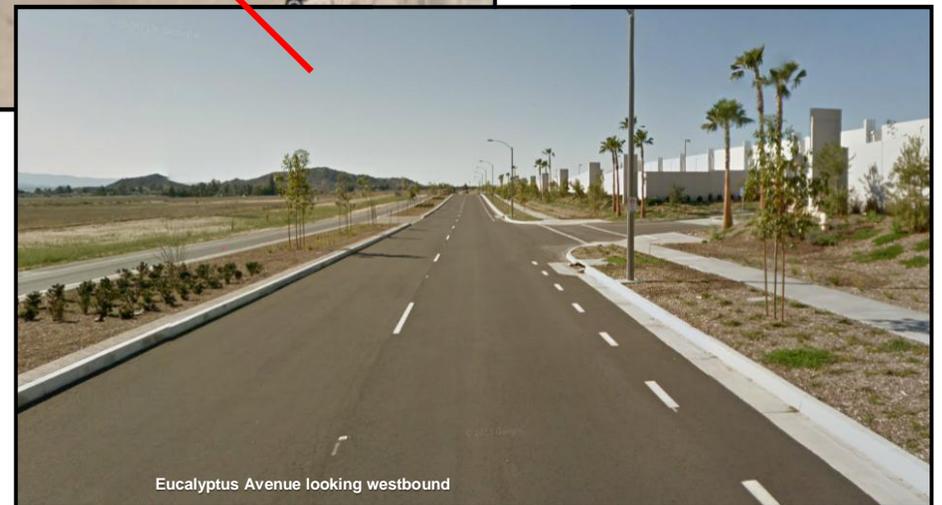


Exhibit 5: Current Condition of the Eucalyptus Avenue

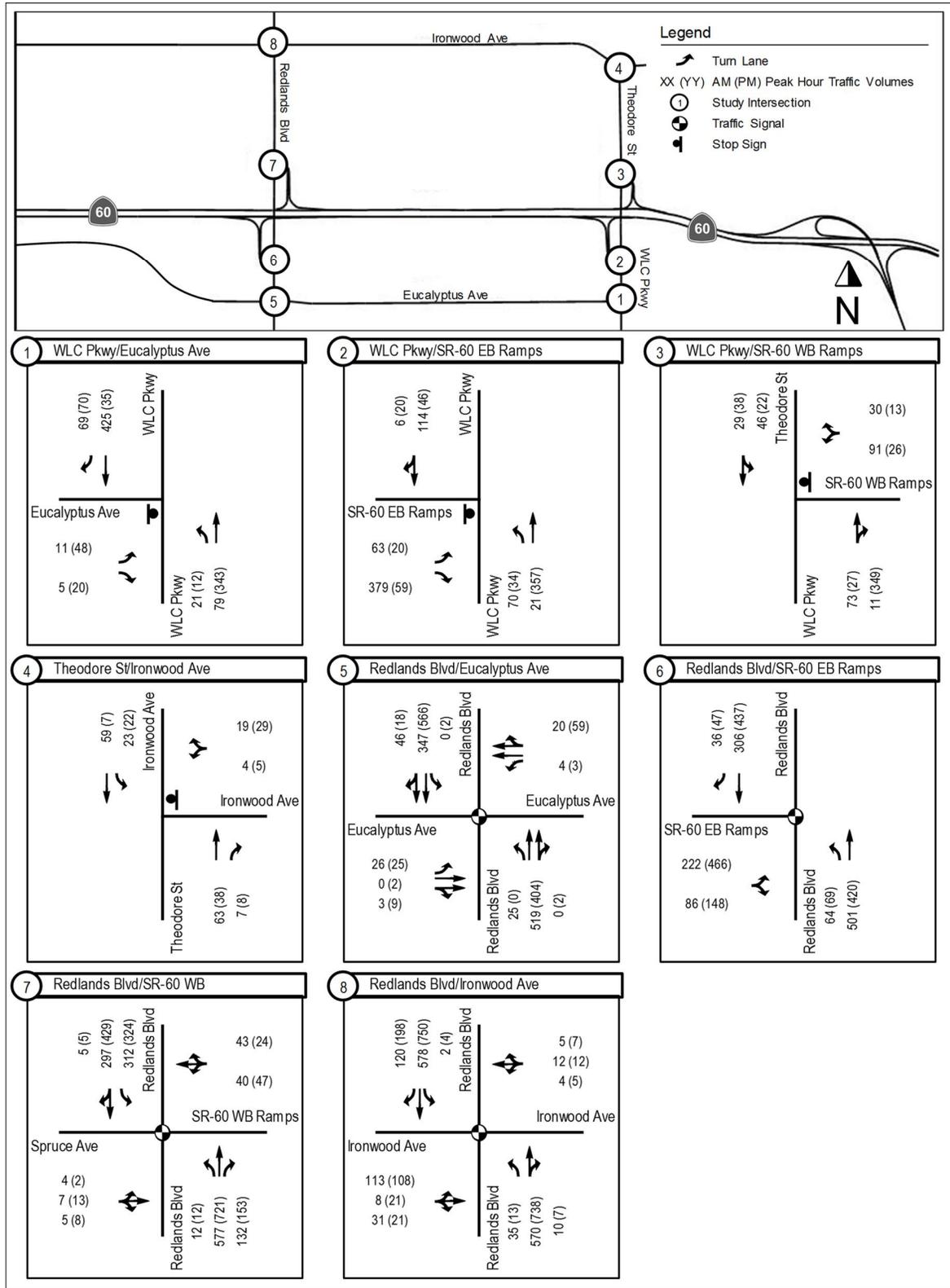


Exhibit 6: Turning Movement Volumes for Base Conditions (2022)

4. CONDITIONS WITH INTERCHANGE CLOSURE

Limits of Construction and Construction Staging

Construction of the project will require the closure of WLC Pkwy at times, from north of the existing SR-60 westbound ramps to the intersection of Eucalyptus Avenue/WLC Pkwy (including the bridge over SR-60). The exact point of closure will be determined during the development of construction plans; however, it is likely that due to the grade changes the northern closure point would be beyond the driveway to the residence at 12400 WLC Pkwy. Staging would then be required to maintain access to and from the residence.

On the south side of SR-60, the differences in profile grade between proposed WLC Pkwy and existing Eucalyptus Avenue would require construction to elevate the WLC Pkwy/Eucalyptus intersection by as much as 30 feet. Due to the substantial difference between the existing and proposed grades at the intersection, the proposed plan is to close the intersection for construction and maintain an alternate route to access Eucalyptus Avenue, through Redlands Boulevard as an alternate route. As part of this, a temporary roadway would be constructed at the south west quadrant of the closed intersection to connect Eucalyptus Avenue and WLC Pkwy to the south.

Based on discussions within the design team and input provided at meetings from Caltrans, Caltrans and the team would prefer complete closure of the interchange during construction, rather than trying to build the new ramps and bridge piecemeal so that only partial closures are necessary. Complete closure is expected to substantially reduce the overall cost and timeframe for construction as well as enhancing the safety of the work environment for construction workers and motorists due to the construction challenges with the substantial difference (up to 30 feet) between the existing and the proposed roadway profile. Construction staging concepts were developed with the assumption that the interchange would be completely closed during part of the construction. It is estimated that the duration of the complete closure of the interchange would be approximately 4 months.

The conceptual staged construction and the estimated construction durations are described below. Exhibits depicting the work to be done and construction area for each construction phase are included in Appendix D.

Construction Phase 1

Sub-Phase 1a – Construct portion of the proposed eastbound and westbound ramps of the interchange that are not within the footprint of the existing ramps. No roadway closure is anticipated and the interchange will remain open. *(Estimated Duration: 7 months)*

Sub-Phase 1b – Construct one additional lane along Eucalyptus Avenue between Redlands Boulevard and its current terminus at the western edge of the existing Skechers building to accommodate detoured traffic. Partial closure at the Eucalyptus Avenue and Redlands Boulevard intersection is anticipated but traffic access will be maintained on Redlands Boulevard. The interchange will remain open. *(Estimated duration: 2 months)*

Sub-Phase 1c – Construct the Eucalyptus Avenue and WLC Pkwy intersection and permanent grading for the Southern California Edison (SCE) owned poles relocation. The SCE poles relocation details and timing will be determined during final design. The WLC Pkwy and Eucalyptus Avenue intersection would be closed to all traffic movements during this phase. A temporary roadway would be constructed at the south west quadrant of the closed intersection to connect Eucalyptus Avenue and WLC Pkwy to the south. Traffic accessing in and out of the Skechers distribution facility would be detoured to the Eucalyptus Boulevard and Redlands Boulevard intersection. The interchange would remain open during this sub-phase providing access to and from the north on WLC Pkwy only. *(Estimated duration: 4 months)*

Sub-Phase 1d – Construct the temporary detour connecting the WLC Pkwy and Eucalyptus Avenue intersection to the existing WLC Pkwy and the freeway ramp to the north. The intersection would remain closed during this sub-phase. *(Estimated duration: 1 month)*

The estimated construction duration for Phase 1 is 7 months assuming that sub-phases 1b, 1c, and 1d would occur concurrently with Phase 1a.

Construction Phase 2

Sub-phase 2a – Construct WLC Pkwy north and south of the existing bridge over SR-60 to join with the newly constructed ramps from sub-phase 1a. The interchange will be completely closed to all traffic movements during this sub-phase for approximately 4 months. *(Estimated duration: 4 months)*

Sub-phase 2b – Demolish the existing ramps and construct the remaining portion of the proposed ramps and approaches of the interchange. Portion of the work in this sub-phase can be done concurrently with sub-phase 2a to minimize the need for other roadway closures. *(Estimated duration: 4 months)*

The estimated construction duration for Phase 2 is 6 months with some overlaps of the two sub-phases.

Construction Phase 3

Sub-phase 3a – Construct the new WLC Pkwy bridge over SR-60. The WLC Pkwy bridge will be closed but the newly constructed freeway ramps will be open during this sub-phase. Some of the bridge work could overlap with work in phase 2 to reduce construction duration. The final design of the bridge and bridge type will determine the duration of the construction. *(Estimated duration: 10 months)*

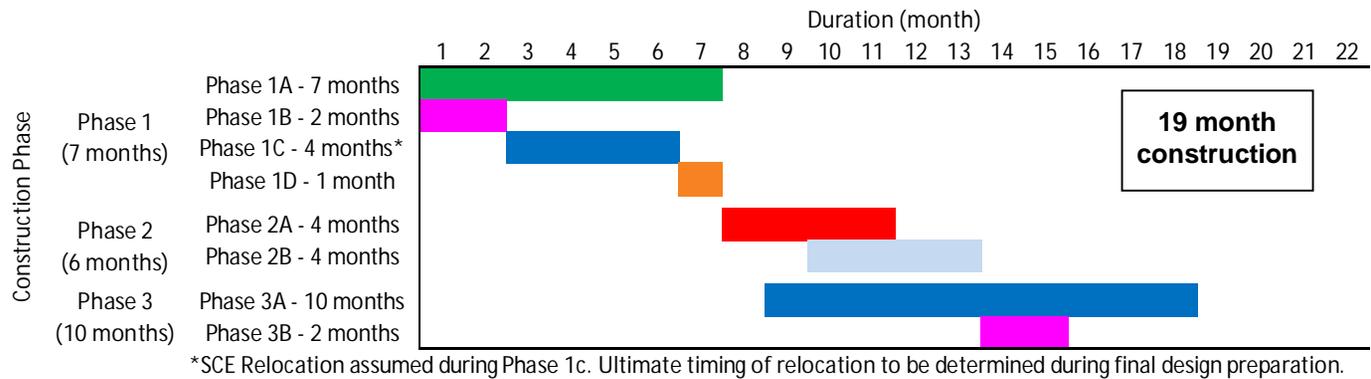
Sub-phase 3b – Widening of WLC Pkwy near Ironwood Avenue. Partial closure of the Theodore Street at Ironwood Avenue is anticipated. *(Estimated duration: 2 months)*

The estimated construction duration for Phase 3 is 10 months with sub-phase 3b occurring concurrently with sub-phase 3a.

It is estimated that the construction staging strategy with the interchange completely closed for 4 months as described above, would reduce the overall project construction duration from 30 months to 19 months. Construction with partial closure of the interchange and allowing traffic flow at the ramps and on WLC Pkwy throughout the course of construction would require the widening of WLC Pkwy to be done for half of the roadway at a time, which would substantially increase the duration for sub-phases 1c and 2a, which would then push back the start of the bridge construction in sub-phase 3a. In addition, widening WLC Pkwy in two settings would be challenging due to the substantial difference (up to 30 feet) between the existing and the proposed roadway profile. Temporary shoring would be required along WLC Pkwy. The estimated construction duration comparison between the construction staging with and without the complete interchange closure is presented in Exhibit 7.

It is estimated that the construction cost of the roadway widening portion would be reduced by 25% to 35% with the complete interchange closure during construction. Due to the substantial difference in the proposed roadway profile on WLC Pkwy, temporary shoring along the roadway would be required to allow traffic on WLC Pkwy during construction. This would not be needed if the roadway and interchange are completely closed to traffic. The effort and cost required for traffic control would be reduced as well.

Estimated Construction Duration with 4 Month Complete Interchange Closure



Estimated Construction Duration without Complete Interchange Closure (Build half of WLC Pkwy with shoring)

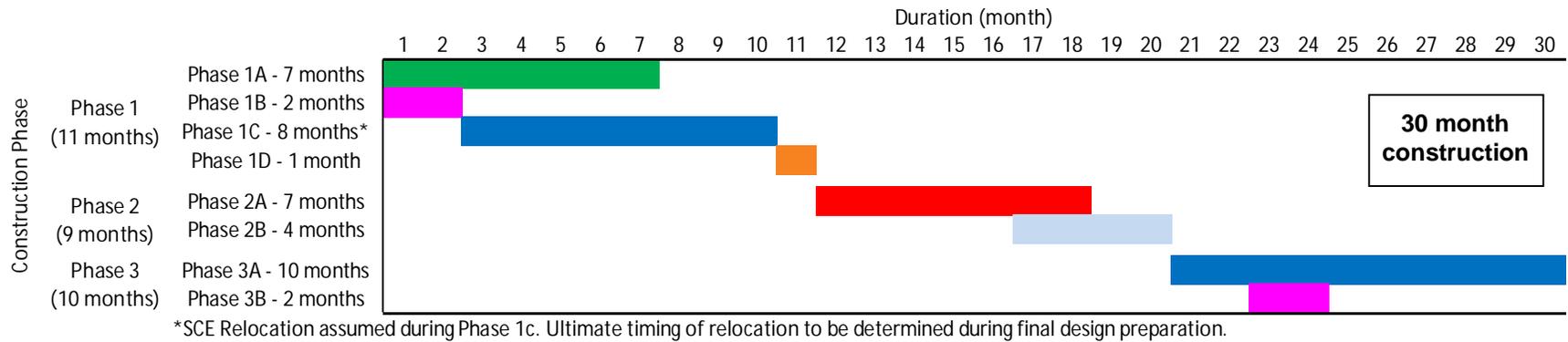


Exhibit 7: Estimated Construction Duration Comparison

Proposed Closure Conditions: Eucalyptus Avenue Extension

The proposed conditions would be to extend Eucalyptus Avenue from its current terminus at the western edge of the developed Skechers site to Redlands Boulevard. The proposed condition would be to widen Eucalyptus Avenue to accommodate detoured traffic during the closure of the SR-60/WLC Pkwy IC. There currently exists a single-lane access road. Highland Corporate Park is conditioned to extend and widen Eucalyptus Avenue to its ultimate condition between Redlands Boulevard and WLC Pkwy as their development expands. The timing of Highland Corporate Park's ultimate improvements on Eucalyptus Avenue is not known. As a result, if the ultimate improvements on Eucalyptus Avenue are not constructed by Highlands Corporate Park at the time it is required for the SR-60/WLC Pkwy IC detoured traffic, an additional lane will be added between Redlands Boulevard and the existing Skechers building as part of the SR-60/WLC Pkwy IC project with the reimbursement of the costs to be collected from Highland Corporate Park.

Detour Routes

Detour routes have been developed to provide access between SR-60 and the land uses north and south of the freeway (shown in Exhibit 8). The detour routes utilize the most direct roadways consistent with existing travel patterns. The detour routes will use the Redlands Boulevard interchange which is located approximately one mile to the west of the proposed WLC Pkwy IC.

The re-distribution of existing traffic was based on a review of the roadway network characteristics including lanes and intersection controls, existing travel patterns, existing turning movement traffic counts, and use of the travel demand forecasting model to observe regional travel patterns. Individual roadway segments adjacent to the WLC Pkwy interchange were selected in the model and trips to/from each link were isolated. The "Select Link Analysis" provided an estimation of directional travel patterns outside of the study area. For example, the Select Link Analysis showed that trips accessing Eucalyptus Avenue from the south primarily originated in the west, which indicates that those motorists could more conveniently use the Eucalyptus Avenue Extension instead of the Eucalyptus Avenue/WLC Pkwy intersection.

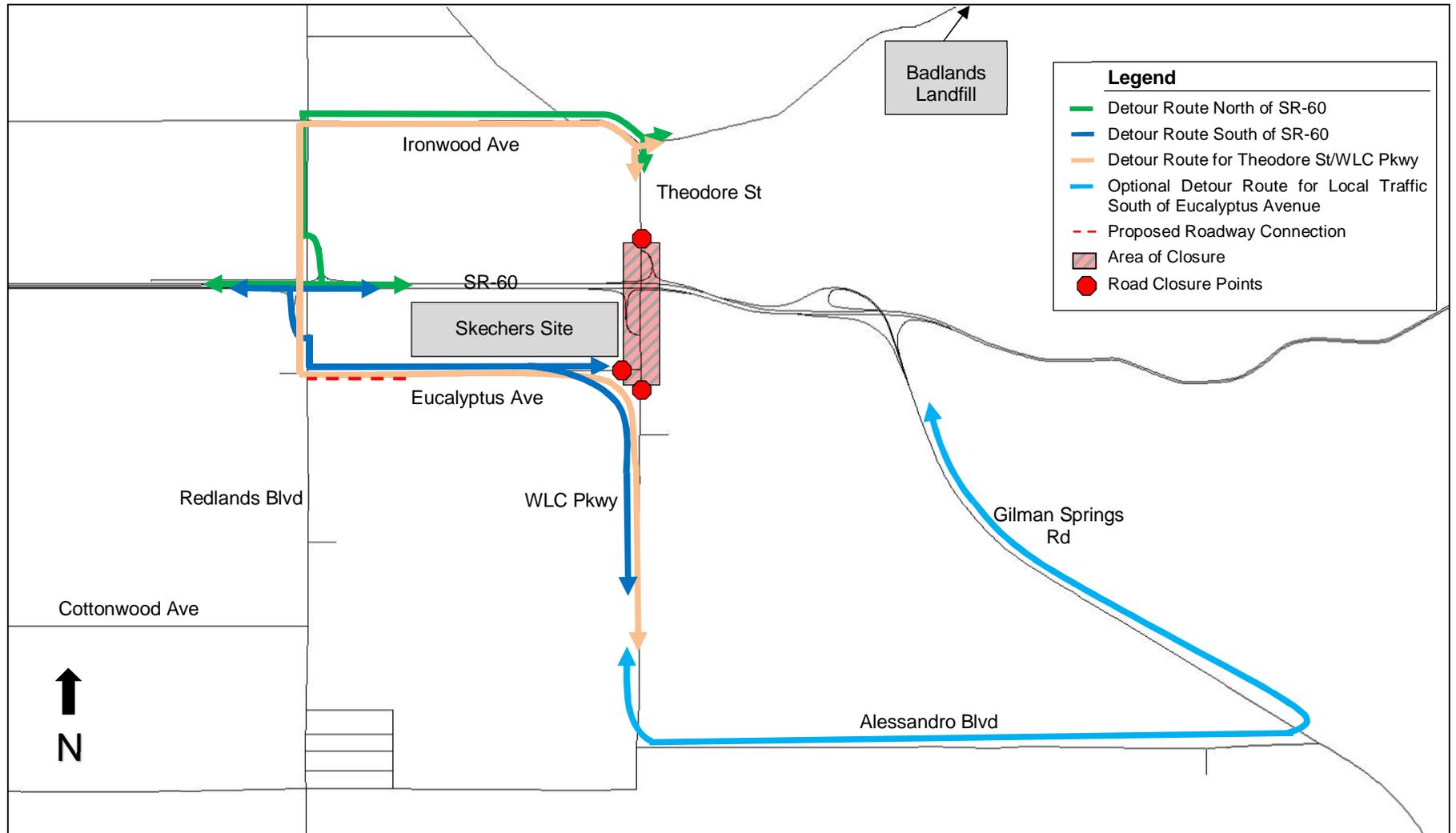


Exhibit 8: Proposed Detour Routes During Interchange Closure

Detour Route North of SR-60 (shown in green in Exhibit 8)

Traffic from the Badlands Landfill and residential land uses to the north of SR-60 will use Ironwood Avenue and Redlands Boulevard to access the Redlands Boulevard interchange with SR-60. This path would require that Ironwood Avenue between Redlands Boulevard and WLC Pkwy be designated as a temporary truck route to accommodate waste disposal trucks going to and from the landfill (it is not currently a designated truck route).

Detour Route to Skechers of SR-60 (shown in blue in Exhibit 8)

Trips to and from the Skechers distribution center will use the Redlands Boulevard Interchange, a short section of Redlands Boulevard, and the Eucalyptus Avenue Extension. This path would require that the short section of Redlands Boulevard, south of the eastbound off-ramp, and the Eucalyptus Avenue Extension be used for truck access and will require it to be open for 2-way access for all vehicles. Emergency services will continue to access the Skechers distribution center on the west side from Redlands Boulevard.

Detour Route to Houses along WLC Pkwy (shown in brown in Exhibit 8)

Trips to and from the five residences along WLC Pkwy will use the bypass road and route around Redlands Boulevard. Local traffic may also use Alessandro Boulevard to access Gilman Springs Road and the Gilman Springs Road interchange to access SR-60.

It is noted that in January 2015, the existing WLC Pkwy bridge was struck by a truck traveling on the SR-60 mainline. This incident resulted in a complete closure of the WLC Pkwy bridge for emergency repairs. During the bridge closure, the same detour routes as proposed in this study were put in place to detour traffic.

Traffic Re-Distribution During Construction

The base condition traffic volumes at the WLC Pkwy IC were distributed through the study intersections based on the primary detour routes, consistent with baseline traffic patterns in the area. Exhibit 9 shows the resulting intersection traffic volumes for the "Project Construction Conditions" at the study intersections.

A conservative approach, assuming all the respective existing traffic volumes at the closed ramp will be diverted to the primary detour routes, was applied to identify the traffic impacts under the worst-case scenario for the interchange closure. It is possible that a certain amount of traffic will be diverted to routes other than the identified primary detour routes and some travelers will adjust their travel plans to avoid the area with closures. Therefore, the actual traffic volumes diverted to the primary detour routes could be less than those identified in the report.

Intersection LOS During Project Construction

Traffic operations at the study intersections were evaluated for the project construction Conditions to determine if distributed traffic would cause negative impacts to the intersection's operations. Intersection operations were evaluated using the Synchro software, and are consistent with the WLC Pkwy IC PA/ED study. The existing conditions' traffic operations in this study are consistent with the findings from the PA/ED study. In addition, no improvement projects were assumed to be completed to the study intersections prior to the beginning of project construction; therefore, the intersection geometries and signal phasing have been assumed to remain consistent with existing conditions.

Exhibit 10 summarizes the peak hour delay and LOS forecasted for existing and the project construction conditions. Detailed worksheets are presented in Appendix C.

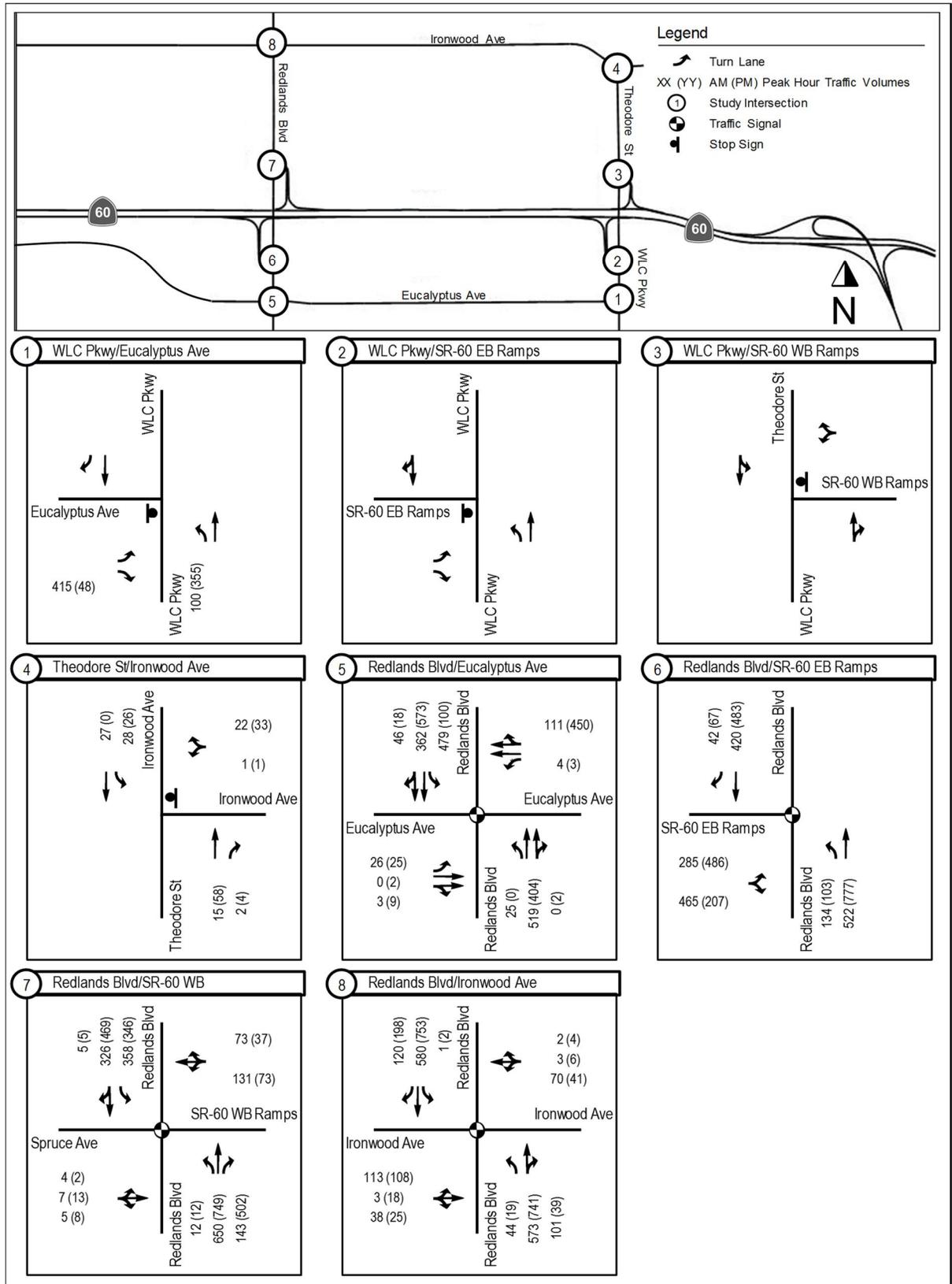


Exhibit 9: Forecasted Turning Movement Volumes during Project Construction Conditions (2022)

Exhibit 10: Forecasted Intersection LOS during Project Construction (2022)

ID	Intersection	Traffic Control	Base Conditions (2022)				Base Conditions + Construction (2022)			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay (sec/v eh)	LOS	Delay (sec/v eh)	LOS	Delay (sec/v eh)	LOS	Delay (sec/v eh)	LOS
1	WLC Pkwy & Eucalyptus Avenue	SSSC ²	15.4	C	13.3	B	Closed during Project Construction (Bypass Road does not have intersection control) ³			
2	WLC Pkwy & SR-60 EB Ramps	SSSC ²	12.7	B	9.9	A				
3	WLC Pkwy & SR-60 WB Ramps	SSSC ²	10.6	B	11.4	B				
4	Theodore Street & Ironwood Avenue	SSSC ²	8.9	A	8.9	A	8.5	A	9.0	A
5	Redlands Boulevard & Eucalyptus Avenue	SIGNAL ¹	9.8	A	6.7	A	20.0	B	11.9	B
6	Redlands Boulevard & SR-60 EB Ramps	SIGNAL ¹	12.3	B	24.7	C	37.9	D	38.6	D
7	Redlands Boulevard & SR-60 WB Ramps	SIGNAL ¹	22.5	C	33.2	C	26.6	C	28.4	C
8	Redlands Boulevard & Ironwood Avenue	SIGNAL ¹	12.4	B	12.8	B	18.2	B	16.6	B

Notes:
 1. For signalized intersections, average delay and LOS for all approaches are reported.
 2. "SSSC" means "side-street stop controlled." For SSSC intersections, delay and LOS for the worst performing approach are reported.
 3. Assumes the Eucalyptus Avenue Extension is open.

All study intersections would operate at the target LOS of "D" or better during the AM and PM peak hours during construction. Therefore, no capacity increasing improvements are needed to accommodate the additional traffic demand at the study intersections.

Travel Time

Travel time was determined for scenarios before and after the WLC Pkwy IC closure to assess the additional time required to travel on the detour routes and to determine whether unreasonable inconvenience would occur as a result of the proposed detours. The travel time estimates were conducted using roadway travel distances and posted speed limits to calculate a route travel time.

Given the relatively low congestion and delay along the roadways and intersections in the study area, the Time-Speed approach was deemed sufficient for travel time estimations. However, all detour routes were driven to ensure that they were free of constraints that may hinder free-flow travel. Exhibit 11 provides the estimated travel times between SR-60 and key origins within the study area for existing conditions and project construction conditions. The intent of estimating travel time between SR-60 and points of interest within the area is to better understand how a typical motorist would be affected by the WLC Pkwy IC closure. Traffic counts and field observations indicate that most traffic along WLC Pkwy uses SR-60; therefore, selecting destination points on SR-60 was intended to mimic existing travel patterns.

For example, Exhibit 11 provides an estimate of the distance and travel time from the Theodore Street/Ironwood Avenue intersection to a point on SR-60 west of the Redlands Boulevard ramps. The route is a common route for vehicles traveling between areas within Moreno Valley and the Badlands Landfill. The exhibit provides distance and estimated travel time increases to be expected during the project construction conditions.

The travel time along the routes refers to the time spent traveling along each respective detour. Time is rounded to the nearest minute.

Exhibit 11: Travel Time and Distance Estimates

Travel Time	Existing Conditions	Project Construction Conditions*	Difference
<i>From SR-60 West of Redlands Boulevard to:</i>			
Theodore Street/Ironwood Avenue	1.4 miles 2 minutes	1.5 miles 2 minutes	0.1 miles < 1 minute
WLC Pkwy/Eucalyptus Avenue	1.4 miles 2 minutes	1.4 miles 2 minutes	0 miles < 1 minute
Skechers Distribution Site – Vehicle Access	1.7 miles 2 minutes	1.1 miles 2 minutes	-0.6 miles < 1 minute
Skechers Distribution Site – Truck Access	2.0 miles 3 minutes	0.7 miles 1 minutes	-1.3 miles -1 minute
WLC Pkwy/Dracaea Avenue	2.1 miles 3 minutes	3.8 miles 6 minutes	1.7 miles 3 minutes
<i>From SR-60 East of Gilman Springs Road to:</i>			
Theodore Street/Ironwood Avenue	1.6 miles 2 minutes	3.7 miles 5 minutes	2.1 miles 3 minutes
WLC Pkwy/Eucalyptus Avenue	1.0 miles 1 minute	3.2 miles 3 minutes	2.1 miles 2 minutes
Skechers Distribution Site – Vehicle Access	1.3 miles 1 minute	2.9 miles 3 minutes	1.5 miles 2 minutes
Skechers Distribution Site – Truck Access	1.8 miles 2 minutes	2.3 miles 3 minutes	0.7 miles 1 minute
WLC Pkwy/Dracaea Avenue	1.6 miles 2 minutes	4.7 miles 7 minutes	3.1 miles 5 minutes
*Notes:			
<ul style="list-style-type: none"> - Travel times represent approximations based on distance and posted speed limit calculation and do not include stopped time at intersections. Minimum travel time shown as “< 1 minute”. - “Vehicle Access” was assumed to be the driveway approximately 1,600 feet from WLC Pkwy. - “Truck Access” was assumed to be the driveway approximately 3,600 feet from WLC Pkwy. 			

As can be seen in Exhibit 11, most travelers coming from or going to places west of Redlands Boulevard on SR-60 (76% of current WLC Pkwy IC users) would experience little, if any, delay as a result of the closure of the WLC Pkwy IC. In fact, the extension of Eucalyptus Avenue will decrease the distance and travel time for the largest group of users of the WLC Pkwy IC, namely to and from the Skechers distribution site. As shown in Exhibit 8, the truck access for the Skechers site and the west will decrease by over one mile; passenger car access to the site will decrease by over half a mile (passenger cars typically enter the site from a different driveway than trucks). The only notable inconvenience to/from areas west of the site would be travelers to and from the five residences along WLC Pkwy south of Eucalyptus Avenue, who would travel an additional 1.7 miles (approximately 3 minutes) to reach SR-60 at Redlands Boulevard.

The 23% of current WLC Pkwy IC users traveling to or from SR-60 east of Gilman Springs Road IC would experience increases in travel time of 1 to 3 minutes, with the exception of travelers to and from the five residences along WLC Pkwy south of Eucalyptus Avenue, who would travel an additional 3.1 miles (approximately 5 minutes) to reach SR-60 at Gilman Springs Road.

Emergency Response Travel Time

Emergency response travel time was considered when evaluating the detour routes associated with the closure of the WLC Pkwy IC. Access to the Skechers site by the Moreno Valley Fire Department was analyzed to determine the amount of delay that would be added to their response times with the closure of the interchange. The calculated travel time delay was compared to the Moreno Valley Fire Department

goal of responding within a five minute response time to 90% of the calls (Moreno Valley Fire Department Strategic Plan, December 2011).

The closest fire station to the Skechers distribution site is the Moreno Beach Fire Station #58, located at 28040 Eucalyptus Avenue. Eucalyptus Avenue has recently been constructed and opened to connect to Redlands Boulevard. This allows for access directly to the Skechers site.

Field observations noted that fire response vehicles, while responding to a call, used the open “truck” entrance along the western edge of the Skechers site. The other access gates along Eucalyptus are closed and not staffed, whereas the gates at the western edge of the site are staffed so that they can be opened for the fire department. For purposes of this evaluation, emergency response vehicles were assumed to access the site via the driveway on the western end of the Skechers distribution site.

Estimated travel times for emergency response were calculated similar to passenger car and truck travel times, by using a speed-distance calculation. The estimated travel times do not account for stoppage time.

With Eucalyptus Avenue extending to connect to Redlands Boulevard, the distance required to access the site decreases by 1.4 miles, resulting in an approximately 90 seconds of response time savings. The emergency travel time to the Skechers site is less than one minute.

Emergency access from the Moreno Beach Fire Station #58 site to the five residences south of the WLC Pkwy IC would remain the same. The access route will be on Eucalyptus Avenue to WLC Pkwy.

Heavy Vehicle Traffic

Intersections along the detour routes were evaluated to determine if the addition of heavy vehicle turning movements could be accommodated. Field observations and a review of the City of Moreno Valley Truck Routes found that heavy vehicles already successfully make turns at intersections under existing conditions. The following intersections require special attention for project construction conditions:

Redlands Boulevard/Ironwood Avenue

The detour route between the SR-60 Redlands Boulevard interchange and the Badlands Landfill would require heavy vehicles to make a northbound right-turn and westbound left-turn at the Redlands Boulevard/Ironwood Avenue intersection. At the present time, this turning movement is not frequently made by heavy vehicles. Exhibit 12 shows a truck turning analysis at the intersection to determine if heavy vehicles could make the turning movements without impacting vehicles in adjacent travel lanes. As shown, the truck template goes beyond the existing footprint of the intersection. Therefore, the southeast quadrant of this intersection will need to be improved to accommodate the detoured trucks.

Alessandro Boulevard/ WLC Pkwy

Exhibit 13 shows a truck turning analysis at the intersection to determine if heavy vehicles could make the turning movements. As shown, the truck template goes beyond the existing footprint of the intersection. Therefore, the intersection will need to be improved to accommodate the detoured trucks.

Alessandro Boulevard/Gilman Springs Road

Exhibit 14 shows a truck turning analysis at the intersection to determine if heavy vehicles could make the turning movements. As shown, the truck template goes beyond the existing footprint of the intersection. Therefore, the southwest and southeast quadrants of this intersection may need to be improved to accommodate the detoured vehicles.

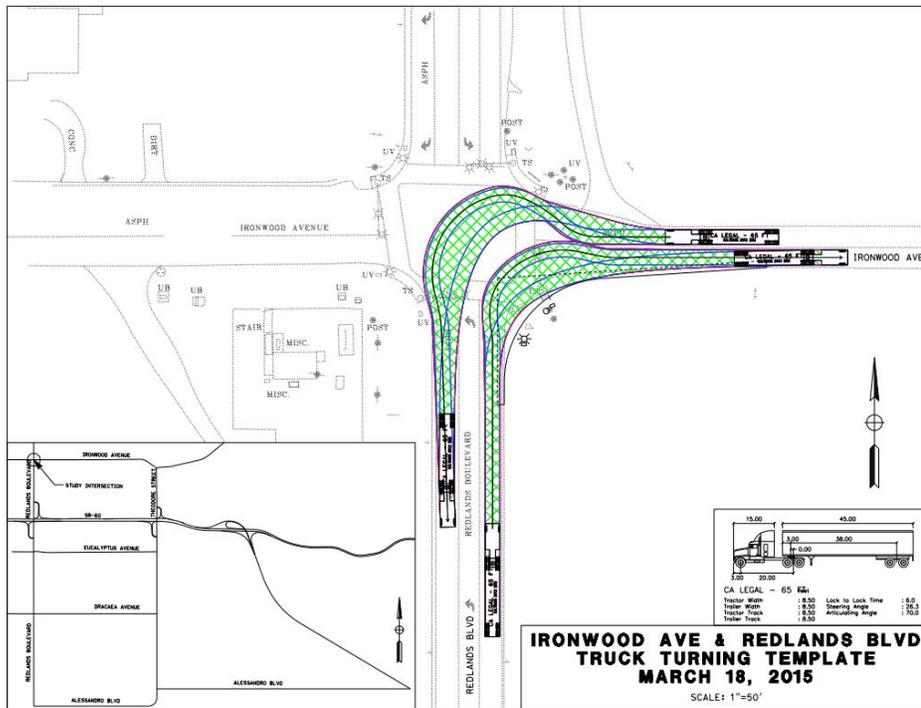


Exhibit 12: Truck Turning Analysis at Redlands Boulevard / Ironwood Avenue Intersection

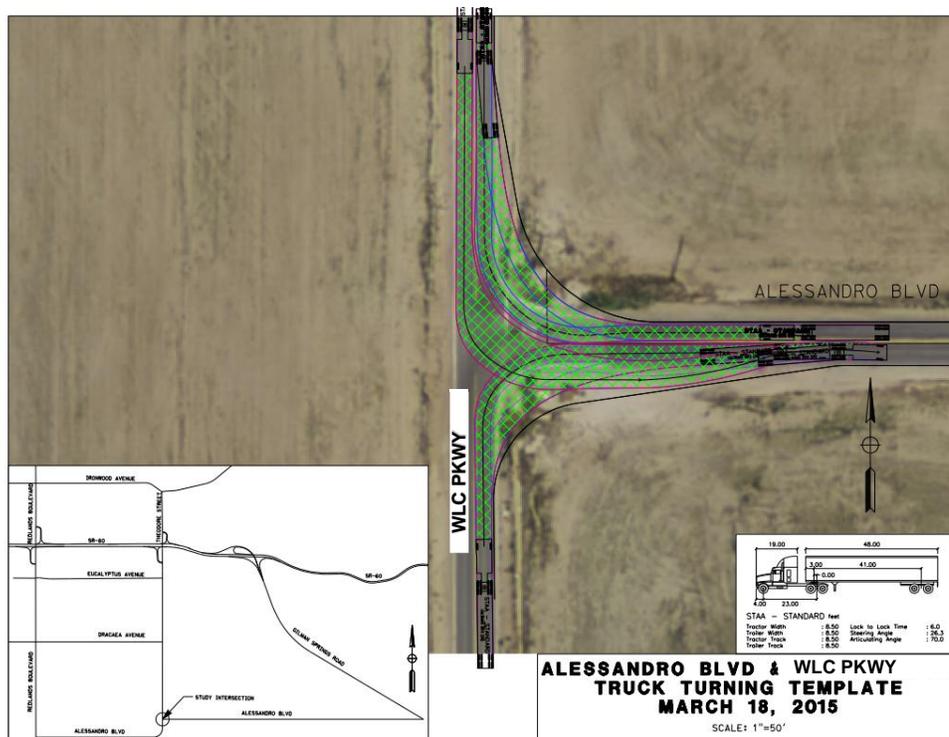


Exhibit 13: Truck Turning Analysis at Alessandro Boulevard / WLC Pkwy Intersection

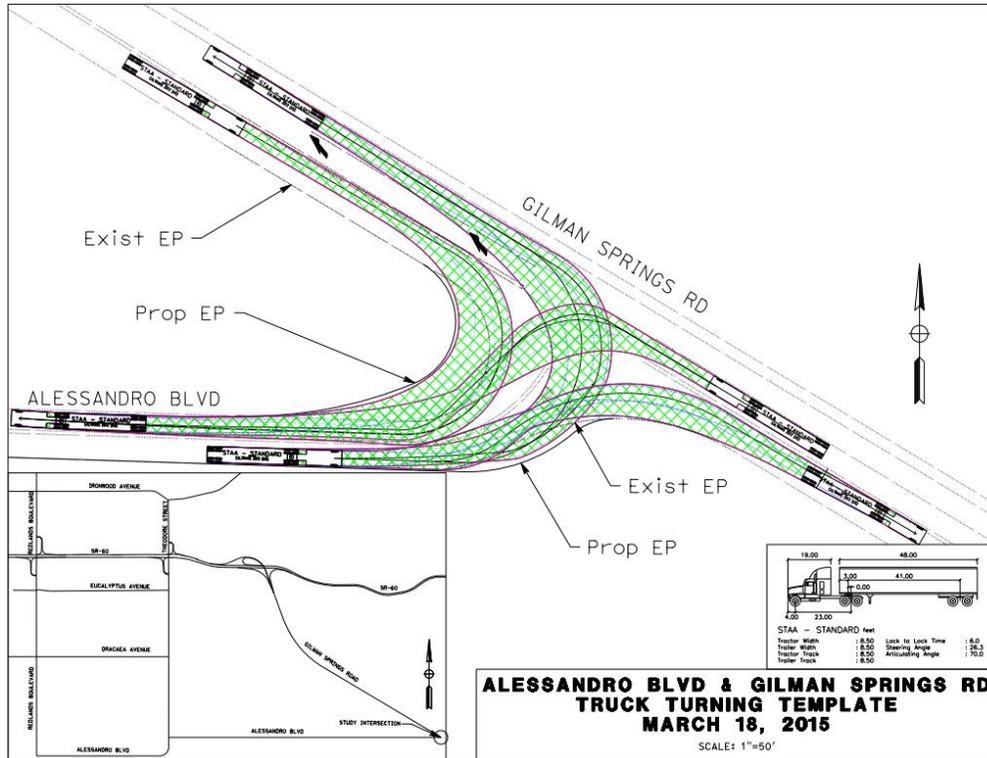


Exhibit 14: Truck Turning Analysis at Alessandro Boulevard / Gilman Springs Road Intersection

Bicycle and Pedestrian Traffic

Bicycle and pedestrian crossings of the WLC Pkwy IC will be prohibited during construction. Bicyclists and pedestrians should be detoured to the Redlands Boulevard freeway crossing. Additionally, temporary paving or grading could be included on the same side as the pedestrian walkway on the bridge. The Redlands Boulevard IC, similar to the WLC Pkwy IC, has striped hard shoulders and a sidewalk on the west side of the bridge. Therefore, no significant impact due to degradation of facilities is expected for bicyclists and pedestrians.

5. CONCLUSIONS

The closure of the WLC Pkwy IC would require existing traffic to be diverted to adjacent roadways and the Redlands Boulevard interchange. The evaluations completed as part of this study found that the detour routes and study intersections could accommodate the detoured vehicles while maintaining an acceptable Level of Service. Closure of the WLC Pkwy IC with proper notice and planning will not adversely impact the existing traffic operations in the study area. Inconveniences to motorists would be minimal given the close proximity and relative ease of access to the Redlands Boulevard IC.

Time-delay analysis and intersection operational analysis were performed for the proposed primary detour routes associated with the WLC Pkwy IC closure to identify the potential traffic impacts due to the closure. The analysis found that all study intersections would continue to operate at acceptable levels during construction of the project.

In addition, travel times of the existing routes and the proposed primary detour routes for the interchange closure scenario were determined for free-flow conditions. The travel time delay analysis concluded that all the proposed detour routes for the closure would impose a less than one minute delay to motorists traveling to/from the west on SR-60. Motorists travelling to/from the east, which represent a smaller amount of traffic, would incur an approximate 2:00 minute delay.

Completion of the Eucalyptus Avenue Extension prior to initiation of the project would reduce travel delay for motorists on Eucalyptus Avenue, when compared to existing conditions. The completion of the Eucalyptus Avenue Extension would allow for the WLC Pkwy/Redlands Boulevard intersection to be closed for the entire construction period with increased delay to only a small percentage of motorists in the area.

The goals and objectives of the interchange closure are to enhance safety to the work environment for both the work force and motoring public as well as minimizing delays for motorists. Based on the existing and future forecasted traffic volumes, the WLC Pkwy IC is considered an interchange with low traffic volumes. The analysis in this study revealed that the intersections along the detour routes would operate at an acceptable Level of Service and thus the impacts on motorists would not be significant. In addition, having complete closure of the interchange for 4 months during construction would reduce the construction duration when compared to having partial closure of the WLC Pkwy bridge. Complete interchange closure would reduce the overall construction duration by approximately 11 months with a cost savings of 25% to 35% on the overall construction costs. In general, construction costs are reduced due to multiple contractor mobilizations for various construction trades, a reduction in the traffic control needed for multiple stages, and more efficient construction activities. To ensure the 4-month closure duration is successful, controls will be placed on the contractor as well as maintain close coordination with Caltrans and the community.

Recommendations

The WLC Pkwy IC project is not expected to adversely impact businesses and residences in the area; however, the following measures are recommended:

- Partially close Theodore Street north of the SR-60 westbound on/off ramp intersection and provide continued access to local land owners during the closure. (Phase 2)
- Partially close WLC Pkwy south of the WLC Pkwy/Eucalyptus Avenue intersection. (Phase 1)
- Post notifications at the Badlands Landfill, along landfill access road, and at the Ironwood Avenue/Theodore Street intersection to notify trucks of the closure of WLC Pkwy and its detour route.
- Install temporary Truck Route Detour signage (SC3 CA DETOUR with arrow supplement to R14-1 TRUCK ROUTE) to direct trucks along Ironwood Avenue and Redlands Boulevard between the Badlands Landfill and SR-60 (to provide special notice to Badlands Landfill-related truck trips, in addition to standard detour signage, as needed).

- Install temporary Truck Route Detour signage (SC3 CA DETOUR with arrow supplement to R14-1 TRUCK ROUTE) to direct trucks along the short section of Redlands Boulevard, south of the eastbound off-ramp, and the Eucalyptus Avenue Extension.
- Create one point of contact within the City of Moreno Valley and/or Caltrans to provide closure information to requesting parties.
- Post notifications at intersections along Alessandro Boulevard and Redlands Boulevard to alert northbound motorists of the WLC Pkwy closure.
- Provide proper notification and continued communication for all affected groups as part of the public outreach program in the Transportation Management Plan including:
 - Local businesses
 - Local agencies (City of Moreno Valley and County of Riverside public services)
 - Emergency response services (Moreno Valley Fire Department, Riverside County Fire Department, and local ambulance services, etc.)
 - Law enforcement agencies (City of Moreno Valley Police Department, County of Riverside Sheriff, California Highway Patrol, etc.)
 - Local school districts
 - Trucking industry
 - Chamber of Commerce and local politicians
- Conduct an open house Town Hall meeting to discuss the interchange closure plan with the public.
- Notify the public of the pending interchange closure through multiple media outlets by sending informational notices, issuing press releases, and making public service radio announcements, etc.
 - Form an email interest/distribution list for updates
 - Create a project website for updates
- Involve the City of Moreno Valley and County of Riverside Traffic Engineer in interchange closure actions as needed.
- Include elements as listed in the Transportation Management Plan attached in Appendix E.
- Provide improvements at the following intersections:
 - Redlands Boulevard/Ironwood Avenue – Improve the southeast quadrant of this intersection to accommodate the detoured trucks.
 - Alessandro Boulevard/WLC Pkwy – Improve intersection to accommodate the detoured trucks.
 - Alessandro Boulevard/Gilman Springs Road – Improve intersection to accommodate the detoured vehicles.

**SR-60/WORLD LOGISTICS CENTER PARKWAY
INTERCHANGE CLOSURE STUDY**

Appendix A

Traffic Counts

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City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MR_V_Theodore_Eucalyptus AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers - Large 2 Axle Vehicles - 3 Axle Vehicles - 4 Axle Trucks - 5 Axle Trucks - 6+ Axle Trucks - Buses & RV's -
 Motorcycles - Bicycles - Medium Truck

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	7	7	14	1	8	9	1	0	1	24
07:15 AM	17	11	28	4	11	15	2	0	2	45
07:30 AM	15	15	30	6	12	18	0	2	2	50
07:45 AM	14	16	30	7	13	20	2	2	4	54
Total	53	49	102	18	44	62	5	4	9	173
08:00 AM	10	23	33	15	12	27	2	1	3	63
08:15 AM	12	34	46	10	10	20	2	4	6	72
08:30 AM	12	26	38	6	12	18	9	27	36	92
08:45 AM	10	17	27	2	12	14	4	5	9	50
Total	44	100	144	33	46	79	17	37	54	277
Grand Total	97	149	246	51	90	141	22	41	63	450
Apprch %	39.4	60.6		36.2	63.8		34.9	65.1		
Total %	21.6	33.1	54.7	11.3	20	31.3	4.9	9.1	14	
Cars & Trailers	45	117	162	47	44	91	13	37	50	303
% Cars & Trailers	46.4	78.5	65.9	92.2	48.9	64.5	59.1	90.2	79.4	67.3
Large 2 Axle Vehicles	0	1	1	0	0	0	0	0	0	1
% Large 2 Axle Vehicles	0	0.7	0.4	0	0	0	0	0	0	0.2
3 Axle Vehicles	0	2	2	0	0	0	1	0	1	3
% 3 Axle Vehicles	0	1.3	0.8	0	0	0	4.5	0	1.6	0.7
4 Axle Trucks	1	2	3	0	0	0	1	0	1	4
% 4 Axle Trucks	1	1.3	1.2	0	0	0	4.5	0	1.6	0.9
5 Axle Trucks	43	13	56	0	40	40	3	0	3	99
% 5 Axle Trucks	44.3	8.7	22.8	0	44.4	28.4	13.6	0	4.8	22
6+ Axle Trucks	0	1	1	0	0	0	0	0	0	1
% 6+ Axle Trucks	0	0.7	0.4	0	0	0	0	0	0	0.2
Buses & RV's	0	0	0	0	0	0	0	0	0	0
% Buses & RV's	0	0	0	0	0	0	0	0	0	0
Motorcycles	0	1	1	0	0	0	0	0	0	1
% Motorcycles	0	0.7	0.4	0	0	0	0	0	0	0.2
Bicycles	0	1	1	0	0	0	0	1	1	2
% Bicycles	0	0.7	0.4	0	0	0	0	2.4	1.6	0.4
Medium Truck	8	11	19	4	6	10	4	3	7	36
% Medium Truck	8.2	7.4	7.7	7.8	6.7	7.1	18.2	7.3	11.1	8

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	14	16	30	7	13	20	2	2	4	54
08:00 AM	10	23	33	15	12	27	2	1	3	63
08:15 AM	12	34	46	10	10	20	2	4	6	72
08:30 AM	12	26	38	6	12	18	9	27	36	92
Total Volume	48	99	147	38	47	85	15	34	49	281
% App. Total	32.7	67.3		44.7	55.3		30.6	69.4		
PHF	.857	.728	.799	.633	.904	.787	.417	.315	.340	.764

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	5	4	9	1	7	8	0	0	0	17
07:15 AM	10	6	16	4	10	14	1	0	1	31
07:30 AM	9	10	19	5	6	11	0	1	1	31
07:45 AM	4	13	17	7	6	13	1	1	2	32
Total	28	33	61	17	29	46	2	2	4	111
08:00 AM	6	19	25	13	3	16	1	1	2	43
08:15 AM	3	29	32	9	5	14	1	4	5	51
08:30 AM	3	22	25	6	5	11	6	25	31	67
08:45 AM	5	14	19	2	2	4	3	5	8	31
Total	17	84	101	30	15	45	11	35	46	192
Grand Total	45	117	162	47	44	91	13	37	50	303
Apprch %	27.8	72.2		51.6	48.4		26	74		
Total %	14.9	38.6	53.5	15.5	14.5	30	4.3	12.2	16.5	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:45 AM	4	13	17	7	6	13	1	1	2	32
08:00 AM	6	19	25	13	3	16	1	1	2	43
08:15 AM	3	29	32	9	5	14	1	4	5	51
08:30 AM	3	22	25	6	5	11	6	25	31	67
Total Volume	16	83	99	35	19	54	9	31	40	193
% App. Total	16.2	83.8		64.8	35.2		22.5	77.5		
PHF	.667	.716	.773	.673	.792	.844	.375	.310	.323	.720

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	1	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	1	0	0	0	0	0	0	1
Apprch %	0	100		0	0		0	0		
Total %	0	100	100	0	0	0	0	0	0	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	1	1	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	1	1	0	0	0	0	0	0	1
Total	0	2	2	0	0	0	1	0	1	3
Grand Total	0	2	2	0	0	0	1	0	1	3
Apprch %	0	100		0	0		100	0		
Total %	0	66.7	66.7	0	0	0	33.3	0	33.3	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	1	1	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	1	1	0	0	0	1	0	1	2
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.250	.000	.250	.500

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 4 Axle Trucks

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	1	1	2	0	0	0	0	0	0	2
Total	1	1	2	0	0	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	1	0	0	0	1	0	1	2
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	1	0	1	2
Grand Total	1	2	3	0	0	0	1	0	1	4
Apprch %	33.3	66.7		0	0		100	0		
Total %	25	50	75	0	0	0	25	0	25	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:45 AM	1	1	2	0	0	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	1	1	0	0	0	1	0	1	2
08:30 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	1	2	3	0	0	0	1	0	1	4
% App. Total	33.3	66.7		0	0		100	0		
PHF	.250	.500	.375	.000	.000	.000	.250	.000	.250	.500

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 5 Axle Trucks

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	1	1	0	0	0	0	0	0	1
07:15 AM	7	3	10	0	1	1	1	0	1	12
07:30 AM	5	0	5	0	6	6	0	0	0	11
07:45 AM	8	1	9	0	6	6	1	0	1	16
Total	20	5	25	0	13	13	2	0	2	40
08:00 AM	4	1	5	0	8	8	1	0	1	14
08:15 AM	7	1	8	0	4	4	0	0	0	12
08:30 AM	7	4	11	0	7	7	0	0	0	18
08:45 AM	5	2	7	0	8	8	0	0	0	15
Total	23	8	31	0	27	27	1	0	1	59
Grand Total	43	13	56	0	40	40	3	0	3	99
Apprch %	76.8	23.2		0	100		100	0		
Total %	43.4	13.1	56.6	0	40.4	40.4	3	0	3	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:45 AM	8	1	9	0	6	6	1	0	1	16
08:00 AM	4	1	5	0	8	8	1	0	1	14
08:15 AM	7	1	8	0	4	4	0	0	0	12
08:30 AM	7	4	11	0	7	7	0	0	0	18
Total Volume	26	7	33	0	25	25	2	0	2	60
% App. Total	78.8	21.2		0	100		100	0		
PHF	.813	.438	.750	.000	.781	.781	.500	.000	.500	.833

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 6+ Axle Trucks

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	1	1	0	0	0	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	1	0	0	0	0	0	0	1
Apprch %	0	100		0	0		0	0		
Total %	0	100	100	0	0	0	0	0	0	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Buses & RV's

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Motorcycles

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	1	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	1	0	0	0	0	0	0	1
Apprch %	0	100		0	0		0	0		
Total %	0	100	100	0	0	0	0	0	0	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRJV_Theodore_Eucalyptus AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Bicycles

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	1	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	1	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	1	1	2
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	1	0	0	0	0	1	1	2
Apprch %	0	100		0	0		0	100		
Total %	0	50	50	0	0	0	0	50	50	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRJV_Theodore_Eucalyptus AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Medium Truck

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	2	1	3	0	1	1	1	0	1	5
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	1	4	5	1	0	1	0	0	0	6
07:45 AM	1	1	2	0	1	1	0	1	1	4
Total	4	6	10	1	2	3	1	1	2	15
08:00 AM	0	2	2	2	1	3	0	0	0	5
08:15 AM	2	3	5	1	1	2	0	0	0	7
08:30 AM	2	0	2	0	0	0	2	2	4	6
08:45 AM	0	0	0	0	2	2	1	0	1	3
Total	4	5	9	3	4	7	3	2	5	21
Grand Total	8	11	19	4	6	10	4	3	7	36
Apprch %	42.1	57.9		40	60		57.1	42.9		
Total %	22.2	30.6	52.8	11.1	16.7	27.8	11.1	8.3	19.4	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:45 AM	1	1	2	0	1	1	0	1	1	4
08:00 AM	0	2	2	2	1	3	0	0	0	5
08:15 AM	2	3	5	1	1	2	0	0	0	7
08:30 AM	2	0	2	0	0	0	2	2	4	6
Total Volume	5	6	11	3	3	6	2	3	5	22
% App. Total	45.5	54.5		50	50		40	60		
PHF	.625	.500	.550	.375	.750	.500	.250	.375	.313	.786

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers - Large 2 Axle Vehicles - 3 Axle Vehicles - 4 Axle Trucks - 5 Axle Trucks - 6+ Axle Trucks - Buses & RV's -
 Motorcycles - Bicycles - Medium Truck

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	6	6	12	3	11	14	12	2	14	40
04:15 PM	10	8	18	1	4	5	11	4	15	38
04:30 PM	9	10	19	2	10	12	11	8	19	50
04:45 PM	6	8	14	4	7	11	10	2	12	37
Total	31	32	63	10	32	42	44	16	60	165
05:00 PM	6	10	16	2	3	5	9	4	13	34
05:15 PM	4	10	14	0	3	3	5	2	7	24
05:30 PM	8	11	19	1	12	13	15	8	23	55
05:45 PM	9	3	12	4	5	9	10	3	13	34
Total	27	34	61	7	23	30	39	17	56	147
Grand Total	58	66	124	17	55	72	83	33	116	312
Apprch %	46.8	53.2		23.6	76.4		71.6	28.4		
Total %	18.6	21.2	39.7	5.4	17.6	23.1	26.6	10.6	37.2	
Cars & Trailers	47	45	92	12	37	49	63	29	92	233
% Cars & Trailers	81	68.2	74.2	70.6	67.3	68.1	75.9	87.9	79.3	74.7
Large 2 Axle Vehicles	0	1	1	1	0	1	1	0	1	3
% Large 2 Axle Vehicles	0	1.5	0.8	5.9	0	1.4	1.2	0	0.9	1
3 Axle Vehicles	0	1	1	0	0	0	4	0	4	5
% 3 Axle Vehicles	0	1.5	0.8	0	0	0	4.8	0	3.4	1.6
4 Axle Trucks	0	2	2	0	0	0	0	0	0	2
% 4 Axle Trucks	0	3	1.6	0	0	0	0	0	0	0.6
5 Axle Trucks	3	13	16	1	5	6	2	0	2	24
% 5 Axle Trucks	5.2	19.7	12.9	5.9	9.1	8.3	2.4	0	1.7	7.7
6+ Axle Trucks	0	0	0	0	0	0	0	0	0	0
% 6+ Axle Trucks	0	0	0	0	0	0	0	0	0	0
Buses & RV's	0	0	0	0	0	0	0	0	0	0
% Buses & RV's	0	0	0	0	0	0	0	0	0	0
Motorcycles	0	0	0	0	4	4	0	0	0	4
% Motorcycles	0	0	0	0	7.3	5.6	0	0	0	1.3
Bicycles	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0
Medium Truck	8	4	12	3	9	12	13	4	17	41
% Medium Truck	13.8	6.1	9.7	17.6	16.4	16.7	15.7	12.1	14.7	13.1

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	6	6	12	3	11	14	12	2	14	40
04:15 PM	10	8	18	1	4	5	11	4	15	38
04:30 PM	9	10	19	2	10	12	11	8	19	50
04:45 PM	6	8	14	4	7	11	10	2	12	37
Total Volume	31	32	63	10	32	42	44	16	60	165
% App. Total	49.2	50.8		23.8	76.2		73.3	26.7		
PHF	.775	.800	.829	.625	.727	.750	.917	.500	.789	.825

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	5	5	10	2	7	9	6	2	8	27
04:15 PM	8	6	14	1	2	3	7	4	11	28
04:30 PM	6	6	12	0	5	5	9	6	15	32
04:45 PM	4	6	10	3	7	10	8	1	9	29
Total	23	23	46	6	21	27	30	13	43	116
05:00 PM	4	7	11	2	2	4	7	4	11	26
05:15 PM	3	5	8	0	3	3	5	2	7	18
05:30 PM	8	8	16	1	9	10	12	7	19	45
05:45 PM	9	2	11	3	2	5	9	3	12	28
Total	24	22	46	6	16	22	33	16	49	117
Grand Total	47	45	92	12	37	49	63	29	92	233
Apprch %	51.1	48.9		24.5	75.5		68.5	31.5		
Total %	20.2	19.3	39.5	5.2	15.9	21	27	12.4	39.5	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	5	5	10	2	7	9	6	2	8	27
04:15 PM	8	6	14	1	2	3	7	4	11	28
04:30 PM	6	6	12	0	5	5	9	6	15	32
04:45 PM	4	6	10	3	7	10	8	1	9	29
Total Volume	23	23	46	6	21	27	30	13	43	116
% App. Total	50	50		22.2	77.8		69.8	30.2		
PHF	.719	.958	.821	.500	.750	.675	.833	.542	.717	.906

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	1	0	1	0	0	0	1
04:15 PM	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	1	0	1	1	0	1	3
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	1	1	0	1	1	0	1	3
Apprch %	0	100		100	0		100	0		
Total %	0	33.3	33.3	33.3	0	33.3	33.3	0	33.3	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	1	0	1	0	0	0	1
04:15 PM	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	1	0	1	1	0	1	3
% App. Total	0	100		100	0		100	0		
PHF	.000	.250	.250	.250	.000	.250	.250	.000	.250	.750

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	2	0	2	2
04:15 PM	0	1	1	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	3	0	3	4
05:00 PM	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	1	1
Grand Total	0	1	1	0	0	0	4	0	4	5
Apprch %	0	100		0	0		100	0		
Total %	0	20	20	0	0	0	80	0	80	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	2	0	2	2
04:15 PM	0	1	1	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	3	0	3	4
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.375	.000	.375	.500

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 4 Axle Trucks

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	1	0	0	0	0	0	0	1
Total	0	1	1	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	1	1	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	1
Grand Total	0	2	2	0	0	0	0	0	0	2
Apprch %	0	100		0	0		0	0		
Total %	0	100	100	0	0	0	0	0	0	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	1	1	0	0	0	0	0	0	1
Total Volume	0	1	1	0	0	0	0	0	0	1
% App. Total	0	100		0	0		0	0		
PHF	.000	.250	.250	.000	.000	.000	.000	.000	.000	.250

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 5 Axle Trucks

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	1	1	0	3	3	0	0	0	4
04:15 PM	1	0	1	0	0	0	1	0	1	2
04:30 PM	1	2	3	1	0	1	0	0	0	4
04:45 PM	1	1	2	0	0	0	1	0	1	3
Total	3	4	7	1	3	4	2	0	2	13
05:00 PM	0	2	2	0	0	0	0	0	0	2
05:15 PM	0	4	4	0	0	0	0	0	0	4
05:30 PM	0	2	2	0	2	2	0	0	0	4
05:45 PM	0	1	1	0	0	0	0	0	0	1
Total	0	9	9	0	2	2	0	0	0	11
Grand Total	3	13	16	1	5	6	2	0	2	24
Apprch %	18.8	81.2		16.7	83.3		100	0		
Total %	12.5	54.2	66.7	4.2	20.8	25	8.3	0	8.3	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	1	1	0	3	3	0	0	0	4
04:15 PM	1	0	1	0	0	0	1	0	1	2
04:30 PM	1	2	3	1	0	1	0	0	0	4
04:45 PM	1	1	2	0	0	0	1	0	1	3
Total Volume	3	4	7	1	3	4	2	0	2	13
% App. Total	42.9	57.1		25	75		100	0		
PHF	.750	.500	.583	.250	.250	.333	.500	.000	.500	.813

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 6+ Axle Trucks

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Buses & RV's

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Motorcycles

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	4	4	0	0	0	4
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	4	4	0	0	0	4
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	4	4	0	0	0	4
Apprch %	0	0		0	100		0	0		
Total %	0	0		0	100	100	0	0		

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	4	4	0	0	0	4
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	4	4	0	0	0	4
% App. Total	0	0		0	100		0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000	.250

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRV_Theodore_Eucalyptus PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Bicycles

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: Eucalyptus Avenue
 Weather: Clear

File Name : 04_MRJV_Theodore_Eucalyptus PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Medium Truck

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	1	0	1	0	1	1	4	0	4	6
04:15 PM	1	1	2	0	2	2	1	0	1	5
04:30 PM	2	1	3	1	1	2	2	2	4	9
04:45 PM	1	0	1	1	0	1	1	1	2	4
Total	5	2	7	2	4	6	8	3	11	24
05:00 PM	2	1	3	0	1	1	1	0	1	5
05:15 PM	1	0	1	0	0	0	0	0	0	1
05:30 PM	0	1	1	0	1	1	3	1	4	6
05:45 PM	0	0	0	1	3	4	1	0	1	5
Total	3	2	5	1	5	6	5	1	6	17
Grand Total	8	4	12	3	9	12	13	4	17	41
Apprch %	66.7	33.3		25	75		76.5	23.5		
Total %	19.5	9.8	29.3	7.3	22	29.3	31.7	9.8	41.5	

Start Time	Theodore Street Southbound			Theodore Street Northbound			Eucalyptus Avenue Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	1	0	1	0	1	1	4	0	4	6
04:15 PM	1	1	2	0	2	2	1	0	1	5
04:30 PM	2	1	3	1	1	2	2	2	4	9
04:45 PM	1	0	1	1	0	1	1	1	2	4
Total Volume	5	2	7	2	4	6	8	3	11	24
% App. Total	71.4	28.6		33.3	66.7		72.7	27.3		
PHF	.625	.500	.583	.500	.500	.750	.500	.375	.688	.667

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MR_V_Theodore_60E AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers - Large 2 Axle Vehicles - 3 Axle Vehicles - 4 Axle Trucks - 5 Axle Trucks - 6+ Axle Trucks - Buses & RV's -
 Motorcycles - Bicycles - Medium Truck

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	6	0	6	5	3	8	10	7	17	31
07:15 AM	10	0	10	11	4	15	9	11	20	45
07:30 AM	21	1	22	10	0	10	6	13	19	51
07:45 AM	13	2	15	12	3	15	5	15	20	50
Total	50	3	53	38	10	48	30	46	76	177
08:00 AM	14	1	15	10	5	15	5	22	27	57
08:15 AM	15	1	16	6	5	11	5	29	34	61
08:30 AM	14	1	15	8	10	18	6	26	32	65
08:45 AM	9	3	12	12	5	17	9	16	25	54
Total	52	6	58	36	25	61	25	93	118	237
Grand Total	102	9	111	74	35	109	55	139	194	414
Apprch %	91.9	8.1		67.9	32.1		28.4	71.6		
Total %	24.6	2.2	26.8	17.9	8.5	26.3	13.3	33.6	46.9	
Cars & Trailers	56	7	63	38	29	67	23	122	145	275
% Cars & Trailers	54.9	77.8	56.8	51.4	82.9	61.5	41.8	87.8	74.7	66.4
Large 2 Axle Vehicles	1	1	2	0	1	1	4	1	5	8
% Large 2 Axle Vehicles	1	11.1	1.8	0	2.9	0.9	7.3	0.7	2.6	1.9
3 Axle Vehicles	0	0	0	0	0	0	3	1	4	4
% 3 Axle Vehicles	0	0	0	0	0	0	5.5	0.7	2.1	1
4 Axle Trucks	0	0	0	0	0	0	5	3	8	8
% 4 Axle Trucks	0	0	0	0	0	0	9.1	2.2	4.1	1.9
5 Axle Trucks	39	1	40	32	5	37	19	10	29	106
% 5 Axle Trucks	38.2	11.1	36	43.2	14.3	33.9	34.5	7.2	14.9	25.6
6+ Axle Trucks	5	0	5	4	0	4	0	1	1	10
% 6+ Axle Trucks	4.9	0	4.5	5.4	0	3.7	0	0.7	0.5	2.4
Buses & RV's	0	0	0	0	0	0	1	0	1	1
% Buses & RV's	0	0	0	0	0	0	1.8	0	0.5	0.2
Motorcycles	0	0	0	0	0	0	0	1	1	1
% Motorcycles	0	0	0	0	0	0	0	0.7	0.5	0.2
Bicycles	1	0	1	0	0	0	0	0	0	1
% Bicycles	1	0	0.9	0	0	0	0	0	0	0.2
Medium Truck	0	0	0	0	0	0	0	0	0	0
% Medium Truck	0	0	0	0	0	0	0	0	0	0

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	14	1	15	10	5	15	5	22	27	57
08:15 AM	15	1	16	6	5	11	5	29	34	61
08:30 AM	14	1	15	8	10	18	6	26	32	65
08:45 AM	9	3	12	12	5	17	9	16	25	54
Total Volume	52	6	58	36	25	61	25	93	118	237
% App. Total	89.7	10.3		59	41		21.2	78.8		
PHF	.867	.500	.906	.750	.625	.847	.694	.802	.868	.912

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MRV_Theodore_60E AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	6	0	6	5	3	8	4	5	9	23
07:15 AM	5	0	5	10	3	13	5	7	12	30
07:30 AM	13	0	13	5	0	5	2	12	14	32
07:45 AM	6	2	8	5	2	7	3	13	16	31
Total	30	2	32	25	8	33	14	37	51	116
08:00 AM	10	1	11	2	3	5	1	20	21	37
08:15 AM	8	1	9	2	5	7	2	28	30	46
08:30 AM	6	1	7	3	8	11	4	23	27	45
08:45 AM	2	2	4	6	5	11	2	14	16	31
Total	26	5	31	13	21	34	9	85	94	159
Grand Total	56	7	63	38	29	67	23	122	145	275
Apprch %	88.9	11.1		56.7	43.3		15.9	84.1		
Total %	20.4	2.5	22.9	13.8	10.5	24.4	8.4	44.4	52.7	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
08:00 AM	10	1	11	2	3	5	1	20	21	37
08:15 AM	8	1	9	2	5	7	2	28	30	46
08:30 AM	6	1	7	3	8	11	4	23	27	45
08:45 AM	2	2	4	6	5	11	2	14	16	31
Total Volume	26	5	31	13	21	34	9	85	94	159
% App. Total	83.9	16.1		38.2	61.8		9.6	90.4		
PHF	.650	.625	.705	.542	.656	.773	.563	.759	.783	.864

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MR_V_Theodore_60E AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	2	1	3	3
07:45 AM	0	0	0	0	1	1	0	0	0	1
Total	0	0	0	0	1	1	2	1	3	4
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	1	0	1	0	0	0	1	0	1	2
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	1	1	0	0	0	1	0	1	2
Total	1	1	2	0	0	0	2	0	2	4
Grand Total	1	1	2	0	1	1	4	1	5	8
Apprch %	50	50		0	100		80	20		
Total %	12.5	12.5	25	0	12.5	12.5	50	12.5	62.5	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	1	0	1	0	0	0	1	0	1	2
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	1	1	0	0	0	1	0	1	2
Total Volume	1	1	2	0	0	0	2	0	2	4
% App. Total	50	50		0	0		100	0		
PHF	.250	.250	.500	.000	.000	.000	.500	.000	.500	.500

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MRV_Theodore_60E AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	1	0	1	1
08:00 AM	0	0	0	0	0	0	1	1	2	2
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	2	1	3	3
Grand Total	0	0	0	0	0	0	3	1	4	4
Apprch %	0	0		0	0		75	25		
Total %	0	0		0	0		75	25	100	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
08:00 AM	0	0	0	0	0	0	1	1	2	2
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	2	1	3	3
% App. Total	0	0		0	0		66.7	33.3		
PHF	.000	.000	.000	.000	.000	.000	.500	.250	.375	.375

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MRV_Theodore_60E AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 4 Axle Trucks

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	1	1	2	2
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	1	1	1
08:30 AM	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	0	3	1	4	4
Total	0	0	0	0	0	0	4	2	6	6
Grand Total	0	0	0	0	0	0	5	3	8	8
Apprch %	0	0		0	0		62.5	37.5		
Total %	0	0		0	0		62.5	37.5	100	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	1	1	1
08:30 AM	0	0	0	0	0	0	1	0	1	1
08:45 AM	0	0	0	0	0	0	3	1	4	4
Total Volume	0	0	0	0	0	0	4	2	6	6
% App. Total	0	0		0	0		66.7	33.3		
PHF	.000	.000	.000	.000	.000	.000	.333	.500	.375	.375

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MRV_Theodore_60E AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 5 Axle Trucks

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	5	1	6	6
07:15 AM	4	0	4	1	1	2	4	3	7	13
07:30 AM	7	1	8	4	0	4	2	0	2	14
07:45 AM	6	0	6	7	0	7	1	1	2	15
Total	17	1	18	12	1	13	12	5	17	48
08:00 AM	2	0	2	7	2	9	2	1	3	14
08:15 AM	6	0	6	3	0	3	2	0	2	11
08:30 AM	8	0	8	5	2	7	1	3	4	19
08:45 AM	6	0	6	5	0	5	2	1	3	14
Total	22	0	22	20	4	24	7	5	12	58
Grand Total	39	1	40	32	5	37	19	10	29	106
Apprch %	97.5	2.5		86.5	13.5		65.5	34.5		
Total %	36.8	0.9	37.7	30.2	4.7	34.9	17.9	9.4	27.4	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
08:00 AM	2	0	2	7	2	9	2	1	3	14
08:15 AM	6	0	6	3	0	3	2	0	2	11
08:30 AM	8	0	8	5	2	7	1	3	4	19
08:45 AM	6	0	6	5	0	5	2	1	3	14
Total Volume	22	0	22	20	4	24	7	5	12	58
% App. Total	100	0		83.3	16.7		58.3	41.7		
PHF	.688	.000	.688	.714	.500	.667	.875	.417	.750	.763

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MRVT_Theodore_60E AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 6+ Axle Trucks

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	1	1	1
07:15 AM	1	0	1	0	0	0	0	0	0	1
07:30 AM	0	0	0	1	0	1	0	0	0	1
07:45 AM	1	0	1	0	0	0	0	0	0	1
Total	2	0	2	1	0	1	0	1	1	4
08:00 AM	2	0	2	1	0	1	0	0	0	3
08:15 AM	0	0	0	1	0	1	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	1	0	1	1	0	1	0	0	0	2
Total	3	0	3	3	0	3	0	0	0	6
Grand Total	5	0	5	4	0	4	0	1	1	10
Apprch %	100	0		100	0		0	100		
Total %	50	0	50	40	0	40	0	10	10	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
08:00 AM	2	0	2	1	0	1	0	0	0	3
08:15 AM	0	0	0	1	0	1	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	1	0	1	1	0	1	0	0	0	2
Total Volume	3	0	3	3	0	3	0	0	0	6
% App. Total	100	0		100	0		0	0		
PHF	.375	.000	.375	.750	.000	.750	.000	.000	.000	.500

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MR_V_Theodore_60E AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Buses & RV's

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	1	1
Grand Total	0	0	0	0	0	0	1	0	1	1
Apprch %	0	0		0	0		100	0		
Total %	0	0		0	0		100	0	100	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
08:00 AM	0	0	0	0	0	0	1	0	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	1	0	1	1
% App. Total	0	0		0	0		100	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.000	.250	.250

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MR_V_Theodore_60E AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Motorcycles

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	1	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	1	1	1
Apprch %	0	0		0	0		0	100		
Total %	0	0		0	0		0	100	100	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MR_V_Theodore_60E AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Bicycles

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	1	0	1	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	1	0	1	0	0	0	0	0	0	1
Apprch %	100	0		0	0		0	0		
Total %	100	0	100	0	0	0	0	0	0	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MR_V_Theodore_60E AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Medium Truck

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MR_V_Theodore_60E PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers - Large 2 Axle Vehicles - 3 Axle Vehicles - 4 Axle Trucks - 5 Axle Trucks - 6+ Axle Trucks - Buses & RV's -
 Motorcycles - Bicycles - Medium Truck

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	7	3	10	7	15	22	1	5	6	38
04:15 PM	13	4	17	4	15	19	2	5	7	43
04:30 PM	9	4	13	10	5	15	5	10	15	43
04:45 PM	9	3	12	11	11	22	5	6	11	45
Total	38	14	52	32	46	78	13	26	39	169
05:00 PM	9	3	12	5	5	10	3	7	10	32
05:15 PM	7	5	12	3	9	12	1	8	9	33
05:30 PM	6	3	9	8	16	24	1	11	12	45
05:45 PM	9	0	9	7	8	15	2	6	8	32
Total	31	11	42	23	38	61	7	32	39	142
Grand Total	69	25	94	55	84	139	20	58	78	311
Apprch %	73.4	26.6		39.6	60.4		25.6	74.4		
Total %	22.2	8	30.2	17.7	27	44.7	6.4	18.6	25.1	
Cars & Trailers	66	23	89	46	75	121	11	41	52	262
% Cars & Trailers	95.7	92	94.7	83.6	89.3	87.1	55	70.7	66.7	84.2
Large 2 Axle Vehicles	0	1	1	0	1	1	6	1	7	9
% Large 2 Axle Vehicles	0	4	1.1	0	1.2	0.7	30	1.7	9	2.9
3 Axle Vehicles	0	0	0	0	3	3	0	1	1	4
% 3 Axle Vehicles	0	0	0	0	3.6	2.2	0	1.7	1.3	1.3
4 Axle Trucks	0	0	0	0	1	1	1	3	4	5
% 4 Axle Trucks	0	0	0	0	1.2	0.7	5	5.2	5.1	1.6
5 Axle Trucks	3	0	3	4	4	8	1	12	13	24
% 5 Axle Trucks	4.3	0	3.2	7.3	4.8	5.8	5	20.7	16.7	7.7
6+ Axle Trucks	0	1	1	0	0	0	1	0	1	2
% 6+ Axle Trucks	0	4	1.1	0	0	0	5	0	1.3	0.6
Buses & RV's	0	0	0	0	0	0	0	0	0	0
% Buses & RV's	0	0	0	0	0	0	0	0	0	0
Motorcycles	0	0	0	5	0	5	0	0	0	5
% Motorcycles	0	0	0	9.1	0	3.6	0	0	0	1.6
Bicycles	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0
Medium Truck	0	0	0	0	0	0	0	0	0	0
% Medium Truck	0	0	0	0	0	0	0	0	0	0

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	7	3	10	7	15	22	1	5	6	38
04:15 PM	13	4	17	4	15	19	2	5	7	43
04:30 PM	9	4	13	10	5	15	5	10	15	43
04:45 PM	9	3	12	11	11	22	5	6	11	45
Total Volume	38	14	52	32	46	78	13	26	39	169
% App. Total	73.1	26.9		41	59		33.3	66.7		
PHF	.731	.875	.765	.727	.767	.886	.650	.650	.650	.939

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MRV_Theodore_60E PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	7	3	10	5	12	17	0	5	5	32
04:15 PM	12	4	16	4	10	14	0	3	3	33
04:30 PM	8	3	11	6	5	11	4	7	11	33
04:45 PM	8	3	11	10	11	21	4	4	8	40
Total	35	13	48	25	38	63	8	19	27	138
05:00 PM	9	3	12	5	5	10	1	5	6	28
05:15 PM	7	4	11	3	8	11	1	3	4	26
05:30 PM	6	3	9	6	16	22	0	9	9	40
05:45 PM	9	0	9	7	8	15	1	5	6	30
Total	31	10	41	21	37	58	3	22	25	124
Grand Total	66	23	89	46	75	121	11	41	52	262
Apprch %	74.2	25.8		38	62		21.2	78.8		
Total %	25.2	8.8	34	17.6	28.6	46.2	4.2	15.6	19.8	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	7	3	10	5	12	17	0	5	5	32
04:15 PM	12	4	16	4	10	14	0	3	3	33
04:30 PM	8	3	11	6	5	11	4	7	11	33
04:45 PM	8	3	11	10	11	21	4	4	8	40
Total Volume	35	13	48	25	38	63	8	19	27	138
% App. Total	72.9	27.1		39.7	60.3		29.6	70.4		
PHF	.729	.813	.750	.625	.792	.750	.500	.679	.614	.863

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MR_V_Theodore_60E PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	1	1	2	0	2	3
04:30 PM	0	0	0	0	0	0	1	1	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	3	1	4	5
05:00 PM	0	0	0	0	0	0	2	0	2	2
05:15 PM	0	1	1	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	3	0	3	4
Grand Total	0	1	1	0	1	1	6	1	7	9
Apprch %	0	100		0	100		85.7	14.3		
Total %	0	11.1	11.1	0	11.1	11.1	66.7	11.1	77.8	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	1	1	2	0	2	3
04:30 PM	0	0	0	0	0	0	1	1	2	2
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	1	3	1	4	5
% App. Total	0	0		0	100		75	25		
PHF	.000	.000	.000	.000	.250	.250	.375	.250	.500	.417

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MRV_Theodore_60E PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	1	1	0	0	0	1
04:15 PM	0	0	0	0	2	2	0	1	1	3
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	3	3	0	1	1	4
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	3	3	0	1	1	4
Apprch %	0	0		0	100		0	100		
Total %	0	0		0	75	75	0	25	25	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	1	1	0	0	0	1
04:15 PM	0	0	0	0	2	2	0	1	1	3
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	3	3	0	1	1	4
% App. Total	0	0		0	100		0	100		
PHF	.000	.000	.000	.000	.375	.375	.000	.250	.250	.333

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MRVT_Theodore_60E PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 4 Axle Trucks

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	1	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	1	2	2
05:00 PM	0	0	0	0	0	0	0	1	1	1
05:15 PM	0	0	0	0	1	1	0	1	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	0	2	2	3
Grand Total	0	0	0	0	1	1	1	3	4	5
Apprch %	0	0		0	100		25	75		
Total %	0	0		0	20	20	20	60	80	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	1	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	1	1	2	2
% App. Total	0	0		0	0		50	50		
PHF	.000	.000	.000	.000	.000	.000	.250	.250	.500	.500

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MRVT_Theodore_60E PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 5 Axle Trucks

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	1	2	3	0	0	0	3
04:15 PM	1	0	1	0	2	2	0	1	1	4
04:30 PM	1	0	1	0	0	0	0	1	1	2
04:45 PM	1	0	1	1	0	1	1	2	3	5
Total	3	0	3	2	4	6	1	4	5	14
05:00 PM	0	0	0	0	0	0	0	1	1	1
05:15 PM	0	0	0	0	0	0	0	4	4	4
05:30 PM	0	0	0	2	0	2	0	2	2	4
05:45 PM	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	2	0	2	0	8	8	10
Grand Total	3	0	3	4	4	8	1	12	13	24
Apprch %	100	0		50	50		7.7	92.3		
Total %	12.5	0	12.5	16.7	16.7	33.3	4.2	50	54.2	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	1	2	3	0	0	0	3
04:15 PM	1	0	1	0	2	2	0	1	1	4
04:30 PM	1	0	1	0	0	0	0	1	1	2
04:45 PM	1	0	1	1	0	1	1	2	3	5
Total Volume	3	0	3	2	4	6	1	4	5	14
% App. Total	100	0		33.3	66.7		20	80		
PHF	.750	.000	.750	.500	.500	.500	.250	.500	.417	.700

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MR_V_Theodore_60E PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 6+ Axle Trucks

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	1	0	1	1
Grand Total	0	1	1	0	0	0	1	0	1	2
Apprch %	0	100		0	0		100	0		
Total %	0	50	50	0	0	0	50	0	50	

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	0	0	0	1
% App. Total	0	100		0	0		0	0		
PHF	.000	.250	.250	.000	.000	.000	.000	.000	.000	.250

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MR_V_Theodore_60E PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Buses & RV's

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MR_V_Theodore_60E PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Motorcycles

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	1	0	1	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	4	0	4	0	0	0	4
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	5	0	5	0	0	0	5
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	5	0	5	0	0	0	5
Apprch %	0	0		100	0		0	0		
Total %	0	0		100	0	100	0	0		

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	1	0	1	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	4	0	4	0	0	0	4
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	5	0	5	0	0	0	5
% App. Total	0	0		100	0		0	0		
PHF	.000	.000	.000	.313	.000	.313	.000	.000	.000	.313

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MR_V_Theodore_60E PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Bicycles

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Eastbound Ramps
 Weather: Clear

File Name : 03_MRV_Theodore_60E PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Medium Truck

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			Theodore Street Northbound			SR-60 Eastbound Ramps Eastbound			Int. Total
	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers - Large 2 Axle Vehicles - 3 Axle Vehicles - 4 Axle Trucks - 5 Axle Trucks - 6+ Axle Trucks - Buses & RV's -
 Motorcycles - Bicycles - Medium Truck

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	2	5	7	2	7	9	12	3	15	31
07:15 AM	4	1	5	16	3	19	10	2	12	36
07:30 AM	7	6	13	9	5	14	4	1	5	32
07:45 AM	4	3	7	15	9	24	7	1	8	39
Total	17	15	32	42	24	66	33	7	40	138
08:00 AM	6	5	11	7	7	14	9	3	12	37
08:15 AM	6	6	12	11	1	12	7	3	10	34
08:30 AM	6	3	9	11	0	11	11	7	18	38
08:45 AM	4	4	8	12	3	15	8	2	10	33
Total	22	18	40	41	11	52	35	15	50	142
Grand Total	39	33	72	83	35	118	68	22	90	280
Apprch %	54.2	45.8		70.3	29.7		75.6	24.4		
Total %	13.9	11.8	25.7	29.6	12.5	42.1	24.3	7.9	32.1	
Cars & Trailers	15	30	45	36	29	65	37	16	53	163
% Cars & Trailers	38.5	90.9	62.5	43.4	82.9	55.1	54.4	72.7	58.9	58.2
Large 2 Axle Vehicles	3	1	4	1	3	4	4	1	5	13
% Large 2 Axle Vehicles	7.7	3	5.6	1.2	8.6	3.4	5.9	4.5	5.6	4.6
3 Axle Vehicles	3	0	3	0	0	0	3	1	4	7
% 3 Axle Vehicles	7.7	0	4.2	0	0	0	4.4	4.5	4.4	2.5
4 Axle Trucks	3	1	4	0	0	0	5	0	5	9
% 4 Axle Trucks	7.7	3	5.6	0	0	0	7.4	0	5.6	3.2
5 Axle Trucks	15	1	16	39	1	40	18	4	22	78
% 5 Axle Trucks	38.5	3	22.2	47	2.9	33.9	26.5	18.2	24.4	27.9
6+ Axle Trucks	0	0	0	7	0	7	1	0	1	8
% 6+ Axle Trucks	0	0	0	8.4	0	5.9	1.5	0	1.1	2.9
Buses & RV's	0	0	0	0	0	0	0	0	0	0
% Buses & RV's	0	0	0	0	0	0	0	0	0	0
Motorcycles	0	0	0	0	2	2	0	0	0	2
% Motorcycles	0	0	0	0	5.7	1.7	0	0	0	0.7
Bicycles	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0
Medium Truck	0	0	0	0	0	0	0	0	0	0
% Medium Truck	0	0	0	0	0	0	0	0	0	0

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	4	3	7	15	9	24	7	1	8	39
08:00 AM	6	5	11	7	7	14	9	3	12	37
08:15 AM	6	6	12	11	1	12	7	3	10	34
08:30 AM	6	3	9	11	0	11	11	7	18	38
Total Volume	22	17	39	44	17	61	34	14	48	148
% App. Total	56.4	43.6		72.1	27.9		70.8	29.2		
PHF	.917	.708	.813	.733	.472	.635	.773	.500	.667	.949

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	1	5	6	2	6	8	5	3	8	22
07:15 AM	3	1	4	9	3	12	7	0	7	23
07:30 AM	0	5	5	4	5	9	1	1	2	16
07:45 AM	0	3	3	6	6	12	4	1	5	20
Total	4	14	18	21	20	41	17	5	22	81
08:00 AM	3	5	8	3	6	9	4	1	5	22
08:15 AM	3	5	8	4	1	5	6	2	8	21
08:30 AM	2	3	5	4	0	4	7	6	13	22
08:45 AM	3	3	6	4	2	6	3	2	5	17
Total	11	16	27	15	9	24	20	11	31	82
Grand Total	15	30	45	36	29	65	37	16	53	163
Apprch %	33.3	66.7		55.4	44.6		69.8	30.2		
Total %	9.2	18.4	27.6	22.1	17.8	39.9	22.7	9.8	32.5	

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:45 AM	0	3	3	6	6	12	4	1	5	20
08:00 AM	3	5	8	3	6	9	4	1	5	22
08:15 AM	3	5	8	4	1	5	6	2	8	21
08:30 AM	2	3	5	4	0	4	7	6	13	22
Total Volume	8	16	24	17	13	30	21	10	31	85
% App. Total	33.3	66.7		56.7	43.3		67.7	32.3		
PHF	.667	.800	.750	.708	.542	.625	.750	.417	.596	.966

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	1	1	1
07:30 AM	0	0	0	0	0	0	1	0	1	1
07:45 AM	1	0	1	0	1	1	1	0	1	3
Total	1	0	1	0	1	1	2	1	3	5
08:00 AM	1	0	1	0	1	1	0	0	0	2
08:15 AM	1	1	2	0	0	0	1	0	1	3
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	1	1	2	1	0	1	3
Total	2	1	3	1	2	3	2	0	2	8
Grand Total	3	1	4	1	3	4	4	1	5	13
Apprch %	75	25		25	75		80	20		
Total %	23.1	7.7	30.8	7.7	23.1	30.8	30.8	7.7	38.5	

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:45 AM	1	0	1	0	1	1	1	0	1	3
08:00 AM	1	0	1	0	1	1	0	0	0	2
08:15 AM	1	1	2	0	0	0	1	0	1	3
08:30 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	3	1	4	0	2	2	2	0	2	8
% App. Total	75	25		0	100		100	0		
PHF	.750	.250	.500	.000	.500	.500	.500	.000	.500	.667

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	1	0	1	1
08:00 AM	1	0	1	0	0	0	1	0	1	2
08:15 AM	1	0	1	0	0	0	0	0	0	1
08:30 AM	1	0	1	0	0	0	0	1	1	2
08:45 AM	0	0	0	0	0	0	1	0	1	1
Total	3	0	3	0	0	0	2	1	3	6
Grand Total	3	0	3	0	0	0	3	1	4	7
Apprch %	100	0		0	0		75	25		
Total %	42.9	0	42.9	0	0	0	42.9	14.3	57.1	

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:45 AM	0	0	0	0	0	0	1	0	1	1
08:00 AM	1	0	1	0	0	0	1	0	1	2
08:15 AM	1	0	1	0	0	0	0	0	0	1
08:30 AM	1	0	1	0	0	0	0	1	1	2
Total Volume	3	0	3	0	0	0	2	1	3	6
% App. Total	100	0		0	0		66.7	33.3		
PHF	.750	.000	.750	.000	.000	.000	.500	.250	.750	.750

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 4 Axle Trucks

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	1	0	1	0	0	0	1	0	1	2
07:15 AM	1	0	1	0	0	0	0	0	0	1
07:30 AM	1	0	1	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	3	0	3	0	0	0	1	0	1	4
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	2	0	2	2
08:45 AM	0	1	1	0	0	0	2	0	2	3
Total	0	1	1	0	0	0	4	0	4	5
Grand Total	3	1	4	0	0	0	5	0	5	9
Apprch %	75	25		0	0		100	0		
Total %	33.3	11.1	44.4	0	0	0	55.6	0	55.6	

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	2	0	2	2
Total Volume	0	0	0	0	0	0	2	0	2	2
% App. Total	0	0		0	0		100	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.000	.250	.250

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 5 Axle Trucks

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	1	1	5	0	5	6
07:15 AM	0	0	0	6	0	6	3	1	4	10
07:30 AM	6	1	7	5	0	5	2	0	2	14
07:45 AM	3	0	3	7	0	7	1	0	1	11
Total	9	1	10	18	1	19	11	1	12	41
08:00 AM	1	0	1	3	0	3	4	2	6	10
08:15 AM	1	0	1	7	0	7	0	1	1	9
08:30 AM	3	0	3	5	0	5	2	0	2	10
08:45 AM	1	0	1	6	0	6	1	0	1	8
Total	6	0	6	21	0	21	7	3	10	37
Grand Total	15	1	16	39	1	40	18	4	22	78
Apprch %	93.8	6.2		97.5	2.5		81.8	18.2		
Total %	19.2	1.3	20.5	50	1.3	51.3	23.1	5.1	28.2	

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:45 AM	3	0	3	7	0	7	1	0	1	11
08:00 AM	1	0	1	3	0	3	4	2	6	10
08:15 AM	1	0	1	7	0	7	0	1	1	9
08:30 AM	3	0	3	5	0	5	2	0	2	10
Total Volume	8	0	8	22	0	22	7	3	10	40
% App. Total	100	0		100	0		70	30		
PHF	.667	.000	.667	.786	.000	.786	.438	.375	.417	.909

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 6+ Axle Trucks

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	1	0	1	1
07:15 AM	0	0	0	1	0	1	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	2	0	2	0	0	0	2
Total	0	0	0	3	0	3	1	0	1	4
08:00 AM	0	0	0	1	0	1	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	2	0	2	0	0	0	2
08:45 AM	0	0	0	1	0	1	0	0	0	1
Total	0	0	0	4	0	4	0	0	0	4
Grand Total	0	0	0	7	0	7	1	0	1	8
Apprch %	0	0		100	0		100	0		
Total %	0	0		87.5	0	87.5	12.5	0	12.5	

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:45 AM	0	0	0	2	0	2	0	0	0	2
08:00 AM	0	0	0	1	0	1	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	2	0	2	0	0	0	2
Total Volume	0	0	0	5	0	5	0	0	0	5
% App. Total	0	0		100	0		0	0		
PHF	.000	.000	.000	.625	.000	.625	.000	.000	.000	.625

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MR_V_Theodore_60W AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Buses & RV's

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Motorcycles

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	2	2	0	0	0	2
Total	0	0	0	0	2	2	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	2	2	0	0	0	2
Apprch %	0	0		0	100		0	0		
Total %	0	0		0	100	100	0	0		

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:45 AM	0	0	0	0	2	2	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	2	2	0	0	0	2
% App. Total	0	0		0	100		0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000	.250

Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:45 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Bicycles

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Medium Truck

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers - Large 2 Axle Vehicles - 3 Axle Vehicles - 4 Axle Trucks - 5 Axle Trucks - 6+ Axle Trucks - Buses & RV's -
 Motorcycles - Bicycles - Medium Truck

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	11	7	18	3	1	4	5	13	18	40
04:15 PM	9	6	15	10	4	14	4	9	13	42
04:30 PM	10	11	21	4	3	7	7	10	17	45
04:45 PM	5	5	10	6	2	8	4	6	10	28
Total	35	29	64	23	10	33	20	38	58	155
05:00 PM	1	7	8	6	3	9	2	10	12	29
05:15 PM	3	8	11	3	4	7	1	4	5	23
05:30 PM	2	3	5	5	0	5	8	13	21	31
05:45 PM	2	3	5	4	4	8	1	6	7	20
Total	8	21	29	18	11	29	12	33	45	103
Grand Total	43	50	93	41	21	62	32	71	103	258
Apprch %	46.2	53.8		66.1	33.9		31.1	68.9		
Total %	16.7	19.4	36	15.9	8.1	24	12.4	27.5	39.9	
Cars & Trailers	32	49	81	37	20	57	27	59	86	224
% Cars & Trailers	74.4	98	87.1	90.2	95.2	91.9	84.4	83.1	83.5	86.8
Large 2 Axle Vehicles	3	0	3	0	1	1	2	6	8	12
% Large 2 Axle Vehicles	7	0	3.2	0	4.8	1.6	6.2	8.5	7.8	4.7
3 Axle Vehicles	1	0	1	1	0	1	0	4	4	6
% 3 Axle Vehicles	2.3	0	1.1	2.4	0	1.6	0	5.6	3.9	2.3
4 Axle Trucks	4	0	4	0	0	0	0	0	0	4
% 4 Axle Trucks	9.3	0	4.3	0	0	0	0	0	0	1.6
5 Axle Trucks	3	0	3	3	0	3	2	2	4	10
% 5 Axle Trucks	7	0	3.2	7.3	0	4.8	6.2	2.8	3.9	3.9
6+ Axle Trucks	0	1	1	0	0	0	1	0	1	2
% 6+ Axle Trucks	0	2	1.1	0	0	0	3.1	0	1	0.8
Buses & RV's	0	0	0	0	0	0	0	0	0	0
% Buses & RV's	0	0	0	0	0	0	0	0	0	0
Motorcycles	0	0	0	0	0	0	0	0	0	0
% Motorcycles	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	0	0	0	0	0	0
% Bicycles	0	0	0	0	0	0	0	0	0	0
Medium Truck	0	0	0	0	0	0	0	0	0	0
% Medium Truck	0	0	0	0	0	0	0	0	0	0

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	11	7	18	3	1	4	5	13	18	40
04:15 PM	9	6	15	10	4	14	4	9	13	42
04:30 PM	10	11	21	4	3	7	7	10	17	45
04:45 PM	5	5	10	6	2	8	4	6	10	28
Total Volume	35	29	64	23	10	33	20	38	58	155
% App. Total	54.7	45.3		69.7	30.3		34.5	65.5		
PHF	.795	.659	.762	.575	.625	.589	.714	.731	.806	.861

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	7	7	14	2	1	3	4	9	13	30
04:15 PM	4	6	10	10	3	13	4	5	9	32
04:30 PM	9	10	19	3	3	6	7	9	16	41
04:45 PM	5	5	10	5	2	7	3	5	8	25
Total	25	28	53	20	9	29	18	28	46	128
05:00 PM	1	7	8	5	3	8	2	8	10	26
05:15 PM	3	8	11	3	4	7	1	4	5	23
05:30 PM	2	3	5	5	0	5	5	13	18	28
05:45 PM	1	3	4	4	4	8	1	6	7	19
Total	7	21	28	17	11	28	9	31	40	96
Grand Total	32	49	81	37	20	57	27	59	86	224
Apprch %	39.5	60.5		64.9	35.1		31.4	68.6		
Total %	14.3	21.9	36.2	16.5	8.9	25.4	12.1	26.3	38.4	

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	7	7	14	2	1	3	4	9	13	30
04:15 PM	4	6	10	10	3	13	4	5	9	32
04:30 PM	9	10	19	3	3	6	7	9	16	41
04:45 PM	5	5	10	5	2	7	3	5	8	25
Total Volume	25	28	53	20	9	29	18	28	46	128
% App. Total	47.2	52.8		69	31		39.1	60.9		
PHF	.694	.700	.697	.500	.750	.558	.643	.778	.719	.780

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	2	0	2	0	0	0	0	1	1	3
04:15 PM	0	0	0	0	1	1	0	2	2	3
04:30 PM	0	0	0	0	0	0	0	1	1	1
04:45 PM	0	0	0	0	0	0	0	1	1	1
Total	2	0	2	0	1	1	0	5	5	8
05:00 PM	0	0	0	0	0	0	0	1	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	2	0	2	2
05:45 PM	1	0	1	0	0	0	0	0	0	1
Total	1	0	1	0	0	0	2	1	3	4
Grand Total	3	0	3	0	1	1	2	6	8	12
Apprch %	100	0		0	100		25	75		
Total %	25	0	25	0	8.3	8.3	16.7	50	66.7	

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	2	0	2	0	0	0	0	1	1	3
04:15 PM	0	0	0	0	1	1	0	2	2	3
04:30 PM	0	0	0	0	0	0	0	1	1	1
04:45 PM	0	0	0	0	0	0	0	1	1	1
Total Volume	2	0	2	0	1	1	0	5	5	8
% App. Total	100	0		0	100		0	100		
PHF	.250	.000	.250	.000	.250	.250	.000	.625	.625	.667

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MR_V_Theodore_60W PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	2	2	2
04:15 PM	0	0	0	0	0	0	0	1	1	1
04:30 PM	1	0	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	0	0	0	0	3	3	4
05:00 PM	0	0	0	1	0	1	0	1	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	1	0	1	1	2
Grand Total	1	0	1	1	0	1	0	4	4	6
Apprch %	100	0		100	0		0	100		
Total %	16.7	0	16.7	16.7	0	16.7	0	66.7	66.7	

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	2	2	2
04:15 PM	0	0	0	0	0	0	0	1	1	1
04:30 PM	1	0	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	0	0	0	3	3	4
% App. Total	100	0		0	0		0	100		
PHF	.250	.000	.250	.000	.000	.000	.000	.375	.375	.500

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 4 Axle Trucks

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	2	0	2	0	0	0	0	0	0	2
04:15 PM	2	0	2	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	4	0	4	0	0	0	0	0	0	4
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	4	0	4	0	0	0	0	0	0	4
Apprch %	100	0		0	0		0	0		
Total %	100	0	100	0	0	0	0	0	0	

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	2	0	2	0	0	0	0	0	0	2
04:15 PM	2	0	2	0	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	4	0	4	0	0	0	0	0	0	4
% App. Total	100	0		0	0		0	0		
PHF	.500	.000	.500	.000	.000	.000	.000	.000	.000	.500

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 5 Axle Trucks

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	1	0	1	1	1	2	3
04:15 PM	3	0	3	0	0	0	0	1	1	4
04:30 PM	0	0	0	1	0	1	0	0	0	1
04:45 PM	0	0	0	1	0	1	1	0	1	2
Total	3	0	3	3	0	3	2	2	4	10
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	3	0	3	3	0	3	2	2	4	10
Apprch %	100	0		100	0		50	50		
Total %	30	0	30	30	0	30	20	20	40	

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	1	0	1	1	1	2	3
04:15 PM	3	0	3	0	0	0	0	1	1	4
04:30 PM	0	0	0	1	0	1	0	0	0	1
04:45 PM	0	0	0	1	0	1	1	0	1	2
Total Volume	3	0	3	3	0	3	2	2	4	10
% App. Total	100	0		100	0		50	50		
PHF	.250	.000	.250	.750	.000	.750	.500	.500	.500	.625

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 6+ Axle Trucks

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	1	1
Grand Total	0	1	1	0	0	0	1	0	1	2
Apprch %	0	100		0	0		100	0		
Total %	0	50	50	0	0	0	50	0	50	

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	0	0	0	1
% App. Total	0	100		0	0		0	0		
PHF	.000	.250	.250	.000	.000	.000	.000	.000	.000	.250

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MR_V_Theodore_60W PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Buses & RV's

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Motorcycles

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Bicycles

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: SR-60 Westbound Ramps
 Weather: Clear

File Name : 02_MRV_Theodore_60W PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Medium Truck

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Theodore Street Southbound			SR-60 Westbound Ramps Westbound			Theodore Street Northbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers - Large 2 Axle Vehicles - 3 Axle Vehicles - 4 Axle Trucks - 5 Axle Trucks - 6+ Axle Trucks - Buses & RV's -
 Motorcycles - Bicycles - Medium Truck

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	1	5	6	6	1	7	0	8	8	21
07:15 AM	0	3	3	5	2	7	5	7	12	22
07:30 AM	1	6	7	11	2	13	3	6	9	29
07:45 AM	0	3	3	9	0	9	8	4	12	24
Total	2	17	19	31	5	36	16	25	41	96
08:00 AM	2	5	7	5	0	5	10	7	17	29
08:15 AM	3	4	7	7	1	8	4	5	9	24
08:30 AM	1	3	4	13	3	16	5	6	11	31
08:45 AM	2	2	4	6	2	8	4	9	13	25
Total	8	14	22	31	6	37	23	27	50	109
Grand Total	10	31	41	62	11	73	39	52	91	205
Apprch %	24.4	75.6		84.9	15.1		42.9	57.1		
Total %	4.9	15.1	20	30.2	5.4	35.6	19	25.4	44.4	
Cars & Trailers	2	25	27	21	3	24	25	6	31	82
% Cars & Trailers	20	80.6	65.9	33.9	27.3	32.9	64.1	11.5	34.1	40
Large 2 Axle Vehicles	1	0	1	3	1	4	2	5	7	12
% Large 2 Axle Vehicles	10	0	2.4	4.8	9.1	5.5	5.1	9.6	7.7	5.9
3 Axle Vehicles	1	0	1	7	1	8	0	8	8	17
% 3 Axle Vehicles	10	0	2.4	11.3	9.1	11	0	15.4	8.8	8.3
4 Axle Trucks	0	0	0	0	0	0	0	0	0	0
% 4 Axle Trucks	0	0	0	0	0	0	0	0	0	0
5 Axle Trucks	0	0	0	16	1	17	1	19	20	37
% 5 Axle Trucks	0	0	0	25.8	9.1	23.3	2.6	36.5	22	18
6+ Axle Trucks	0	0	0	0	0	0	0	0	0	0
% 6+ Axle Trucks	0	0	0	0	0	0	0	0	0	0
Buses & RV's	0	0	0	0	0	0	0	1	1	1
% Buses & RV's	0	0	0	0	0	0	0	1.9	1.1	0.5
Motorcycles	0	0	0	0	0	0	2	0	2	2
% Motorcycles	0	0	0	0	0	0	5.1	0	2.2	1
Bicycles	2	1	3	0	1	1	1	0	1	5
% Bicycles	20	3.2	7.3	0	9.1	1.4	2.6	0	1.1	2.4
Medium Truck	4	5	9	15	4	19	8	13	21	49
% Medium Truck	40	16.1	22	24.2	36.4	26	20.5	25	23.1	23.9

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	2	5	7	5	0	5	10	7	17	29
08:15 AM	3	4	7	7	1	8	4	5	9	24
08:30 AM	1	3	4	13	3	16	5	6	11	31
08:45 AM	2	2	4	6	2	8	4	9	13	25
Total Volume	8	14	22	31	6	37	23	27	50	109
% App. Total	36.4	63.6		83.8	16.2		46	54		
PHF	.667	.700	.786	.596	.500	.578	.575	.750	.735	.879

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	5	5	2	0	2	0	0	0	7
07:15 AM	0	2	2	1	1	2	3	2	5	9
07:30 AM	1	6	7	4	2	6	3	3	6	19
07:45 AM	0	1	1	4	0	4	4	0	4	9
Total	1	14	15	11	3	14	10	5	15	44
08:00 AM	0	4	4	1	0	1	6	0	6	11
08:15 AM	0	4	4	2	0	2	4	0	4	10
08:30 AM	1	2	3	6	0	6	5	1	6	15
08:45 AM	0	1	1	1	0	1	0	0	0	2
Total	1	11	12	10	0	10	15	1	16	38
Grand Total	2	25	27	21	3	24	25	6	31	82
Apprch %	7.4	92.6		87.5	12.5		80.6	19.4		
Total %	2.4	30.5	32.9	25.6	3.7	29.3	30.5	7.3	37.8	

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
08:00 AM	0	4	4	1	0	1	6	0	6	11
08:15 AM	0	4	4	2	0	2	4	0	4	10
08:30 AM	1	2	3	6	0	6	5	1	6	15
08:45 AM	0	1	1	1	0	1	0	0	0	2
Total Volume	1	11	12	10	0	10	15	1	16	38
% App. Total	8.3	91.7		100	0		93.8	6.2		
PHF	.250	.688	.750	.417	.000	.417	.625	.250	.667	.633

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	1	0	1	0	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	2	2	2
Total	0	0	0	1	0	1	0	2	2	3
08:00 AM	1	0	1	1	0	1	1	1	2	4
08:15 AM	0	0	0	1	0	1	0	1	1	2
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	1	1	1	1	2	3
Total	1	0	1	2	1	3	2	3	5	9
Grand Total	1	0	1	3	1	4	2	5	7	12
Apprch %	100	0		75	25		28.6	71.4		
Total %	8.3	0	8.3	25	8.3	33.3	16.7	41.7	58.3	

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
08:00 AM	1	0	1	1	0	1	1	1	2	4
08:15 AM	0	0	0	1	0	1	0	1	1	2
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	1	1	1	1	2	3
Total Volume	1	0	1	2	1	3	2	3	5	9
% App. Total	100	0		66.7	33.3		40	60		
PHF	.250	.000	.250	.500	.250	.750	.500	.750	.625	.563

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	1	0	1	0	1	1	2
07:15 AM	0	0	0	1	0	1	0	0	0	1
07:30 AM	0	0	0	2	0	2	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	4	0	4	0	2	2	6
08:00 AM	0	0	0	0	0	0	0	1	1	1
08:15 AM	1	0	1	1	1	2	0	0	0	3
08:30 AM	0	0	0	1	0	1	0	0	0	1
08:45 AM	0	0	0	1	0	1	0	5	5	6
Total	1	0	1	3	1	4	0	6	6	11
Grand Total	1	0	1	7	1	8	0	8	8	17
Apprch %	100	0		87.5	12.5		0	100		
Total %	5.9	0	5.9	41.2	5.9	47.1	0	47.1	47.1	

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
08:00 AM	0	0	0	0	0	0	0	1	1	1
08:15 AM	1	0	1	1	1	2	0	0	0	3
08:30 AM	0	0	0	1	0	1	0	0	0	1
08:45 AM	0	0	0	1	0	1	0	5	5	6
Total Volume	1	0	1	3	1	4	0	6	6	11
% App. Total	100	0		75	25		0	100		
PHF	.250	.000	.250	.750	.250	.500	.000	.300	.300	.458

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 4 Axle Trucks

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 5 Axle Trucks

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	4	4	4
07:15 AM	0	0	0	1	0	1	1	5	6	7
07:30 AM	0	0	0	5	0	5	0	2	2	7
07:45 AM	0	0	0	4	0	4	0	1	1	5
Total	0	0	0	10	0	10	1	12	13	23
08:00 AM	0	0	0	1	0	1	0	2	2	3
08:15 AM	0	0	0	1	0	1	0	2	2	3
08:30 AM	0	0	0	3	1	4	0	1	1	5
08:45 AM	0	0	0	1	0	1	0	2	2	3
Total	0	0	0	6	1	7	0	7	7	14
Grand Total	0	0	0	16	1	17	1	19	20	37
Apprch %	0	0		94.1	5.9		5	95		
Total %	0	0		43.2	2.7	45.9	2.7	51.4	54.1	

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
08:00 AM	0	0	0	1	0	1	0	2	2	3
08:15 AM	0	0	0	1	0	1	0	2	2	3
08:30 AM	0	0	0	3	1	4	0	1	1	5
08:45 AM	0	0	0	1	0	1	0	2	2	3
Total Volume	0	0	0	6	1	7	0	7	7	14
% App. Total	0	0		85.7	14.3		0	100		
PHF	.000	.000	.000	.500	.250	.438	.000	.875	.875	.700

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 6+ Axle Trucks

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Buses & RV's

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	1	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	1	1
Grand Total	0	0	0	0	0	0	0	1	1	1
Apprch %	0	0		0	0		0	100		
Total %	0	0		0	0		0	100	100	

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
08:00 AM	0	0	0	0	0	0	0	1	1	1
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0		0	0		0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Motorcycles

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	0	2	0	2	2
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	2	0	2	2
Apprch %	0	0		0	0		100	0		
Total %	0	0		0	0		100	0	100	

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Bicycles

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	1	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	1
08:00 AM	1	0	1	0	0	0	0	0	0	1
08:15 AM	1	0	1	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	1	1	0	0	0	1
08:45 AM	0	0	0	0	0	0	1	0	1	1
Total	2	0	2	0	1	1	1	0	1	4
Grand Total	2	1	3	0	1	1	1	0	1	5
Apprch %	66.7	33.3		0	100		100	0		
Total %	40	20	60	0	20	20	20	0	20	

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
08:00 AM	1	0	1	0	0	0	0	0	0	1
08:15 AM	1	0	1	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	1	1	0	0	0	1
08:45 AM	0	0	0	0	0	0	1	0	1	1
Total Volume	2	0	2	0	1	1	1	0	1	4
% App. Total	100	0		0	100		100	0		
PHF	.500	.000	.500	.000	.250	.250	.250	.000	.250	1.00

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood AM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Medium Truck

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	1	0	1	2	1	3	0	3	3	7
07:15 AM	0	0	0	2	1	3	1	0	1	4
07:30 AM	0	0	0	0	0	0	0	1	1	1
07:45 AM	0	2	2	1	0	1	2	0	2	5
Total	1	2	3	5	2	7	3	4	7	17
08:00 AM	0	1	1	2	0	2	3	2	5	8
08:15 AM	1	0	1	2	0	2	0	2	2	5
08:30 AM	0	1	1	3	1	4	0	4	4	9
08:45 AM	2	1	3	3	1	4	2	1	3	10
Total	3	3	6	10	2	12	5	9	14	32
Grand Total	4	5	9	15	4	19	8	13	21	49
Apprch %	44.4	55.6		78.9	21.1		38.1	61.9		
Total %	8.2	10.2	18.4	30.6	8.2	38.8	16.3	26.5	42.9	

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
08:00 AM	0	1	1	2	0	2	3	2	5	8
08:15 AM	1	0	1	2	0	2	0	2	2	5
08:30 AM	0	1	1	3	1	4	0	4	4	9
08:45 AM	2	1	3	3	1	4	2	1	3	10
Total Volume	3	3	6	10	2	12	5	9	14	32
% App. Total	50	50		83.3	16.7		35.7	64.3		
PHF	.375	.750	.500	.833	.500	.750	.417	.563	.700	.800

Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 08:00 AM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers - Large 2 Axle Vehicles - 3 Axle Vehicles - 4 Axle Trucks - 5 Axle Trucks - 6+ Axle Trucks - Buses & RV's -
 Motorcycles - Bicycles - Medium Truck

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	1	6	7	9	1	10	2	6	8	25
04:15 PM	0	7	7	10	1	11	6	3	9	27
04:30 PM	1	8	9	11	4	15	4	3	7	31
04:45 PM	1	2	3	10	0	10	4	1	5	18
Total	3	23	26	40	6	46	16	13	29	101
05:00 PM	1	6	7	2	1	3	6	0	6	16
05:15 PM	0	6	6	2	1	3	4	0	4	13
05:30 PM	1	2	3	7	0	7	6	1	7	17
05:45 PM	0	3	3	1	0	1	3	2	5	9
Total	2	17	19	12	2	14	19	3	22	55
Grand Total	5	40	45	52	8	60	35	16	51	156
Apprch %	11.1	88.9		86.7	13.3		68.6	31.4		
Total %	3.2	25.6	28.8	33.3	5.1	38.5	22.4	10.3	32.7	
Cars & Trailers	2	25	27	21	3	24	25	6	31	82
% Cars & Trailers	40	62.5	60	40.4	37.5	40	71.4	37.5	60.8	52.6
Large 2 Axle Vehicles	0	1	1	2	0	2	0	0	0	3
% Large 2 Axle Vehicles	0	2.5	2.2	3.8	0	3.3	0	0	0	1.9
3 Axle Vehicles	0	0	0	5	0	5	0	2	2	7
% 3 Axle Vehicles	0	0	0	9.6	0	8.3	0	12.5	3.9	4.5
4 Axle Trucks	0	0	0	0	0	0	0	0	0	0
% 4 Axle Trucks	0	0	0	0	0	0	0	0	0	0
5 Axle Trucks	0	0	0	4	0	4	1	2	3	7
% 5 Axle Trucks	0	0	0	7.7	0	6.7	2.9	12.5	5.9	4.5
6+ Axle Trucks	0	0	0	0	0	0	0	0	0	0
% 6+ Axle Trucks	0	0	0	0	0	0	0	0	0	0
Buses & RV's	0	0	0	0	0	0	0	0	0	0
% Buses & RV's	0	0	0	0	0	0	0	0	0	0
Motorcycles	0	0	0	0	0	0	0	0	0	0
% Motorcycles	0	0	0	0	0	0	0	0	0	0
Bicycles	0	0	0	0	1	1	0	0	0	1
% Bicycles	0	0	0	0	12.5	1.7	0	0	0	0.6
Medium Truck	3	14	17	20	4	24	9	6	15	56
% Medium Truck	60	35	37.8	38.5	50	40	25.7	37.5	29.4	35.9

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	1	6	7	9	1	10	2	6	8	25
04:15 PM	0	7	7	10	1	11	6	3	9	27
04:30 PM	1	8	9	11	4	15	4	3	7	31
04:45 PM	1	2	3	10	0	10	4	1	5	18
Total Volume	3	23	26	40	6	46	16	13	29	101
% App. Total	11.5	88.5		87	13		55.2	44.8		
PHF	.750	.719	.722	.909	.375	.767	.667	.542	.806	.815

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Cars & Trailers

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	5	5	2	0	2	0	0	0	7
04:15 PM	0	2	2	1	1	2	3	2	5	9
04:30 PM	1	6	7	4	2	6	3	3	6	19
04:45 PM	0	1	1	4	0	4	4	0	4	9
Total	1	14	15	11	3	14	10	5	15	44
05:00 PM	0	4	4	1	0	1	6	0	6	11
05:15 PM	0	4	4	2	0	2	4	0	4	10
05:30 PM	1	2	3	6	0	6	5	1	6	15
05:45 PM	0	1	1	1	0	1	0	0	0	2
Total	1	11	12	10	0	10	15	1	16	38
Grand Total	2	25	27	21	3	24	25	6	31	82
Apprch %	7.4	92.6		87.5	12.5		80.6	19.4		
Total %	2.4	30.5	32.9	25.6	3.7	29.3	30.5	7.3	37.8	

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	5	5	2	0	2	0	0	0	7
04:15 PM	0	2	2	1	1	2	3	2	5	9
04:30 PM	1	6	7	4	2	6	3	3	6	19
04:45 PM	0	1	1	4	0	4	4	0	4	9
Total Volume	1	14	15	11	3	14	10	5	15	44
% App. Total	6.7	93.3		78.6	21.4		66.7	33.3		
PHF	.250	.583	.536	.688	.375	.583	.625	.417	.625	.579

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	1	0	1	0	0	0	1
04:15 PM	0	0	0	1	0	1	0	0	0	1
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	2	0	2	0	0	0	3
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	1	1	2	0	2	0	0	0	3
Apprch %	0	100		100	0		0	0		
Total %	0	33.3	33.3	66.7	0	66.7	0	0	0	

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	1	0	1	0	0	0	1
04:15 PM	0	0	0	1	0	1	0	0	0	1
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	2	0	2	0	0	0	3
% App. Total	0	100		100	0		0	0		
PHF	.000	.250	.250	.500	.000	.500	.000	.000	.000	.750

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	2	0	2	0	2	2	4
04:15 PM	0	0	0	1	0	1	0	0	0	1
04:30 PM	0	0	0	2	0	2	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	5	0	5	0	2	2	7
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	5	0	5	0	2	2	7
Apprch %	0	0		100	0		0	100		
Total %	0	0		71.4	0	71.4	0	28.6	28.6	

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	2	0	2	0	2	2	4
04:15 PM	0	0	0	1	0	1	0	0	0	1
04:30 PM	0	0	0	2	0	2	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	5	0	5	0	2	2	7
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.625	.000	.625	.000	.250	.250	.438

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 4 Axle Trucks

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 5 Axle Trucks

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	0	0	3	0	3	0	0	0	3
04:30 PM	0	0	0	1	0	1	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	4	0	4	1	1	2	6
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	1	1	1
Grand Total	0	0	0	4	0	4	1	2	3	7
Apprch %	0	0		100	0		33.3	66.7		
Total %	0	0		57.1	0	57.1	14.3	28.6	42.9	

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	1	0	1	1
04:15 PM	0	0	0	3	0	3	0	0	0	3
04:30 PM	0	0	0	1	0	1	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	4	0	4	1	1	2	6
% App. Total	0	0		100	0		50	50		
PHF	.000	.000	.000	.333	.000	.333	.250	.250	.500	.500

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- 6+ Axle Trucks

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Buses & RV's

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Motorcycles

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0		0	0		0	0		
Total %										

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0		0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Bicycles

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	1	1	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	0	0	0	1
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	1	1	0	0	0	1
Apprch %	0	0		0	100		0	0		
Total %	0	0		0	100	100	0	0		

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	1	1	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	1	0	0	0	1
% App. Total	0	0		0	100		0	0		
PHF	.000	.000	.000	.000	.250	.250	.000	.000	.000	.250

City of Moreno Valley
 N/S: Theodore Street
 E/W: Ironwood Avenue
 Weather: Clear

File Name : 01_MRV_Theodore_Ironwood PM
 Site Code : 09817323
 Start Date : 5/31/2017
 Page No : 1

Groups Printed- Medium Truck

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	1	1	2	4	1	5	1	4	5	12
04:15 PM	0	5	5	4	0	4	3	1	4	13
04:30 PM	0	1	1	4	1	5	1	0	1	7
04:45 PM	1	1	2	6	0	6	0	0	0	8
Total	2	8	10	18	2	20	5	5	10	40
05:00 PM	1	2	3	1	1	2	0	0	0	5
05:15 PM	0	2	2	0	1	1	0	0	0	3
05:30 PM	0	0	0	1	0	1	1	0	1	2
05:45 PM	0	2	2	0	0	0	3	1	4	6
Total	1	6	7	2	2	4	4	1	5	16
Grand Total	3	14	17	20	4	24	9	6	15	56
Apprch %	17.6	82.4		83.3	16.7		60	40		
Total %	5.4	25	30.4	35.7	7.1	42.9	16.1	10.7	26.8	

Start Time	Ironwood Avenue Westbound			Theodore Street Northbound			Ironwood Avenue Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:00 PM	1	1	2	4	1	5	1	4	5	12
04:15 PM	0	5	5	4	0	4	3	1	4	13
04:30 PM	0	1	1	4	1	5	1	0	1	7
04:45 PM	1	1	2	6	0	6	0	0	0	8
Total Volume	2	8	10	18	2	20	5	5	10	40
% App. Total	20	80		90	10		50	50		
PHF	.500	.400	.500	.750	.500	.833	.417	.313	.500	.769

Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:00 PM

INTERSECTION #5 AM

Start Date: 1/30/2018
 Comment 1: City of Moreno Valley
 Comment 2: N/S: Redlands Boulevard
 Comment 3: E/W: Eucalyptus Avenue
 Comment 4: Weather: Clear

Cars	Redlands Boulevard Southbound				Eucalyptus Avenue Westbound				Redlands Boulevard Northbound				Eucalyptus Avenue Eastbound				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00 AM	0	59	6	0	1	0	2	0	9	132	0	0	0	0	0	0	0
07:15 AM	0	66	6	0	0	0	4	0	3	140	0	0	3	0	2	0	0
07:30 AM	0	91	8	0	1	0	1	0	2	100	0	0	0	0	0	0	0
07:45 AM	0	92	7	0	1	0	2	0	5	101	0	0	2	0	0	0	0
08:00 AM	1	80	6	0	0	0	2	0	4	83	0	0	6	0	1	0	0
08:15 AM	3	64	1	0	0	1	1	0	1	94	3	0	4	0	2	0	0
08:30 AM	1	61	2	0	1	0	20	0	2	78	0	0	2	0	4	0	0
08:45 AM	0	38	3	0	1	0	31	0	0	59	0	0	6	0	0	0	0

2-Axle Trucks	Redlands Boulevard Southbound				Eucalyptus Avenue Westbound				Redlands Boulevard Northbound				Eucalyptus Avenue Eastbound				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00 AM	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
07:15 AM	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0
07:45 AM	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
08:00 AM	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
08:30 AM	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0

3-Axle Trucks	Redlands Boulevard Southbound				Eucalyptus Avenue Westbound				Redlands Boulevard Northbound				Eucalyptus Avenue Eastbound				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00 AM	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
07:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
08:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0

4+ Axle Trucks	Redlands Boulevard Southbound				Eucalyptus Avenue Westbound				Redlands Boulevard Northbound				Eucalyptus Avenue Eastbound				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
07:15 AM	0	0	2	0	0	0	1	0	0	0	0	0	2	0	0	0	0
07:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
07:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0
08:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0
08:15 AM	0	0	1	0	0	0	3	0	0	2	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0

INTERSECTION #5 PM

Start Date: 1/30/2018
 Comment 1: City of Moreno Valley
 Comment 2: N/S: Redlands Boulevard
 Comment 3: E/W: Eucalyptus Avenue
 Comment 4: Weather: Clear

Cars	Redlands Boulevard Southbound				Eucalyptus Avenue Westbound				Redlands Boulevard Northbound				Eucalyptus Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	0	114	0	0	0	0	4	0	0	84	0	0	6	0	3	0
04:15 PM	1	99	4	0	0	0	1	0	0	92	0	0	13	0	5	0
04:30 PM	0	125	0	0	0	0	11	0	0	83	0	0	3	1	1	0
04:45 PM	1	134	1	0	0	0	4	0	0	96	1	0	8	0	2	0
05:00 PM	0	118	0	0	2	0	9	0	0	94	0	0	2	0	5	0
05:15 PM	0	119	3	0	0	0	4	0	0	103	0	0	7	0	0	0
05:30 PM	0	136	2	0	0	0	10	0	0	91	0	0	5	0	0	0
05:45 PM	0	116	0	0	0	0	9	0	1	72	0	0	3	0	1	0

2-Axle Trucks	Redlands Boulevard Southbound				Eucalyptus Avenue Westbound				Redlands Boulevard Northbound				Eucalyptus Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0
04:15 PM	0	3	0	0	0	0	0	0	0	2	0	0	0	0	0	0
04:30 PM	0	2	0	0	0	0	1	0	0	2	0	0	0	0	0	0
04:45 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
05:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0
05:45 PM	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0

3-Axle Trucks	Redlands Boulevard Southbound				Eucalyptus Avenue Westbound				Redlands Boulevard Northbound				Eucalyptus Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
04:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0

4+ Axle Trucks	Redlands Boulevard Southbound				Eucalyptus Avenue Westbound				Redlands Boulevard Northbound				Eucalyptus Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
04:30 PM	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
05:00 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0

INTERSECTION #6 AM

Start Date: 1/30/2018
 Comment 1: City of Moreno Valley
 Comment 2: N/S: Redlands Boulevard
 Comment 3: E/W: SR-60 Eastbound Ramps
 Comment 4: Weather: Clear

Cars	Redlands Boulevard Southbound				Dead End Westbound				Redlands Boulevard Northbound				SR-60 Eastbound Ramps Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:00 AM	0	48	4	0	0	0	0	0	10	140	0	0	50	0	11	0
07:15 AM	0	63	10	0	0	0	0	0	16	105	0	0	39	0	10	0
07:30 AM	0	79	4	0	0	0	0	0	14	95	0	0	35	0	25	0
07:45 AM	0	85	7	0	0	0	0	0	17	82	0	0	49	0	17	0
08:00 AM	0	70	7	0	0	0	0	0	15	77	0	0	64	0	16	0
08:15 AM	0	46	0	0	0	0	0	0	10	83	0	0	72	0	21	0
08:30 AM	0	42	8	0	0	0	0	0	9	106	0	0	61	0	12	0
08:45 AM	0	28	4	0	0	0	0	0	10	78	0	0	72	0	16	0

2-Axle Trucks	Redlands Boulevard Southbound				Dead End Westbound				Redlands Boulevard Northbound				SR-60 Eastbound Ramps Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
07:15 AM	0	2	0	0	0	0	0	0	0	2	0	0	2	0	0	0
07:30 AM	0	0	1	0	0	0	0	0	0	3	0	0	2	0	2	0
07:45 AM	0	2	0	0	0	0	0	0	0	5	0	0	4	0	0	0
08:00 AM	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	2	0	1	0
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0

3-Axle Trucks	Redlands Boulevard Southbound				Dead End Westbound				Redlands Boulevard Northbound				SR-60 Eastbound Ramps Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
07:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0

4+ Axle Trucks	Redlands Boulevard Southbound				Dead End Westbound				Redlands Boulevard Northbound				SR-60 Eastbound Ramps Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:00 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	3	0	0	1	0	2	0
07:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	3	0	1	0
07:45 AM	0	0	1	0	0	0	0	0	0	1	0	0	2	0	0	0
08:00 AM	0	0	1	0	0	0	0	0	1	2	0	0	2	0	2	0
08:15 AM	0	0	0	0	0	0	0	0	1	2	0	0	1	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0

INTERSECTION #6 PM

Start Date: 1/30/2018
 Comment 1: City of Moreno Valley
 Comment 2: N/S: Redlands Boulevard
 Comment 3: E/W: SR-60 Eastbound Ramps
 Comment 4: Weather: Clear

Cars	Redlands Boulevard Southbound				Dead End Westbound				Redlands Boulevard Northbound				SR-60 Eastbound Ramps Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	0	85	8	0	0	0	0	0	10	84	0	0	95	0	26	0
04:15 PM	0	75	12	0	0	0	0	0	14	92	0	0	98	0	35	0
04:30 PM	0	93	9	0	0	0	0	0	10	79	0	0	102	0	31	0
04:45 PM	0	93	13	0	0	0	0	0	20	90	0	0	103	0	33	0
05:00 PM	0	97	9	0	0	0	0	0	14	87	0	0	110	0	33	0
05:15 PM	0	107	6	0	0	0	0	0	14	92	0	0	104	0	26	0
05:30 PM	0	103	13	0	0	0	0	0	5	104	0	0	99	0	24	0
05:45 PM	0	87	10	0	0	0	0	0	10	70	0	0	109	0	25	0

2-Axle Trucks	Redlands Boulevard Southbound				Dead End Westbound				Redlands Boulevard Northbound				SR-60 Eastbound Ramps Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	0	5	1	0	0	0	0	0	1	3	0	0	1	0	2	0
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0
04:30 PM	0	1	0	0	0	0	0	0	0	3	0	0	1	0	2	0
04:45 PM	0	0	2	0	0	0	0	0	1	2	0	0	2	0	2	0
05:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0
05:30 PM	0	2	1	0	0	0	0	0	0	2	0	0	1	0	0	0
05:45 PM	0	1	0	0	0	0	0	0	0	1	0	0	2	0	2	0

3-Axle Trucks	Redlands Boulevard Southbound				Dead End Westbound				Redlands Boulevard Northbound				SR-60 Eastbound Ramps Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0

4+ Axle Trucks	Redlands Boulevard Southbound				Dead End Westbound				Redlands Boulevard Northbound				SR-60 Eastbound Ramps Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2	0
04:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0
04:30 PM	0	1	1	0	0	0	0	0	0	1	0	0	0	0	1	0
04:45 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0
05:00 PM	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0
05:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

INTERSECTION #7 AM

Start Date: 1/30/2018
 Comment 1: City of Moreno Valley
 Comment 2: N/S: Redlands Boulevard
 Comment 3: E/W: Spruce Avenue/SR-60 Westbound Ramps
 Comment 4: Weather: Clear

Cars	Redlands Boulevard Southbound				SR-60 Westbound Ramps Westbound				Redlands Boulevard Northbound				Spruce Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:00 AM	61	42	0	0	5	0	10	0	1	156	26	0	0	0	1	0
07:15 AM	72	64	1	0	11	0	5	0	1	123	27	0	0	3	0	0
07:30 AM	73	80	0	0	10	0	9	0	2	105	26	0	0	0	2	0
07:45 AM	76	72	1	0	9	0	12	0	7	101	14	0	1	1	1	0
08:00 AM	61	55	0	0	11	0	5	0	4	123	20	0	1	0	3	0
08:15 AM	53	46	0	0	8	0	4	0	0	137	17	0	0	2	1	0
08:30 AM	53	38	1	0	7	0	9	0	3	122	44	0	1	0	0	0
08:45 AM	38	26	3	0	3	0	5	0	0	108	39	0	3	0	0	0

2-Axle Trucks	Redlands Boulevard Southbound				SR-60 Westbound Ramps Westbound				Redlands Boulevard Northbound				Spruce Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	2	0	0	0	0	0	0	0	2	2	0	0	0	0	0
07:30 AM	2	1	0	0	0	0	0	0	0	2	2	0	0	0	0	0
07:45 AM	0	0	1	0	0	0	0	0	0	5	0	0	1	0	0	0
08:00 AM	0	0	0	0	1	0	0	0	0	2	0	0	0	0	1	0
08:15 AM	1	0	1	0	0	0	0	0	0	0	1	0	2	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
08:45 AM	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0

3-Axle Trucks	Redlands Boulevard Southbound				SR-60 Westbound Ramps Westbound				Redlands Boulevard Northbound				Spruce Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
08:30 AM	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0

4+ Axle Trucks	Redlands Boulevard Southbound				SR-60 Westbound Ramps Westbound				Redlands Boulevard Northbound				Spruce Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:00 AM	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0
07:45 AM	1	1	0	0	0	0	0	0	0	3	1	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0
08:15 AM	1	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0
08:30 AM	2	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0

INTERSECTION #7 PM

Start Date: 1/30/2018
 Comment 1: City of Moreno Valley
 Comment 2: N/S: Redlands Boulevard
 Comment 3: E/W: Spruce Avenue/SR-60 Westbound Ramps
 Comment 4: Weather: Clear

Cars	Redlands Boulevard Southbound				SR-60 Westbound Ramps Westbound				Redlands Boulevard Northbound				Spruce Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	71	82	0	0	12	0	9	0	1	153	27	0	0	2	2	0
04:15 PM	73	80	0	0	8	0	7	0	4	158	29	0	1	2	2	0
04:30 PM	74	92	1	0	5	0	3	0	3	140	24	0	1	3	1	0
04:45 PM	66	94	1	0	15	0	4	0	0	176	24	0	0	2	0	0
05:00 PM	69	93	0	0	7	0	9	0	4	165	29	0	0	3	1	0
05:15 PM	72	104	0	0	13	0	4	0	0	175	37	0	0	2	2	0
05:30 PM	98	100	0	0	13	0	6	0	1	166	25	0	1	1	2	0
05:45 PM	72	93	0	0	5	0	7	0	2	158	25	0	0	0	0	0

2-Axle Trucks	Redlands Boulevard Southbound				SR-60 Westbound Ramps Westbound				Redlands Boulevard Northbound				Spruce Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	0	4	0	0	0	1	0	0	0	1	1	0	0	0	0	0
04:15 PM	1	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0
04:30 PM	1	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0
04:45 PM	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0
05:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	2	0	0	0	0	1	0	0	0	1	0	0	0	0	0
05:30 PM	1	2	0	0	0	0	0	0	0	1	2	0	0	0	0	0
05:45 PM	3	1	0	0	0	0	0	0	1	1	0	0	0	1	0	0

3-Axle Trucks	Redlands Boulevard Southbound				SR-60 Westbound Ramps Westbound				Redlands Boulevard Northbound				Spruce Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0
04:30 PM	1	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0

4+ Axle Trucks	Redlands Boulevard Southbound				SR-60 Westbound Ramps Westbound				Redlands Boulevard Northbound				Spruce Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0
04:15 PM	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0
04:30 PM	1	1	0	0	1	0	0	0	0	0	1	0	0	0	0	0
04:45 PM	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
05:00 PM	2	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0
05:15 PM	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0
05:30 PM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

INTERSECTION #8 AM

Start Date: 1/30/2018
 Comment 1: City of Moreno Valley
 Comment 2: N/S: Redlands Boulevard
 Comment 3: E/W: Ironwood Avenue
 Comment 4: Weather: Clear

Cars	Redlands Boulevard Southbound				Ironwood Avenue Westbound				Redlands Boulevard Northbound				Ironwood Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:00 AM	0	102	24	0	0	1	1	0	2	168	1	0	33	0	0	0
07:15 AM	0	139	33	0	1	1	0	0	7	129	2	0	21	1	5	0
07:30 AM	1	143	26	0	0	4	0	0	9	98	0	0	25	2	6	0
07:45 AM	0	139	25	0	2	2	1	0	11	106	0	0	20	1	11	0
08:00 AM	0	108	12	0	2	1	0	0	4	121	2	0	37	2	8	0
08:15 AM	0	88	11	0	1	0	2	0	2	131	0	0	23	1	1	0
08:30 AM	1	92	19	0	0	2	0	0	0	135	3	0	11	0	5	0
08:45 AM	0	54	21	0	0	1	5	0	0	134	4	0	0	0	24	0

2-Axle Trucks	Redlands Boulevard Southbound				Ironwood Avenue Westbound				Redlands Boulevard Northbound				Ironwood Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0
07:15 AM	0	2	0	0	0	0	0	0	1	1	0	0	0	1	0	0
07:30 AM	0	3	2	0	0	2	1	0	0	2	0	0	0	0	1	0
07:45 AM	0	1	0	0	0	0	0	0	0	4	0	0	0	1	1	0
08:00 AM	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	1	2	0	0	0	0	1	0
08:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0
08:45 AM	0	2	0	0	0	0	0	0	0	4	0	0	0	0	0	0

3-Axle Trucks	Redlands Boulevard Southbound				Ironwood Avenue Westbound				Redlands Boulevard Northbound				Ironwood Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
07:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

4+ Axle Trucks	Redlands Boulevard Southbound				Ironwood Avenue Westbound				Redlands Boulevard Northbound				Ironwood Avenue Eastbound				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
07:45 AM	0	1	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0
08:15 AM	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
08:30 AM	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0

INTERSECTION #8 PM

Start Date: 1/30/2018
 Comment 1: City of Moreno Valley
 Comment 2: N/S: Redlands Boulevard
 Comment 3: E/W: Ironwood Avenue
 Comment 4: Weather: Clear

Cars	Redlands Boulevard Southbound				Ironwood Avenue Westbound				Redlands Boulevard Northbound				Ironwood Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	3	146	39	0	1	8	1	0	4	161	0	0	14	5	6	0
04:15 PM	2	152	44	0	0	9	1	0	5	149	1	0	26	2	3	0
04:30 PM	0	163	53	0	0	3	1	0	5	153	2	0	20	3	5	0
04:45 PM	1	160	41	0	1	1	3	0	1	171	0	0	26	4	3	0
05:00 PM	0	162	47	0	0	4	1	0	3	174	0	0	28	4	3	0
05:15 PM	2	181	39	0	0	3	1	0	3	170	4	0	21	6	5	0
05:30 PM	2	169	46	0	2	3	1	0	3	172	1	0	39	2	9	0
05:45 PM	0	154	47	0	0	2	0	0	5	168	0	0	24	2	6	0

2-Axle Trucks	Redlands Boulevard Southbound				Ironwood Avenue Westbound				Redlands Boulevard Northbound				Ironwood Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	0
04:15 PM	0	1	2	0	0	0	0	0	0	2	0	0	0	0	0	0
04:30 PM	0	1	1	0	0	0	0	0	0	3	0	0	0	1	2	0
04:45 PM	0	2	1	0	0	0	0	0	0	2	0	0	0	0	0	0
05:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0
05:15 PM	0	3	0	0	0	0	0	0	0	1	0	0	1	0	0	0
05:30 PM	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	0
05:45 PM	0	5	0	0	0	1	0	0	0	1	0	0	0	0	0	0

3-Axle Trucks	Redlands Boulevard Southbound				Ironwood Avenue Westbound				Redlands Boulevard Northbound				Ironwood Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
04:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

4+ Axle Trucks	Redlands Boulevard Southbound				Ironwood Avenue Westbound				Redlands Boulevard Northbound				Ironwood Avenue Eastbound			
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds
04:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
04:30 PM	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	0
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
05:30 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**SR-60/WORLD LOGISTICS CENTER PARKWAY
INTERCHANGE CLOSURE STUDY**

Appendix B

**Intersection LOS Worksheets
for Base Conditions**

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HCM Unsignalized Intersection Capacity Analysis

1: WLC Pkwy & Eucalyptus Avenue

12/04/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	11	5	21	79	425	69
Future Volume (Veh/h)	11	5	21	79	425	69
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	15	7	29	110	590	96
Pedestrians				5	5	
Lane Width (ft)				12.0	12.0	
Walking Speed (ft/s)				4.0	4.0	
Percent Blockage				0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	763	595	686			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	763	595	686			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	99	97			
cM capacity (veh/h)	362	506	917			
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	15	7	29	110	590	96
Volume Left	15	0	29	0	0	0
Volume Right	0	7	0	0	0	96
cSH	362	506	917	1700	1700	1700
Volume to Capacity	0.04	0.01	0.03	0.06	0.35	0.06
Queue Length 95th (ft)	3	1	2	0	0	0
Control Delay (s)	15.4	12.2	9.1	0.0	0.0	0.0
Lane LOS	C	B	A			
Approach Delay (s)	14.4		1.9	0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			0.7			
Intersection Capacity Utilization			32.4%	ICU Level of Service	A	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

2: WLC Pkwy & SR-60 EB Ramps

12/04/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	63	379	70	21	114	6
Future Volume (Veh/h)	63	379	70	21	114	6
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	75	451	83	25	136	7
Pedestrians				5	5	
Lane Width (ft)				12.0	12.0	
Walking Speed (ft/s)				4.0	4.0	
Percent Blockage				0	0	
Right turn flare (veh)	10					
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	336	144	143			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	336	144	143			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	88	50	94			
cM capacity (veh/h)	623	904	1452			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1		
Volume Total	526	83	25	143		
Volume Left	75	83	0	0		
Volume Right	451	0	0	7		
cSH	1055	1452	1700	1700		
Volume to Capacity	0.50	0.06	0.01	0.08		
Queue Length 95th (ft)	72	5	0	0		
Control Delay (s)	12.7	7.6	0.0	0.0		
Lane LOS	B	A				
Approach Delay (s)	12.7	5.9		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			9.4			
Intersection Capacity Utilization			36.5%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

3: WLC Pkwy/Theodore St & SR-60 WB Ramps

12/04/2018



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	91	30	73	11	46	29
Future Volume (Veh/h)	91	30	73	11	46	29
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	103	34	83	13	52	33
Pedestrians			5			5
Lane Width (ft)			12.0			12.0
Walking Speed (ft/s)			4.0			4.0
Percent Blockage			0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	232	94			96	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	232	94			96	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	86	96			97	
cM capacity (veh/h)	732	964			1510	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	137	96	85			
Volume Left	103	0	52			
Volume Right	34	13	0			
cSH	778	1700	1510			
Volume to Capacity	0.18	0.06	0.03			
Queue Length 95th (ft)	16	0	3			
Control Delay (s)	10.6	0.0	4.7			
Lane LOS	B		A			
Approach Delay (s)	10.6	0.0	4.7			
Approach LOS	B					
Intersection Summary						
Average Delay			5.8			
Intersection Capacity Utilization		24.3%		ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

4: Theodore St & Ironwood Ave

12/04/2018



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↑	↗	↖	↑
Traffic Volume (veh/h)	4	19	63	7	23	59
Future Volume (Veh/h)	4	19	63	7	23	59
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	5	22	72	8	26	67
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	191	72			80	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	191	72			80	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	98			98	
cM capacity (veh/h)	789	996			1531	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	27	72	8	26	67	
Volume Left	5	0	0	26	0	
Volume Right	22	0	8	0	0	
cSH	950	1700	1700	1531	1700	
Volume to Capacity	0.03	0.04	0.00	0.02	0.04	
Queue Length 95th (ft)	2	0	0	1	0	
Control Delay (s)	8.9	0.0	0.0	7.4	0.0	
Lane LOS	A		A			
Approach Delay (s)	8.9	0.0		2.1		
Approach LOS	A					
Intersection Summary						
Average Delay		2.2				
Intersection Capacity Utilization		17.9%		ICU Level of Service	A	
Analysis Period (min)		15				

HCM Signalized Intersection Capacity Analysis

5: Redlands Blvd & Eucalyptus Ave

12/04/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗		↖	↗		↖	↗	
Traffic Volume (vph)	26	0	3	4	0	20	25	519	0	0	347	46
Future Volume (vph)	26	0	3	4	0	20	25	519	0	0	347	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95			0.95	
Frt	1.00	0.85		1.00	0.85		1.00	1.00			0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1805	3068		1805	3068		1805	3610			3547	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1805	3068		1805	3068		1805	3610			3547	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	0	3	4	0	22	27	564	0	0	377	50
RTOR Reduction (vph)	0	3	0	0	22	0	0	0	0	0	14	0
Lane Group Flow (vph)	28	0	0	4	0	0	27	564	0	0	413	0
Turn Type	Prot	NA		Prot	NA		Prot	NA			Prot	NA
Protected Phases	7	4		3	8		5	2			1	6
Permitted Phases												
Actuated Green, G (s)	0.5	0.5		0.5	0.5		0.5	13.4			8.9	
Effective Green, g (s)	0.5	0.5		0.5	0.5		0.5	13.4			8.9	
Actuated g/C Ratio	0.02	0.02		0.02	0.02		0.02	0.51			0.34	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	34	58		34	58		34	1832			1195	
v/s Ratio Prot	c0.02	0.00		0.00	c0.00		0.01	c0.16			0.12	
v/s Ratio Perm												
v/c Ratio	0.82	0.00		0.12	0.01		0.79	0.31			0.35	
Uniform Delay, d1	12.9	12.7		12.7	12.7		12.9	3.8			6.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	85.0	0.0		1.5	0.0		75.1	0.1			0.2	
Delay (s)	97.9	12.7		14.3	12.8		88.0	3.9			6.7	
Level of Service	F	B		B	B		F	A			A	
Approach Delay (s)		89.6			13.0			7.7			6.7	
Approach LOS		F			B			A			A	

Intersection Summary

HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	26.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	35.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

6: Redlands Blvd & SR-60 EB Ramps

12/04/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	222	86	64	501	306	36
Future Volume (vph)	222	86	64	501	306	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00
Frbp, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	0.97		0.95	1.00	1.00	1.00
Satd. Flow (prot)	1765		1805	1900	1900	1615
Flt Permitted	0.97		0.95	1.00	1.00	1.00
Satd. Flow (perm)	1765		1805	1900	1900	1615
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	229	89	66	516	315	37
RTOR Reduction (vph)	29	0	0	0	0	11
Lane Group Flow (vph)	289	0	66	516	315	26
Confl. Peds. (#/hr)						
Turn Type	Prot		Prot	NA	NA	pm+ov
Protected Phases	3		5	2	6	3
Permitted Phases						6
Actuated Green, G (s)	13.7		4.6	33.3	24.7	38.4
Effective Green, g (s)	13.7		4.6	33.3	24.7	38.4
Actuated g/C Ratio	0.25		0.08	0.61	0.45	0.70
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	439		150	1150	853	1245
v/s Ratio Prot	c0.16		0.04	c0.27	0.17	0.01
v/s Ratio Perm						0.01
v/c Ratio	0.66		0.44	0.45	0.37	0.02
Uniform Delay, d1	18.6		24.0	5.9	10.0	2.5
Progression Factor	1.00		1.00	1.00	0.76	1.52
Incremental Delay, d2	3.6		2.1	1.3	1.2	0.0
Delay (s)	22.1		26.0	7.1	8.9	3.9
Level of Service	C		C	A	A	A
Approach Delay (s)	22.1			9.3	8.3	
Approach LOS	C			A	A	
Intersection Summary						
HCM 2000 Control Delay			12.3		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.56			
Actuated Cycle Length (s)			55.0		Sum of lost time (s)	12.0
Intersection Capacity Utilization			50.6%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

7: Redlands Blvd & SR-60 WB Ramps

12/04/2018

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Traffic Volume (vph)	4	7	5	40	0	43	12	577	132	312	297	5		
Future Volume (vph)	4	7	5	40	0	43	12	577	132	312	297	5		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor		1.00			1.00		1.00	1.00	1.00	1.00	1.00			
Frbp, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00			
Frt		0.96			0.93		1.00	1.00	0.85	1.00	1.00			
Flt Protected		0.99			0.98		0.95	1.00	1.00	0.95	1.00			
Satd. Flow (prot)		1797			1726		1805	1900	1615	1805	1895			
Flt Permitted		0.99			0.98		0.95	1.00	1.00	0.95	1.00			
Satd. Flow (perm)		1797			1726		1805	1900	1615	1805	1895			
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98		
Adj. Flow (vph)	4	7	5	41	0	44	12	589	135	318	303	5		
RTOR Reduction (vph)	0	5	0	0	79	0	0	0	55	0	0	0		
Lane Group Flow (vph)	0	11	0	0	6	0	12	589	80	318	308	0		
Confl. Peds. (#/hr)														
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA			
Protected Phases	4	4		8	8		5	2	8	1	6			
Permitted Phases									2					
Actuated Green, G (s)		3.0			7.2		1.5	57.7	64.9	26.1	82.3			
Effective Green, g (s)		3.0			7.2		1.5	57.7	64.9	26.1	82.3			
Actuated g/C Ratio		0.03			0.07		0.01	0.52	0.59	0.24	0.75			
Clearance Time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)		49			112		24	996	1011	428	1417			
v/s Ratio Prot		c0.01			0.00		0.01	c0.31	c0.01	c0.18	0.16			
v/s Ratio Perm									0.04					
v/c Ratio		0.23			0.05		0.50	0.59	0.08	0.74	0.22			
Uniform Delay, d1		52.4			48.2		53.9	18.0	9.7	38.8	4.2			
Progression Factor		1.00			1.00		0.95	0.87	0.49	1.00	1.00			
Incremental Delay, d2		2.4			0.2		13.9	2.3	0.0	6.8	0.4			
Delay (s)		54.7			48.4		65.1	18.0	4.8	45.7	4.5			
Level of Service		D			D		E	B	A	D	A			
Approach Delay (s)		54.7			48.4		16.3				25.4			
Approach LOS		D			D		B				C			
Intersection Summary														
HCM 2000 Control Delay			22.5									HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio			0.58											
Actuated Cycle Length (s)			110.0								16.0			
Intersection Capacity Utilization			66.5%										ICU Level of Service	C
Analysis Period (min)			15											
c	Critical Lane Group													

HCM Signalized Intersection Capacity Analysis

8: Redlands Blvd & Ironwood Ave

12/04/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	8	31	4	12	5	35	570	10	2	578	120
Future Volume (vph)	113	8	31	4	12	5	35	570	10	2	578	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	1.00
Frbp, ped/bikes		0.99			0.99		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	1.00
Frt		0.97			0.97		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.96			0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1771			1811		1805	1894		1805	1900	1572
Flt Permitted		0.96			0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1771			1811		1805	1894		1805	1900	1572
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	115	8	32	4	12	5	36	582	10	2	590	122
RTOR Reduction (vph)	0	10	0	0	5	0	0	0	0	0	0	47
Lane Group Flow (vph)	0	145	0	0	16	0	36	592	0	2	590	75
Confl. Peds. (#/hr)			5			5			5			5
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)		8.1			1.0		2.2	31.2		1.0	30.0	30.0
Effective Green, g (s)		8.1			1.0		2.2	31.2		1.0	30.0	30.0
Actuated g/C Ratio		0.14			0.02		0.04	0.54		0.02	0.52	0.52
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		250			31		69	1031		31	994	823
v/s Ratio Prot		c0.08			c0.01		c0.02	c0.31		0.00	0.31	
v/s Ratio Perm												0.05
v/c Ratio		0.58			0.52		0.52	0.57		0.06	0.59	0.09
Uniform Delay, d1		23.0			27.9		27.0	8.6		27.7	9.4	6.8
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		3.2			13.9		6.9	0.8		0.9	1.0	0.0
Delay (s)		26.2			41.8		34.0	9.4		28.6	10.4	6.9
Level of Service		C			D		C	A		C	B	A
Approach Delay (s)		26.2			41.8		10.8			9.8		
Approach LOS		C			D		B			A		
Intersection Summary												
HCM 2000 Control Delay			12.4									B
HCM 2000 Volume to Capacity ratio			0.59									
Actuated Cycle Length (s)			57.3						16.0			
Intersection Capacity Utilization			53.3%									A
Analysis Period (min)			15									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

1: WLC Pkwy & Eucalyptus Avenue

12/04/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	48	20	12	343	35	70
Future Volume (Veh/h)	48	20	12	343	35	70
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Hourly flow rate (vph)	64	27	16	457	47	93
Pedestrians				5	5	
Lane Width (ft)				12.0	12.0	
Walking Speed (ft/s)				4.0	4.0	
Percent Blockage				0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	541	52	140			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	541	52	140			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	87	97	99			
cM capacity (veh/h)	498	1017	1456			
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	64	27	16	457	47	93
Volume Left	64	0	16	0	0	0
Volume Right	0	27	0	0	0	93
cSH	498	1017	1456	1700	1700	1700
Volume to Capacity	0.13	0.03	0.01	0.27	0.03	0.05
Queue Length 95th (ft)	11	2	1	0	0	0
Control Delay (s)	13.3	8.6	7.5	0.0	0.0	0.0
Lane LOS	B	A	A			
Approach Delay (s)	11.9	0.3		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay			1.7			
Intersection Capacity Utilization			28.1%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

2: WLC Pkwy & SR-60 EB Ramps

12/04/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	20	59	34	357	46	20
Future Volume (Veh/h)	20	59	34	357	46	20
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	23	68	39	410	53	23
Pedestrians				5	5	
Lane Width (ft)				12.0	12.0	
Walking Speed (ft/s)				4.0	4.0	
Percent Blockage				0	0	
Right turn flare (veh)	10					
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	558	70	76			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	558	70	76			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	95	93	97			
cM capacity (veh/h)	480	995	1536			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1		
Volume Total	91	39	410	76		
Volume Left	23	39	0	0		
Volume Right	68	0	0	23		
cSH	1331	1536	1700	1700		
Volume to Capacity	0.07	0.03	0.24	0.04		
Queue Length 95th (ft)	5	2	0	0		
Control Delay (s)	9.9	7.4	0.0	0.0		
Lane LOS	A	A				
Approach Delay (s)	9.9	0.6		0.0		
Approach LOS	A					
Intersection Summary						
Average Delay			1.9			
Intersection Capacity Utilization			28.8%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

3: WLC Pkwy/Theodore St & SR-60 WB Ramps

12/04/2018



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	26	13	27	349	22	38
Future Volume (Veh/h)	26	13	27	349	22	38
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68
Hourly flow rate (vph)	38	19	40	513	32	56
Pedestrians			5			5
Lane Width (ft)			12.0			12.0
Walking Speed (ft/s)			4.0			4.0
Percent Blockage			0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	422	302			553	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	422	302			553	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	93	97			97	
cM capacity (veh/h)	572	740			1027	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	57	553	88			
Volume Left	38	0	32			
Volume Right	19	513	0			
cSH	619	1700	1027			
Volume to Capacity	0.09	0.33	0.03			
Queue Length 95th (ft)	8	0	2			
Control Delay (s)	11.4	0.0	3.3			
Lane LOS	B		A			
Approach Delay (s)	11.4	0.0	3.3			
Approach LOS	B					
Intersection Summary						
Average Delay			1.3			
Intersection Capacity Utilization			33.0%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

4: Theodore St & Ironwood Ave

12/04/2018

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	5	29	38	8	22	7
Future Volume (Veh/h)	5	29	38	8	22	7
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.64	0.64	0.64	0.64	0.64	0.64
Hourly flow rate (vph)	8	45	59	13	34	11
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	138	59			72	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	138	59			72	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	99	96			98	
cM capacity (veh/h)	841	1012			1541	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	53	59	13	34	11	
Volume Left	8	0	0	34	0	
Volume Right	45	0	13	0	0	
cSH	982	1700	1700	1541	1700	
Volume to Capacity	0.05	0.03	0.01	0.02	0.01	
Queue Length 95th (ft)	4	0	0	2	0	
Control Delay (s)	8.9	0.0	0.0	7.4	0.0	
Lane LOS	A			A		
Approach Delay (s)	8.9	0.0		5.6		
Approach LOS	A					
Intersection Summary						
Average Delay			4.2			
Intersection Capacity Utilization			17.9%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Signalized Intersection Capacity Analysis
 5: Redlands Blvd & Eucalyptus Avenue

12/04/2018

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		 			 			 			 		
Traffic Volume (vph)	25	2	9	3	0	59	0	404	2	2	566	18	
Future Volume (vph)	25	2	9	3	0	59	0	404	2	2	566	18	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0		
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95		1.00	0.95		
Frt	1.00	0.88		1.00	0.85			1.00		1.00	1.00		
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00		
Satd. Flow (prot)	1805	3167		1805	3068			3607		1805	3593		
Flt Permitted	0.95	1.00		0.95	1.00			1.00		0.95	1.00		
Satd. Flow (perm)	1805	3167		1805	3068			3607		1805	3593		
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	
Adj. Flow (vph)	26	2	9	3	0	61	0	416	2	2	584	19	
RTOR Reduction (vph)	0	10	0	0	58	0	0	0	0	0	1	0	
Lane Group Flow (vph)	26	1	0	3	3	0	0	418	0	2	602	0	
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA		
Protected Phases	7	4		3	8		5	2		1	6		
Permitted Phases													
Actuated Green, G (s)	4.1	7.9		1.8	5.6			72.5		1.8	78.3		
Effective Green, g (s)	4.1	7.9		1.8	5.6			72.5		1.8	78.3		
Actuated g/C Ratio	0.04	0.08		0.02	0.06			0.72		0.02	0.78		
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0		
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0		
Lane Grp Cap (vph)	74	250		32	171			2615		32	2813		
v/s Ratio Prot	c0.01	0.00		0.00	c0.00			0.12		0.00	c0.17		
v/s Ratio Perm													
v/c Ratio	0.35	0.00		0.09	0.02			0.16		0.06	0.21		
Uniform Delay, d1	46.7	42.4		48.3	44.6			4.3		48.3	2.8		
Progression Factor	1.00	1.00		1.01	1.00			1.00		1.10	0.52		
Incremental Delay, d2	2.9	0.0		1.3	0.0			0.1		0.6	0.1		
Delay (s)	49.5	42.4		50.1	44.7			4.4		53.6	1.6		
Level of Service	D	D		D	D			A		D	A		
Approach Delay (s)		47.4			44.9			4.4			1.8		
Approach LOS		D			D			A			A		
Intersection Summary													
HCM 2000 Control Delay			6.7									HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio			0.22										
Actuated Cycle Length (s)			100.0									Sum of lost time (s)	16.0
Intersection Capacity Utilization			30.9%									ICU Level of Service	A
Analysis Period (min)			15										

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

6: Redlands Blvd & SR-60 EB Ramps

12/04/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	466	148	69	420	437	47
Future Volume (vph)	466	148	69	420	437	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00
Frbp, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	1.00	1.00	0.85
Flt Protected	0.96		0.95	1.00	1.00	1.00
Satd. Flow (prot)	1771		1805	1900	1900	1615
Flt Permitted	0.96		0.95	1.00	1.00	1.00
Satd. Flow (perm)	1771		1805	1900	1900	1615
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	485	154	72	438	455	49
RTOR Reduction (vph)	13	0	0	0	0	9
Lane Group Flow (vph)	626	0	72	438	455	40
Confl. Peds. (#/hr)						
Turn Type	Prot		Prot	NA	NA	pm+ov
Protected Phases	3		5	2	6	3
Permitted Phases						6
Actuated Green, G (s)	40.3		6.9	51.7	40.8	81.1
Effective Green, g (s)	40.3		6.9	51.7	40.8	81.1
Actuated g/C Ratio	0.40		0.07	0.52	0.41	0.81
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	713		124	982	775	1374
v/s Ratio Prot	c0.35		0.04	c0.23	c0.24	0.01
v/s Ratio Perm						0.01
v/c Ratio	0.88		0.58	0.45	0.59	0.03
Uniform Delay, d1	27.6		45.1	15.2	23.0	1.8
Progression Factor	1.00		0.91	0.80	0.46	0.00
Incremental Delay, d2	11.9		6.7	1.5	3.1	0.0
Delay (s)	39.5		47.9	13.6	13.8	0.0
Level of Service	D		D	B	B	A
Approach Delay (s)	39.5			18.4	12.4	
Approach LOS	D			B	B	
Intersection Summary						
HCM 2000 Control Delay			24.7		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.72			
Actuated Cycle Length (s)			100.0		Sum of lost time (s)	12.0
Intersection Capacity Utilization			73.7%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

7: Redlands Blvd & SR-60 WB Ramps

12/04/2018

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	2	13	8	47	0	24	12	721	153	324	429	5	
Future Volume (vph)	2	13	8	47	0	24	12	721	153	324	429	5	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0		
Lane Util. Factor		1.00			1.00		1.00	1.00	1.00	1.00	1.00		
Frbp, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00		
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00		
Frt		0.95			0.95		1.00	1.00	0.85	1.00	1.00		
Flt Protected		1.00			0.97		0.95	1.00	1.00	0.95	1.00		
Satd. Flow (prot)		1800			1755		1805	1900	1615	1805	1897		
Flt Permitted		1.00			0.97		0.95	1.00	1.00	0.95	1.00		
Satd. Flow (perm)		1800			1755		1805	1900	1615	1805	1897		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	
Adj. Flow (vph)	2	14	9	50	0	26	13	767	163	345	456	5	
RTOR Reduction (vph)	0	9	0	0	71	0	0	0	86	0	0	0	
Lane Group Flow (vph)	0	16	0	0	5	0	13	767	77	345	461	0	
Confl. Peds. (#/hr)													
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA		
Protected Phases	4	4		8	8		5	2	8	1	6		
Permitted Phases									2				
Actuated Green, G (s)		3.1			7.0		3.9	40.3	47.3	33.6	70.0		
Effective Green, g (s)		3.1			7.0		3.9	40.3	47.3	33.6	70.0		
Actuated g/C Ratio		0.03			0.07		0.04	0.40	0.47	0.34	0.70		
Clearance Time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0		
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		55			122		70	765	763	606	1327		
v/s Ratio Prot		c0.01			0.00		0.01	c0.40	c0.01	c0.19	0.24		
v/s Ratio Perm									0.04				
v/c Ratio		0.30			0.04		0.19	1.00	0.10	0.57	0.35		
Uniform Delay, d1		47.4			43.4		46.5	29.9	14.6	27.3	5.9		
Progression Factor		1.00			1.00		0.94	0.94	1.74	0.52	0.83		
Incremental Delay, d2		3.0			0.1		1.0	29.7	0.0	0.9	0.5		
Delay (s)		50.4			43.5		44.9	57.8	25.4	15.0	5.5		
Level of Service		D			D		D	E	C	B	A		
Approach Delay (s)		50.4			43.5			52.0			9.6		
Approach LOS		D			D			D			A		
Intersection Summary													
HCM 2000 Control Delay			33.2									HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.73										
Actuated Cycle Length (s)			100.0									Sum of lost time (s)	16.0
Intersection Capacity Utilization			76.6%									ICU Level of Service	D
Analysis Period (min)			15										
c	Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

8: Redlands Blvd & Ironwood Ave

12/04/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	108	21	21	5	12	7	13	738	7	4	750	198
Future Volume (vph)	108	21	21	5	12	7	13	738	7	4	750	198
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	1.00
Frbp, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	1.00
Frt		0.98			0.96		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.97			0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1791			1791		1805	1897		1805	1900	1565
Flt Permitted		0.97			0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1791			1791		1805	1897		1805	1900	1565
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	111	22	22	5	12	7	13	761	7	4	773	204
RTOR Reduction (vph)	0	6	0	0	7	0	0	0	0	0	0	41
Lane Group Flow (vph)	0	149	0	0	17	0	13	768	0	4	773	163
Confl. Peds. (#/hr)			5			5			5			5
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)		21.0			3.1		1.5	58.5		1.4	58.4	58.4
Effective Green, g (s)		21.0			3.1		1.5	58.5		1.4	58.4	58.4
Actuated g/C Ratio		0.21			0.03		0.02	0.58		0.01	0.58	0.58
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		376			55		27	1109		25	1109	913
v/s Ratio Prot		c0.08			c0.01		0.01	c0.40		0.00	c0.41	
v/s Ratio Perm												0.10
v/c Ratio		0.40			0.31		0.48	0.69		0.16	0.70	0.18
Uniform Delay, d1		34.0			47.4		48.9	14.5		48.7	14.6	9.7
Progression Factor		1.00			1.00		1.46	0.12		1.00	1.00	1.00
Incremental Delay, d2		3.1			3.2		5.1	0.7		3.0	1.9	0.1
Delay (s)		37.1			50.7		76.6	2.5		51.7	16.5	9.8
Level of Service		D			D		E	A		D	B	A
Approach Delay (s)		37.1			50.7		3.7			15.3		
Approach LOS		D			D		A			B		
Intersection Summary												
HCM 2000 Control Delay			12.8									B
HCM 2000 Volume to Capacity ratio			0.62									
Actuated Cycle Length (s)			100.0						16.0			
Intersection Capacity Utilization			66.1%									C
Analysis Period (min)			15									
c Critical Lane Group												

**SR-60/WORLD LOGISTICS CENTER PARKWAY
INTERCHANGE CLOSURE STUDY**

Appendix C

**Intersection LOS Worksheets
during Interchange Closure**

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HCM Unsignalized Intersection Capacity Analysis

1: WLC Pkwy & Eucalyptus Avenue

12/05/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	415	100	0	0	0
Future Volume (Veh/h)	0	415	100	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72
Hourly flow rate (vph)	0	576	139	0	0	0
Pedestrians				5	5	
Lane Width (ft)				12.0	12.0	
Walking Speed (ft/s)				4.0	4.0	
Percent Blockage				0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	283	5	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	283	5	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	47	92			
cM capacity (veh/h)	648	1080	1636			
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	0	576	139	0	0	0
Volume Left	0	0	139	0	0	0
Volume Right	0	576	0	0	0	0
cSH	1700	1080	1636	1700	1700	1700
Volume to Capacity	0.00	0.53	0.08	0.00	0.00	0.00
Queue Length 95th (ft)	0	82	7	0	0	0
Control Delay (s)	0.0	12.1	7.4	0.0	0.0	0.0
Lane LOS	A	B	A			
Approach Delay (s)	12.1	7.4		0.0		
Approach LOS	B					
Intersection Summary						
Average Delay	11.2					
Intersection Capacity Utilization	29.0%		ICU Level of Service		A	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

2: WLC Pkwy & SR-60 EB Ramps

12/05/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians				5	5	
Lane Width (ft)				12.0	12.0	
Walking Speed (ft/s)				4.0	4.0	
Percent Blockage				0	0	
Right turn flare (veh)	10					
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	5	5	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	5	5	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	1018	1080	1636			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1		
Volume Total	0	0	0	0		
Volume Left	0	0	0	0		
Volume Right	0	0	0	0		
cSH	1700	1700	1700	1700		
Volume to Capacity	0.00	0.00	0.00	0.00		
Queue Length 95th (ft)	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0		
Lane LOS	A					
Approach Delay (s)	0.0	0.0		0.0		
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

3: WLC Pkwy/Theodore St & SR-60 WB Ramps

12/05/2018



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians			5			5
Lane Width (ft)			12.0			12.0
Walking Speed (ft/s)			4.0			4.0
Percent Blockage			0			0
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	5	5			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	5	5			0	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1018	1080			1636	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

4: Theodore St & Ironwood Ave

12/05/2018



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙		↑	↗	↙	↗
Traffic Volume (veh/h)	1	22	15	2	28	27
Future Volume (Veh/h)	1	22	15	2	28	27
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Hourly flow rate (vph)	1	25	17	2	32	31
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	112	17			19	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	112	17			19	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			98	
cM capacity (veh/h)	872	1068			1611	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	26	17	2	32	31	
Volume Left	1	0	0	32	0	
Volume Right	25	0	2	0	0	
cSH	1059	1700	1700	1611	1700	
Volume to Capacity	0.02	0.01	0.00	0.02	0.02	
Queue Length 95th (ft)	2	0	0	2	0	
Control Delay (s)	8.5	0.0	0.0	7.3	0.0	
Lane LOS	A		A			
Approach Delay (s)	8.5	0.0		3.7		
Approach LOS	A					
Intersection Summary						
Average Delay			4.2			
Intersection Capacity Utilization			18.2%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Signalized Intersection Capacity Analysis

5: Redlands Blvd & Eucalyptus Ave

12/05/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↕		↖	↕		↖	↕		↖	↕	
Traffic Volume (vph)	26	0	3	4	0	111	25	519	0	479	362	46
Future Volume (vph)	26	0	3	4	0	111	25	519	0	479	362	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.85		1.00	0.85		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	3068		1805	3068		1805	3610		1805	3549	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1805	3068		1805	3068		1805	3610		1805	3549	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	0	3	4	0	121	27	564	0	521	393	50
RTOR Reduction (vph)	0	3	0	0	110	0	0	0	0	0	8	0
Lane Group Flow (vph)	28	0	0	4	11	0	27	564	0	521	435	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	2.3	7.1		1.1	5.9		2.3	16.8		22.1	36.6	
Effective Green, g (s)	2.3	7.1		1.1	5.9		2.3	16.8		22.1	36.6	
Actuated g/C Ratio	0.04	0.11		0.02	0.09		0.04	0.27		0.35	0.58	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	65	345		31	286		65	961		632	2058	
v/s Ratio Prot	c0.02	0.00		0.00	c0.00		0.01	c0.16		c0.29	0.12	
v/s Ratio Perm												
v/c Ratio	0.43	0.00		0.13	0.04		0.42	0.59		0.82	0.21	
Uniform Delay, d1	29.8	24.9		30.5	26.0		29.7	20.1		18.7	6.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.5	0.0		1.9	0.1		4.3	0.9		8.6	0.1	
Delay (s)	34.3	24.9		32.4	26.1		34.0	21.1		27.3	6.4	
Level of Service	C	C		C	C		C	C		C	A	
Approach Delay (s)		33.4			26.3			21.6			17.7	
Approach LOS		C			C			C			B	

Intersection Summary

HCM 2000 Control Delay	20.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	63.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

6: Redlands Blvd & SR-60 EB Ramps

12/05/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	285	465	134	522	420	42
Future Volume (vph)	285	465	134	522	420	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00
Frbp, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.92		1.00	1.00	1.00	0.85
Flt Protected	0.98		0.95	1.00	1.00	1.00
Satd. Flow (prot)	1709		1805	1900	1900	1615
Flt Permitted	0.98		0.95	1.00	1.00	1.00
Satd. Flow (perm)	1709		1805	1900	1900	1615
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	294	479	138	538	433	43
RTOR Reduction (vph)	52	0	0	0	0	9
Lane Group Flow (vph)	721	0	138	538	433	34
Confl. Peds. (#/hr)						
Turn Type	Prot		Prot	NA	NA	pm+ov
Protected Phases	3		5	2	6	3
Permitted Phases						6
Actuated Green, G (s)	54.9		12.6	57.1	40.5	95.4
Effective Green, g (s)	54.9		12.6	57.1	40.5	95.4
Actuated g/C Ratio	0.46		0.10	0.48	0.34	0.80
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	781		189	904	641	1337
v/s Ratio Prot	c0.42		c0.08	0.28	c0.23	0.01
v/s Ratio Perm						0.01
v/c Ratio	0.92		0.73	0.60	0.68	0.03
Uniform Delay, d1	30.6		52.1	23.0	34.1	2.6
Progression Factor	1.00		1.00	1.00	0.75	1.75
Incremental Delay, d2	16.4		13.5	2.9	5.4	0.0
Delay (s)	46.9		65.6	25.9	31.0	4.5
Level of Service	D		E	C	C	A
Approach Delay (s)	46.9			34.0	28.6	
Approach LOS	D			C	C	

Intersection Summary

HCM 2000 Control Delay	37.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

7: Redlands Blvd & SR-60 WB Ramps

12/05/2018

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR		
Lane Configurations														
Traffic Volume (vph)	4	7	5	131	0	73	12	650	143	358	326	5		
Future Volume (vph)	4	7	5	131	0	73	12	650	143	358	326	5		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor		1.00			1.00		1.00	1.00	1.00	1.00	1.00			
Frbp, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00			
Frt		0.96			0.95		1.00	1.00	0.85	1.00	1.00			
Flt Protected		0.99			0.97		0.95	1.00	1.00	0.95	1.00			
Satd. Flow (prot)		1797			1752		1805	1900	1615	1805	1896			
Flt Permitted		0.99			0.97		0.95	1.00	1.00	0.95	1.00			
Satd. Flow (perm)		1797			1752		1805	1900	1615	1805	1896			
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98		
Adj. Flow (vph)	4	7	5	134	0	74	12	663	146	365	333	5		
RTOR Reduction (vph)	0	5	0	0	106	0	0	0	60	0	0	0		
Lane Group Flow (vph)	0	11	0	0	102	0	12	663	86	365	338	0		
Confl. Peds. (#/hr)														
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA			
Protected Phases	4	4		8	8		5	2	8	1	6			
Permitted Phases									2					
Actuated Green, G (s)		3.0			12.5		6.7	58.2	70.7	30.3	81.8			
Effective Green, g (s)		3.0			12.5		6.7	58.2	70.7	30.3	81.8			
Actuated g/C Ratio		0.02			0.10		0.06	0.49	0.59	0.25	0.68			
Clearance Time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)		44			182		100	921	1005	455	1292			
v/s Ratio Prot		c0.01			c0.06		0.01	c0.35	0.01	c0.20	0.18			
v/s Ratio Perm									0.04					
v/c Ratio		0.25			0.56		0.12	0.72	0.09	0.80	0.26			
Uniform Delay, d1		57.4			51.1		53.8	24.4	10.7	42.0	7.4			
Progression Factor		1.00			1.00		0.80	0.59	0.07	1.00	1.00			
Incremental Delay, d2		3.0			3.9		0.4	3.5	0.0	9.8	0.5			
Delay (s)		60.4			55.1		43.6	17.8	0.7	51.9	7.9			
Level of Service		E			E		D	B	A	D	A			
Approach Delay (s)		60.4			55.1			15.1			30.7			
Approach LOS		E			E			B			C			
Intersection Summary														
HCM 2000 Control Delay			26.6									HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio			0.71											
Actuated Cycle Length (s)			120.0								16.0		Sum of lost time (s)	
Intersection Capacity Utilization			82.4%										ICU Level of Service	E
Analysis Period (min)			15											
c	Critical Lane Group													

HCM Signalized Intersection Capacity Analysis

8: Redlands Blvd & Ironwood Ave

12/05/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	3	38	70	3	2	44	573	101	1	580	120
Future Volume (vph)	113	3	38	70	3	2	44	573	101	1	580	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	1.00
Frbp, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	1.00
Frt		0.97			1.00		1.00	0.98		1.00	1.00	0.85
Flt Protected		0.96			0.96		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1759			1807		1805	1850		1805	1900	1569
Flt Permitted		0.96			0.96		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		1759			1807		1805	1850		1805	1900	1569
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	115	3	39	71	3	2	45	585	103	1	592	122
RTOR Reduction (vph)	0	12	0	0	1	0	0	4	0	0	0	44
Lane Group Flow (vph)	0	145	0	0	75	0	45	684	0	1	592	78
Confl. Peds. (#/hr)			5			5			5			5
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												6
Actuated Green, G (s)		11.8			7.1		3.7	41.6		1.2	39.1	39.1
Effective Green, g (s)		11.8			7.1		3.7	41.6		1.2	39.1	39.1
Actuated g/C Ratio		0.15			0.09		0.05	0.54		0.02	0.50	0.50
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		267			165		85	990		27	956	789
v/s Ratio Prot		c0.08			c0.04		c0.02	c0.37		0.00	0.31	
v/s Ratio Perm												0.05
v/c Ratio		0.54			0.46		0.53	0.69		0.04	0.62	0.10
Uniform Delay, d1		30.5			33.5		36.1	13.3		37.7	13.9	10.1
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		2.3			2.0		5.8	2.1		0.6	1.2	0.1
Delay (s)		32.7			35.5		42.0	15.4		38.2	15.1	10.1
Level of Service		C			D		D	B		D	B	B
Approach Delay (s)		32.7			35.5		17.0			14.3		
Approach LOS		C			D		B			B		
Intersection Summary												
HCM 2000 Control Delay			18.2				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.64									
Actuated Cycle Length (s)			77.7			Sum of lost time (s)			16.0			
Intersection Capacity Utilization			53.5%			ICU Level of Service			A			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

1: WLC Pkwy & Eucalyptus Avenue

12/05/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	48	355	0	0	0
Future Volume (Veh/h)	0	48	355	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75
Hourly flow rate (vph)	0	64	473	0	0	0
Pedestrians				5	5	
Lane Width (ft)				12.0	12.0	
Walking Speed (ft/s)				4.0	4.0	
Percent Blockage				0	0	
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	951	5	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	951	5	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	94	71			
cM capacity (veh/h)	206	1080	1636			
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	SB 2
Volume Total	0	64	473	0	0	0
Volume Left	0	0	473	0	0	0
Volume Right	0	64	0	0	0	0
cSH	1700	1080	1636	1700	1700	1700
Volume to Capacity	0.00	0.06	0.29	0.00	0.00	0.00
Queue Length 95th (ft)	0	5	30	0	0	0
Control Delay (s)	0.0	8.5	8.1	0.0	0.0	0.0
Lane LOS	A	A	A			
Approach Delay (s)	8.5		8.1	0.0		
Approach LOS	A					
Intersection Summary						
Average Delay			8.1			
Intersection Capacity Utilization			23.0%	ICU Level of Service	A	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

2: WLC Pkwy & SR-60 EB Ramps

12/05/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians				5	5	
Lane Width (ft)				12.0	12.0	
Walking Speed (ft/s)				4.0	4.0	
Percent Blockage				0	0	
Right turn flare (veh)	10					
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	5	5	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	5	5	0			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	1018	1080	1636			
Direction, Lane #	EB 1	NB 1	NB 2	SB 1		
Volume Total	0	0	0	0		
Volume Left	0	0	0	0		
Volume Right	0	0	0	0		
cSH	1700	1700	1700	1700		
Volume to Capacity	0.00	0.00	0.00	0.00		
Queue Length 95th (ft)	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0		
Lane LOS	A					
Approach Delay (s)	0.0	0.0		0.0		
Approach LOS	A					
Intersection Summary						
Average Delay	0.0					
Intersection Capacity Utilization	0.0%			ICU Level of Service	A	
Analysis Period (min)	15					

HCM Unsignalized Intersection Capacity Analysis

3: WLC Pkwy/Theodore St & SR-60 WB Ramps

12/05/2018



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians			5		5	
Lane Width (ft)			12.0		12.0	
Walking Speed (ft/s)			4.0		4.0	
Percent Blockage			0		0	
Right turn flare (veh)						
Median type			None		None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	5	5			0	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	5	5			0	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1018	1080			1636	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

4: Theodore St & Ironwood Ave

12/05/2018

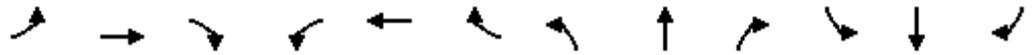


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↑	↗	↘	↑
Traffic Volume (veh/h)	1	33	58	4	26	0
Future Volume (Veh/h)	1	33	58	4	26	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.64	0.64	0.64	0.64	0.64	0.64
Hourly flow rate (vph)	2	52	91	6	41	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage (veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	173	91			97	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	173	91			97	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	95			97	
cM capacity (veh/h)	799	972			1509	
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	
Volume Total	54	91	6	41	0	
Volume Left	2	0	0	41	0	
Volume Right	52	0	6	0	0	
cSH	964	1700	1700	1509	1700	
Volume to Capacity	0.06	0.05	0.00	0.03	0.00	
Queue Length 95th (ft)	4	0	0	2	0	
Control Delay (s)	9.0	0.0	0.0	7.5	0.0	
Lane LOS	A			A		
Approach Delay (s)	9.0	0.0		7.5		
Approach LOS	A					
Intersection Summary						
Average Delay			4.1			
Intersection Capacity Utilization			18.1%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Signalized Intersection Capacity Analysis

5: Redlands Blvd & Eucalyptus Avenue

12/05/2018



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↕		↰	↕		↰	↕		↰	↕	
Traffic Volume (vph)	25	2	9	3	0	450	0	404	2	100	573	18
Future Volume (vph)	25	2	9	3	0	450	0	404	2	100	573	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			0.95		1.00	0.95	
Frt	1.00	0.88		1.00	0.85			1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (prot)	1805	3167		1805	3068			3607		1805	3593	
Flt Permitted	0.95	1.00		0.95	1.00			1.00		0.95	1.00	
Satd. Flow (perm)	1805	3167		1805	3068			3607		1805	3593	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	26	2	9	3	0	464	0	416	2	103	591	19
RTOR Reduction (vph)	0	9	0	0	366	0	0	1	0	0	3	0
Lane Group Flow (vph)	26	2	0	3	98	0	0	417	0	103	607	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	0.9	8.6		0.9	8.6			11.1		4.2	19.3	
Effective Green, g (s)	0.9	8.6		0.9	8.6			11.1		4.2	19.3	
Actuated g/C Ratio	0.02	0.21		0.02	0.21			0.27		0.10	0.47	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0		3.0	3.0	
Lane Grp Cap (vph)	39	667		39	646			981		185	1699	
v/s Ratio Prot	c0.01	0.00		0.00	c0.03			0.12		c0.06	c0.17	
v/s Ratio Perm												
v/c Ratio	0.67	0.00		0.08	0.15			0.43		0.56	0.36	
Uniform Delay, d1	19.8	12.7		19.5	13.1			12.2		17.4	6.8	
Progression Factor	1.00	1.00		1.00	1.00			1.00		1.00	1.00	
Incremental Delay, d2	35.5	0.0		0.8	0.1			0.3		3.6	0.1	
Delay (s)	55.3	12.7		20.4	13.2			12.5		21.0	6.9	
Level of Service	E	B		C	B			B		C	A	
Approach Delay (s)		42.7			13.3			12.5			9.0	
Approach LOS		D			B			B			A	

Intersection Summary

HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	40.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

6: Redlands Blvd & SR-60 EB Ramps

12/05/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	486	207	103	777	483	67
Future Volume (vph)	486	207	103	777	483	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	1.00		1.00	1.00	1.00	1.00
Frbp, ped/bikes	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.96		1.00	1.00	1.00	0.85
Flt Protected	0.97		0.95	1.00	1.00	1.00
Satd. Flow (prot)	1762		1805	1900	1900	1615
Flt Permitted	0.97		0.95	1.00	1.00	1.00
Satd. Flow (perm)	1762		1805	1900	1900	1615
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	506	216	107	809	503	70
RTOR Reduction (vph)	14	0	0	0	0	13
Lane Group Flow (vph)	708	0	107	809	503	57
Confl. Peds. (#/hr)						
Turn Type	Prot		Prot	NA	NA	pm+ov
Protected Phases	3		5	2	6	3
Permitted Phases						6
Actuated Green, G (s)	46.9		9.1	55.1	42.0	88.9
Effective Green, g (s)	46.9		9.1	55.1	42.0	88.9
Actuated g/C Ratio	0.43		0.08	0.50	0.38	0.81
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	751		149	951	725	1363
v/s Ratio Prot	c0.40		0.06	c0.43	0.26	0.02
v/s Ratio Perm						0.02
v/c Ratio	0.94		0.72	0.85	0.69	0.04
Uniform Delay, d1	30.3		49.2	23.9	28.6	2.1
Progression Factor	1.00		1.00	1.00	0.87	0.06
Incremental Delay, d2	20.0		15.2	9.5	5.2	0.0
Delay (s)	50.2		64.4	33.3	30.1	0.1
Level of Service	D		E	C	C	A
Approach Delay (s)	50.2			37.0	26.4	
Approach LOS	D			D	C	
Intersection Summary						
HCM 2000 Control Delay			38.6		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.93			
Actuated Cycle Length (s)			110.0		Sum of lost time (s)	12.0
Intersection Capacity Utilization			87.1%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

HCM Signalized Intersection Capacity Analysis

7: Redlands Blvd & SR-60 WB Ramps

12/05/2018

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	2	13	8	73	0	37	12	749	502	346	469	5	
Future Volume (vph)	2	13	8	73	0	37	12	749	502	346	469	5	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0		
Lane Util. Factor		1.00			1.00		1.00	1.00	1.00	1.00	1.00		
Frbp, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00		
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00		
Frt		0.95			0.95		1.00	1.00	0.85	1.00	1.00		
Flt Protected		1.00			0.97		0.95	1.00	1.00	0.95	1.00		
Satd. Flow (prot)		1800			1756		1805	1900	1615	1805	1897		
Flt Permitted		1.00			0.97		0.95	1.00	1.00	0.95	1.00		
Satd. Flow (perm)		1800			1756		1805	1900	1615	1805	1897		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	
Adj. Flow (vph)	2	14	9	78	0	39	13	797	534	368	499	5	
RTOR Reduction (vph)	0	9	0	0	107	0	0	0	208	0	0	0	
Lane Group Flow (vph)	0	16	0	0	10	0	13	797	326	368	504	0	
Confl. Peds. (#/hr)													
Turn Type	Split	NA		Split	NA		Prot	NA	pm+ov	Prot	NA		
Protected Phases	4	4		8	8		5	2	8	1	6		
Permitted Phases									2				
Actuated Green, G (s)		4.6			9.7		3.6	57.5	67.2	22.2	76.1		
Effective Green, g (s)		4.6			9.7		3.6	57.5	67.2	22.2	76.1		
Actuated g/C Ratio		0.04			0.09		0.03	0.52	0.61	0.20	0.69		
Clearance Time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0		
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0		
Lane Grp Cap (vph)		75			154		59	993	1045	364	1312		
v/s Ratio Prot		c0.01			0.01		0.01	c0.42	c0.03	c0.20	0.27		
v/s Ratio Perm									0.17				
v/c Ratio		0.22			0.07		0.22	0.80	0.31	1.01	0.38		
Uniform Delay, d1		51.0			46.0		51.8	21.6	10.3	43.9	7.1		
Progression Factor		1.00			1.00		0.98	0.83	0.73	1.00	1.00		
Incremental Delay, d2		1.5			0.2		0.9	3.5	0.1	50.0	0.9		
Delay (s)		52.4			46.2		51.6	21.3	7.6	93.9	8.0		
Level of Service		D			D		D	C	A	F	A		
Approach Delay (s)		52.4			46.2			16.2			44.2		
Approach LOS		D			D			B			D		
Intersection Summary													
HCM 2000 Control Delay			28.4									HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.78										
Actuated Cycle Length (s)			110.0									Sum of lost time (s)	16.0
Intersection Capacity Utilization			81.6%									ICU Level of Service	D
Analysis Period (min)			15										
c	Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

8: Redlands Blvd & Ironwood Ave

12/05/2018

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	108	18	25	41	6	4	19	741	39	2	753	198	
Future Volume (vph)	108	18	25	41	6	4	19	741	39	2	753	198	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	1.00	
Frbp, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	0.97	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	1.00	
Frt		0.98			0.99		1.00	0.99		1.00	1.00	0.85	
Flt Protected		0.97			0.96		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		1785			1803		1805	1883		1805	1900	1567	
Flt Permitted		0.97			0.96		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (perm)		1785			1803		1805	1883		1805	1900	1567	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	
Adj. Flow (vph)	111	19	26	42	6	4	20	764	40	2	776	204	
RTOR Reduction (vph)	0	7	0	0	3	0	0	1	0	0	0	34	
Lane Group Flow (vph)	0	149	0	0	49	0	20	803	0	2	776	170	
Confl. Peds. (#/hr)			5			5			5			5	
Turn Type	Split	NA		Split	NA		Prot	NA		Prot	NA	Perm	
Protected Phases	4	4		8	8		5	2		1	6		
Permitted Phases												6	
Actuated Green, G (s)		12.3			4.8		2.3	50.5		1.1	49.3	49.3	
Effective Green, g (s)		12.3			4.8		2.3	50.5		1.1	49.3	49.3	
Actuated g/C Ratio		0.15			0.06		0.03	0.60		0.01	0.58	0.58	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)		259			102		49	1122		23	1105	912	
v/s Ratio Prot		c0.08			c0.03		c0.01	c0.43		0.00	0.41		
v/s Ratio Perm												0.11	
v/c Ratio		0.58			0.48		0.41	0.72		0.09	0.70	0.19	
Uniform Delay, d1		33.8			38.7		40.5	12.0		41.3	12.5	8.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	1.00	
Incremental Delay, d2		3.1			3.6		5.5	2.2		1.6	2.0	0.1	
Delay (s)		36.9			42.3		46.0	14.2		42.9	14.6	8.4	
Level of Service		D			D		D	B		D	B	A	
Approach Delay (s)		36.9			42.3		15.0			13.3			
Approach LOS		D			D		B			B			
Intersection Summary													
HCM 2000 Control Delay			16.6									HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.68										
Actuated Cycle Length (s)			84.7									Sum of lost time (s)	16.0
Intersection Capacity Utilization			58.7%									ICU Level of Service	B
Analysis Period (min)			15										
c Critical Lane Group													

**SR-60/WORLD LOGISTICS CENTER PARKWAY
INTERCHANGE CLOSURE STUDY**

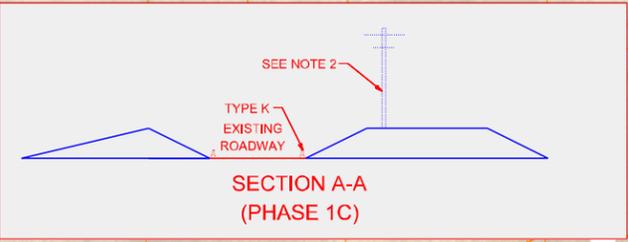
Appendix D

Conceptual Construction Staging Exhibits

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GENERAL NOTE

1. COMPLETE THE IMPROVEMENT OF SOUTHEAST QUADRANT OF THE REDLANDS BLVD/IRONWOOD AVE INTERSECTION, GILMAN SPRINGS RD/ALESSANDRO BLVD INTERSECTION, AND THEODORE ST/ALESSANDRO BLVD INTERSECTION PRIOR TO THE BEGINNING OF PHASE 1C AND PHASE 1D TO ACCOMMODATE TRUCK TURNING
2. SCE RELOCATION DETAILS AND TIMING TO BE DETERMINED DURING FINAL DESIGN



ACCESS ROAD
REMAIN OPEN

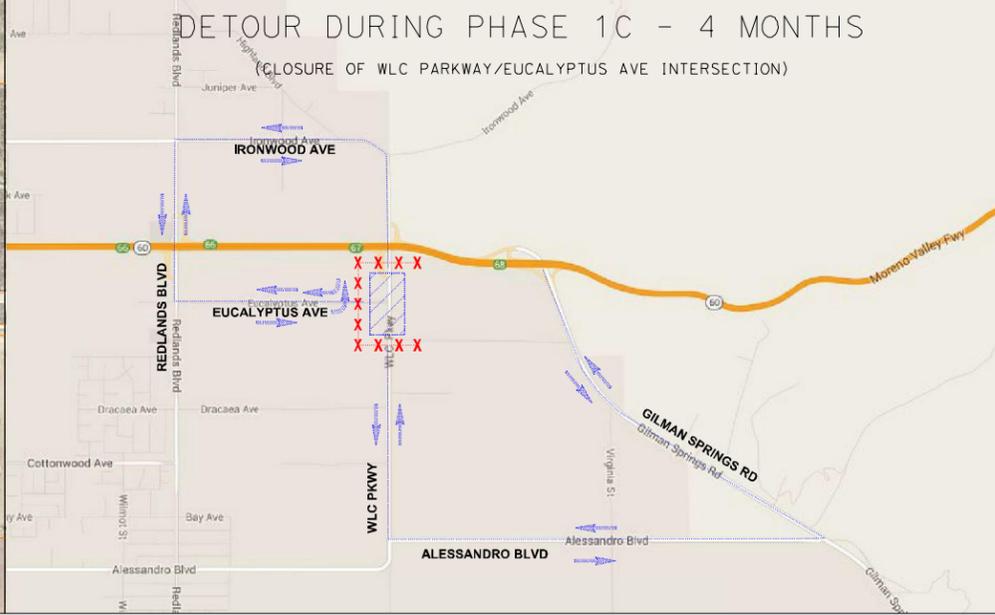
SR-60

REDLANDS BLVD

EUCALYPTUS AVE

WLC PKWY

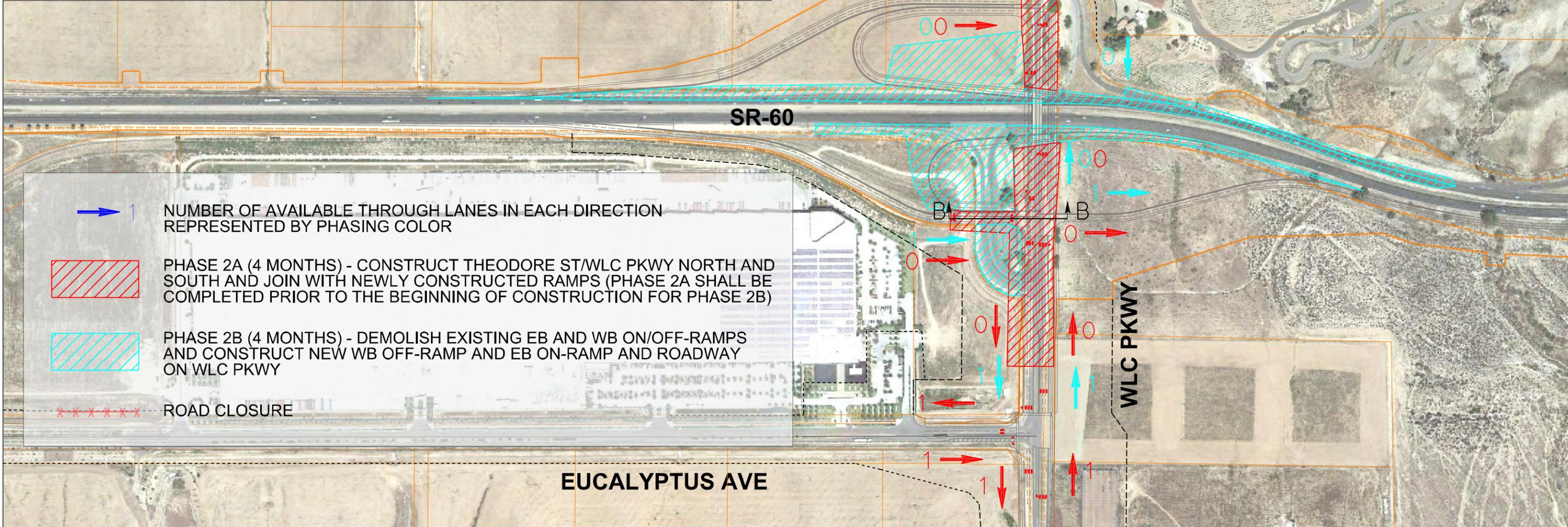
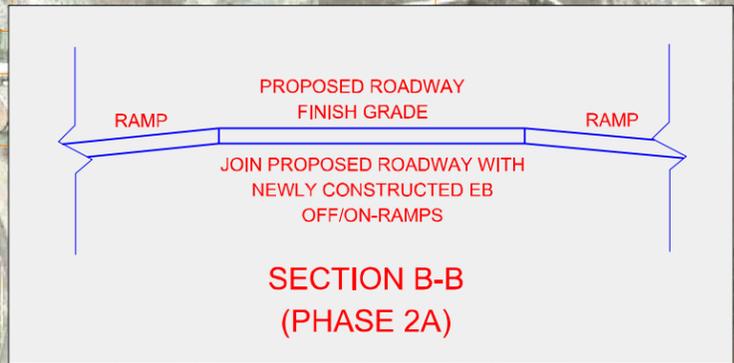
- PHASE 1A (7 MONTHS) - CONSTRUCT EB AND WB ON-RAMP; CONSTRUCT PARTIAL ROADWAY AND WB OFF-RAMP
- PHASE 1B (2 MONTHS) - CONSTRUCTION OF EUCALYPTUS AVE TO REDLANDS BLVD (PHASE 1B SHALL BE COMPLETED PRIOR TO THE BEGINNING OF CONSTRUCTION FOR PHASE 1C)
- PHASE 1C (4 MONTHS) - INTERSECTION WIDENING. CONSTRUCT TEMPORARY GRADING FOR SCE POLE RELOCATION (CLOSE WLC PKWY/EUCALYPTUS AVE INTERSECTION) "SEE NOTE 2"
- PHASE 1D (1 MONTH) - CONSTRUCT DETOUR TO CONNECT WITH WLC PKWY INTERCHANGE
- 1 MINIMUM NUMBER OF AVAILABLE THROUGH LANES IN EACH DIRECTION REPRESENTED BY PHASING COLOR
- ROAD CLOSURE



PHASE 1 (ESTIMATED CONSTRUCTION DURATION - 7 MONTHS)

DETOUR DURING PHASE 2A - 4 MONTHS

(FULL INTERCHANGE CLOSURE)



 NUMBER OF AVAILABLE THROUGH LANES IN EACH DIRECTION REPRESENTED BY PHASING COLOR

 PHASE 2A (4 MONTHS) - CONSTRUCT THEODORE ST/WLC PKWY NORTH AND SOUTH AND JOIN WITH NEWLY CONSTRUCTED RAMPS (PHASE 2A SHALL BE COMPLETED PRIOR TO THE BEGINNING OF CONSTRUCTION FOR PHASE 2B)

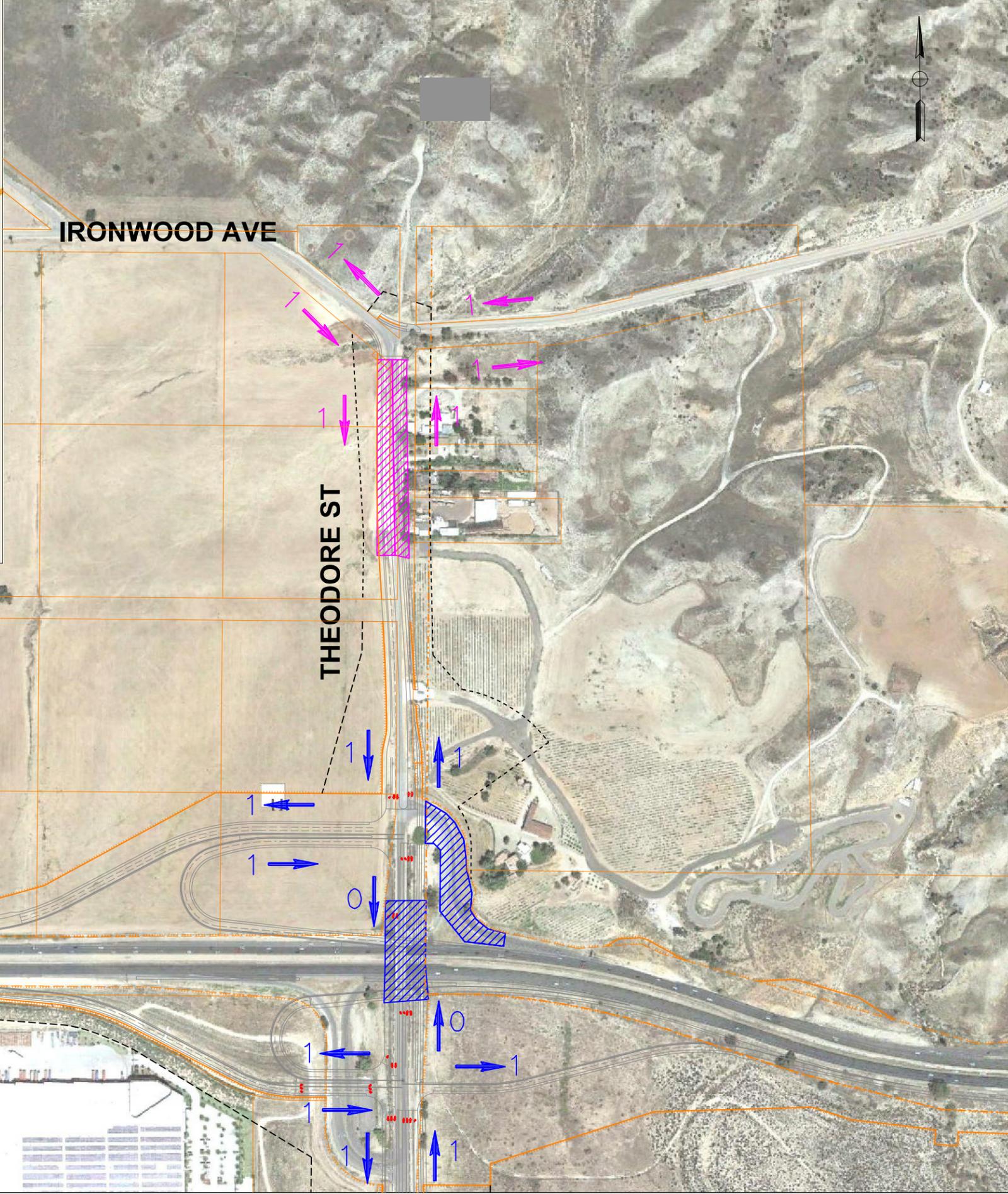
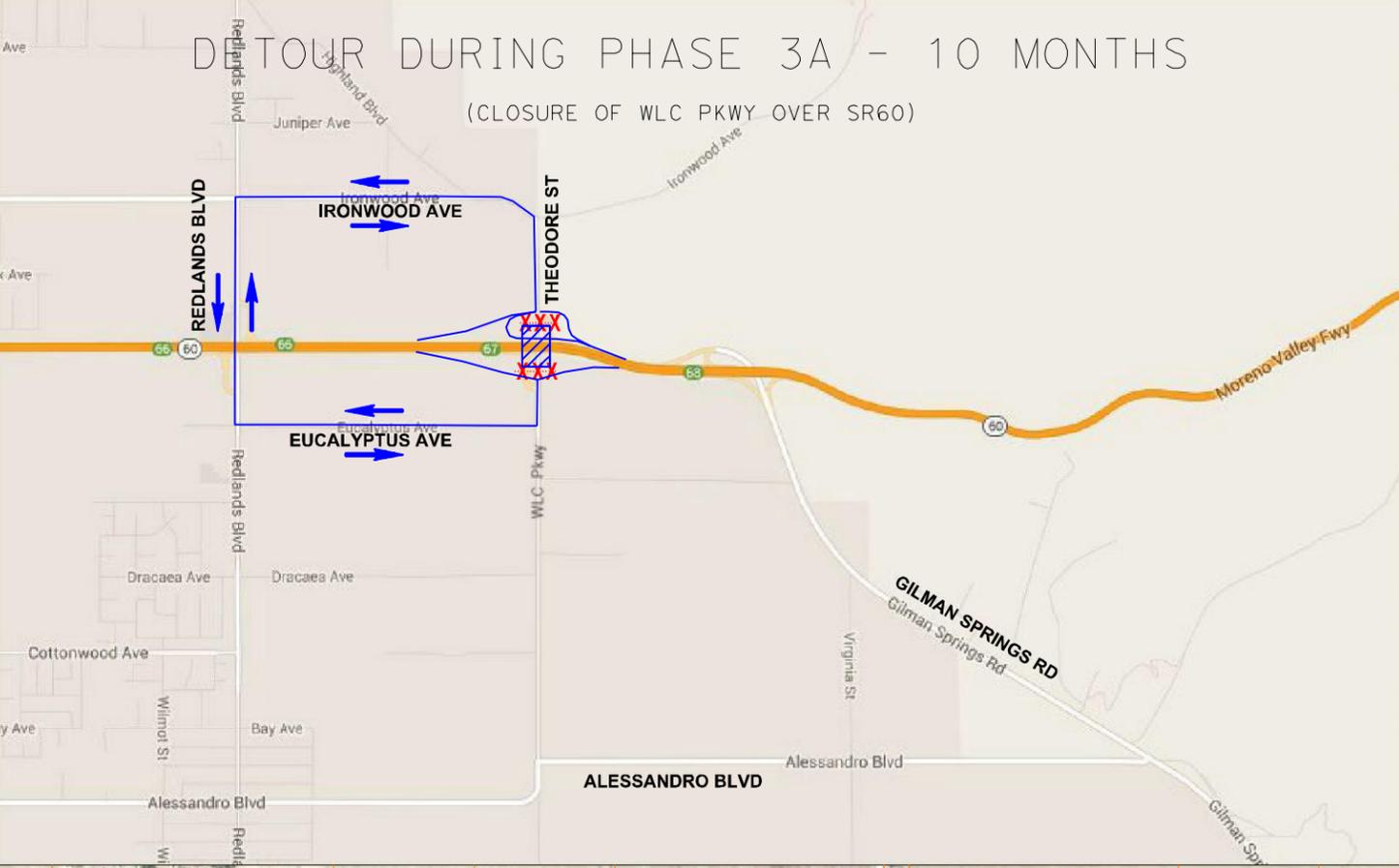
 PHASE 2B (4 MONTHS) - DEMOLISH EXISTING EB AND WB ON/OFF-RAMPS AND CONSTRUCT NEW WB OFF-RAMP AND EB ON-RAMP AND ROADWAY ON WLC PKWY

 ROAD CLOSURE

PHASE 2 (ESTIMATED CONSTRUCTION DURATION - 6 MONTHS)

DETOUR DURING PHASE 3A - 10 MONTHS

(CLOSURE OF WLC PKWY OVER SR60)



-  NUMBER OF AVAILABLE THROUGH LANES IN EACH DIRECTION REPRESENTED BY PHASING COLOR
-  PHASE 3A (10 MONTHS) - DEMO BRIDGE AND CONSTRUCT FALSEWORK. CONSTRUCT WLC PKWY BRIDGE OVER SR60 (NIGHT TIME FULL FREEWAY CLOSURE REQUIRED FOR FALSEWORK INSTALLATION) DEMOLISH WB OFF-RAMP AFTER BRIDGE DEMO AND CONSTRUCT WB OFF-RAMP.
-  PHASE 3B - ROAD WIDENING ON NORTH END OF THEODORE (PARTIAL CLOSURE)
-  ROAD CLOSURE

PHASE 3 (ESTIMATED CONSTRUCTION DURATION - 10 MONTHS)

**SR-60/WORLD LOGISTICS CENTER PARKWAY
INTERCHANGE CLOSURE STUDY**

Appendix E

Transportation Management Plan

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TMP Elements	EA #/ID#	0M590/0813000109	Date	10/23/2018
<p>Note: A checkmark in the box means you need to include this in the project unless staging, material, or work hour changes eliminate the need for the item. A ? in front means TMP anticipates this - please check into this. A blank box means the item is not needed at this time based on the information received.</p>				

Public Affairs officer's 1st. & last name _____ Phone number _____

1	<p>Public Information/Public Awareness Campaign (PAC). Developer: Remember to obtain the estimate from Public affairs by contacting Terri Kasinga. Procedure is in the file under 3- TMP matters</p>	Estimated Cost
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BEES 066063 (Traffic Management Plan-Public Information). Cost to be reduced by Public Affairs (PA) and Construction Liaison (CL) only. Show under State Furnished as the total of PA+CL.

1.1	<input type="checkbox"/> Include Rideshare information in PA/CL project material to encourage vehicles reduction in work area		
1.2	<input checked="" type="checkbox"/> Brochures and Mailers	\$	15,000
1.3	<input checked="" type="checkbox"/> Media Releases (& minority media sources)	\$	10,000
1.4	<input checked="" type="checkbox"/> Paid Advertising	\$	5,000
1.5	<input checked="" type="checkbox"/> Public Meetings/PAC Mtgs./Speakers Bureau (show cost also for room rental)	\$	30,000
1.6	<input checked="" type="checkbox"/> Hand deliver notices to vicinity	\$	10,000
1.7	<input type="checkbox"/> Broadcast fax service		
1.8	<input checked="" type="checkbox"/> Telephone Hotline OR	\$	10,000
1.9	<input type="checkbox"/> 1-800-COMMUTE (The telephone number is shown on CS-Info signs) -		
1.10	<input type="checkbox"/> Visual Information (videos, slide shows, etc.)		
1.11	<input checked="" type="checkbox"/> Local cable TV and News	\$	5,000
1.12	<input checked="" type="checkbox"/> Traveler Information System (Internet)		
1.13	<input checked="" type="checkbox"/> Internet, E-mail, Social Media	\$	10,000
1.14	<input type="checkbox"/> Notification to targeted groups:		
	<input type="checkbox"/> Revised Transit Schedules/maps		
	<input type="checkbox"/> Rideshare organizations		
	<input type="checkbox"/> schools		
	<input type="checkbox"/> organizations representing people with disabilities		
	<input type="checkbox"/> bicycle organizations		
1.15	<input type="checkbox"/> Include PA/CL/Consultant resources in WPS		
1.16	<input checked="" type="checkbox"/> Commercial traffic reporters/feeds - e.g. brief Traffic Information people (TIP) group	\$	-
1.17	<input checked="" type="checkbox"/> Insert SSP's	\$	-
	"A representative of the Contractor, at Superintendent level or higher, and authorized to commit the Contractor, shall attend and participate in all Public Awareness Campaign meetings. Time commitment for the meeting(s) varies from two to four hours per month."		
1.18	<input type="checkbox"/> Other		
Section 1 Total			\$ 95,000

2	<p>Traveler Information Strategies Project team needs to coordinate with Traffic Design!</p>
2.1	<input checked="" type="checkbox"/> Existing Overhead Changeable Message Signs (Stationary)
	<input type="checkbox"/> New Installation (Stationary) - BEES 860532 CHANGEABLE MESSAGE SIGN SYSTEM - list locations

2.2	<input checked="" type="checkbox"/> Portable Changeable Message Signs (PCMS) - BEES 066578		
	This strategy is in addition to Traffic Design's PCMS for regular traffic handling within the project limits and is used for advising motorists to divert at remote advance decision points - outside the usual project limits. This also allows for advanced motorist information - e.g. a week ahead. Their placement may need to be cleared environmentally. Placement should be of sufficient distance prior to decision points as determined by the Resident Engineer.		
	# of PCMS <input type="text" value="4"/>	Unit cost/month <input type="text" value="\$ 1,000.00"/>	Months needed <input type="text" value="19"/>
			\$ 76,000

2.3	<input checked="" type="checkbox"/> Lane Closure System Website	\$	-
2.4	<input checked="" type="checkbox"/> Caltrans Highway Information Network (CHIN)	\$	-
2.5	<input type="checkbox"/> Radar Speed Message Sign (Specter sign) BEES 066064 (approx. EA @ \$30,000)		
2.6	<input type="checkbox"/> Bicycle and pedestrian information, e.g. Detour maps		
2.7	<input type="checkbox"/> Automated Workzone Information System (AWIS) BEES 120105 - consult with TMP Developer prior to updating SSP 12-3.35A(1) for AWIS - refer to Section 12-3.35, page 156 to 158 of the 2015 Standard Spec.		
2.8	<input type="checkbox"/> Other		

TMP Elements	EA #/ID#	0M590/0813000109	Date	10/23/2018
			Section 2 Total	\$ 76,000

3 Incident Management

3.1 CHP's Construction or Maintenance Zone Enhanced Enforcement Program – COZEEL or MAZEEL. BEES 066062 - show under "State or Agency furnished" in the Cost Estimate.

Make sure to consider the LC hours and add CHP driving time to/from their office

Day COZEEL: To protect active closures

	hours/day	CHP vehicles	# of officers.	Rate/Hr.
0	8	2	2	\$ 100

\$ -

Night COZEEL: To protect active closures

# of nights	hours/night	CHP vehicles	# of officers. Nights need 2 per car	Rate/Hr.
130	8	2	2	\$ 100

\$ 416,000

3.2 Freeway Service Patrol (FSP) for Construction (CFSP) \$/hr./truck \$55

BEES 066065 - show under "State or Agency furnished" in the Cost Estimate

Short duration or remote area CFSP usually is bid with much higher hourly rates. If enhancement of program FSP feasible, CFSP could tie into the lower long-term FSP rates.

	# of trucks	# of days	Hours per day	
A For service within the regular FSP hours	0	0	8	\$0
B Extended Peak hour coverage	0	0	0	\$0
C Support during night closures	1	10	8	\$4,400
D Weekend support	0	0	0	\$0
Local agency (SAFE) support 8% of truck cost		8%		\$352
CFSP CHP support 5% of truck cost only if within regular FSP and area		5%		\$0
Equipment/Supplies % of truck cost unless more detail available		10%		\$440

Consult with the Inland Empire division of CHP or the border division in the southern Riverside county to select the method which is acceptable for the B,C,D that are outside the regular FSP hours or area.

Method 1

CFSP/CHP support 20% \$880
20% of truck cost or

CFSP Dispatcher @

# of days	# of nights	hours	# of FSP	Rate	# of FSP vehicles
				\$ 45.00	

\$ -

CFSP CHP Officers (See Cozeep rate)

# of days	# of nights	hours	# of officers	Rate	# of CHP vehicles
				\$ 45.00	

\$ -

- Cooperative Agreement or Task Order with SAFE for \$4,752
- Task Order with CHP (State-wide Master Agreement for FSP support). for \$880
- Contact District FSP Coordinator for task orders.
- Service Contract
- Local Agency will arrange CFSP with SAFE
- Local Agency will arrange CFSP administration with CHP

3.2 Total \$6,072

TMP Elements	EA #/ID#	0M590/0813000109	Date	10/23/2018
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3.3 Other

Section 3 Total	\$ 422,072
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4 Construction Strategies

Contact DTM, at 909-383-6262, to get Delay Calculations, Lane Requirement Charts (LRC), Table Z and Special events list. Inform DTM of any concerns/commitments regarding special LC days, times, seasons, events; environmental restrictions; if work may be affected by snow and low or high temperatures. E.g. excessive heat may delay HMA operations lane openings which may increase traffic impact when vehicles overheat in the queue; etc. If traffic volumes vary significantly between seasons, consider 2 sets of LRCs to avoid CCOs.

4.1 This TMP presumes that work is planned as below. If different, TMP needs to be revised. The Project Engineer shall ensure all appropriate lane requirement charts are included.

- Off peak
- Night
- Weekend

4.2 Expected facility closures and requirements

- Flagging
- Shoulder
- Lane
- Street
- Ramp
- Connector*
- Extended Weekend Closures*
- Total Facility Closures*

*Consult with TMP developer and the DTM regarding COZEEP & other costs. Provide proposed detour and traffic diversion plans for review.

CAUTION: If the Lane Requirement Chart (LRC) for full mainline closures, of one or both directions on a highway or freeway, does not show the maximum number of allowable closures, the PS&E shall not be certified by DTM/TMP.

- 4.3 Coordinate with adjacent ongoing and planned construction projects - also on detour routes.
- 4.4 BEES 066008 Incentives
- 4.5 Strictly enforce construction CPM schedule
- 4.6 10-Min. Delay Penalty Contact DTM at 909-838-6262 for 10 Min. Delay Penalty Calculations.
- 4.7 Other

Section 4 Total	\$ -
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5 Demand Management (DM)

Project team needs to coordinate with RCTC/SANBAG/CVAG

Traffic diversion may increase available work hours.

5.1 A co-op will be executed - mentioned in PSR or PR.

Instead of a co-op, 15% is added to the cost of DM elements since the payment to the local agency will be routed through the contractor.

Instead of a co-op, the local agency will make their own arrangements with RCTC/SANBAG/CVAG.

PA/CL or local agency need to inform commuters through RCTC/SANBAG. Funds part of PA/CL.

- 5.2 HOV Lanes/Ramps (New or Convert)
- 5.3 Park-and-Ride Lots
- 5.4 Parking Management/Pricing (Coordination with local agency is required)
- 5.5 BEES 066067 Rideshare Promotion
- 5.6 Other

Section 5 Total	\$ -
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6 Alternate Route Strategies

Caution - signed detours may require environmental clearance. Traffic diversion may increase available work hours. Please work with Traffic Design. BEES 066060 - ADDITIONAL TRAFFIC CONTROL

- 6.1 Add Capacity to Freeway connector
- 6.2 Ramp Closures
- 6.3 Temporary Highway Lanes or Shoulder Use
- 6.4 Parking Restrictions
- 6.5 Street Improvements \$ 50,000
 - State R/W - Signals, Widen, etc.
 - Local R/W - Signals, Widen, etc. co-op or permit may be needed
- 6.6 Local Street USE - co-op or Permit may be needed
- 6.7 Traffic Control Officers (see 3.1 COZEEP)
- 6.8 Signed detour - using State routes
- 6.9 Signed detour - using local streets and roads. Coordinate with corresponding local agency. \$ 50,000
- 6.10 Adjust signals
- 6.11 Temporary bicycle or pedestrian facilities
- 6.12 Other

Section 6 Total	\$ 100,000
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TMP Estimate

Developed by

Joe De La Garza

EA#/ID#

OM590/0813000109

Date

10/23/2018

TMP developer: Amounts under the cost column will automatically be copied from the TMP elements

TMP Elements	Cost
1. Public Information	\$95,000
2. Motorist Information Strategies	\$76,000
3. Incident Management	\$426,402
4. Construction Strategies	\$0
5. Demand Management (DM)	\$0
6. Alternate Route Strategies	\$100,000
Total TMP Estimate	\$ 697,402

**SR-60/WORLD LOGISTICS CENTER PARKWAY
INTERCHANGE CLOSURE STUDY**

Appendix F

Lane Closure Request Form

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District 8 - DTM/TMP Service Request

Project Phase:

Request Type: TMP LRC SSP

Submit date: 11/05/2018

Requested by date: 11/19/2018

A) Requester Information

Contact Name: Joe De La Garza

Email address: joe.delagarza@wsp.com

Division: -

Phone #: 619-338-9376

Project Manager: Rebecca Young

Email address: RYoung@mbakerintl.com

Phone #: 909-974-4976

B) Project Information

Project EA: 0M590 Project ID: 0813000109 Phase/Subobject: PA/ED

County: RIV Route: SR-60 Postmiles: PM R14.1/R15.26

Direction: EB,WB Nearest cross street: World Logistics Center Parkway

Provide work description: Estimated Capital Cost: \$ 90,000,000.00

Reconstruct Interchange at World Logistics Center Parkway in the City of Moreno Valley

Type of Work: Construction

Working Days: 450

Ready to List (RTL) Date:

Construction Date: 07/01/2022

C) Requested Closure Information

Road Profile: Level Estimated Work Shift Hours Required: 7

Requested Closure Work Windows (select all that apply)

Daytime Nighttime Weekday Weekend Extended Weekend

Full, Directional, list directions: EB/WB

Requested Facility Closure (select all that apply)

Shoulder Lane Ramp Connector Local Street

D) Traffic Handling Information

K-rail utilization - List Postmiles: 20 to 22

Proposed Lane Width with K-rail: 12'

Median Shoulder Width: 12'

Outside Shoulder Width: 10'

Detours Required: No Yes, Consult Traffic Design

Additional Information

Anticipate 4 months of full ramp and interchange closure to construct the interchange. The project is staged to reduce the duration of interchange closure. There would be other phases of construction that would require closure of ramps or some turning movements at ramp intersections. Also a full freeway closure for falsework install and removal.

Attach project location map to the service request.

DTM Service Request - Ramp or Connector Closures Information

Project EA: 0M590
 Project ID: 0813000109

County: RIV
 Route: SR-60
 Postmile: 20 -22

No.	Facility Type	Direction	Postmile	No. of Existing Lanes	No. of Lanes to be Closed	Proposed Work Requiring Closure	Remarks
1	Onramp	EB	21.265	1	1	Ramp Work	Demolish and install new ramp
2	Offramp	EB	21.265	1	1	Ramp Work	Demolish and install new ramp
3	Onramp	WB	21.460	1	1	Ramp Work	Demolish and install new ramp
4	Offramp	WB	21.460	1	1	Ramp Work	Demolish and install new ramp
5	-	-				-	
6	-	-				-	
7	-	-				-	
8	-	-				-	
9	-	-				-	
10	-	-				-	
11	-	-				-	
12	-	-				-	
13	-	-				-	
14	-	-				-	
15	-	-				-	
16	-	-				-	
17	-	-				-	
18	-	-				-	
19	-	-				-	
20	-	-				-	
21	-	-				-	
22	-	-				-	
23	-	-				-	
24	-	-				-	
25	-	-				-	

* Continuous ramp closures of more than 10 days requires Environmental approval.

DTM Service Request - Lane and Profile Information

Project EA: 0M590
 Project ID: 0813000109

County: RIV
 Route: SR-60
 Postmile: 20 -22

No.	Starting Postmile	Ending Postmile	Direction	No. of Existing Lanes	Profile Grade %	Uphill or Downhill	Profile Description	Remarks
1	20.26	21.95	EB	2		-	Level	Install and take down falsework
2	22.00	20.47	WB	2		-	Level	Install and take down falsework
3			-			-	Level	
4			-			-	Level	
5			-			-	Level	
6			-			-	Level	
7			-			-	Level	
8			-			-	Level	
9			-			-	Level	
10			-			-	Level	
11			-			-	Level	
12			-			-	Level	
13			-			-	Level	
14			-			-	Level	
15			-			-	Level	