CARSON CITY CONSOLIDATED MUNICIPALITY
NOTICE OF THE MEETING OF THE CARSON AREA METROPOLITAN PLANNING ORGANIZATION

Day: Wednesday
Date: July 10, 2024
Time: Beginning at 4:30 pm
Location: Community Center, Robert 'Bob' Crowell Board Room
851 E. William Street
Carson City, NV 89701

AGENDA

NOTICE TO THE PUBLIC:
Members of the public who wish to view the meeting may watch the livestream of the Carson Area Metropolitan Planning Organization meeting at www.carson.org/granicus and by clicking on "In progress" next to the meeting date, or by tuning in to cable channel 191. Livestream of the meeting is provided solely as a courtesy and convenience to the public. Carson City does not give any assurance or guarantee that the livestream or cable channel access will be reliable. Although all reasonable efforts will be made to provide livestream, unanticipated technical difficulties beyond the control of City staff may delay, interrupt, or render unavailable continuous livestream capability.

The public may provide public comment in advance of a meeting by written submission to the following email address: cmartinovich@carson.org. For inclusion or reference in the minutes of the meeting, your public comment must include your full name and be submitted via email by not later than 3:00 p.m. the day before the meeting. Public comment during a meeting is limited to three minutes for each speaker.

1. Call to Order - Carson Area Metropolitan Planning Organization (CAMPO)

2. Roll Call

3. Public Comment:**
The public is invited at this time to comment on and discuss any topic that is relevant to, or within the authority of this public body.

4. For Possible Action: Approval of Minutes - June 12, 2024

4.A Minutes for June 12, 2024
Click Here for Staff Report

5. Public Meeting Item(s):

5.A For Possible Action – Discussion and possible action regarding the status, and potential approval, of Phase 1 of the US 50 East Carson Complete Streets Study

("Study").

Staff Summary: The Study identifies, evaluates, and recommends potential safety and multimodal transportation improvements along U.S. Highway 50 in east Carson City between Interstate 580 and Highlands Drive. The results of this Study will inform the design and construction of future corridor projects intended to improve safety for all users, including motor vehicles, transit riders, pedestrians, and bicyclists. The Study also weighs the competing needs for travel, circulation, and access along the corridor, including the needs of those using the corridor for through travel and individuals accessing adjacent businesses and properties.
Click Here for Staff Report

5.B For Possible Action – Discussion and possible action regarding an application for the distribution of $193,493 in available Federal Transit Administration ("FTA") Section 5310 Program funds to the Carson City Regional Transportation Commission ("RTC") for the capitalized operating expenses of the Jump Around Carson ("JAC") Assist ADA Paratransit program.

Staff Summary: The Carson Area Metropolitan Planning Organization ("CAMPO") received one grant application for FTA Section 5310 funds. The RTC submitted the only application received in response to a call for projects issued by CAMPO for Federal Fiscal Year ("FFY") 2024 Section 5310 funding. The RTC seeks $193,493 in Section 5310 funding to help offset operating expenses for its JAC Assist Paratransit program.
Click Here for Staff Report

5.C For Possible Action – Discussion and possible action regarding an application for the distribution of $262,928 in available Federal Transit Administration ("FTA") Section 5339(a) Program funds to the Carson City Regional Transportation Commission ("RTC") for maintenance and improvements of bus and bus stop facilities and the replacement of an Americans with Disabilities Act ("ADA") accessible transit vehicle for Jump Around Carson ("JAC").

Staff Summary: The Carson Area Metropolitan Planning Organization ("CAMPO") received one grant application for FTA Section 5339(a) funds, from the RTC, in response to a call for projects for the balance of FTA Section 5339(a) funds for Federal Fiscal Years ("FFY") 2022 and 2023, as well as the full amount of FFY 2024 funds, totaling $262,928. The RTC's application seeks $262,928 in FTA Section 5339(a) funds for maintenance and improvements of bus and bus stop facilities and the replacement of an ADA accessible transit vehicle for JAC.
Click Here for Staff Report

6. Non-Action Items

6.A Transportation Manager's Report
Click Here for Staff Report

6.B Other Comments and Reports

Staff Summary: This item may include future agenda items, status review of additional

projects, internal communications and administrative matters, correspondence to CAMPO, project status reports, and comments or other reports from the CAMPO members or staff.
Click Here for Staff Report

7. Public Comment:**
The public is invited at this time to comment on any matter that is not specifically included on the agenda as an action item. No action may be taken on a matter raised under this item of the agenda.

8. For Possible Action: To Adjourn

PUBLIC COMMENT LIMITATIONS - The CAMPO will provide at least two public comment periods in compliance with the minimum requirements of the Open Meeting Law prior to adjournment. No action may be taken on a matter raised under public comment unless the item has been specifically included on the agenda as an item upon which action may be taken. **Public comment will be limited to three minutes per speaker to facilitate the efficient conduct of a meeting and to provide reasonable opportunity for comment from all members of the public who wish to speak. Testimony from a person who is directly involved with an item, such as City staff, an applicant or a party to an administrative hearing or appeal, is not considered public comment and would not be subject to a three-minute time limitation.

Agenda Management Notice - Items on the agenda may be taken out of order; the public body may combine two or more agenda items for consideration; and the public body may remove an item from the agenda or delay discussion relating to an item on the agenda at any time.

Titles of agenda items are intended to identify specific matters. If you desire detailed information concerning any subject matter itemized within this agenda, including copies of the supporting material regarding any of the items listed on the agenda, please contact Christopher Martinovich, Transportation Manager, in writing at 3505 Butti Way, Carson City, Nevada, 89701 or at cmartinovich@carson.org, or by phone at (775) 887-2355. You are encouraged to attend this meeting and participate by commenting on any agendized item.

Notice to persons with disabilities: Members of the public who are disabled and require special assistance or accommodations at the meeting are requested to notify CAMPO staff in writing at 3505 Butti Way, Carson City, Nevada, 89701 or at cmartinovich@carson.org, or by calling Christopher Martinovich at (775) 887-2355 at least 24 hours in advance of the meeting.

This agenda and backup information are available on the City's website at www.carson.org/agendas and at the office for Carson City Public Works - 3505 Butti Way, Carson City, Nevada, 89701 (775) 887-2355.

This notice has been posted at the following locations:
Carson City Public Works, 3505 Butti Way
Community Center, 851 East William Street
City Hall, 201 North Carson Street
Carson City Library, 900 North Roop Street
Community Development Permit Center, 108 East Proctor Street
Douglas County Executive Offices, 1594 Esmeralda Avenue, Minden

Lyon County Manager's Office, 27 South Main Street, Yerington
Lyon County Utilities, 34 Lakes Blvd, Dayton
Nevada Department of Transportation, 1263 S. Stewart Street, Carson City
www.carson.org/agendas
notice.nv.gov

STAFF REPORT

Report To:	Carson Area Metropolitan Planning Organization	**Meeting Date:**	July 10, 2024
Staff Contact:			
Agenda Title:	Minutes for June 12, 2024		
Agenda Action:	Formal Action / Motion	**Time Requested:**	

Proposed Motion
I move to approve the minutes, as presented.

Board's Strategic Goal
N/A

Previous Action

Background/Issues & Analysis

Applicable Statute, Code, Policy, Rule or Regulation

Financial Information
Is there a fiscal impact? No

If yes, account name/number:

Is it currently budgeted? No

Explanation of Fiscal Impact:

Alternatives

Attachment(s):
06-12-2024 Minutes (CAMPO).pdf

Motion: _____ 1) _____ Aye/Nay
2) _____
_____
_____
_____
_____

_____
(Vote Recorded By)

DRAFT

A regular meeting of the Carson Area Metropolitan Planning Organization (CAMPO) was scheduled for 4:30 p.m. on Wednesday, June 12, 2024, in the Community Center, Robert "Bob" Crowell Boardroom, 851 East William Street, Carson City, Nevada.

PRESENT: Chairperson Lori Bagwell
Vice Chairperson Gregory Novak
Member Robert "Jim" Dodson
Member Jon Erb
Member Wes Henderson
Member Lucia Maloney
Member Lisa Schuette
Ex-Officio Member Sondra Rosenberg

STAFF: Darren Schulz, Public Works Director
Chris Martinovich, Transportation Manager
Adam Tully, Deputy District Attorney
Kelly Norman, Senior Transportation Planner/Analyst
Casey Sylvester, Transportation/Traffic Engineer
Jared Cragun, Transportation Planner/Analyst
Scott Bohemier, Transportation Planner
Dan Kelsey, Transit Coordinator
Tamar Warren, Senior Deputy Clerk

NOTE: A recording of these proceedings, the CAMPO's agenda materials, and any written comments or documentation provided to the Clerk during the meeting are part of the public record. These materials are available for review in the Clerk's Office during regular business hours. All approved minutes are posted on https://www.carson.org/government/city-meetings.

1. CALL TO ORDER – CARSON AREA METROPOLITAN PLANNING ORGANIZATION (CAMPO)

(4:31:40) – Chairperson Bagwell called the meeting to order at 4:31 p.m.

2. ROLL CALL

(4:32:02) – Roll was called, and a quorum was present.

3. PUBLIC COMMENT

(4:32:17) – Chairperson Bagwell entertained public comments; however, none were forthcoming.

4. FOR POSSIBLE ACTION: APPROVAL OF MINUTES – APRIL 29, 2024

(4:32:26) – Chairperson Bagwell introduced the item and entertained corrections, comments, or a motion.

(5:32:39) – Member Dodson moved to approve the minutes of the CAMPO April 29, 2024 meeting as presented. The motion was seconded by Member Schuette and carried 7-0-0.

5. PUBLIC MEETING ITEM(S):

5-A FOR DISCUSSION ONLY – DISCUSSION AND PRESENTATION REGARDING CARSON CITY'S DRAFT 2024 AMERICANS WITH DISABILITIES ACT ("ADA") TRANSITION PLAN FOR PEDESTRIAN FACILITIES IN THE PUBLIC RIGHT-OF-WAY ("TRANSITION PLAN").

(4:32:56) – Chairperson Bagwell introduced the item. Ms. Norman reviewed the draft 2024 Americans with Disabilities Act (ADA) Transition Plan for Pedestrian Facilities in the Public Right-of-Way, which is incorporated into the record, and responded to clarifying questions. Mr. Cragun presented the Example of ADA Barriers and future projects. Chair Bagwell highlighted a public comment received from Dee Dee Foremaster, Executive Director of the Rural Center for Independent Living (RCIL), regarding disabled person fatalities in crosswalks. Ex-Officio Member Rosenberg offered to look into the data but was not certain how it was captured. Chair Bagwell noted that a citizen provides public comment often at Board of Supervisors meetings regarding the ramps that were difficult to navigate by persons with disabilities during the winter weather and wondered if it were a nationwide issue.

(4:42:55) – Member Schuette highlighted the comments from the Master Plan Update Listening Tour which had mentioned "missing pathways or breaking connectivity." Mr. Martinovich acknowledged receipt of requests from residents regarding ramp issues which were prioritized and addressed. Vice Chair Novak inquired about issues in Douglas and Lyon Counties also and Ms. Norman clarified that the data at hand was regarding the presence and absence of ramps and not their ADA compliance status. Vice Chair Novak was also informed that grievances in those counties would be handled by them and not Carson City. Member Erb explained that each town in Douglas County addressed their own issues, adding that there were many rural roads in the County that did not have sidewalks. Ms. Norman offered to reach out to both Counties in order to update the assets. Vice Chair Novak was pleased with the overall Plan; however, he recommended talking to the disabled community more frequently.

(4:49:37) – Member Dodson inquired about non-compliant ramps and Mr. Martinovich noted that the next meeting would include a discussion on curb ramps. He also explained that the requirements had changed over the years since implementation which resulted in non-compliant ramps. Member Maloney referenced the CAMPO FY 2023 and FY 2024 UPWP Cost/Funding Summary (Table 5.1) and wished to understnd how much progress was being made annually. Chair Bagwell entertained public comments; however, none were forthcoming. This item was not agendized for action.

5.B FOR POSSIBLE ACTION – DISCUSSION AND POSSIBLE ACTION REGARDING PROPOSED REVISIONS TO THE CARSON AREA METROPOLITAN PLANNING ORGANIZATION ("CAMPO") PUBLIC PARTICIPATION PLAN ("PPP").

(4:52:42) – Chairperson Bagwell introduced the item. Ms. Norman reviewed the proposed revisions to the CAMPO Public Participation Plan based on the training session received on Title VI of the Civil Rights Act of 1964, provided by the Nevada Department of Transportation on the USDOT Title VI Program. The proposed revisions, incorporated into the record, were opened to public comments; however, none were received. She responded to clarifying questions and informed Chair Bagwell that the information was based on the most recent census data. The Chair also inquired about reaching out to populations who had not commented, to avoid missed opportunities. Member Maloney praised CAMPO Staff for exceeding the expectations of reaching out to the public and inquired about the additional Staff efforts required to achieve those goals. Ms. Norman explained the sign-in sheets used at public participation meetings. Chair Bagwell entertained public comments; however, none were forthcoming. She then entertained a motion.

(5:03:09) – Member Schuette moved to approve the Public Participation Plan (PPP), as presented. The motion was seconded by Member Maloney and carried 7-0-0.

5.C FOR POSSIBLE ACTION – DISCUSSION AND POSSIBLE ACTION REGARDING FORMAL AMENDMENT 23-09 TO THE CARSON AREA METROPOLITAN PLANNING ORGANIZATION'S ("CAMPO") FEDERAL FISCAL YEAR ("FFY") 2023-2026 TRANSPORTATION IMPROVEMENT PROGRAM ("TIP") TO ADD THREE NEW PROJECTS AND TO REVISE FUNDING INFORMATION ACROSS MULTIPLE PROJECTS.

(5:03:30) – Chairperson Bagwell introduced the item. Ms. Norman gave background and referenced the following updates to the Transportation Improvement Program for Federal Fiscal Years (FFY) 2023 through 2026 (incorporated into the record): update construction dates for the Appion Way Traffic Signal and Intersection Improvement Project and the South Carson Multi-Use Connector Project; update the funding source and construction dates for the North Lompa Multi-Use Path Project; update the funding for the US 50, Carson City, from FRCC11 to East Deer Run Road Project, the District 3 Fifth Street Roundabout Project, and the US 50, East of Dayton, Fortune Drive to Six Mile Canyon Road Preservation Project; and add FFY 2024 5339 FTA Apportionment, FFY 2024 5310 FTA Apportionment, and the US 50 East Carson Complete Streets Corridor Study- Phase 2. She also responded to clarifying questions. Vice Chair Novak recommended updating the Federal Funding Category List as he believed the Federal Lands Access Program (FLAP) or the Recreational Trails Program were missing from the TIP. Mr. Martinovich noted that they were not listed as there were no FLAP projects now. There were no public comments and Chair Bagwell entertained a motion.

(5:06:33) – Vice Chair Novak moved to formally amend CAMPO's FFY 2023-2026 TIP, as presented. The motion was seconded by Member Erb and carried 7-0-0.

6. NON-ACTION ITEMS

6-A TRANSPORTATION MANAGER'S REPORT

(5:06:58) – Chairperson Bagwell introduced the item. Mr. Martinovich stated that NDOT would present US Hwy 50/Mound House information to the Lyon County Board of Commissioners on June 20, 2024.

He also updated the members on his conversations with the Washoe Tribe regarding their upcoming Long Range Tribal Regional Transportation Plan and his offer of assistance.

6-B OTHER COMMENTS AND REPORTS

(5:08:17) – Chairperson Bagwell entertained Board comments and reports. Vice Chair Novak inquired about an Environmental Excellence Award won by NDOT and Ex-Officio Member Rosenberg explained that the Award had been announced at the meeting prior to the last one. She also announced that the Nevada Advisory Committee on Traffic Safety would meet on June 13, 2024, at NDOT Headquarters at 2 p.m. Vice Chair Novak also suggested "staying on top of" the Local Roads Safety Plan funding opportunities. Member Henderson believed that the Office for Transportation Security (OTS) would also attend the next Lyon County Board of Commissioners meeting.

7. PUBLIC COMMENT

(5:11:46) – Chairperson Bagwell entertained final public comments; however, none were forthcoming.

8. FOR POSSIBLE ACTION: TO ADJOURN

(5:11:57) – Chairperson Bagwell adjourned the meeting at 5:11 p.m.

The Minutes of June 12, 2024, Carson Area Metropolitan Planning Organization meeting are so approved on this 10th day of July 2024.

STAFF REPORT

Report To: Carson Area Metropolitan Planning Organization **Meeting Date:** July 10, 2024

Staff Contact: Kelly Norman, Transportation Planner

Agenda Title: For Possible Action – Discussion and possible action regarding the status, and potential approval, of Phase 1 of the US 50 East Carson Complete Streets Study ("Study").

Staff Summary: The Study identifies, evaluates, and recommends potential safety and multimodal transportation improvements along U.S. Highway 50 in east Carson City between Interstate 580 and Highlands Drive. The results of this Study will inform the design and construction of future corridor projects intended to improve safety for all users, including motor vehicles, transit riders, pedestrians, and bicyclists. The Study also weighs the competing needs for travel, circulation, and access along the corridor, including the needs of those using the corridor for through travel and individuals accessing adjacent businesses and properties.

Agenda Action: Formal Action / Motion **Time Requested:** 10 Minutes

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Proposed Motion
I move to approve Phase 1 of the Study.

Board's Strategic Goal
N/A

Previous Action
September 13, 2023 (Item 5.A) – CAMPO approved Contract No. 23300352 for Parametrix, Inc. to perform Phase 1 of the Study.

April 12, 2023 (Item 5.A) – CAMPO approved Cooperative Agreement No. P164-23-802 with the Nevada Department of Transportation ("NDOT") to utilize federal State Planning and Research ("SPR") funds for Phase 1 of the Study.

March 8, 2023 (Item 5.B) – The Carson Area Metropolitan Planning Organization ("CAMPO") approved submission of a Transportation Alternatives Program ("TAP") grant application for Phase 2 of the Study.

Background/Issues & Analysis
The Study extends from the junction of US 50 and I-580 in Carson City to the roadway's intersection

with Highlands Drive in Mound House. The Study reviewed existing conditions along the study corridor, including safety, traffic/congestion, land use, and multimodal facilities, to gain a better understanding of the holistic context of the corridor. Many of these elements are interconnected, and issues affecting one primary aspect of the corridor often impact others.

The study team developed a set of character zones, along with a series of goals, to help frame and guide recommendations. The character zones were based mainly on existing conditions, while the goals were based on input from stakeholders, members of the public, and staff. The study team identified (1) corridor needs including operations, safety, access management, multi-modal improvements, equity, resiliency, and sustainability and (2) recommended corridor improvements.

NDOT owns and maintains US 50 throughout the entire study limits. During the development of this study, NDOT was concurrently working on design of a pavement preservation and safety improvement project for a portion of the corridor, from Russell Way to Deer Run Road/ Arrowhead Drive, ("NDOT Pavement Project"). Close coordination between the CAMPO team and NDOT was maintained throughout the Study, and CAMPO staff shared Phase 1 of the Study with NDOT to inform the NDOT Pavement Project, which is currently in design.

Phase 2 of the Study will be going forward as well, because, on March 12, 2024, NDOT informed CAMPO staff that Phase 2 of the Study was approved to receive TAP grant funding.

Applicable Statute, Code, Policy, Rule or Regulation
Carson City Grant Policy, 23 U.S.C. Section 505

Financial Information
Is there a fiscal impact? Yes

If yes, account name/number: For revenues: CAMPO Fund, Federal Grants 2453081-431010
For expenses: CAMPO Fund, CAMPO Grants account / 2453028-501210, and Regional Transportation Fund, Complete Streets account / 2503035-501235.

Is it currently budgeted? No

Explanation of Fiscal Impact: Phase 1 was funded by $100,000 in SPR funds reimbursed by NDOT to CAMPO, plus $50,000 through CAMPO's UPWP, Work Element 5.0 – Street and Corridor Planning, Project # G302823001. Phase 1 of the Study is a complete street planning project, therefore no local match was required.

Phase 2 will be funded by a TAP grant. The federal share of the TAP grant may not exceed 95% with a 5% minimum local match, which would be approximately $9,000. Local match for the portion of the Study in Carson City would be transferred to Project # G302823002 from the Regional Transportation Fund, Complete Streets account 2503035-501235, which has an available balance of $45,040. Local match for the portion of the Phase 2 Study in Lyon County, estimated to be $720, would come from Lyon County's contribution to CAMPO. If approved and awarded the grant, the revenue and capital project expenses will be augmented by $171,000 and $180,000, respectively.

Alternatives
Do not approve the Phase 1 of the Study and provide alternative direction to staff.

Attachment(s):

5A_CAMPO_07_10_24_Exhibit 1__US_50_East Carson Complete Streets Study_Phase_1.pdf

5A_CAMPO_Exhibit 2 - US_50_East Carson Complete Streets Study_Phase_1_Presentation.pdf

5A_CAMPO_07_10_24_Exhibit 3__US_50_East Carson Complete Streets Study_Phase_1.pdf

Motion: _____	1) _____	Aye/Nay
	2) _____	_____
		_____
		_____
		_____
		_____

_____
(Vote Recorded By)

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US 50 East Carson Complete Streets Study

2024

Prepared for

Carson Area Metropolitan Planning Organization

CONTENTS

FIGURES

TABLES

APPENDICES

1. INTRODUCTION

1.1 Study Purpose and Background

The Carson Area Metropolitan Planning Organization (CAMPO) initiated the US 50 East Carson Complete Streets Study to identify, evaluate, and recommend potential safety and multimodal transportation improvements along US 50 in east Carson City between I-580 and Highlands Drive.

The results of this study will be used to help identify and inform the design and construction of future corridor projects intended to improve safety for all users, including motor vehicles, transit riders, pedestrians, and bicyclists. The study was also designed to help weigh the tradeoffs between travel, circulation, and access along the corridor, including the needs of those using the corridor for through travel and individuals accessing adjacent businesses and other properties.

This study was envisioned as a two-phase approach, with the first phase focusing primarily on safety and operations improvements. Phase 2 of the study, which is not the subject of this report, will expand upon multimodal components and include cultural, historic, landscape, aesthetic, freight, and environmental considerations.

1.2 Study Area

The project corridor for the US 50 East Carson Complete Streets Study extends from the junction of US 50 and I-580 in Carson City to the roadway's intersection with Highlands Drive in Mound House, as shown in Figure 1. Land uses within 1/4 mile of the corridor were considered in various analyses and stakeholder/ business outreach, particularly on the western end of the corridor.

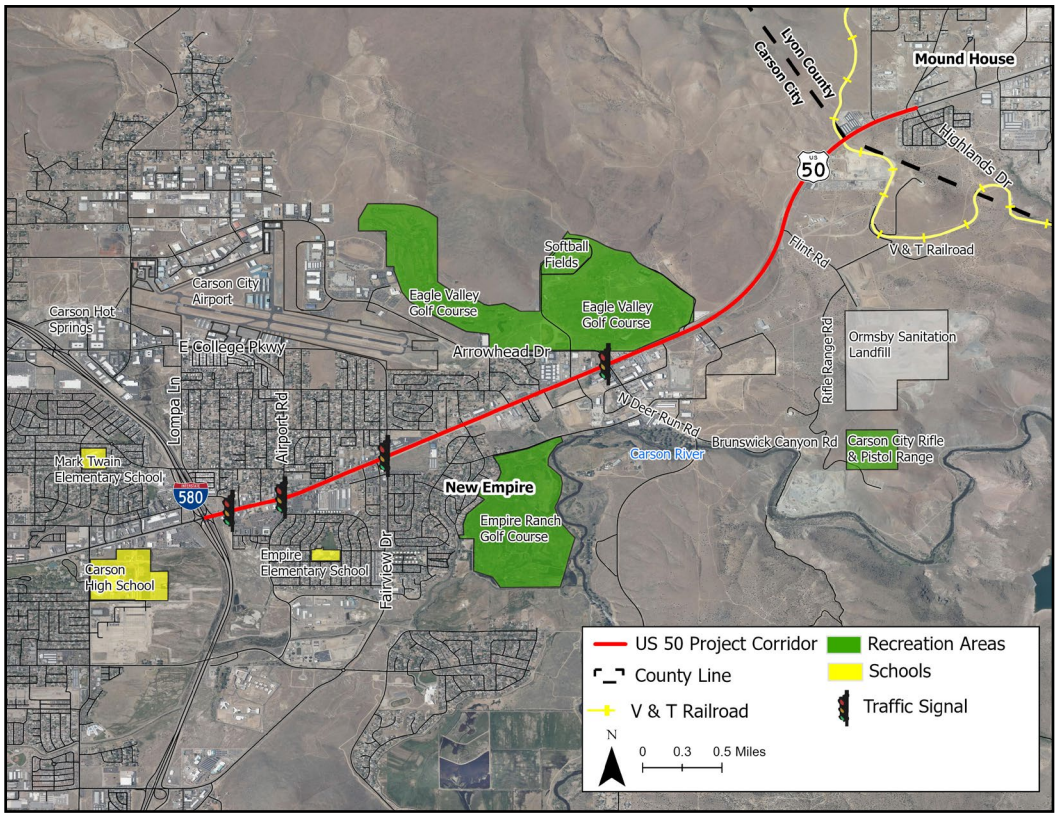


Figure 1: Study Area Map

2. EXISTING CONDITIONS

Existing conditions along the project corridor were reviewed, including safety, traffic/congestion, land use, and multimodal facilities, to gain a better understanding of the holistic context of the corridor. Many of these elements are interconnected, and issues affecting one primary aspect of the corridor often impact others.

2.1 Safety

A review of crashes that occurred on US Highway 50/East Carson Street within the project limits between April 2018 and September 2023 was conducted for this study. As shown in Figure 2, the crashes that occurred over the approximate 5-year time frame are somewhat evenly distributed throughout the corridor, with the exception of a notable concentration between the I-580 interchange and Airport Road (35% of all crashes) and a few localized clusters near the intersections with College Parkway/Fairview Drive, Arrowhead Drive/Deer Run Road, and Flint Drive. Alcohol use was a factor in 32 (6%) of overall crashes and drug use was a factor in fewer than 2% of crashes. It should be noted that portions of this corridor were evaluated in CAMPO's Local Road Safety Plan (LRSP), specifically, the intersections of US 50 and Airport Road and US 50 and Highlands Drive. The LRSP utilized data from a slightly different period (2018-2022) and did not evaluate the corridor within the project limits as a whole, therefore, the crash data was presented in a different manner and context.

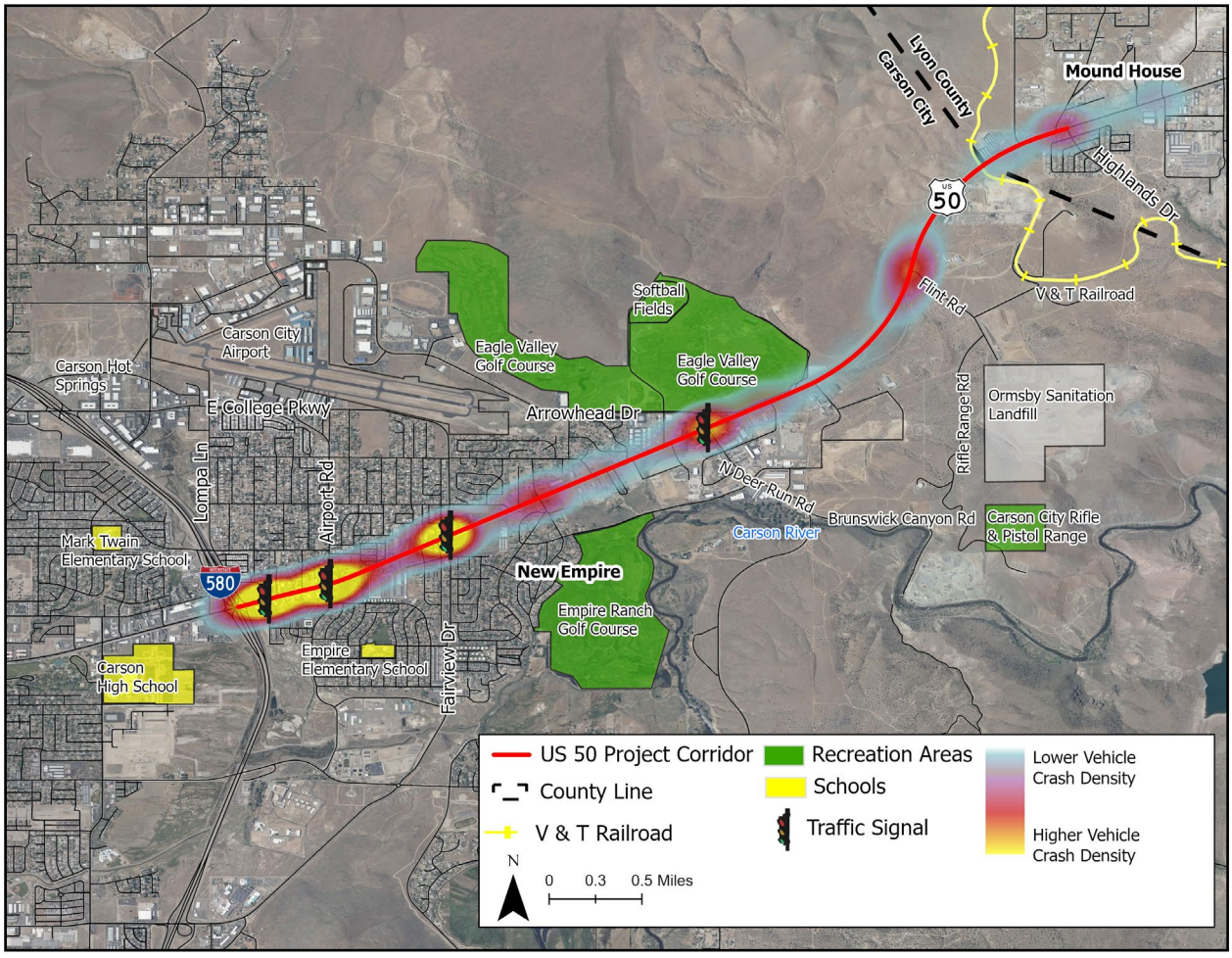


Figure 2: US 50 Crashes (April 2018 – September 2023)

Table 1 highlights trends and patterns related to transportation safety.

Table 1: Selected Crash Data on US 50 (April 2018 – September 2023)

Number of Crashes by Severity	
Total Crashes (4/2018 – 9/2023)	**533**
Fatal Crashes	6
Overall Fatalities	6
Serious Injury Crashes (Incapacitating)	9
Overall Serious Injuries	20
Injury Crashes (Non-Incapacitating)	175
Overall Injuries	238
Pedestrian Crashes	6 (resulting in 5 fatalities)
Bicycle Crashes	3
Crash Type	
Rear End	242
Angle	109
Non-Collision*	96
Sideswipe	70
Head On	7
Backing	4
Unknown	3
Rear-to-Rear	2
Number of Crashes by Roadway Location	
Travel Lane	371
Intersection	78
Turn Lane	31
Outside Shoulder	22
Other/Unknown	31

Source: Nevada Department of Transportation.

*A non-collision crash is one that does not involve contact between units or a motor vehicle and a fixed object. Examples: lane departure, rollover, mechanical failure/fire, etc. All pedestrian crashes are defined as non-collision.

As noted in the table above, five of the six fatalities that occurred were pedestrians. All but one of the pedestrian fatalities occurred in the late evening or early morning hours when it was dark and where there was little to no roadway lighting. In addition, all but one of the crashes occurred in the travel lane with the exception of one occurring in a marked crosswalk at Airport Road. Drugs or alcohol were a factor in four of the pedestrian fatalities. One collision involved a motorist who was killed by an angle crash at the intersection of US 50 and Airport Road. A non-fatal pedestrian crash also occurred as part of the same incident at Airport Road and resulted in a non-incapacitating injury.

The serious injury crashes included a variety of crash types, with most occurring during the daytime hours. One of the bicycle crashes resulted in a serious injury at the intersection with Lompa Lane. Alcohol was not a factor in any of the serious injury crashes. It was reported for one of the crashes that vehicle backups due to traffic congestion was a factor. Information regarding vehicle speeds was not included with the crash data.

Regarding crash type, rear end crashes accounted for almost half of all crashes, and over 53% of total rear end crashes occurred between the hours of 2 p.m. and 6 p.m., when traffic volumes tend to be higher for US 50 as identified in the Carson Area Transportation System Management Plan (CATSMP). Angle crashes were the second most common crash type, followed closely by non-collision crashes. The majority of crashes occurred in the travel lane, which coincides with the high number of rear end collisions.

Table 2 shows the distribution of the age of the driver, when available. No notable age-related trends were identified.

Table 2: Percentage of Crashes by Driver Age

Driver Age Group in Years	Percentage of Total Crashes
Under 21	9%
21–29	16%
30–39	20%
40–49	15%
50–59	15%
60 and Over	25%

Source: Nevada Department of Transportation.

The Nevada Department of Transportation (NDOT) provided crash data in addition to the information summarized above, specifically for the first mile of US 50 in Lyon County from the county line to just east of Newman Lane (milepost 0.00 to 1.00). While this segment extends a little beyond the project study limits, it highlights relevant information. This data included updated crash history through January 23, 2024, which included three additional fatalities: one near the intersection with Red Rock Road, and two others just to the east between Highlands Drive and Newman Lane. NDOT compared average crash data along this segment to the statewide average for like roadways (rural principal arterial) and found that crash rates are higher across all severity types (property damage only, injuries, and fatalities) by roughly 35%. For fatalities alone, the average crash rate is 117% higher than the statewide average.

Intersection of US 50 and Highlands Drive.

2.2 Traffic/Congestion

Annual average daily traffic (AADT) counts were obtained from NDOT's Traffic Records Information Access (TRINA) system. AADT counts from 2022 ranged from 22,200 to 31,500 vehicles within the study area. The AADT counts represent estimates for the combined number of vehicles traveling in each direction (east and west) over a 24-hour period. NDOT applies seasonal and daily factors to develop these estimates.

Turning movement counts (TMCs), including classification of commercial trucks, pedestrian, and bicycle counts, were also collected at each intersection in the project area. Traffic count data was collected over a 4-hour period during the AM and PM peak periods. This data was used to determine the systemwide AM and PM peak hours and the volumes during the systemwide AM and PM peak hours were utilized to calculate the peak hour factor (PHF) at each intersection. TMCs at intersections were conservatively adjusted to ensure that the inflow and outflow of vehicles at each intersection were consistent with each other, maintaining a balanced approach. This adjustment was made to ensure consistency and realistic traffic flow in the model. The adjusted volumes were then utilized to calculate existing conditions, delays, and the level of service (LOS) at each intersection using Synchro software. The results are shown in Table 3 below. The level of service (LOS) of the entire intersection (all movements combined) for both the AM and PM peak periods are shown. Those with a LOS of D or below are highlighted. With a couple of exceptions, LOS is worse during the PM peak at most intersections. This is not surprising at stop-controlled intersections where vehicles must cross a four-lane highway with a center turn lane in some situations. However, this does highlight the need for improved access management. US 50 and Airport Road as well as US 50 and College Parkway currently experience significant traffic delay.

The worst movements at these intersections indicate PM congestion in the eastbound direction, likely caused by commuter traffic returning to residences in Lyon County. The complete detailed analysis can be found in Appendix A.

Table 3: Intersection Traffic Analysis

Location	Control Type	Existing Scenario - AM Peak			Existing Scenario - PM Peak		
		Delay	LOS	Worst Movement	Delay	LOS	Worst Movement
US-50 & Ramps I-580	Signal	26.3	C	EBL	29.0	C	WBL
US-50 & Lompa Lane	Signal	16.7	B	EBL	14.7	B	EBL
US-50 & Airport Road	Signal	36.1	D	EBL	108.9	F	EBT
US-50 & Silver State Street	Stop	16.0	C	SB	15.5	C	SB
US-50 & Brown Street	Stop	18.7	C	NB	27.1	D	NB
US-50 & College Parkway	Signal	56.0	E	WBL	96.7	F	NBR
US-50 & Sherman Lane	Stop	23.9	C	SB	19.3	C	SB
US-50 & Empire Ranch Road	Stop	169.2	F	SB	4187.9	F	NB
US-50 & Nye Lane	Stop	28.8	D	SB	21.2	C	SB
US-50 & Arrowhead Drive	Signal	13.5	B	EBL	37.5	D	EBL
US-50 & Flint Road	Stop	34.8	D	WB	1782.1	F	WB
US-50 & Linehan Road	Stop	257.2	F	SB	153.6	F	SB
US-50 & Red Rock Road	Stop	31.6	D	SB	15.7	C	SB
US-50 & Highlands Drive	Stop	30.3	D	NB	77.3	F	NB

2.3 Land Use

2.3.1 Land Use

A variety of land uses are adjacent to US 50 within the project limits of the Complete Streets Study corridor. Heading east from the I-580 interchange toward Mound House, the land use pattern gradually transitions from higher density suburban commercial development to more industrial and exurban in nature.

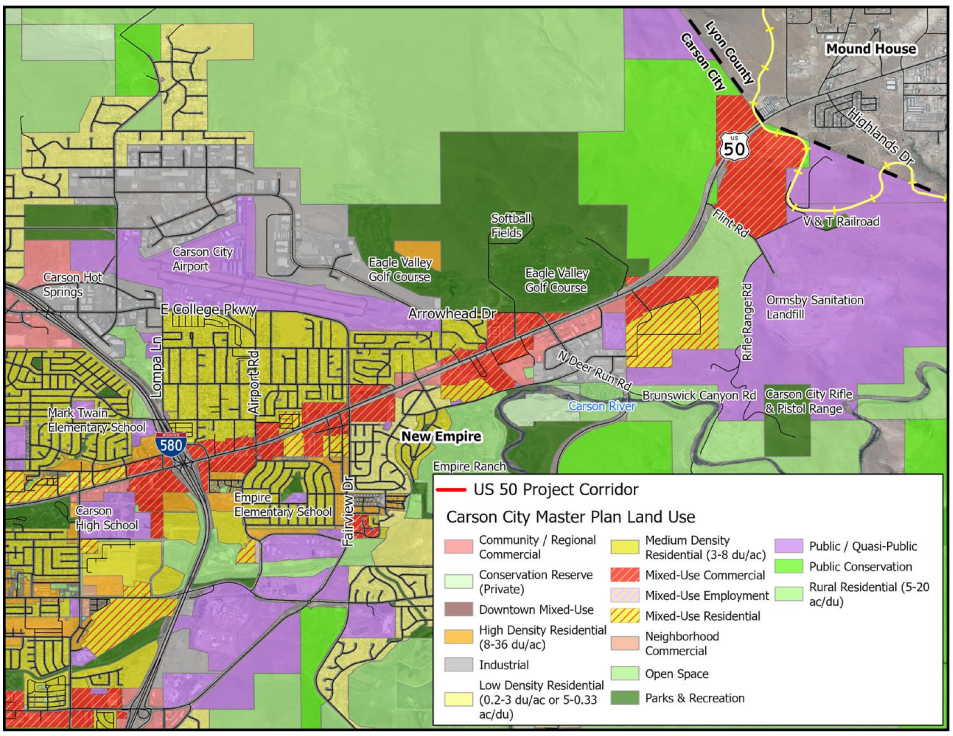


Figure 3: Carson City Land Use Map

Source: Carson City Community Development, Planning Division

The roadway segment within Carson City is predominately fronted by Mixed-Use Commercial and Mixed-Use Residential land uses with pockets of Community/Regional Commercial employment, as identified in the Carson City Master Plan. Toward the east end of the city limits there is a significant amount of open land with Parks & Recreation, Public Conservation, and Open Space designations.

The Master Plan also identifies three distinct Mixed-Use Activity Centers along the corridor at the I-580 interchange intersection with College Parkway/Fairview Drive, and near the intersection with Drako Way. The activity centers are described as compact centers in easily accessible and highly visible locations of the community. The activity centers are intended to promote the efficient use of available commercial lands and concentrate retail services in pedestrian and transit-oriented development nodes that may be easily accessed from and serve surrounding neighborhoods. The Mixed-Use Activity Center concept was developed as part of a scenario planning process for the Master Plan.

Figure 3 shows the Carson City land use designations along the corridor. The percentage of homes built prior to 1980 varies by census tract within the corridor but ranges from 31% to 65%. In addition, the percentage of housing units that are renter-occupied ranges from 34% up to 75%, depending on the tract.

The 2020 Lyon County Master Plan identifies seven distinct communities within the county due to its vast land area and cultural diversity, including Mound House. Residential designations in Mound House are often found on the edges of employment zones, where industrial and commercial uses are established and live/work arrangements are prevalent.

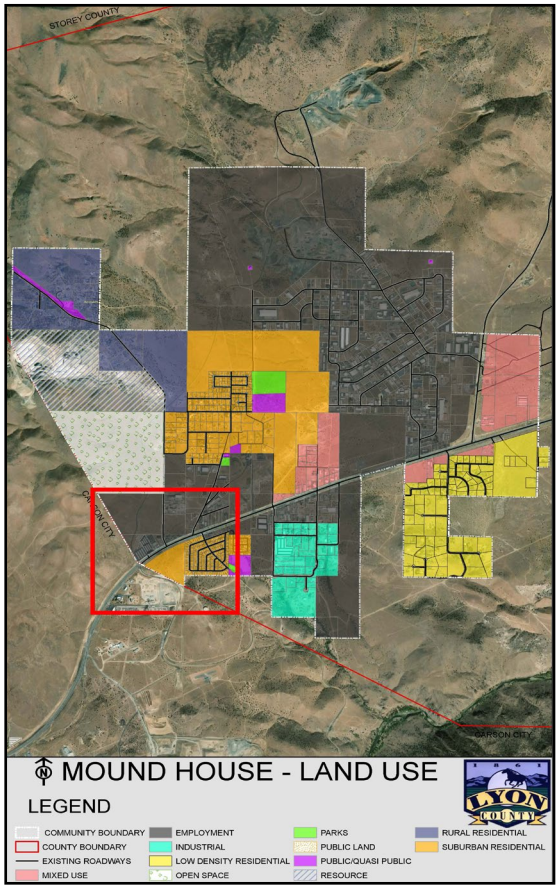


Figure 4: Mound House Land Use Map

Source: Lyon County Planning Division

For the portion of Mound House within the study area, the land use designations are Employment on the north side of US 50, and Suburban Residential on the south side. This land use pattern forces residents to cross US 50 to reach employment destinations and services. Approximately 46% of residences in the Mound House census tract are mobile homes. Resource areas lie adjacent to the Lyon County Employment land use designations, filling out the majority land use on the US 50 corridor. Resource Land is defined as private properties located within federal lands as in-holdings, or in very rural and/or remote areas of the County away from developed lands.

Lyon County Policy LU 1.4 as it relates to Mound House states that "new industrial uses should only be located in areas that do not adversely impact existing residential settlements." In addition, commercial and industrial development is encouraged where sufficient public facilities currently exist or are planned. Figure 4 shows the Lyon County land use designations in the Mound House area, with the red box identifying the area within the study limits.

2.3.2 Employment

According to the U.S. Census Bureau On The Map tool, in 2021 Carson City residents filled over 40% of the total jobs in the City, or 11,504 jobs of the total 28,173. The remainder were filled by residents of nearby locations, including Reno (~11%) and Dayton (~8%), meaning that approximately 2,200 people were commuting on US 50 into Carson City on the typical workday from Dayton alone. Conversely, there was a much smaller contingent of about 380 Carson City residents who commuted to jobs in Dayton. Figure 5 shows the number of jobs per square mile within the corridor study limits, as well as the total number of jobs.

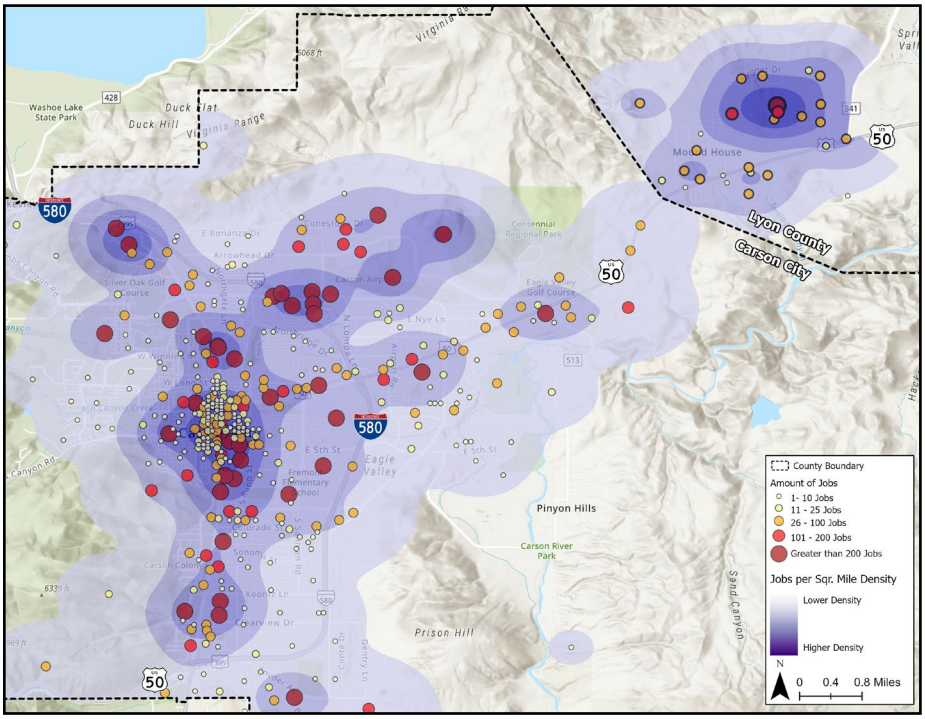


Figure 5: Carson City and Mound House Employment (2021)

Source: U.S. Census Bureau, On The Map

As would be expected, the number of jobs is most dense in downtown Carson City and gradually decreases further away from the core. However, along US 50, there are areas of significant employment extending out to the intersection of Arrowhead Drive/Deer Run Road. There is another area northeast of the corridor project limits off of Affonso Drive in Mound House where employment density is higher than the surrounding areas.

The US DOT Equitable Transportation Community (ETC) Explorer is an interactive web application that uses 2020 Census tracts and data to explore the cumulative burden communities experience as a result of underinvestment in transportation, including the following five components: transportation insecurity, climate and disaster risk burden, environmental burden, health vulnerability, and social vulnerability. This tool was used to assess the Census tracts adjacent to US 50 within the project limits.

Two of the five census tracts that are adjacent to US 50 are defined as "disadvantaged" based on the criteria

established by US DOT. In total, this accounts for approximately 9,800 people living within disadvantaged tracts. The remaining three census tracts have a significantly larger geography and, due to their size, include a much more diverse population in terms of social and economic backgrounds. In all, those combined tracts account for 9,500 people. In short, over half of the people living in census tracts along US 50 are identified as part of a disadvantaged community. Figure 6 shows each of the tracts relative to the project study area.

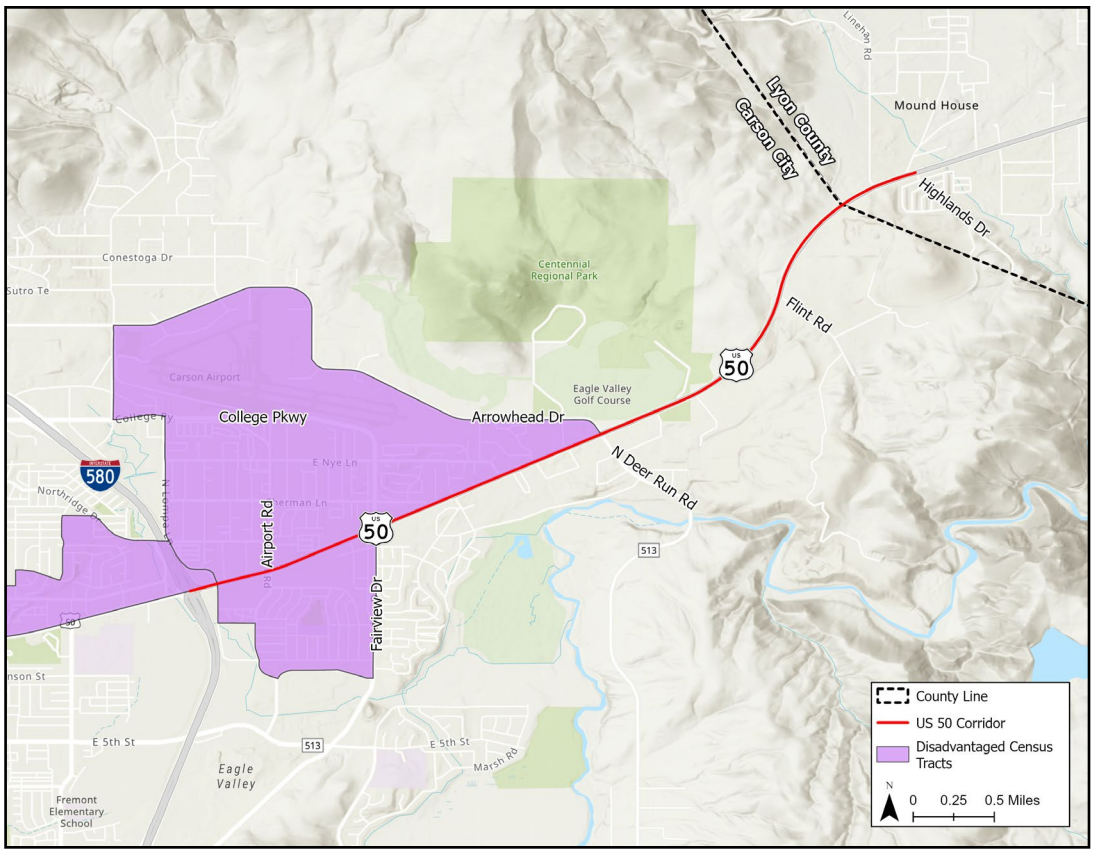


Figure 6: US DOT Equitable Transportation Community (ETC) Disadvantaged Census Tracts

Source: U.S. Department of Transportation, Equitable Transportation Community (ETC) Explorer

Across all Census tracts, transportation access is at 78%. Communities with higher scores may experience difficulty traveling to important destinations across all modes of travel. Limited access to personal vehicles or transit can create significant barriers to employment and resources. Transportation access is one of three factors comprising transportation insecurity, which can be a significant contributor to persistent poverty. The other two factors are transportation cost burden and transportation safety. Transportation cost burden is a measure of the percentage of household income spent on transportation, including transit costs; vehicle maintenance and insurance costs; and gasoline and fuel, which leaves less money for housing; medical care; and food. Transportation safety, in this case, is determined by fatalities per 100,000 persons related to motor vehicle crashes. Of the US 50 census tracts, transportation cost burden is as high as 78% and transportation safety reaches a score of 82%. As with access, the higher the score, the greater the impact.

According to the ETC Explorer, the population in the most burdened census tract had a median household income of $43,498, spent roughly 24% of their income on transportation, and over 20% had incomes below the poverty level. The Bureau of Transportation Statistics (BTS) reported that in 2022, transportation was the second largest household expenditure behind housing, accounting for 15% of average household spending. Additionally, the cost burden of transportation fell hardest on households in the lowest fifth by household income, while households in the highest fifth experienced the least amount of transportation cost burden. Across all tracts, there were over 300 households without access to a vehicle. Average commute times for the population living in census tracts within the corridor study area ranged from 17 to 23 minutes. With the exception of one census tract, none of the others had less than a 15-minute walk to adult education, grocery stores, medical facilities, or parks. Twenty-five percent of households in the Lyon County Census tract, which includes Mound House, do not have an internet subscription, which could be an indicator of affordability.

2.4 Multimodal Facilities

The presence and type of multimodal facilities vary considerably along the study corridor, changing with land use and development density. Facilities provided at various locations include sidewalks, a multiuse path, and striped bike lanes/ roadway shoulders.

Intersection of US 50 and Airport Road. Inconsistent sidewalk, faded crosswalk, gap in connectivity.

Sidewalks appear more frequently on the western end of the corridor, where businesses are more densely clustered. However, their width and presence are inconsistent, which poses safety hazards and connectivity issues for pedestrians.

Designated bike lanes are striped from the I-580 interchange to Arrowhead Drive/N. Deer Run Road, where they transition into striped shoulders. Their width and condition also vary considerably. East of Arrowhead Drive/N. Deer Run Road, bike lanes are maintained at select intersections such as Drako Way and Flint Drive to inform motorists turning on and off US 50 at those locations.

There is also a multiuse path on the north side of US 50, which is signed as a bike route and extends from N. Lompa Lane to Arrowhead Drive/N. Deer Run Road. As land uses become less dense in the central and eastern portions of the corridor, the multiuse path transitions to wide roadway shoulders which can be used for bicycling.

Although this path provides a dedicated facility for walking and bicycling, with separation from motor vehicle traffic, there are safety challenges and concerns related to the frequent driveway access along the western section of the corridor. The majority of driveway points do not have signage or other information indicating to motorists that pedestrians and bicyclists may be crossing in front of them.

The path surface is also inconsistent and in need of maintenance in some areas. There are sections of asphalt and concrete, and others that appear to be unpaved or wholly covered by sand.

Multiuse path on US 50. Does not meet design standards; loose gravel on asphalt is a hazard.

This surface variability poses concerns for safe usage by bicyclists, as well as pedestrians with various levels of mobility (e.g., individuals using a scooter, wheelchair, or other mobility assistance device).

While transit does not operate along US 50, Jump Around Carson (JAC) Routes 2A and 2B intersect with the corridor. There are bus stops on these routes just north and south of US 50 on both N. Lompa Lane and Airport Road. As US 50 is a commercial corridor, particularly on the west end of the study area, safe connectivity and accessibility from these stops and along the corridor is imperative for transit users.

3. PUBLIC AND STAKEHOLDER OUTREACH

Public and stakeholder outreach were concentrated at the beginning of the study to help inform the development of the corridor vision and goals. A variety of outreach media were used to reach a broad segment of corridor users, business owners, and other interested stakeholders, as described in the following sections.

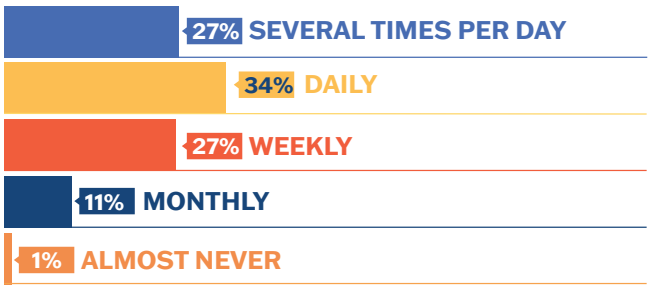
3.1 Public Outreach

Public outreach opportunities helped to gather feedback about needs, goals, and concerns along the corridor. Opportunities for feedback included an online survey and an open invitation to contact the CAMPO project manager via email or telephone.

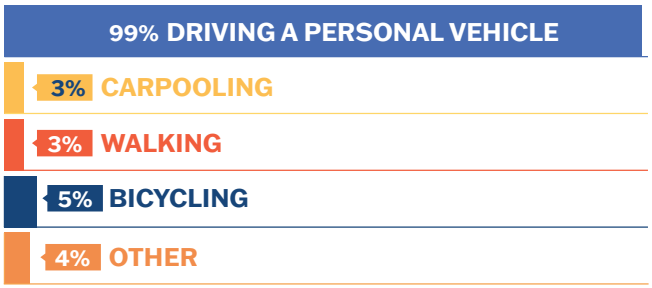
3.1.1 Online Survey

The study team developed a five-question online survey to better understand the needs and preferences of those who travel along US 50. The survey was available online between November 28, 2023, and January 9, 2024. In total, 940 responses were received. The core questions included in the survey were:

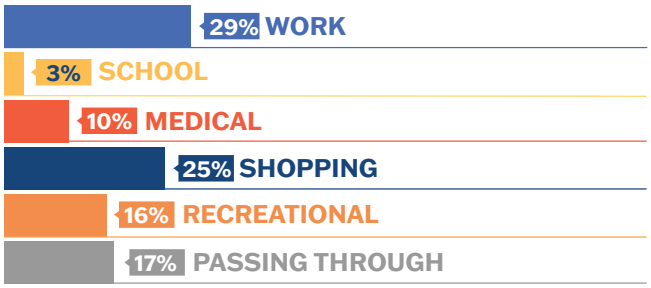
How often do you travel along the study area section of US 50?



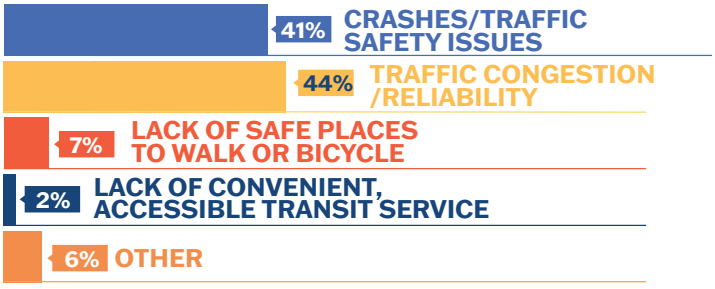
When you travel along US 50, which mode(s) of transportation do you typically use?



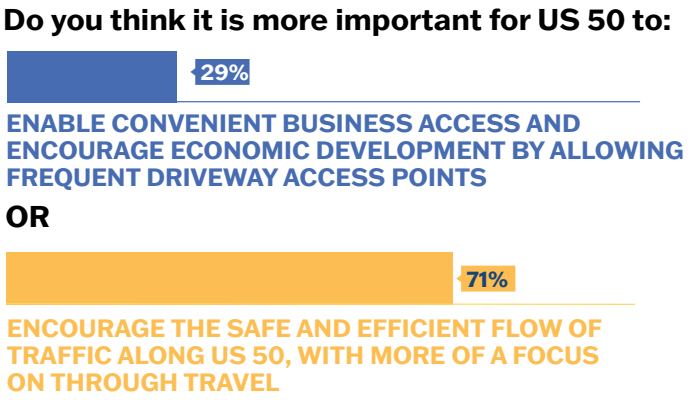
For which of the following trip purposes do you most often travel along the study area section of US 50?



What do you think is currently the biggest problem on or along this section of US 50?



These questions were followed by a series of five optional demographic questions to provide basic information about the location (home zip code), age, gender, race/ethnicity, and household income of respondents.



Major Themes:

- The majority of survey respondents traveled the project corridor either daily (34%), several times per day (27%), or weekly (27%).
- 915 of the 923 respondents who answered this question indicated that they travel along US 50 using a personal vehicle. Because respondents had the option to choose more than one mode, some individuals indicated that they also carpool (32 responses), walk (28 responses), bicycle (46 responses), or use other modes (e.g., a company vehicle or motorcycle) (38 responses).
- When asked about trip purpose, respondents indicated a variety of reasons for traveling the corridor, with work (29%) and shopping (25%) being the most common.
- Respondents were somewhat divided about the biggest problem on or along this section of US 50, with 44% indicating traffic congestion/reliability and 41% citing crashes/traffic safety issues.
- More than 2/3 of respondents (71%) felt it was more important for US 50 to encourage the safe and efficient flow of travel (i.e., focus on through travel) than to enable convenient business access and encourage economic development via frequent driveway access points.

A detailed log of survey responses, including demographics, is included in Appendix B.

3.1.2 Emails and Phone Calls

During the first comment period, the CAMPO project manager received nine comments either via email or telephone call. These comments are provided in full in Appendix B.

3.1.3 Social Media

In early December, CAMPO posted updates on its social media accounts and also partnered with Carson City and CarsonNOW.org to help disseminate information about the study. Posts focused on opportunities for public and stakeholder input, particularly the online survey.

3.1.4 Web Presence

CAMPO posted information about the US 50 project on the agency's web page, including a study area map, the project fact sheet, a link to the online survey, and contact information for the study's project manager. This information was updated periodically throughout the duration of the study.

3.1.5 Press Release

CAMPO released a press release on December 6, 2023, announcing the availability of the online survey. The press release is included as Appendix C.

3.1.6 Fact Sheet/Flyer

The study team developed a project fact sheet containing basic information about the study, as well as a series of frequently asked questions (FAQs). The fact sheet is included as Appendix C.

3.2 Stakeholder Outreach

The project team was able to obtain valuable feedback on issues and concerns from corridor stakeholders through several venues. Most of the outreach was conducted through in-person discussion with business owners and employees, neighborhood associations, and formal boards and commissions. As the owner-operator of US 50, NDOT remained a critical partner throughout this effort.

3.2.1 Business Walk

Members of the study team (CAMPO staff and the consultant team) conducted a business walk on November 28, 2023. The group visited 67 businesses along the study area section of US 50 to distribute fact sheets and ask business owners and workers about their experiences using the corridor. In general, most business owners/employees were very interested in the study and agreed to take the online survey as well as share information with their customers. In addition, several business owners/employees offered constructive feedback on their personal experiences as both participants and observers of activity on US 50. Most of the comments identified traffic safety and operations concerns. A list of specific comments is included as Appendix B.

3.2.2 Neighborhood Association Coordination

The project team met specifically with CAMPO Commissioner Wes Henderson, as the Lyon County representative on the CAMPO Board, to discuss issues and concerns in the Mound House area. At his suggestion, CAMPO staff provided information regarding the study, including the survey, to the Mound House Citizens Advisory Board as well as both the Dayton Regional and Stagecoach Advisory Boards. Even though the Dayton and Stagecoach areas are outside of the study limits, many residents of those communities travel the US 50 corridor into Carson City on a daily basis.

3.2.3 Board and Committee Presentations

CAMPO staff made several presentations and updates regarding the study to the CAMPO Board, Carson City Regional Transportation Commission (RTC), and other boards and committees. Some notable occurrences include:

- **March 8, 2023** – CAMPO/Carson City RTC presentation and permission to apply for Transportation Alternatives Program (TAP) to fund Phase 2 of the US 50 East Carson Complete Streets Corridor Study.
- **September 13, 2023** – CAMPO presentation and permission for to hire a consultant to assist with development of the study.
- **January 29, 2023** – Healthy Communities Coalition had a Traffic Safety Meeting in Mound House. Items discussed were both the CAMPO Local Road Safety Plan and the US 50 East Carson Complete Streets Corridor Study.
- **March 5, 2024** – Mound House Citizens Advisory Board presentation on the CAMPO Local Road Safety Plan and the US 50 East Carson Complete Streets Corridor Study; specifically, about Mound House. There were close to 100 attendees.

3.2.4 Nevada Department of Transportation

NDOT owns and maintains US 50 throughout the entire study limits. During the development of this study, NDOT was concurrently working on design of a pavement preservation and safety improvement project for a portion of the corridor. Close coordination between the CAMPO team and NDOT was maintained throughout the study.

The NDOT preservation project limits are from the I-580 Interchange to 0.29 miles east of Deer Run Road, a total distance of 2.55 miles. Preliminary plans for the project consists of a mill and replacement of existing roadway surfacing; improvement of existing pedestrian walkways, ramps and crossings to current Americans with Disabilities Act (ADA) Public Right-of-Way Accessibility Guidelines (PROWAG); turn lane channelization; and installation of new corridor lighting. Additional improvements will include grading roadside ditches and installing new drainage inlets to eliminate areas of water ponding during storm events, improvements to multiuse paths, driveway reconstruction, addition of a fiber optic trunk line cable, and upgrades to traffic signal systems such as proper alignment of signal heads over travel lanes as well as improved signage throughout the corridor. Project construction is planned for the second quarter of 2027.) Carson City Public Works also has plans to construct the East William Street Complete Streets project just west of the future NDOT improvements, which will dovetail into their project and establish a larger and more consistent complete street corridor.

4. CORRIDOR VISION AND GOALS

The study team developed a set of character zones, along with a series of goals, to help frame and guide recommendations. The character zones were based mainly on existing conditions, while the goals were based on input from stakeholders, members of the public, and staff.

4.1 Character Zones

The Project Corridor was divided into three zones based on changing land use characteristics. These zones are summarized below and illustrated in Figure 7.

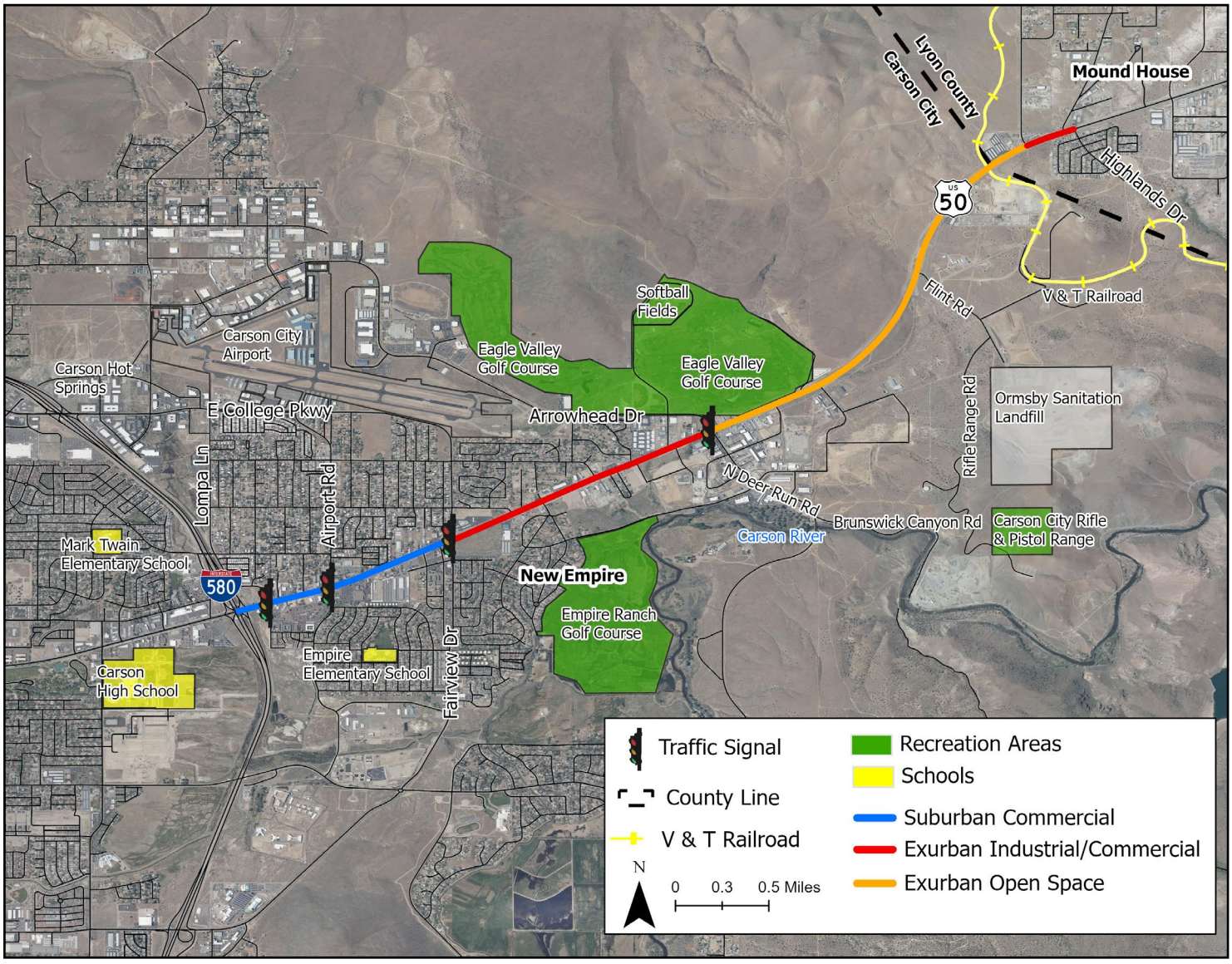


Figure 7: US 50 Corridor Character Zones

Zone 1: Suburban Commercial

The section of US 50 between the I-580 interchange and Fairview Drive was classified as Suburban Commercial due to the presence of predominantly commercial land uses and relatively frequent driveway access points.

Zone 2: Exurban Industrial/Commercial

The section of US 50 between Fairview Drive and Deer Run Road/Arrowhead Drive was classified as Exurban Industrial/Commercial due to the presence of predominantly industrial and commercial land uses, with less frequent driveway spacing and lower density overall.

The section between Linehan Road and Highlands Drive was also classified as Exurban Industrial/Commercial, as the roadway resumes this general character as you enter the western edge of Mound House.

Zone 3: Exurban Open Space

The section of US 50 between Deer Run Road/Arrowhead Drive and Linehan Road was classified as Exurban Open Space due to the low-density nature of the land uses and infrequent spacing of driveway access points.

4.2 Corridor Goals

A set of goals was developed to help guide improvements along the project corridor and ensure that recommendations are aligned with input received via public and stakeholder outreach, as well as previous planning efforts. The four corridor goals identified are:

GOAL 1: Identify improvements that enhance safety for all corridor users.

GOAL 2: Plan and deliver roadway safety and traffic projects that meet the needs of local residents, commuters, and business owners.

GOAL 3: Improve multimodal connections between residential areas, essential services, and recreational opportunities.

GOAL 4: Identify improvements that balance mobility needs with business access and economic development objectives.

These corridor goals align well with the goals identified in NDOT's *One Nevada Transportation Plan*. Specifically, the plan identifies the following four of six main goals including: Enhance Safety, Optimize Mobility, Transform Economies, and Connect Communities. Additionally, the Plan also identifies US 50 as a critical corridor, which is defined as a primary artery for freight and people movement essential to Nevada's future economic vitality. As a US Bike Route (USBR 50), US 50 has the highest volume of touring bicyclists in Nevada, who are supported by local businesses along the corridor.

5. CORRIDOR NEEDS IDENTIFICATION

5.1 Operations

As demonstrated by the traffic analysis, there is significant congestion in both the AM and PM peak periods. As indicated by the survey results, traffic congestion/reliability ranked as the most common response when participants were asked what is the biggest problem on this section of US 50. Anecdotal public input also suggested that traffic is often backed up at major intersections during peak periods and that it is significantly challenging to turn on and off US 50 at unsignalized intersections and business accesses due to limited breaks in traffic flow. Both the traffic analysis and public feedback indicated that the PM peak period is the most congested. Proposed improvements will address traffic signal optimization and enhanced roadway and intersection geometry for better traffic flow.

5.2 Safety

As stated in the safety analysis, the average crash rates along this segment of US 50 are nearly 35% higher than the statewide average for similar roadways and for all crash severity types. The crash data also correlates with the findings of the traffic analysis, with the majority of crashes (40%) having occurred in the peak period between 2 p.m. and 6 p.m. (as identified for US 50 in the CATSMP), with many at or near major intersections. As previously stated, the crash data in the CAMPO LRSP represents a slightly different dataset and geographic scale of analysis. However, the trends along the US 50 corridor are largely representative of the region as a whole as detailed in the findings of the LRSP.

5.3 Access Management

There are over 60 private driveways and access points on both sides combined of the corridor within the project study area. They range from highly visible concrete drives with marked crosswalks, curb, gutter, and pork chop islands, to worn asphalt or faded dirt breaks in the shoulder of varying width. With few exceptions, the majority of the corridor does not have raised medians or channelization, particularly in Zones 2 and 3 where more informal access exists. Improved access management has both safety and operations benefits by minimization of conflict points and removal of obstructions to through traffic.

5.4 Multimodal

While basic bicycle and pedestrian infrastructure is present along portions of the corridor, it is inconsistent and in various states of repair, which does not allow for accessibility by all users and abilities. Likewise, connected, safe sidewalks with ADA compliant curb ramps as well as a continuous and clearly signed USBR 50 would enhance the overall corridor. Federal Highway Administration (FHWA) proven safety countermeasures provide a menu of tiered improvements that can be applied throughout the corridor.

Sections of multiuse path on US 50 do not have clear delineation between shoulders and access driveways.

5.5 Equity, Resiliency, Sustainability

Section 2 of this report discusses populations along the corridor living in ETC-defined Disadvantaged Census Tracts and some of the challenges associated with these areas including high levels of specific indicators which lead to overall transportation insecurity. Factors that contribute to equity concerns along the corridor include areas of low vehicle ownership and the absence of transit or other affordable mobility options. These issues are exacerbated by incomplete and auto-centric infrastructure along the corridor which limit the ability of people to safely engage in other transportation modes such as walking or riding a bike.

The corridor has 31,500 AADT volumes in some sections and a fatality crash rate that is 117% higher than the statewide average. Posted speed limits range from 40 mph at the west end of the project limits at the freeway interchange to 55 mph east of Deer Run Road/Arrowhead Drive. However, the majority of the corridor in the populated and developed areas is 45 mph, but the design as a multi-lane state highway with wide shoulders lends itself to higher speeds. As described in the sections above, there are a host of issues that, both singularly and collectively, limit mobility options for those who might not have access to a vehicle. This situation disproportionately impacts those who are most vulnerable in terms of safety and financial security.

Aside from mobility, the relatively high AADT, congested peak periods, and percentage of trucks is a source of concentrated vehicle emissions. In addition, the particulate matter from tires, brakes, exhaust, and the natural desert landscape contributes to the overall impact on air quality. In general, the corridor has very little vegetation or shade cover to mitigate urban heat island effects. The roadway width varies along the 4.5-mile corridor, but is approximately 60-75 feet wide in typical sections, not including shoulders. The average high temperature for the month of August in Carson City is approximately 89° F. Depending on a variety of factors (cloud cover, angle of the sun, altitude, etc.) surface pavement temperatures can reach up to 140° F. This radiates back into the air increasing overall temperatures along the corridor. Heat islands can contribute to poor air quality, magnify the impacts of extreme heat events, and put people's health at higher risk.

6. CORRIDOR IMPROVEMENT RECOMMENDATIONS

6.1 Summary Table

Table 4 provides a list of improvements and associated cost estimates by location along the US 50 corridor study area. This table represents a simplified version of the table located in Appendix D, which also contains preliminary design concepts for some of the project recommendations.

Table 4: Recommended Corridor Improvements

Countermeasures	Potential Extents	Cost ($1,000)
Roadway Segments		
Install lane departure prevention systems.	Shoulder gaps throughout	$3,100
Construct driveways with curb and gutter.	Airport to Arrowhead / Deer Run	$760
Design the roadway to a lower design speed.	Lompa to Highlands	Planning - $100K Implementation - Cost integrated into subsequent projects
Install high-visibility roadway striping.	Lompa to Highlands	$1,390
Install wide edge lines and/or buffer striping.	Lompa to Highlands	$460
Install roadway lighting.	Airport to Arrowhead / Deer Run	$1,650
Close existing sidewalk / Asphalt Concrete (AC) path gaps.	AC path gaps throughout	$2,040
Install signs and markings at path driveway crossings.	Lompa to Arrowhead / Deer Run	$220
Signalized Intersections		
Convert protected-permissive phasing from side streets to protected phasing only.	Airport Road	$20
Program leading pedestrian intervals.	Lompa, Airport, E. College Parkway / Fairview, and Deer Run	$20

Countermeasures	Potential Extents	Cost ($1,000)
Signalized Intersections		
Install Advance Dilemma Zone Detection (ADZD) signal equipment to allow for All Red Extension.	Lompa, Airport, E. College Parkway / Fairview, and Deer Run	$200
Program off-peak Rest in Red operations; install vehicle detection systems to actuate traffic signals when vehicles are at the desired travel speed.	Lompa, Airport, E. College Parkway / Fairview, and Deer Run	$80
Program signal coordination at 10 mph below the speed limit if existing signals are coordinated.	Lompa, Airport, E. College Parkway / Fairview, and Deer Run	$100
Program signal visibility (signal head louvers) to the design speed stopping sight distance.	4 signal heads x 2 approaches x 4 intersections	$64
Add near-side signal heads to US 50 approaches.	2 approaches x 4 intersections; upgrade all hardware	$40
Install new signal or Pedestrian Hybrid Beacon (PHB) at existing intersection.	Highlands Drive	$800
Speed Policy		
Install speed safety cameras for observation and data collection.	Highlands, Arrowhead / Deer Run, and E. College Parkway	$150
Implement variable speed limits based on time of day and congestion.	Entire corridor	Planning - $50-100K Implementation - $500K - $2M *Does not include enforcement expense
Install changeable message signs alerting drivers of congestion ahead.	Highlands, Arrowhead / Deer Run, and E. College Parkway	$300
Midblock Crossings		
Install PHBs and coordinate with signals to 10 MPH below the speed limit.	Silver State St, Empire Ranch Rd, and E Nye Lane	$1,500

Countermeasures	Potential Extents	Cost ($1,000)
Install signs, beacons, and lighting at select side street locations and large driveways.	Airport to Arrowhead	$380
Install median curbs and posts to channelize left turns where appropriate.	Airport to Arrowhead	$380
Intersection Geometry		
Consider reduced design vehicle (from WB-67 to WB-40 or SU-30). Adjust (reduce) corner curb radii to accommodate the reduced design vehicle and shorten crossing distance.	Lompa, Airport, and Deer Run; exclude E. College Parkway / Fairview	Planning - ~$20-50K. Implementation - cost integrated into other projects
Study use of lead-lag phasing at opposing left turns to allow for left-turn lane / center median consolidation or pedestrian refuge islands.	Lompa (2), E. College Parkway / Fairview (1)	$50
Study reducing corner curb radii, designing right-turn slip lane channels to sharper (60- to 75-degree) approach angles, and installing mountable curb aprons.	Airport (NE), E. College Parkway / Fairview (NE and SW), Deer Run (SW)	$100
Update corner channel islands (pork chops) to ADA standards.	Airport (NE and SW)	$100
Study a long-term option to convert signals to multilane roundabouts.	Lompa, Airport, E. College Parkway / Fairview, Arrowhead / Deer Run	Planning - ~$50-100K. Implementation - $2-5M / intersection
Total Cost for All Improvements		**$14,254**

6.2 Intersection Improvements

Signal system upgrades are recommended at each of the existing signalized intersections on US 50 in the study area. These include intersections with N. Lompa Lane, Airport Road, Fairview Drive/College Parkway, and Deer Run Road/Arrowhead Drive. Recommended improvements include enhanced signal coordination, phasing, and timing, as described below.

"Rest in Red" traffic signal technology can be incorporated to discourage excessive speeding. It works by displaying red lights in select or all directions during late night and early morning hours when traffic volume is light rather than cycling through the green, yellow, and red phases during typical daytime traffic periods. When a person driving a vehicle approaches a "Rest in Red" intersection, the traffic signal may stay red until it detects that the driver reaches the intersection. The traffic signal will turn green to service the approaching driver; these systems can be programmed to provide a green signal to approaching drivers traveling within the speed limit.

Advanced Dilemma Zone Detection (ADZD) systems track approaching vehicles, calculate the time and distance they need to stop or clear the intersection based on their speed and size, and adjust the end time of the applicable phase. Dilemma zones refer to areas where a driver would neither be able to stop before the intersection or clear the intersection with the programmed signal yellow and red time, which increases the likelihood of T-bone, head-on, and rear-end crashes.

These systems have been proven to reduce the frequency of red-light violations, crashes associated with the traffic signal phase change, delay and stop frequency on the major road, and maintain or reduce overall intersection delay.

General speed management systems should also be considered to enhance both safety and operations. **Speed safety cameras** could be installed for active traffic management. These would not be used for enforcement nor to collect personal data such as license plate recognition (LPR). However, they could assist in data collection that both actively manages traffic flow through signal optimization as well as to provide insight into systemic or recurring issues on US 50. Other **Intelligent Transportation Systems (ITS) applications** could assist with the overall management of the corridor such as variable speed limits to optimize traffic flow and reduce congestion. This could be tied into a network of digital message signs to better inform motorists of dynamic conditions.

Pedestrian hybrid beacons (PHBs) are recommended for three uncontrolled intersections where there are higher levels of pedestrian activity. A PHB is a traffic control device designed to help pedestrians safely cross higher-speed roadways at midblock crossings and uncontrolled intersections. The beacon head consists of two red lenses above a sign. It is recommended to install lighting, signage, and beacons to raise visibility.

At the intersection with Highlands Drive, which serves as access to a residential area in Mound House, it is recommended to install a PHB in conjunction with a pedestrian refuge island on US 50 just west of the intersection.

The refuge island would give pedestrians additional protection to confirm that traffic has stopped in both directions before completely crossing the street.

It would also provide enhanced visual cues for drivers. There have been several traffic fatalities at this intersection, including a recent and tragic crash involving a child who was struck and killed.

US 50 / Highlands

The Local Road Safety Plan (CAMPO, April 2024) for the US 50 / Highlands intersection recommends installing a Pedestrian Hybrid Beacon (PHB), new intersection lighting, pavement resurfacing, advanced street name signs, and reduced conflict intersection. This study recommends or assumes the first three improvements (PHB, lighting, and resurfacing), concurs with the recommendation to add advance street name signs, and recommends for further study the reduced conflict intersection for compatibility with the PHB and potential pedestrian refuge islands. In addition to the LRSP recommendation for the US 50 / Highlands intersection, this study recommends installing a speed safety camera for observation and data collection and changeable message signs (CMS) alerting drivers to congestion ahead.

Local Road Safety Plan (LRSP) Recommendation	US 50 Complete Streets Study
Install Pedestrian Hybrid Beacon (PHB)	Recommended in the Complete Streets Study
Install Intersection Lighting	Assumed as part of the PHB project
Resurface Pavement	Assumed as part of NDOT Repaving Project
Install Advanced Street Name Signs	Concur with recommendation
Install Reduced Conflict Intersectiov	Recommend for further study and compatibility with PHB and pedestrian refuge island

Not in LRSP but in Complete Streets study: Install speed safety camera for observation and data collection. Install changeable message signs (CMS) alerting drivers to congestion ahead.

US 50 / Airport

The Local Road Safety Plan for the US 50 / Airport intersection recommends installing an on-street bike lane, adjusting signal timing, resurfacing pavement, installing PROWAG compliant crossings and curb ramps, installing improved intersection lighting and updated signal equipment, adjusting the roadway alignment, and developing a maintenance agreement with the multiuse path owners. This study recommends or assumes pavement resurfacing, PROWAG compliant crossings and curb ramps, updating signal equipment, adjusting the roadway alignment and intersection geometry, and concurs with the recommendation to install improved lighting and replacing pedestrian push buttons with APS.

This study recommends further study of the bike lane since the existing multiuse path appears to be a safer and more comfortable option for bicycle travel over an on-street bike lane. This study recommends adjusting the signal timing in concert with installing Advance Dilemma Zone Detection (ADZD) equipment to allow for dynamic All Red signal timing extensions. This study recommends closing gaps on the multiuse path as part of a larger project to improve its condition.

In addition to the LRSP recommendation for the US 50 / Airport intersection, this study recommends studying long-term options to convert the traffic signal to a multilane roundabout, adding ADZD equipment to allow for dynamic All Red signal timing extensions, programming off-peak Rest in Red signal operations, lowering the signal coordination speed along the US 50 corridor, and installing program visibility signal heads to reduce the likelihood of drivers speeding to clear the intersection.

Local Road Safety Plan (LRSP) Recommendation	US 50 Complete Streets Study
Install on-street bike lane	Recommend further study since the existing bike lane transitions into a shared lane at the intersection. The Complete Streets Study considers the existing, parallel multiuse path as the safer and more comfortable option over an on-street bike lane especially at the intersections.

Adjust signal timing (all-red clearance timing)	Recommended in the Complete Streets Study with additional Advance Dilemma Zone Detection (ADZD) equipment.
Resurface pavement	Assumed as part of NDOT Repaving Project
Install PROWAG compliant crossings and curb ramps	Recommended in the Complete Streets Study
Install improved intersection lighting	Concur with recommendation
Install updated signal equipment: Accessible Pedestrian Signals (APS), new signal heads, and new poles for additional signal heads	New signal heads and poles are recommended as part of the Complete Streets Study. Concur with recommendation to add APS.
Adjust roadway alignment	Recommended in the Complete Streets Study as corner curb radii and slip lane adjustments and reduced design vehicle.
Develop maintenance agreement with owners of multiuse path	Maintenance and gap closures on the multiuse path recommended in the Complete Streets Study.

Not in LRSP but in Complete Streets study: Study long-term option to convert signals to multilane roundabouts, add ADZD equipment to allow for dynamic All Red signal timing extensions, program off-peak Rest in Red signal operations, project lower signal coordination speed, install program visibility signal heads.

6.3 Access Management

As stated earlier in this report, there are over 60 driveways along US 50 within the project study area. Many of the access areas lack appropriate design elements and present a safety issue due to poor visibility and signage. There have been reports from business owners and their employees regarding motorists who have run off the road into stormwater ditches attempting to turn into parking lots due to access points that are poorly lit or not clearly defined.

Improvements include adding high visibility continental crosswalks and path crossing warning signs to alert motorists and non-motorists alike when approaching a driveway. In general, curb, gutter, and a safety edge (as well as rumble strips, where appropriate) should be installed consistently throughout the length of the corridor to clearly identify breaks for access to businesses and other areas. In addition, edge lines and buffer striping will help clearly identify bike lanes and can transition to dashed lines to indicate driveway entrances. Signage and bollards can be installed on the multiuse path where it intersects with driveways to discourage motor vehicles from utilizing the path as a makeshift frontage road. Where feasible, multiple driveways should be consolidated into one to limit the number of access points, which will provide for safer and more efficient traffic flow on the US 50. A median curb with posts to channelize left turns is also recommended between Airport Road and N. Deer Run Road/Arrowhead Drive where appropriate.

6.4 Multimodal Improvements

While some of the intersection and access management improvements previously identified would also benefit pedestrians and bicyclists, additional proposed multimodal improvements largely focus on filling in the gaps

for existing facilities as well as upgrading existing infrastructure to meet current design standards and ADA requirements. As stated, the existing sidewalk and multiuse path varies significantly in consistency and level of accessibility.

Existing RRFB on US 50 at Silver State Street.

6.5 Equity, Resiliency, Sustainability

The multimodal improvements described in the previous section are critical to improving mobility options for residents along the corridor, especially for shorter trips. People will not consider other options if they do not feel safe in doing so. Deliberate and public celebration of newly constructed infrastructure, education on the safety and health benefits it provides, and encouragement of its use will inspire people to consider other modes than driving for necessary trips. It is also important to engage with households in areas of low vehicle ownership throughout planning, design, and implementation of these improvements. Those without other options have the most knowledge of existing conditions and stand to benefit the most from carefully considered and thoughtful design. Any outreach should be done in Spanish as well as English. In one disadvantaged census tract along the corridor, the population that identifies as Hispanic is 57% and Limited English Proficiency (LEP) is higher than anywhere else in the region.

Roadside memorial at stormwater ditch near poorly marked driveway.

While encouraging a mode shift away from single occupancy vehicle trips will have the most profound effect on air quality within the corridor, improvements in access management, traffic signal timing, and safe speed applications will also help to offset vehicle emissions through more efficient traffic operations. One concept that might be explored through Phase 2 of this study is expansion of fixed route transit service or special commuter service along the corridor based on potential demand. If feasible, this could be implemented with dedicated bus-only lanes and transit signal priority at intersections. Other concepts to support resiliency and sustainability that might be considered are alternative pavement design and low maintenance vegetation to improve the tree canopy and mitigate the urban heat island effect along the corridor.

7. IMPLEMENTATION AND FUNDING

7.1 Implementation and Phasing

Most of the project recommendations in this report are near-term in nature and do not require major capital investment. Planning level cost estimates were applied to each of the project types. It is estimated that approximately $13.9 million would be needed to implement all the recommended improvements. However, CAMPO and NDOT could take a phased approach to implement the “low hanging fruit” first which would require the least amount of coordinated investment, such as signage and striping improvements. Areas where existing utilities and infrastructure exist (such as an existing power source for PHB) should also be considered for early implementation.

This study was envisioned as a two-phase approach, with the first phase focusing primarily on safety and operations improvements. Phase 2 of the study, which is not the subject of this report, will expand upon multimodal components and include cultural, historic, landscape, aesthetic, freight, and environmental considerations.

7.2 Funding Mechanisms and Sources

The following section lists Federal-aid programs that provide funding to NDOT through apportionment, which would be eligible for use on US 50 recommended improvements. The Federal-aid programs are formula-based and generally see a modest increase year-over-year. Please note that funding amounts shown are for Nevada’s Fiscal Year (FY) 2023 apportionment and reflect balances after set-aside amounts for specific programs as well as any penalties. In Nevada, most Federal-aid programs require a 5% match in local funds to utilize the available funding. It is assumed that NDOT would be the project lead on any improvements as the owner/operator of US 50. Of the funding sources listed below, CAMPO receives an allocation of Surface Transportation Block Grant Program, Transportation Alternatives Set-Aside, and Carbon Reduction Program funds. CAMPO is also eligible to receive Highway Safety Improvement Program funds due to the recently completed LRSP. NDOT may choose to sub-allocate a portion of funds they receive through any of the formula programs.

National Highway Performance Program (NHPP)

The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments in highway construction are directed to support progress toward the achievement of performance targets established in state asset management plans. In FY 2023, Nevada received $243,551,644 in NHPP funds to be utilized statewide. The US 50 corridor is part of the NHS and would be eligible to receive NHPP funding for the proposed improvements.

Highway Safety Improvement Program (HSIP)

The HSIP is a core Federal-aid program with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance. With an average fatality crash rate on this section of US 50 of 117% more than the statewide average, it is a high-ranking candidate for investment of HSIP funds. Nevada received $27,424,835 in HSIP funds in FY 2023.

Surface Transportation Block Grant Program (STBG)

The STBG program provides flexible funding that may be used by states and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, pedestrian and bicycle infrastructure, and transit capital projects. Nevada received a total of $112,401,874 in STBG funds in FY 2023. After excluding suballocation amounts for areas of specific population thresholds, $47,822,245 in remaining funds were available for any area of the State. A suballocation of STBG funds in the amount of $1,329,545 is designated for areas between 50,000 and 200,000 population. CAMPO is one of the few regions in Nevada to fall within this population threshold, and therefore would be a good candidate to benefit from a significant portion of these funds.

National Highway Freight Program (NHFP)

The NHFP is focused on improving the condition and performance of the National Highway Freight Network (NHFN) and ensuring the network provides the foundation for the United States to compete in the global economy. The NHFN was established to strategically direct Federal resources and policies toward improved performance of highway portions of the US freight transportation system. The section of US 50 from I-580 to SR 341 is designated as a Critical Urban Freight Corridor (CUFC), which is part of the NHFN, making it eligible for NHFP funds. Nevada received $12,588,078 in NHFP funds in FY 2023, (which excludes 2% for State Planning and Research) of which 30% of the total funding amount must be used for freight intermodal and freight rail projects.

Transportation Alternatives (TA) Set-Aside Funds

The TA Set-Aside from the STBG program provides funding for a variety of typically smaller-scale transportation projects such as pedestrian and bicycle facilities and safe routes to school (SRTS) projects. The current Transportation Bill, Bipartisan Infrastructure Law (BIL), requires states to suballocate 59% of total funds based on population. Similarly to STBG, $119,209 in TA Set-Aside is suballocated to areas of the state between 50,000 and 200,000 population, and $3,851,891 is available to for projects in any area of Nevada.

Carbon Reduction Program (CRP)

The BIL also established the CRP, which provides funds for projects designed to reduce transportation emissions, defined as carbon dioxide (CO_2) emissions from on-road highway sources. The state suballocation for areas of population between 50,000 and 200,000 is $156,642. Any of the proposed pedestrian and bicycle improvements would be an eligible use of CRP funds as it supports non-motorized travel. In addition, items like energy efficient street lighting and traffic control devices, roadway enhancements that improve traffic flow without adding capacity, and infrastructure-based intelligent transportation systems are also eligible.

Discretionary Grants

There are dozens of grant opportunities through the US Department of Transportation, many of which are offered on a recurring basis. The following is a list of some grants that could potentially align well with the needs and goals of the US 50 corridor.

- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Safe Streets and Roads for All (SS4A) Program
- Active Transportation Infrastructure Investment Program (ATIIP)
- Neighborhood Access and Equity Program (NAE)

This is by no means an exhaustive list, and new grant opportunities are refined or developed regularly. In addition, smaller improvements would potentially be good candidates for congressionally directed spending projects (otherwise known as earmarks). While state and local funds are limited, there could be opportunities for funding through other state-run programs or even other sectors such as public health. Oftentimes, programs such as these can be leveraged as a match to federal funds. In addition, it is always beneficial to capitalize on maintenance or preservation projects by identifying opportunities to add in additional infrastructure improvements where efficiencies can be captured and maximized.

7.3 Next Steps

Phase 2 of this study will expand upon the analysis and recommendations in this report. However, there are immediate and short-term action items that can and should be pursued, such as the following.

- CAMPO will coordinate with NDOT to ensure that any project recommendations that may be incorporated into their scope of work for planned improvements will be evaluated for efficiency and feasibility.
- Funding options will be explored to offset potential increases in cost estimates.
- Project recommendations should be vetted through NDOT's One Nevada process to determine priorities with competing projects.
- CAMPO staff will also coordinate internally with Carson City Public Works staff responsible for traffic signal maintenance to scope potential upgrades to the signal system along the US 50 corridor.

View of US 50 toward the West.

APPENDIX A

Traffic Analysis

US 50 E Carson Street
Timing Plan: AM Peak

1: US 50 E & I-580 Ramp
HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	WBL	WBT	SEL	NWL
Lane Configurations						
Traffic Volume (vph)	140	365	455	815	190	120
Future Volume (vph)	140	365	455	815	190	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	11.3	7.4	10.7	6.8	11.4	12.2
Lane Util. Factor	0.97	0.91	0.97	0.91	0.97	0.97
Frt	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (prot)	3242	4803	3367	4988	3502	3433
Flt Permitted	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (perm)	3242	4803	3367	4988	3502	3433
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	146	380	474	849	198	125
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	146	380	474	849	198	125
Heavy Vehicles (%)	8%	8%	4%	4%	0%	2%
Turn Type	Prot	NA	Prot	NA	Prot	Prot
Protected Phases	7	4	3	8	1	5
Permitted Phases						
Actuated Green, G (s)	9.4	31.6	18.5	40.7	10.4	9.6
Effective Green, g (s)	9.4	31.6	18.5	40.7	10.4	9.6
Actuated g/C Ratio	0.10	0.35	0.21	0.45	0.12	0.11
Clearance Time (s)	11.3	7.4	10.7	6.8	11.4	12.2
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	338	1686	692	2255	404	366
v/s Ratio Prot	0.05	0.08	c0.14	c0.17	c0.06	0.04
v/s Ratio Perm						
v/c Ratio	0.43	0.23	0.68	0.38	0.49	0.34
Uniform Delay, d1	37.8	20.6	33.1	16.3	37.3	37.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.3	2.8	0.5	0.9	0.6
Delay (s)	38.7	20.9	35.9	16.8	38.3	37.8
Level of Service	D	C	D	B	D	D
Approach Delay (s)		25.8		23.6		
Approach LOS		C		C		

Intersection Summary			
HCM 2000 Control Delay	26.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	30.3
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

US 50 E Carson Street
Timing Plan: AM Peak

2: Lompa Lane & US 50 E
HCM 6th Signalized Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	635	80	15	1355	60	165	30	20	30	30	105
Future Volume (veh/h)	35	635	80	15	1355	60	165	30	20	30	30	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1796	1796	1796	1826	1826	1826	1870	1870	1870	1900	1900	1900
Adj Flow Rate, veh/h	38	683	0	16	1457	65	177	32	22	32	32	113
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	7	7	7	5	5	5	2	2	2	0	0	0
Cap, veh/h	81	2955		83	2947	131	271	243	167	358	87	306
Arrive On Green	0.05	0.60	0.00	0.05	0.60	0.60	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1711	4904	1522	1739	4892	218	1243	1033	710	1371	368	1299
Grp Volume(v), veh/h	38	683	0	16	990	532	177	0	54	32	0	145
Grp Sat Flow(s),veh/h/ln	1711	1635	1522	1739	1662	1787	1243	0	1743	1371	0	1666
Q Serve(g_s), s	2.3	6.8	0.0	0.9	17.7	17.7	14.6	0.0	2.6	2.0	0.0	7.7
Cycle Q Clear(g_c), s	2.3	6.8	0.0	0.9	17.7	17.7	22.2	0.0	2.6	4.5	0.0	7.7
Prop In Lane	1.00		1.00	1.00		0.12	1.00		0.41	1.00		0.78
Lane Grp Cap(c), veh/h	81	2955		83	2002	1076	271	0	411	358	0	393
V/C Ratio(X)	0.47	0.23		0.19	0.49	0.49	0.65	0.00	0.13	0.09	0.00	0.37
Avail Cap(c_a), veh/h	261	2955		265	2002	1076	463	0	680	571	0	651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	48.7	9.6	0.0	48.1	11.8	11.8	42.9	0.0	31.7	33.5	0.0	33.6
Incr Delay (d2), s/veh	1.5	0.2	0.0	0.4	0.9	1.6	1.4	0.0	0.1	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.2	0.0	0.4	5.9	6.6	4.5	0.0	1.1	0.7	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.2	9.8	0.0	48.5	12.7	13.4	44.4	0.0	31.7	33.5	0.0	33.9
LnGrp LOS	D	A		D	B	B	D	A	C	C	A	C
Approach Vol, veh/h		721	A		1538			231			177	
Approach Delay, s/veh		12.0			13.3			41.4			33.8	
Approach LOS		B			B			D			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		28.7	9.0	67.3		28.7	9.0	67.3				
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0				
Max Green Setting (Gmax), s		41.0	16.0	36.0		41.0	16.0	36.0				
Max Q Clear Time (g_c+I1), s		24.2	2.9	8.8		9.7	4.3	19.7				
Green Ext Time (p_c), s		0.5	0.0	3.7		0.7	0.0	7.4				

Intersection Summary	
HCM 6th Ctrl Delay	16.7
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

US 50 E Carson Street
Timing Plan: AM Peak

3: Airport Rd & US 50 E
HCM 6th Signalized Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	560	80	20	1140	55	160	75	20	30	65	130
Future Volume (veh/h)	45	560	80	20	1140	55	160	75	20	30	65	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1781	1781	1811	1811	1811	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	49	615	88	22	1253	60	176	82	22	33	71	143
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	8	8	8	6	6	6	1	1	1	2	2	2
Cap, veh/h	62	695	310	851	2233	996	0	104	28	47	284	241
Arrive On Green	0.04	0.21	0.21	0.49	0.65	0.65	0.00	0.07	0.07	0.03	0.15	0.15
Sat Flow, veh/h	1697	3385	1510	1725	3441	1535	0	1432	384	1781	1870	1585
Grp Volume(v), veh/h	49	615	88	22	1253	60	0	0	104	33	71	143
Grp Sat Flow(s),veh/h/ln	1697	1692	1510	1725	1721	1535	0	0	1816	1781	1870	1585
Q Serve(g_s), s	3.9	24.0	6.3	0.9	27.3	1.2	0.0	0.0	7.7	2.5	4.6	11.4
Cycle Q Clear(g_c), s	3.9	24.0	6.3	0.9	27.3	1.2	0.0	0.0	7.7	2.5	4.6	11.4
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	62	695	310	851	2233	996	0	0	132	47	284	241
V/C Ratio(X)	0.79	0.88	0.28	0.03	0.56	0.06	0.00	0.00	0.79	0.71	0.25	0.59
Avail Cap(c_a), veh/h	155	851	380	851	2233	996	0	0	545	181	561	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.0	52.5	40.8	17.7	13.2	3.4	0.0	0.0	62.0	65.7	50.8	53.7
Incr Delay (d2), s/veh	8.0	15.3	2.3	0.0	1.0	0.1	0.0	0.0	3.8	7.1	0.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	11.4	2.7	0.3	9.9	0.6	0.0	0.0	3.7	1.2	2.1	4.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.0	67.7	43.1	17.7	14.2	3.5	0.0	0.0	65.8	72.8	51.0	54.6
LnGrp LOS	E	E	D	B	B	A	A	A	E	E	D	D
Approach Vol, veh/h		752			1335			104			247	
Approach Delay, s/veh		65.2			13.8			65.8			56.0	
Approach LOS		E			B			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	17.1	74.4	33.7	0.0	27.9	12.6	95.6
Change Period (Y+Rc), s	* 7.2	* 7.2	7.3	5.8	5.7	* 7.2	7.6	* 7.3
Max Green Setting (Gmax), s	14	* 41	12.7	34.2	14.3	* 41	12.4	* 42
Max Q Clear Time (g_c+I1), s	4.5	9.7	2.9	26.0	0.0	13.4	5.9	29.3
Green Ext Time (p_c), s	0.0	0.3	0.0	2.0	0.0	0.3	0.0	5.3

Intersection Summary	
HCM 6th Ctrl Delay	36.1
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

US 50 E Carson Street
Timing Plan: AM Peak

4: US 50 E & Silver State Street
HCM 6th TWSC

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	595	1185	10	5	30
Future Vol, veh/h	15	595	1185	10	5	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	380	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	8	8	6	6	0	0
Mvmt Flow	16	626	1247	11	5	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1258	0	-	0	1598	629
Stage 1	-	-	-	-	1253	-
Stage 2	-	-	-	-	345	-
Critical Hdwy	4.26	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.28	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	517	-	-	-	99	430
Stage 1	-	-	-	-	236	-
Stage 2	-	-	-	-	694	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	517	-	-	-	96	430
Mov Cap-2 Maneuver	-	-	-	-	187	-
Stage 1	-	-	-	-	229	-
Stage 2	-	-	-	-	694	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	16
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	517	-	-	-	363
HCM Lane V/C Ratio	0.031	-	-	-	0.101
HCM Control Delay (s)	12.2	-	-	-	16
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

US 50 E Carson Street
Timing Plan: AM Peak

5: Brown St & US 50 E
HCM 6th TWSC

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	575	25	15	1165	30	5
Future Vol, veh/h	575	25	15	1165	30	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	9	9	7	7	3	3
Mvmt Flow	639	28	17	1294	33	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	667	0	1334	334
Stage 1	-	-	-	-	653	-
Stage 2	-	-	-	-	681	-
Critical Hdwy	-	-	4.24	-	6.86	6.96
Critical Hdwy Stg 1	-	-	-	-	5.86	-
Critical Hdwy Stg 2	-	-	-	-	5.86	-
Follow-up Hdwy	-	-	2.27	-	3.53	3.33
Pot Cap-1 Maneuver	-	-	886	-	144	659
Stage 1	-	-	-	-	477	-
Stage 2	-	-	-	-	461	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	886	-	141	659
Mov Cap-2 Maneuver	-	-	-	-	276	-
Stage 1	-	-	-	-	477	-
Stage 2	-	-	-	-	452	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	18.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	301	-	-	886	-
HCM Lane V/C Ratio	0.129	-	-	0.019	-
HCM Control Delay (s)	18.7	-	-	9.1	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.4	-	-	0.1	-

US 50 E Carson Street
Timing Plan: AM Peak

6: Fairview Drive & US 50 E
HCM 6th Signalized Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	495	40	355	990	320	130	180	205	160	100	60
Future Volume (veh/h)	45	495	40	355	990	320	130	180	205	160	100	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1841	1841	1841	1870	1870	1870	1781	1781	1781
Adj Flow Rate, veh/h	48	532	0	382	1065	0	140	194	220	172	108	65
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	10	10	10	4	4	4	2	2	2	8	8	8
Cap, veh/h	61	1694		351	2022		161	294	249	221	284	160
Arrive On Green	0.04	0.51	0.00	0.10	0.58	0.00	0.09	0.16	0.16	0.07	0.14	0.14
Sat Flow, veh/h	1668	3328	1485	3401	3497	1560	1781	1870	1585	3291	2088	1175
Grp Volume(v), veh/h	48	532	0	382	1065	0	140	194	220	172	86	87
Grp Sat Flow(s),veh/h/ln	1668	1664	1485	1700	1749	1560	1781	1870	1585	1646	1692	1570
Q Serve(g_s), s	4.5	14.8	0.0	16.3	29.2	0.0	12.3	15.4	21.5	8.1	7.3	8.0
Cycle Q Clear(g_c), s	4.5	14.8	0.0	16.3	29.2	0.0	12.3	15.4	21.5	8.1	7.3	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.75
Lane Grp Cap(c), veh/h	61	1694		351	2022		161	294	249	221	230	214
V/C Ratio(X)	0.79	0.31		1.09	0.53		0.87	0.66	0.88	0.78	0.37	0.41
Avail Cap(c_a), veh/h	124	1694		351	2022		195	412	349	560	372	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	75.5	22.7	0.0	70.8	20.2	0.0	70.9	62.6	65.2	72.6	62.1	62.4
Incr Delay (d2), s/veh	20.1	0.5	0.0	73.9	1.0	0.0	27.8	2.5	17.4	5.9	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	5.8	0.0	10.6	11.7	0.0	6.8	7.5	9.7	3.6	3.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	95.6	23.2	0.0	144.8	21.2	0.0	98.7	65.2	82.5	78.5	63.1	63.7
LnGrp LOS	F	C		F	C		F	E	F	E	E	E
Approach Vol, veh/h		580	A		1447	A		554			345	
Approach Delay, s/veh		29.2			53.8			80.5			70.9	
Approach LOS		C			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	30.1	25.0	86.2	20.0	26.8	14.0	97.2
Change Period (Y+Rc), s	* 6.1	* 5.3	* 8.7	5.8	* 5.7	* 5.3	8.3	5.8
Max Green Setting (Gmax), s	* 27	* 35	* 16	54.2	* 17	* 35	11.7	44.2
Max Q Clear Time (g_c+I1), s	10.1	23.5	18.3	16.8	14.3	10.0	6.5	31.2
Green Ext Time (p_c), s	0.5	1.3	0.0	3.6	0.1	0.9	0.0	5.7

Intersection Summary	
HCM 6th Ctrl Delay	56.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

US 50 E Carson Street
Timing Plan: AM Peak

7: US 50 E & Sherman Lane
HCM 6th TWSC

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	855	1635	25	5	30
Future Vol, veh/h	5	855	1635	25	5	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	8	8	7	7	0	0
Mvmt Flow	5	919	1758	27	5	32

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1785	0	-	0	2242	893
Stage 1	-	-	-	-	1772	-
Stage 2	-	-	-	-	470	-
Critical Hdwy	4.26	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.28	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	319	-	-	-	37	289
Stage 1	-	-	-	-	124	-
Stage 2	-	-	-	-	601	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	319	-	-	-	36	289
Mov Cap-2 Maneuver	-	-	-	-	100	-
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	601	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	23.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	319	-	-	-	228
HCM Lane V/C Ratio	0.017	-	-	-	0.165
HCM Control Delay (s)	16.5	0.3	-	-	23.9
HCM Lane LOS	C	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

US 50 E Carson Street
Timing Plan: AM Peak

8: Empire Ranch Road & US 50 E
HCM 6th TWSC

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	845	10	5	1640	5	10	5	5	5	5	10
Future Vol, veh/h	5	845	10	5	1640	5	10	5	5	5	5	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	8	8	8	5	5	5	0	0	0	0	0	0
Mvmt Flow	5	889	11	5	1726	5	11	5	5	5	5	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1731	0	0	900	0	0	1781	2646	450	2196	2649	866
Stage 1	-	-	-	-	-	-	905	905	-	1739	1739	-
Stage 2	-	-	-	-	-	-	876	1741	-	457	910	-
Critical Hdwy	4.26	-	-	4.2	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.28	-	-	2.25	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	335	-	-	732	-	-	53	24	562	26	23	301
Stage 1	-	-	-	-	-	-	302	358	-	92	143	-
Stage 2	-	-	-	-	-	-	314	142	-	558	356	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	335	-	-	732	-	-	41	23	562	21	22	301
Mov Cap-2 Maneuver	-	-	-	-	-	-	41	23	-	21	22	-
Stage 1	-	-	-	-	-	-	297	353	-	91	142	-
Stage 2	-	-	-	-	-	-	290	141	-	536	351	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	151.7	169.2
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	43	335	-	-	732	-	-	40
HCM Lane V/C Ratio	0.49	0.016	-	-	0.007	-	-	0.526
HCM Control Delay (s)	151.7	15.9	-	-	10	-	-	169.2
HCM Lane LOS	F	C	-	-	A	-	-	F
HCM 95th %tile Q(veh)	1.8	0	-	-	0	-	-	1.9

US 50 E Carson Street
Timing Plan: AM Peak

9: US 50 E & Nye Lane
HCM 6th TWSC

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	55	800	1635	10	5	15
Future Vol, veh/h	55	800	1635	10	5	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	25	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	8	8	6	6	0	0
Mvmt Flow	60	879	1797	11	5	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1808	0	-	0	2363	904
Stage 1	-	-	-	-	1803	-
Stage 2	-	-	-	-	560	-
Critical Hdwy	4.26	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.28	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	312	-	-	-	30	284
Stage 1	-	-	-	-	119	-
Stage 2	-	-	-	-	541	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	312	-	-	-	24	284
Mov Cap-2 Maneuver	-	-	-	-	80	-
Stage 1	-	-	-	-	96	-
Stage 2	-	-	-	-	541	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	28.8
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	312	-	-	-	173
HCM Lane V/C Ratio	0.194	-	-	-	0.127
HCM Control Delay (s)	19.3	-	-	-	28.8
HCM Lane LOS	C	-	-	-	D
HCM 95th %tile Q(veh)	0.7	-	-	-	0.4

US 50 E Carson Street
Timing Plan: AM Peak

10: N Deer Run Rd/Arrowhead Drive & US 50 E
HCM 6th Signalized Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	670	115	15	1610	225	30	10	5	35	5	5
Future Volume (veh/h)	20	670	115	15	1610	225	30	10	5	35	5	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1737	1737	1737	1826	1826	1826	1441	1441	1441	1781	1781	1781
Adj Flow Rate, veh/h	22	744	128	17	1789	250	33	11	6	39	6	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	11	11	11	5	5	5	31	31	31	8	8	8
Cap, veh/h	35	2482	1107	31	2307	315	110	49	27	116	46	46
Arrive On Green	0.02	0.75	0.75	0.02	0.75	0.75	0.06	0.06	0.06	0.06	0.06	0.06
Sat Flow, veh/h	1654	3300	1472	1739	3067	419	1080	876	478	1330	817	817
Grp Volume(v), veh/h	22	744	128	17	993	1046	33	0	17	39	0	12
Grp Sat Flow(s),veh/h/ln	1654	1650	1472	1739	1735	1751	1080	0	1355	1330	0	1634
Q Serve(g_s), s	1.6	9.0	3.0	1.2	41.5	45.9	3.7	0.0	1.5	3.6	0.0	0.9
Cycle Q Clear(g_c), s	1.6	9.0	3.0	1.2	41.5	45.9	4.6	0.0	1.5	5.1	0.0	0.9
Prop In Lane	1.00		1.00	1.00		0.24	1.00		0.35	1.00		0.50
Lane Grp Cap(c), veh/h	35	2482	1107	31	1305	1317	110	0	76	116	0	91
V/C Ratio(X)	0.62	0.30	0.12	0.55	0.76	0.79	0.30	0.00	0.22	0.34	0.00	0.13
Avail Cap(c_a), veh/h	172	2482	1107	104	1305	1317	374	0	406	441	0	490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.7	5.0	4.2	60.9	9.0	9.5	58.3	0.0	56.4	58.9	0.0	56.1
Incr Delay (d2), s/veh	6.5	0.3	0.2	5.5	4.2	5.0	0.6	0.0	0.6	0.6	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.3	0.7	0.6	12.2	13.8	1.1	0.0	0.5	1.2	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.2	5.3	4.4	66.4	13.2	14.5	58.9	0.0	57.0	59.5	0.0	56.4
LnGrp LOS	E	A	A	E	B	B	E	A	E	E	A	E
Approach Vol, veh/h		894			2056			50			51	
Approach Delay, s/veh		6.7			14.3			58.2			58.8	
Approach LOS		A			B			E			E	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.5	9.7	100.8		14.5	9.7	100.9				
Change Period (Y+Rc), s		* 7.5	* 7.5	* 6.8		* 7.5	7.0	6.8				
Max Green Setting (Gmax), s		* 38	* 7.5	* 54		* 38	13.0	53.2				
Max Q Clear Time (g_c+I1), s		6.6	3.2	11.0		7.1	3.6	47.9				
Green Ext Time (p_c), s		0.1	0.0	3.1		0.1	0.0	3.8				

Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

US 50 E Carson Street
Timing Plan: AM Peak

11: US 50 E & Flint Rd
HCM 6th TWSC

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	5	690	20	5	1845
Future Vol, veh/h	5	5	690	20	5	1845
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	300	350	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	4	4	8	8	11	11
Mvmt Flow	6	6	775	22	6	2073

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1824	388	0	0	797	0
Stage 1	775	-	-	-	-	-
Stage 2	1049	-	-	-	-	-
Critical Hdwy	6.88	6.98	-	-	4.32	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.34	-	-	2.31	-
Pot Cap-1 Maneuver	67	605	-	-	765	-
Stage 1	410	-	-	-	-	-
Stage 2	294	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	66	605	-	-	765	-
Mov Cap-2 Maneuver	66	-	-	-	-	-
Stage 1	410	-	-	-	-	-
Stage 2	292	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	34.8	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	132	765	-
HCM Lane V/C Ratio	-	-	0.085	0.007	-
HCM Control Delay (s)	-	-	34.8	9.7	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

US 50 E Carson Street
Timing Plan: AM Peak

12: US 50 E & Linehan Road
HCM 6th TWSC

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	675	1830	5	5	20
Future Vol, veh/h	20	675	1830	5	5	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	260	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	8	8	3	3	56	56
Mvmt Flow	23	785	2128	6	6	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2134	0	-	0	2567	1064
Stage 1	-	-	-	-	2128	-
Stage 2	-	-	-	-	439	-
Critical Hdwy	4.26	-	-	-	7.92	8.02
Critical Hdwy Stg 1	-	-	-	-	6.92	-
Critical Hdwy Stg 2	-	-	-	-	6.92	-
Follow-up Hdwy	2.28	-	-	-	4.06	3.86
Pot Cap-1 Maneuver	230	-	-	-	10	146
Stage 1	-	-	-	-	39	-
Stage 2	-	-	-	-	483	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	230	-	-	-	9	146
Mov Cap-2 Maneuver	-	-	-	-	9	-
Stage 1	-	-	-	-	35	-
Stage 2	-	-	-	-	483	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	257.2
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	230	-	-	-	36
HCM Lane V/C Ratio	0.101	-	-	-	0.807
HCM Control Delay (s)	22.4	-	-	-	257.2
HCM Lane LOS	C	-	-	-	F
HCM 95th %tile Q(veh)	0.3	-	-	-	2.9

US 50 E Carson Street
Timing Plan: AM Peak

13: US 50 E & Red Rock Road
HCM 6th TWSC

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	655	1775	15	5	60
Future Vol, veh/h	25	655	1775	15	5	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	390	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	9	9	3	3	0	0
Mvmt Flow	28	736	1994	17	6	67

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	2011	0	-	0	2418	997
Stage 1	-	-	-	-	1994	-
Stage 2	-	-	-	-	424	-
Critical Hdwy	4.28	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.29	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	255	-	-	-	28	246
Stage 1	-	-	-	-	94	-
Stage 2	-	-	-	-	634	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	255	-	-	-	25	246
Mov Cap-2 Maneuver	-	-	-	-	72	-
Stage 1	-	-	-	-	84	-
Stage 2	-	-	-	-	634	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	31.6
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	255	-	-	-	207
HCM Lane V/C Ratio	0.11	-	-	-	0.353
HCM Control Delay (s)	20.9	-	-	-	31.6
HCM Lane LOS	C	-	-	-	D
HCM 95th %tile Q(veh)	0.4	-	-	-	1.5

US 50 E Carson Street
Timing Plan: AM Peak

14: Highlands Drive & US 50 E
HCM 6th TWSC

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	645	15	5	1715	75	15
Future Vol, veh/h	645	15	5	1715	75	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	25	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	9	9	3	3	0	0
Mvmt Flow	717	17	6	1906	83	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	734	0	1682	359
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	965	-
Critical Hdwy	-	-	4.16	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.23	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	860	-	87	643
Stage 1	-	-	-	-	450	-
Stage 2	-	-	-	-	335	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	860	-	86	643
Mov Cap-2 Maneuver	-	-	-	-	213	-
Stage 1	-	-	-	-	450	-
Stage 2	-	-	-	-	333	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	30.3
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	240	-	-	860	-
HCM Lane V/C Ratio	0.417	-	-	0.006	-
HCM Control Delay (s)	30.3	-	-	9.2	-
HCM Lane LOS	D	-	-	A	-
HCM 95th %tile Q(veh)	1.9	-	-	0	-

US 50 E Carson Street
Timing Plan: PM Peak

1: US 50 E & I-580 Ramp
HCM Signalized Intersection Capacity Analysis

Movement	EBL	EBT	WBL	WBT	SEL	NWL
Lane Configurations						
Traffic Volume (vph)	220	820	325	655	360	160
Future Volume (vph)	220	820	325	655	360	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	11.3	7.4	10.7	6.8	11.4	12.2
Lane Util. Factor	0.97	0.91	0.97	0.91	0.97	0.97
Frt	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (prot)	3433	5085	3433	5085	3502	3502
Flt Permitted	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (perm)	3433	5085	3433	5085	3502	3502
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	891	353	712	391	174
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	239	891	353	712	391	174
Heavy Vehicles (%)	2%	2%	2%	2%	0%	0%
Turn Type	Prot	NA	Prot	NA	Prot	Prot
Protected Phases	7	4	3	8	1	5
Permitted Phases						
Actuated Green, G (s)	11.3	31.9	13.6	34.2	15.0	14.2
Effective Green, g (s)	11.3	31.9	13.6	34.2	15.0	14.2
Actuated g/C Ratio	0.13	0.35	0.15	0.38	0.17	0.16
Clearance Time (s)	11.3	7.4	10.7	6.8	11.4	12.2
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	431	1802	518	1932	583	552
v/s Ratio Prot	0.07	c0.18	c0.10	0.14	c0.11	0.05
v/s Ratio Perm						
v/c Ratio	0.55	0.49	0.68	0.37	0.67	0.32
Uniform Delay, d1	37.0	22.7	36.2	20.1	35.2	33.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.5	1.0	3.7	0.5	3.0	0.3
Delay (s)	38.5	23.7	39.8	20.7	38.2	33.9
Level of Service	D	C	D	C	D	C
Approach Delay (s)		26.8		27.0		
Approach LOS		C		C		

Intersection Summary			
HCM 2000 Control Delay	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	30.3
Intersection Capacity Utilization	60.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

US 50 E Carson Street
Timing Plan: PM Peak

2: Lompa Lane & US 50 E
HCM 6th Signalized Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	1335	210	25	1105	70	130	30	25	75	35	70
Future Volume (veh/h)	85	1335	210	25	1105	70	130	30	25	75	35	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	89	1391	0	26	1151	73	135	31	26	78	36	73
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	0	0	0	0	0	0
Cap, veh/h	122	3358		85	3125	198	231	172	145	278	101	205
Arrive On Green	0.07	0.66	0.00	0.05	0.64	0.64	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1781	5106	1585	1781	4907	311	1305	955	801	1368	560	1136
Grp Volume(v), veh/h	89	1391	0	26	798	426	135	0	57	78	0	109
Grp Sat Flow(s),veh/h/ln	1781	1702	1585	1781	1702	1814	1305	0	1756	1368	0	1696
Q Serve(g_s), s	5.1	13.5	0.0	1.5	11.7	11.7	10.6	0.0	2.9	5.4	0.0	5.9
Cycle Q Clear(g_c), s	5.1	13.5	0.0	1.5	11.7	11.7	16.5	0.0	2.9	8.3	0.0	5.9
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.46	1.00		0.67
Lane Grp Cap(c), veh/h	122	3358		85	2167	1155	231	0	317	278	0	306
V/C Ratio(X)	0.73	0.41		0.31	0.37	0.37	0.59	0.00	0.18	0.28	0.00	0.36
Avail Cap(c_a), veh/h	271	3358		271	2167	1155	505	0	686	565	0	662
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.9	8.5	0.0	48.3	9.1	9.1	44.9	0.0	36.4	39.9	0.0	37.7
Incr Delay (d2), s/veh	3.1	0.4	0.0	0.8	0.5	0.9	1.3	0.0	0.1	0.3	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	4.2	0.0	0.7	3.8	4.2	3.5	0.0	1.2	1.8	0.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.0	8.8	0.0	49.1	9.5	10.0	46.2	0.0	36.6	40.2	0.0	38.1
LnGrp LOS	D	A		D	A	A	D	A	D	D	A	D
Approach Vol, veh/h		1480	A		1250			192			187	
Approach Delay, s/veh		11.4			10.5			43.3			39.0	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	22.9	9.0	73.1	22.9	11.2	70.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	41.0	16.0	36.0	41.0	16.0	36.0
Max Q Clear Time (g_c+I1), s	18.5	3.5	15.5	10.3	7.1	13.7
Green Ext Time (p_c), s	0.4	0.0	8.0	0.5	0.1	6.5

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Notes

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

US 50 E Carson Street
Timing Plan: PM Peak

3: Airport Rd & US 50 E
HCM 6th Signalized Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	1125	185	35	930	55	155	130	35	95	140	115
Future Volume (veh/h)	125	1125	185	35	930	55	155	130	35	95	140	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1885	1885	1885	1900	1900	1900
Adj Flow Rate, veh/h	136	1223	201	38	1011	60	168	141	38	103	152	125
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	0	0	0
Cap, veh/h	159	894	399	645	1815	809	0	164	44	126	451	382
Arrive On Green	0.09	0.25	0.25	0.36	0.51	0.51	0.00	0.11	0.11	0.07	0.24	0.24
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	0	1430	385	1810	1900	1610
Grp Volume(v), veh/h	136	1223	201	38	1011	60	0	0	179	103	152	125
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	0	0	1816	1810	1900	1610
Q Serve(g_s), s	10.2	34.2	13.9	1.9	26.5	1.7	0.0	0.0	13.2	7.6	9.0	8.7
Cycle Q Clear(g_c), s	10.2	34.2	13.9	1.9	26.5	1.7	0.0	0.0	13.2	7.6	9.0	8.7
Prop In Lane	1.00		1.00	1.00		1.00	0.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	159	894	399	645	1815	809	0	0	209	126	451	382
V/C Ratio(X)	0.85	1.37	0.50	0.06	0.56	0.07	0.00	0.00	0.86	0.82	0.34	0.33
Avail Cap(c_a), veh/h	162	894	399	645	1815	809	0	0	545	184	570	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	50.9	38.8	28.3	22.8	6.9	0.0	0.0	59.1	62.4	43.0	42.9
Incr Delay (d2), s/veh	31.3	173.0	4.5	0.0	1.2	0.2	0.0	0.0	3.9	10.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	36.2	5.8	0.8	10.9	1.0	0.0	0.0	6.2	3.9	4.3	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	92.3	223.9	43.3	28.3	24.0	7.1	0.0	0.0	63.0	73.3	43.1	43.1
LnGrp LOS	F	F	D	C	C	A	A	A	E	E	D	D
Approach Vol, veh/h		1560			1109			179			380	
Approach Delay, s/veh		189.2			23.2			63.0			51.3	
Approach LOS		F			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	22.8	56.5	40.0	0.0	39.5	19.8	76.8
Change Period (Y+Rc), s	* 7.2	* 7.2	7.3	5.8	5.7	* 7.2	7.6	* 7.3
Max Green Setting (Gmax), s	14.6	* 41	12.7	34.2	14.3	* 41	12.4	* 42
Max Q Clear Time (g_c+I1), s	19.6	15.2	3.9	36.2	0.0	11.0	12.2	28.5
Green Ext Time (p_c), s	0.0	0.5	0.0	0.0	0.0	0.5	0.0	4.2

Intersection Summary	
HCM 6th Ctrl Delay	108.9
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

US 50 E Carson Street
Timing Plan: PM Peak

4: US 50 E & Silver State Street
HCM 6th TWSC

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	1230	1000	5	5	20
Future Vol, veh/h	25	1230	1000	5	5	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	380	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	3	3	0	0
Mvmt Flow	27	1323	1075	5	5	22

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1080	0	-	0	1794	540
Stage 1	-	-	-	-	1078	-
Stage 2	-	-	-	-	716	-
Critical Hdwy	4.14	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.22	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	641	-	-	-	73	491
Stage 1	-	-	-	-	292	-
Stage 2	-	-	-	-	450	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	641	-	-	-	70	491
Mov Cap-2 Maneuver	-	-	-	-	187	-
Stage 1	-	-	-	-	280	-
Stage 2	-	-	-	-	450	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	15.5
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	641	-	-	-	371
HCM Lane V/C Ratio	0.042	-	-	-	0.072
HCM Control Delay (s)	10.9	-	-	-	15.5
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

US 50 E Carson Street
Timing Plan: PM Peak

5: Brown St & US 50 E
HCM 6th TWSC

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1145	90	5	965	40	15
Future Vol, veh/h	1145	90	5	965	40	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	50	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	3	3	0	0
Mvmt Flow	1180	93	5	995	41	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1273	0	1735	637
Stage 1	-	-	-	-	1227	-
Stage 2	-	-	-	-	508	-
Critical Hdwy	-	-	4.16	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.23	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	536	-	80	425
Stage 1	-	-	-	-	244	-
Stage 2	-	-	-	-	575	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	536	-	79	425
Mov Cap-2 Maneuver	-	-	-	-	185	-
Stage 1	-	-	-	-	244	-
Stage 2	-	-	-	-	570	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	27.1
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	219	-	-	536	-
HCM Lane V/C Ratio	0.259	-	-	0.01	-
HCM Control Delay (s)	27.1	-	-	11.8	-
HCM Lane LOS	D	-	-	B	-
HCM 95th %tile Q(veh)	1	-	-	0	-

US 50 E Carson Street
Timing Plan: PM Peak

6: Fairview Drive & US 50 E
HCM 6th Signalized Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	990	105	335	785	205	150	195	525	455	185	35
Future Volume (veh/h)	65	990	105	335	785	205	150	195	525	455	185	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	67	1021	0	345	809	0	155	201	541	469	191	36
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	1	1	1	2	2	2
Cap, veh/h	85	1288		357	1495		176	415	352	519	823	152
Arrive On Green	0.05	0.36	0.00	0.10	0.42	0.00	0.10	0.22	0.22	0.15	0.27	0.27
Sat Flow, veh/h	1781	3554	1585	3456	3554	1585	1795	1885	1598	3456	2994	554
Grp Volume(v), veh/h	67	1021	0	345	809	0	155	201	541	469	112	115
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1728	1777	1585	1795	1885	1598	1728	1777	1771
Q Serve(g_s), s	5.9	40.6	0.0	15.7	27.0	0.0	13.5	14.7	34.8	21.1	7.7	8.0
Cycle Q Clear(g_c), s	5.9	40.6	0.0	15.7	27.0	0.0	13.5	14.7	34.8	21.1	7.7	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	85	1288		357	1495		176	415	352	519	488	487
V/C Ratio(X)	0.79	0.79		0.97	0.54		0.88	0.48	1.54	0.90	0.23	0.24
Avail Cap(c_a), veh/h	132	1288		357	1495		197	415	352	588	488	487
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.5	45.1	0.0	70.6	34.3	0.0	70.3	53.8	61.6	66.0	44.3	44.4
Incr Delay (d2), s/veh	15.9	5.1	0.0	39.0	1.4	0.0	31.5	0.9	255.7	16.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	18.4	0.0	8.8	11.8	0.0	7.7	7.0	38.8	10.4	3.4	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	90.4	50.1	0.0	109.6	35.7	0.0	101.8	54.6	317.3	82.1	44.6	44.7
LnGrp LOS	F	D		F	D		F	D	F	F	D	D
Approach Vol, veh/h		1088	A		1154	A		897			696	
Approach Delay, s/veh		52.6			57.8			221.2			69.9	
Approach LOS		D			E			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.8	40.1	25.0	63.1	21.2	48.7	15.8	72.3
Change Period (Y+Rc), s	* 6.1	* 5.3	* 8.7	5.8	* 5.7	* 5.3	8.3	5.8
Max Green Setting (Gmax), s	* 27	* 35	* 16	54.2	* 17	* 35	11.7	44.2
Max Q Clear Time (g_c+I1), s	23.1	36.8	17.7	42.6	15.5	10.0	7.9	29.0
Green Ext Time (p_c), s	0.7	0.0	0.0	5.0	0.1	1.2	0.0	4.5

Intersection Summary	
HCM 6th Ctrl Delay	96.7
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

US 50 E Carson Street
Timing Plan: PM Peak

7: US 50 E & Sherman Lane
HCM 6th TWSC

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	1950	1305	15	5	20
Future Vol, veh/h	20	1950	1305	15	5	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	3	3	0	0
Mvmt Flow	21	2010	1345	15	5	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1360	0	-	0	2400	680
Stage 1	-	-	-	-	1353	-
Stage 2	-	-	-	-	1047	-
Critical Hdwy	4.14	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.22	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	501	-	-	-	29	398
Stage 1	-	-	-	-	209	-
Stage 2	-	-	-	-	303	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	501	-	-	-	29	398
Mov Cap-2 Maneuver	-	-	-	-	126	-
Stage 1	-	-	-	-	209	-
Stage 2	-	-	-	-	303	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	19.3
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	501	-	-	-	278
HCM Lane V/C Ratio	0.041	-	-	-	0.093
HCM Control Delay (s)	12.5	0	-	-	19.3
HCM Lane LOS	B	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3

US 50 E Carson Street
Timing Plan: PM Peak

8: Empire Ranch Road & US 50 E
HCM 6th TWSC

Intersection	
Int Delay, s/veh	46.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	1910	25	10	1265	20	10	5	10	5	5	45
Future Vol, veh/h	20	1910	25	10	1265	20	10	5	10	5	5	45
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	50	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0	0	0	0
Mvmt Flow	21	1990	26	10	1318	21	10	5	10	5	5	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1339	0	0	2016	0	0	2727	3404	1008	2389	3407	670
Stage 1	-	-	-	-	-	-	2045	2045	-	1349	1349	-
Stage 2	-	-	-	-	-	-	682	1359	-	1040	2058	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	511	-	-	279	-	-	~ 10	7	242	18	7	404
Stage 1	-	-	-	-	-	-	59	100	-	162	221	-
Stage 2	-	-	-	-	-	-	411	219	-	250	99	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	511	-	-	279	-	-	~ 2	6	242	~ 4	6	404
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 2	6	-	~ 4	6	-
Stage 1	-	-	-	-	-	-	57	96	-	155	213	-
Stage 2	-	-	-	-	-	-	342	211	-	217	95	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	$ 4187.9	$ 922.3
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	4	511	-	-	279	-	-	25
HCM Lane V/C Ratio	6.51	0.041	-	-	0.037	-	-	2.292
HCM Control Delay (s)	$ 4187.9	12.3	-	-	18.4	-	-	$ 922.3
HCM Lane LOS	F	B	-	-	C	-	-	F
HCM 95th %tile Q(veh)	4.8	0.1	-	-	0.1	-	-	7.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

US 50 E Carson Street
Timing Plan: PM Peak

9: US 50 E & Nye Lane
HCM 6th TWSC

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	1910	1260	25	10	35
Future Vol, veh/h	15	1910	1260	25	10	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	25	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	16	2011	1326	26	11	37

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1352	0	-	0	2377	676
Stage 1	-	-	-	-	1339	-
Stage 2	-	-	-	-	1038	-
Critical Hdwy	4.14	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.22	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	505	-	-	-	30	401
Stage 1	-	-	-	-	213	-
Stage 2	-	-	-	-	307	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	505	-	-	-	29	401
Mov Cap-2 Maneuver	-	-	-	-	125	-
Stage 1	-	-	-	-	206	-
Stage 2	-	-	-	-	307	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	21.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	505	-	-	-	269
HCM Lane V/C Ratio	0.031	-	-	-	0.176
HCM Control Delay (s)	12.4	-	-	-	21.2
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

US 50 E Carson Street
Timing Plan: PM Peak

10: N Deer Run Rd/Arrowhead Drive & US 50 E
HCM 6th Signalized Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1865	45	15	1145	35	130	15	50	260	10	10
Future Volume (veh/h)	10	1865	45	15	1145	35	130	15	50	260	10	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1841	1841	1841	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	11	1963	47	16	1205	37	137	16	53	274	11	11
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	4	4	4	2	2	2	1	1	1
Cap, veh/h	23	1979	883	30	1958	60	394	96	318	351	218	218
Arrive On Green	0.01	0.56	0.56	0.02	0.57	0.57	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1781	3554	1585	1753	3464	106	1390	381	1262	1342	865	865
Grp Volume(v), veh/h	11	1963	47	16	608	634	137	0	69	274	0	22
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1753	1749	1822	1390	0	1643	1342	0	1730
Q Serve(g_s), s	0.8	68.3	1.7	1.1	29.0	29.0	10.4	0.0	4.1	25.0	0.0	1.2
Cycle Q Clear(g_c), s	0.8	68.3	1.7	1.1	29.0	29.0	11.6	0.0	4.1	29.1	0.0	1.2
Prop In Lane	1.00		1.00	1.00		0.06	1.00		0.77	1.00		0.50
Lane Grp Cap(c), veh/h	23	1979	883	30	989	1030	394	0	413	351	0	435
V/C Ratio(X)	0.49	0.99	0.05	0.54	0.62	0.62	0.35	0.00	0.17	0.78	0.00	0.05
Avail Cap(c_a), veh/h	185	1979	883	105	989	1030	461	0	493	416	0	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.3	27.4	12.6	60.9	18.1	18.1	39.8	0.0	36.5	47.9	0.0	35.5
Incr Delay (d2), s/veh	5.9	18.4	0.1	5.4	2.9	2.8	0.2	0.0	0.1	6.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	30.0	0.6	0.5	11.1	11.6	3.6	0.0	1.7	9.0	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.2	45.8	12.8	66.4	21.0	20.9	40.0	0.0	36.6	54.3	0.0	35.5
LnGrp LOS	E	D	B	E	C	C	D	A	D	D	A	D
Approach Vol, veh/h		2021			1258			206			296	
Approach Delay, s/veh		45.2			21.5			38.9			52.9	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	39.0	9.6	76.4	39.0	8.6	77.5
Change Period (Y+Rc), s	* 7.5	* 7.5	* 6.8	* 7.5	7.0	6.8
Max Green Setting (Gmax), s	* 38	* 7.5	* 54	* 38	13.0	53.2
Max Q Clear Time (g_c+I1), s	13.6	3.1	70.3	31.1	2.8	31.0
Green Ext Time (p_c), s	0.4	0.0	0.0	0.3	0.0	4.4

Intersection Summary	
HCM 6th Ctrl Delay	37.5
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

US 50 E Carson Street
Timing Plan: PM Peak

11: US 50 E & Flint Rd
HCM 6th TWSC

Intersection	
Int Delay, s/veh	29

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	5	2135	40	5	1145
Future Vol, veh/h	50	5	2135	40	5	1145
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	300	350	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	28	28	2	2
Mvmt Flow	52	5	2224	42	5	1193

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2831	1112	0	0	2266	0
Stage 1	2224	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	4.14	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	2.22	-
Pot Cap-1 Maneuver	~ 14	202	-	-	222	-
Stage 1	67	-	-	-	-	-
Stage 2	504	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 14	202	-	-	222	-
Mov Cap-2 Maneuver	~ 14	-	-	-	-	-
Stage 1	67	-	-	-	-	-
Stage 2	492	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	1782.1	0	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	15	222	-
HCM Lane V/C Ratio	-	-	3.819	0.023	-
HCM Control Delay (s)	-	-	$ 1782.1	21.6	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	8	0.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

US 50 E Carson Street
Timing Plan: PM Peak

12: US 50 E & Linehan Road
HCM 6th TWSC

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	35	2105	1120	5	20	30
Future Vol, veh/h	35	2105	1120	5	20	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	260	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	9	9
Mvmt Flow	35	2126	1131	5	20	30

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1136	0	-	0	2264	566
Stage 1	-	-	-	-	1131	-
Stage 2	-	-	-	-	1133	-
Critical Hdwy	4.14	-	-	-	6.98	7.08
Critical Hdwy Stg 1	-	-	-	-	5.98	-
Critical Hdwy Stg 2	-	-	-	-	5.98	-
Follow-up Hdwy	2.22	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	611	-	-	-	31	450
Stage 1	-	-	-	-	256	-
Stage 2	-	-	-	-	255	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	611	-	-	-	29	450
Mov Cap-2 Maneuver	-	-	-	-	29	-
Stage 1	-	-	-	-	241	-
Stage 2	-	-	-	-	255	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	153.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	611	-	-	-	66
HCM Lane V/C Ratio	0.058	-	-	-	0.765
HCM Control Delay (s)	11.3	-	-	-	153.6
HCM Lane LOS	B	-	-	-	F
HCM 95th %tile Q(veh)	0.2	-	-	-	3.5

US 50 E Carson Street
Timing Plan: PM Peak

13: US 50 E & Red Rock Road
HCM 6th TWSC

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	65	2060	1075	15	5	50
Future Vol, veh/h	65	2060	1075	15	5	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	390	-	-	0	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	66	2081	1086	15	5	51

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1101	0	-	0	2259	543
Stage 1	-	-	-	-	1086	-
Stage 2	-	-	-	-	1173	-
Critical Hdwy	4.14	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.22	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	630	-	-	-	36	489
Stage 1	-	-	-	-	289	-
Stage 2	-	-	-	-	261	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	630	-	-	-	32	489
Mov Cap-2 Maneuver	-	-	-	-	133	-
Stage 1	-	-	-	-	259	-
Stage 2	-	-	-	-	261	-

Approach	EB	WB	SB
HCM Control Delay, s	0.3	0	15.7
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	630	-	-	-	393
HCM Lane V/C Ratio	0.104	-	-	-	0.141
HCM Control Delay (s)	11.4	-	-	-	15.7
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	0.5

US 50 E Carson Street
Timing Plan: PM Peak

14: Highlands Drive & US 50 E
HCM 6th TWSC

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1990	75	20	1060	30	5
Future Vol, veh/h	1990	75	20	1060	30	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	25	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	2010	76	20	1071	30	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2086	0	2586	1005
Stage 1	-	-	-	-	2010	-
Stage 2	-	-	-	-	576	-
Critical Hdwy	-	-	4.14	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.22	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	262	-	~ 21	243
Stage 1	-	-	-	-	92	-
Stage 2	-	-	-	-	531	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	262	-	~ 19	243
Mov Cap-2 Maneuver	-	-	-	-	75	-
Stage 1	-	-	-	-	92	-
Stage 2	-	-	-	-	491	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	77.3
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	83	-	-	262	-
HCM Lane V/C Ratio	0.426	-	-	0.077	-
HCM Control Delay (s)	77.3	-	-	19.9	-
HCM Lane LOS	F	-	-	C	-
HCM 95th %tile Q(veh)	1.7	-	-	0.2	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

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US-50 E. Carson Complete Streets Study
Turning Movement Classification Count
US-50 & Airport Road

File Name : US-50 and Airport Road
Site Code : 00000000
Start Date : 10/31/2023
Page No : 1

Groups Printed- Private - Light - Heavy

	Airport Southbound					US-50 Westbound					Airport Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	33	14	2	0	49	6	243	1	0	250	5	13	40	0	58	14	118	8	0	140	497
07:15 AM	47	19	6	0	72	8	281	3	0	292	1	12	43	0	56	22	154	9	0	185	605
07:30 AM	30	15	9	0	54	10	324	5	0	339	11	22	35	0	68	26	145	15	0	186	647
07:45 AM	23	20	11	0	54	9	305	4	0	318	5	30	42	0	77	14	159	10	0	183	632
Total	133	68	28	0	229	33	1153	13	0	1199	22	77	160	0	259	76	576	42	0	694	2381
08:00 AM	24	18	5	0	47	4	245	6	0	255	8	17	32	0	57	19	127	7	0	153	512
08:15 AM	26	16	7	0	49	6	218	1	0	225	12	27	24	0	63	13	160	8	0	181	518
08:30 AM	10	12	10	0	32	2	218	5	0	225	8	21	31	0	60	18	132	6	0	156	473
08:45 AM	17	9	6	0	32	8	246	1	0	255	3	10	20	0	33	10	145	12	0	167	487
Total	77	55	28	0	160	20	927	13	0	960	31	75	107	0	213	60	564	33	0	657	1990
*** BREAK ***																					
04:00 PM	26	32	24	0	82	12	247	10	0	269	10	26	31	0	67	47	244	25	0	316	734
04:15 PM	22	35	21	0	78	18	245	7	0	270	8	24	39	0	71	49	269	34	0	352	771
04:30 PM	32	38	23	0	93	11	236	11	0	258	11	43	42	0	96	44	328	31	0	403	850
04:45 PM	33	36	25	0	94	11	206	8	0	225	6	36	47	0	89	47	296	37	0	380	788
Total	113	141	93	0	347	52	934	36	0	1022	35	129	159	0	323	187	1137	127	0	1451	3143
05:00 PM	27	37	21	0	85	26	190	8	0	224	3	34	40	0	77	52	268	28	0	348	734
05:15 PM	22	30	23	0	75	15	240	10	0	265	4	37	48	0	89	51	269	47	0	367	796
05:30 PM	27	31	14	0	72	19	227	5	0	251	10	42	44	0	96	41	248	37	0	326	745
05:45 PM	26	39	18	0	83	15	175	3	0	193	3	37	40	0	80	40	171	22	0	233	589
Total	102	137	76	0	315	75	832	26	0	933	20	150	172	0	342	184	956	134	0	1274	2864
Grand Total	425	401	225	0	1051	180	3846	88	0	4114	108	431	598	0	1137	507	3233	336	0	4076	10378
Apprch %	40.4	38.2	21.4	0		4.4	93.5	2.1	0		9.5	37.9	52.6	0		12.4	79.3	8.2	0		
Total %	4.1	3.9	2.2	0	10.1	1.7	37.1	0.8	0	39.6	1	4.2	5.8	0	11	4.9	31.2	3.2	0	39.3	
Private	424	396	225	0	1045	179	3679										3073				10032
% Private	99.8	98.8	100	0	99.4	99.4	95.7	98.9	0	95.9	98.1	99.8	99	0	99.2	100	95.1	99.4	0	96	96.7
Light	1	2	0	0	3	1	94	1	0	96	2	1	5	0	8	0	96	1	0	97	204
% Light	0.2	0.5	0	0	0.3	0.6	2.4	1.1	0	2.3	1.9	0.2	0.8	0	0.7	0	3	0.3	0	2.4	2
Heavy	0	3	0	0	3	0	73	0	0	73	0	0	1	0	1	0	64	1	0	65	142
% Heavy	0	0.7	0	0	0.3	0	1.9	0	0	1.8	0	0	0.2	0	0.1	0	2	0.3	0	1.6	1.4

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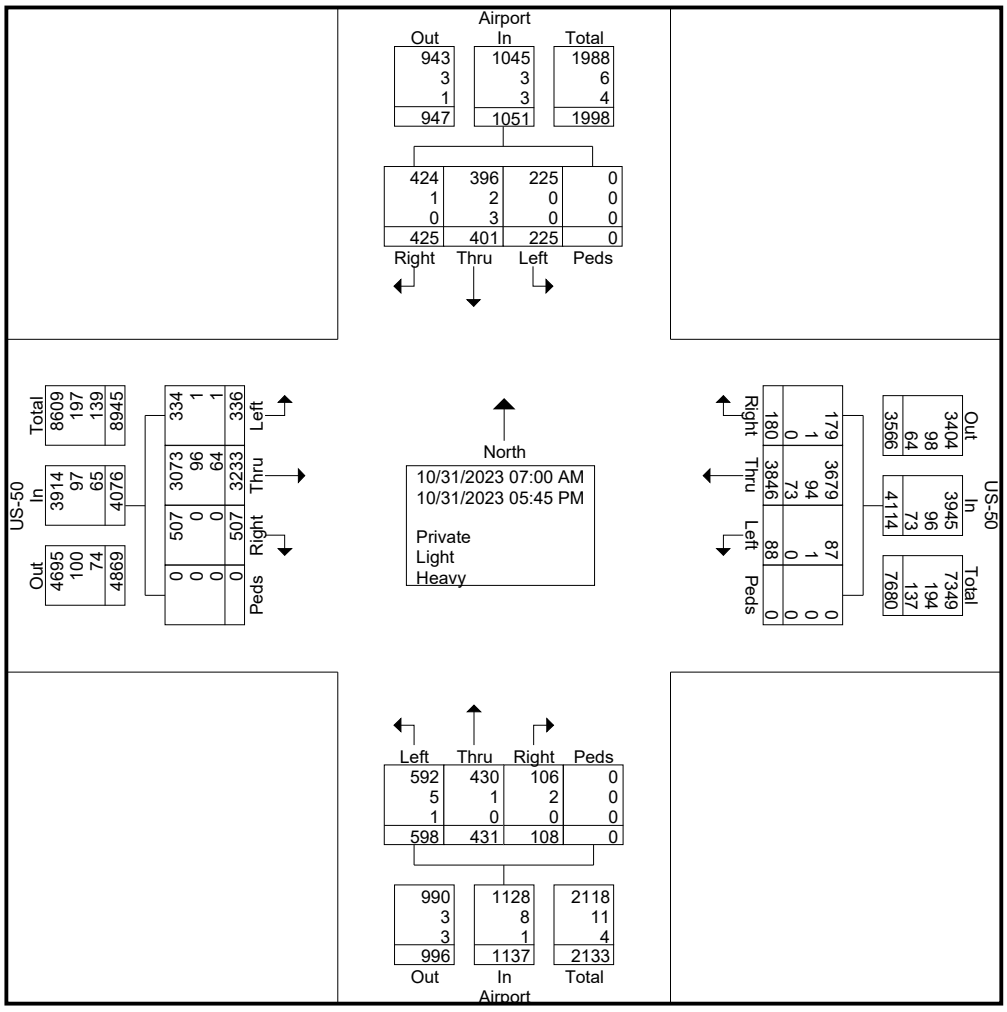
File Name : US-50 and Airport Road
Site Code : 00000000
Start Date : 10/31/2023
Page No : 2



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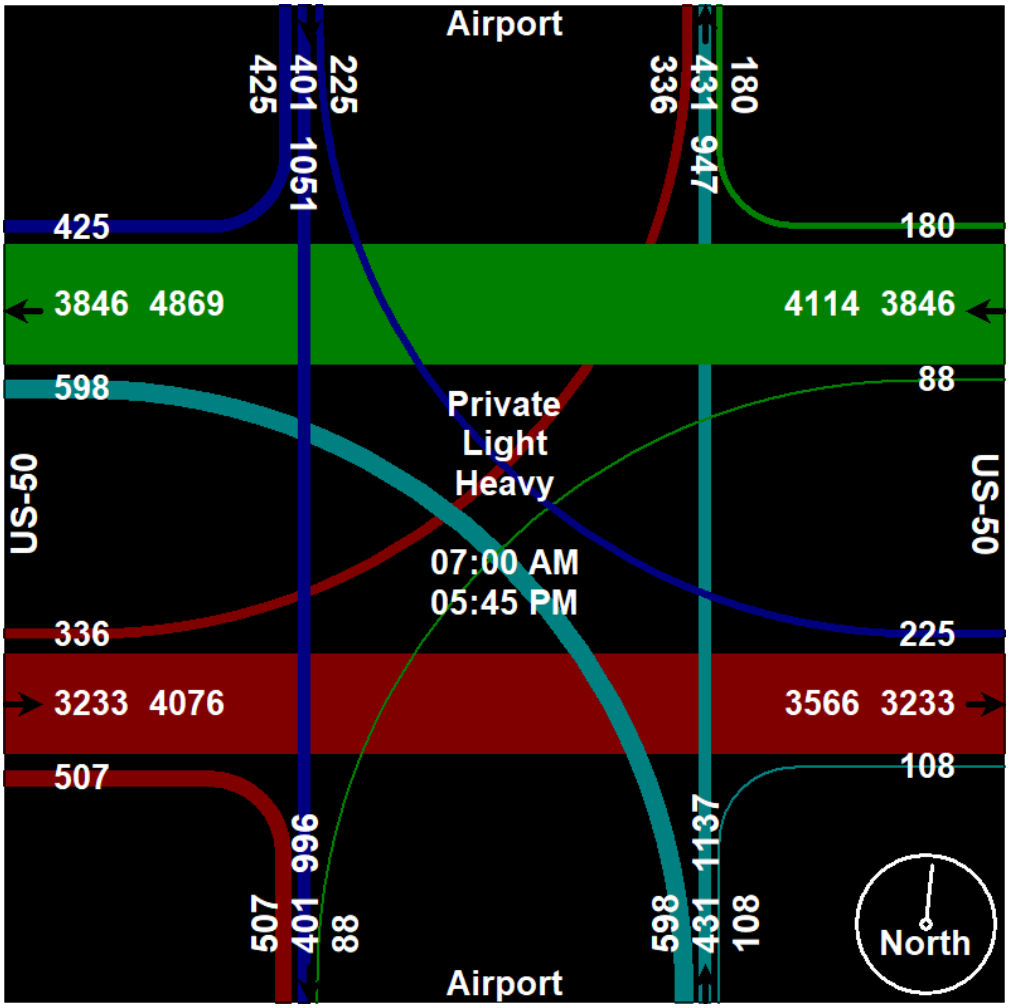

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Site Code : 00000000
Start Date : 10/31/2023
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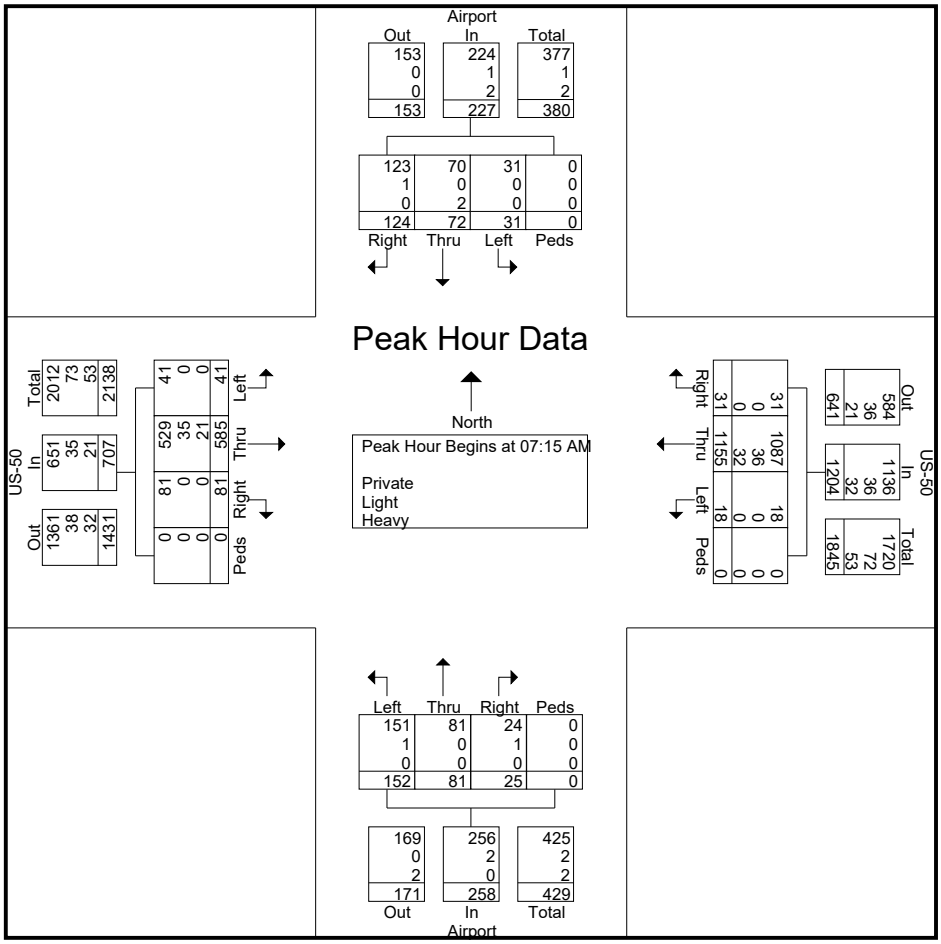
	Airport Southbound					US-50 Westbound					Airport Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**47**	19	6	0	**72**	8	281	3	0	292	1	12	**43**	0	56	22	154	9	0	185	605
07:30 AM	30	15	9	0	54	**10**	**324**	5	0	**339**	**11**	22	35	0	68	**26**	145	**15**	0	**186**	**647**
07:45 AM	23	**20**	**11**	0	54	9	305	4	0	318	5	**30**	42	0	**77**	14	**159**	10	0	183	632
08:00 AM	24	18	5	0	47	4	245	**6**	0	255	8	17	32	0	57	19	127	7	0	153	512
Total Volume	124	72	31	0	227	31	1155	18	0	1204	25	81	152	0	258	81	585	41	0	707	2396
% App. Total	54.6	31.7	13.7	0		2.6	95.9	1.5	0		9.7	31.4	58.9	0		11.5	82.7	5.8	0		
PHF	.660	.900	.705	.000	.788	.775	.891	.750	.000	.888	.568	.675	.884	.000	.838	.779	.920	.683	.000	.950	.926
Private	123	70	31	0	224	31	1087														
% Private	99.2	97.2	100	0	98.7	100	94.1	100	0	94.4	96.0	100	99.3	0	99.2	100	90.4	100	0	92.1	94.6
Light	1	0	0	0	1	0	36	0	0	36	1	0	1	0	2	0	35	0	0	35	74
% Light	0.8	0	0	0	0.4	0	3.1	0	0	3.0	4.0	0	0.7	0	0.8	0	6.0	0	0	5.0	3.1
Heavy	0	2	0	0	2	0	32	0	0	32	0	0	0	0	0	0	21	0	0	21	55
% Heavy	0	2.8	0	0	0.9	0	2.8	0	0	2.7	0	0	0	0	0	0	3.6	0	0	3.0	2.3



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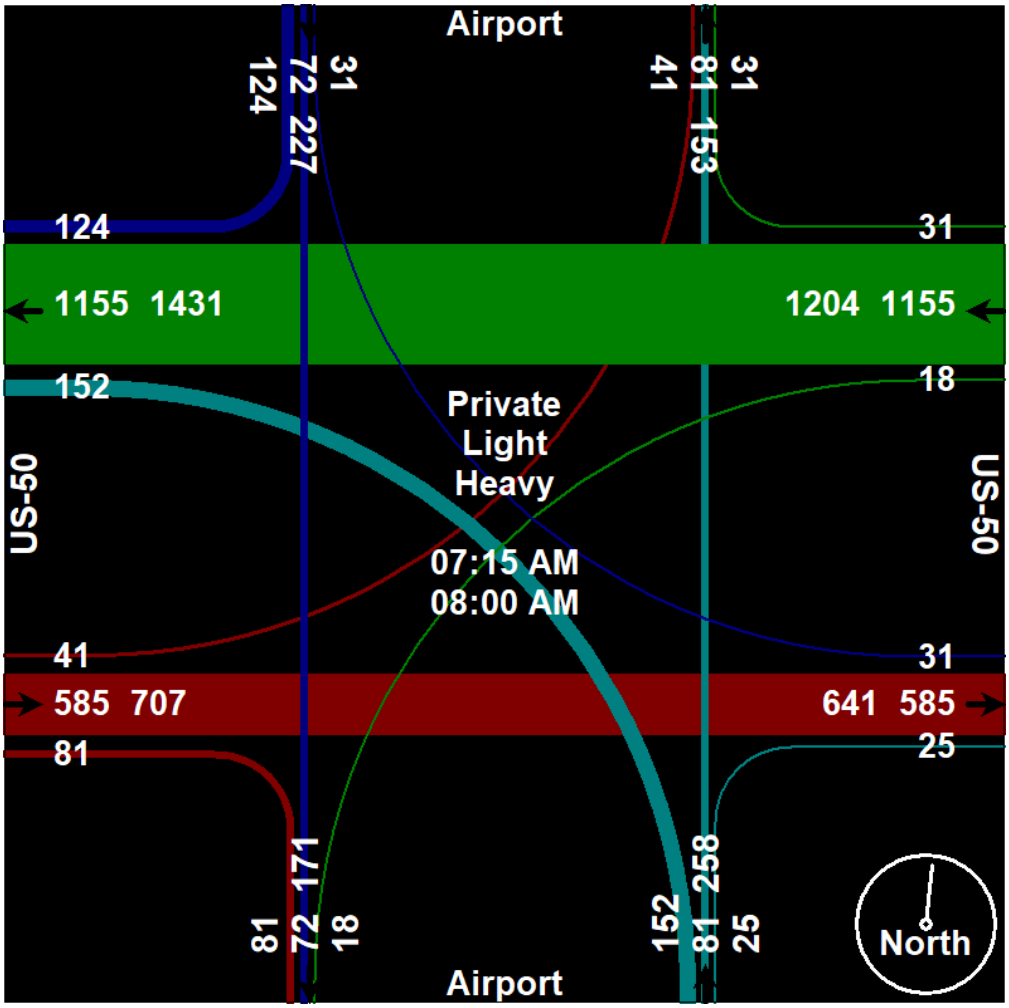

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Site Code : 00000000
Start Date : 10/31/2023
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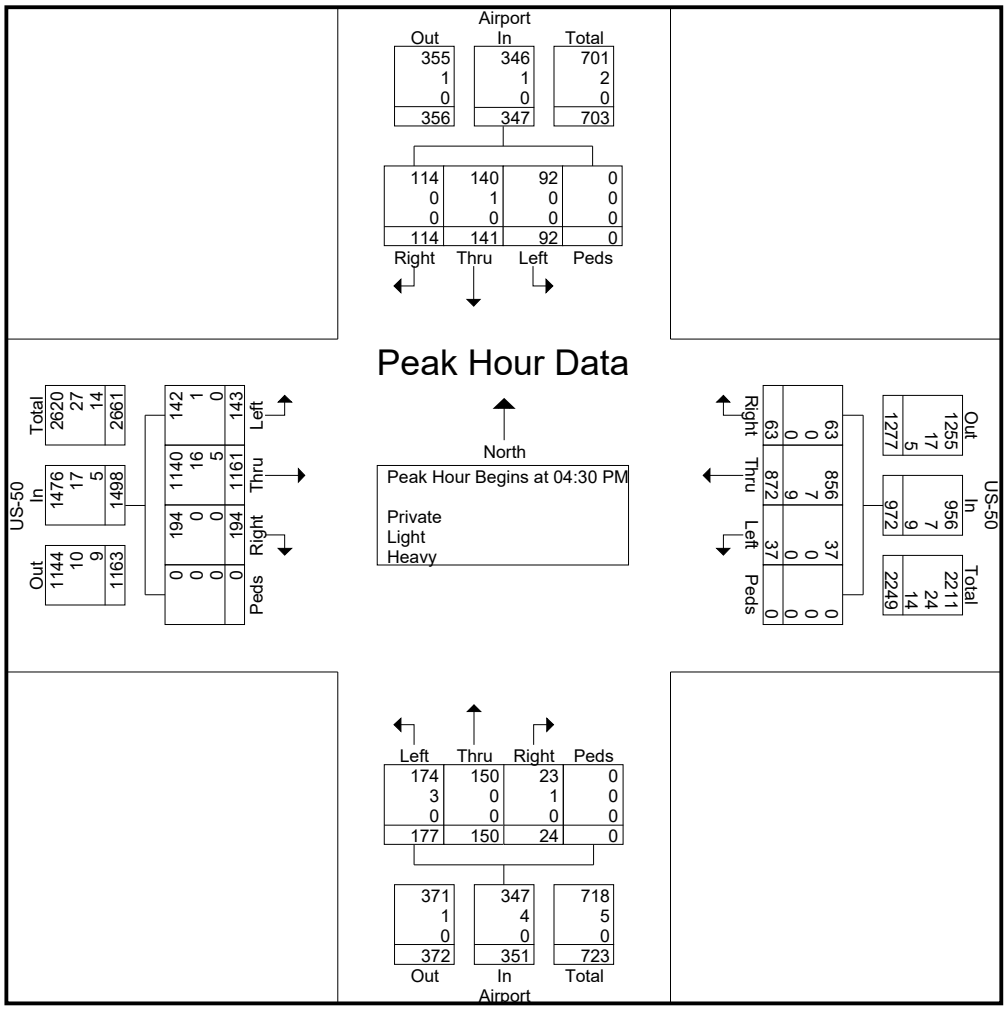
	Airport Southbound					US-50 Westbound					Airport Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	32	**38**	23	0	93	11	236	**11**	0	258	**11**	**43**	42	0	**96**	44	**328**	31	0	**403**	**850**
04:45 PM	**33**	36	**25**	0	**94**	11	206	8	0	225	6	36	47	0	89	47	296	37	0	380	788
05:00 PM	27	37	21	0	85	**26**	190	8	0	224	3	34	40	0	77	**52**	268	28	0	348	734
05:15 PM	22	30	23	0	75	15	**240**	10	0	**265**	4	37	**48**	0	89	51	269	**47**	0	367	796
Total Volume	114	141	92	0	347	63	872	37	0	972	24	150	177	0	351	194	1161	143	0	1498	3168
% App. Total	32.9	40.6	26.5	0		6.5	89.7	3.8	0		6.8	42.7	50.4	0		13	77.5	9.5	0		
PHF	.864	.928	.920	.000	.923	.606	.908	.841	.000	.917	.545	.872	.922	.000	.914	.933	.885	.761	.000	.929	.932
Private	114	140	92	0	346	63	856	37	0	956	23	150	174	0	347	194	1140				
% Private	100	99.3	100	0	99.7	100	98.2	100	0	98.4	95.8	100	98.3	0	98.9	100	98.2	99.3	0	98.5	98.6
Light	0	1	0	0	1	0	7	0	0	7	1	0	3	0	4	0	16	1	0	17	29
% Light	0	0.7	0	0	0.3	0	0.8	0	0	0.7	4.2	0	1.7	0	1.1	0	1.4	0.7	0	1.1	0.9
Heavy	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	5	0	0	5	14
% Heavy	0	0	0	0	0	0	1.0	0	0	0.9	0	0	0	0	0	0	0.4	0	0	0.3	0.4



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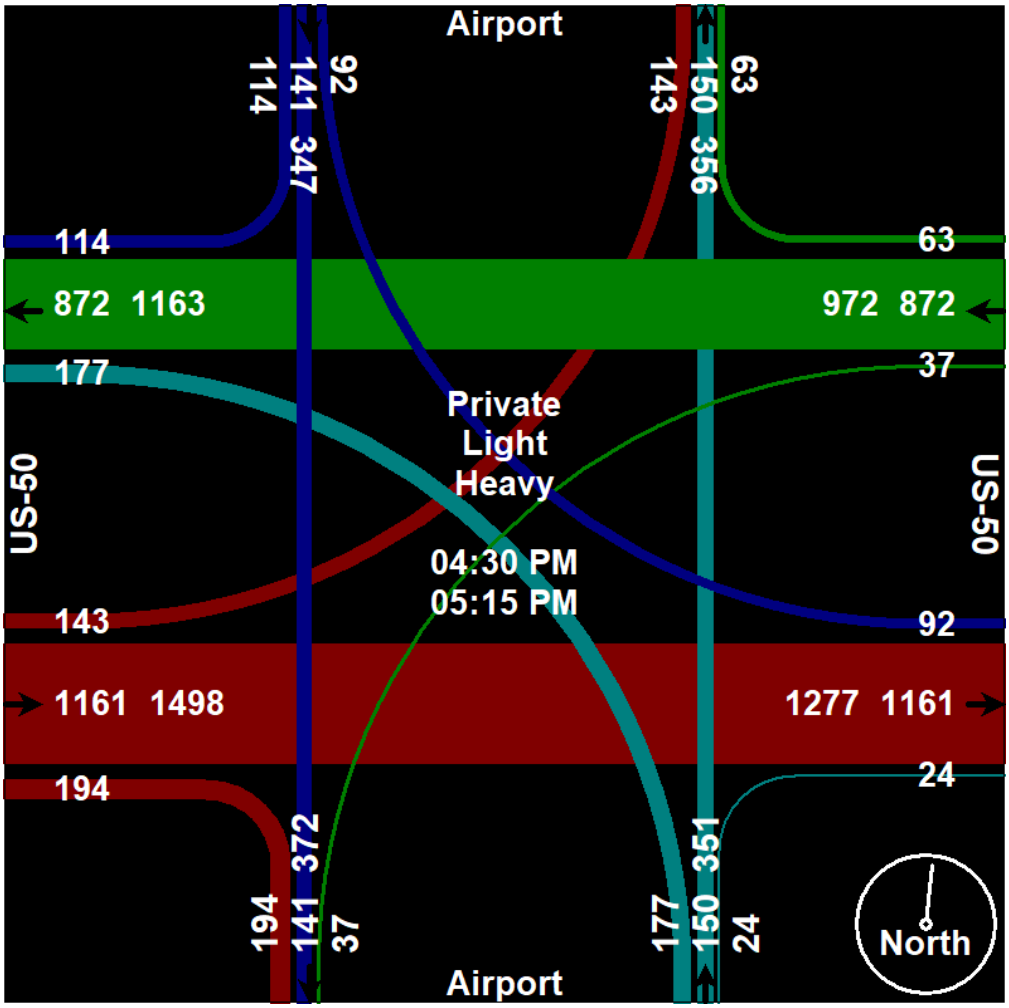

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US-50 E. Carson Complete Streets Study
12-Hour Classification Count
US-50 & Linehan Road

File Name : US-50 and Linehan Road
Site Code : 00000000
Start Date : 11/1/2023
Page No : 1

Groups Printed- Private - Light - Heavy

	Linehan Southbound					US-50 Westbound					Northbound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	5	0	1	0	6	5	222	0	0	227	0	0	73	0	0	73	306
06:15 AM	7	0	0	0	7	3	313	0	0	316	0	0	105	2	0	107	430
06:30 AM	11	0	0	0	11	4	381	0	0	385	0	0	153	5	0	158	554
06:45 AM	4	0	2	0	6	3	388	0	0	391	0	0	200	3	0	203	600
Total	27	0	3	0	30	15	1304	0	0	1319	0	0	531	10	0	541	1890
07:00 AM	9	0	3	0	12	2	386	0	0	388	0	0	132	4	0	136	536
07:15 AM	7	0	2	0	9	1	471	0	0	472	0	0	142	6	0	148	629
07:30 AM	7	0	2	0	9	3	553	0	0	556	0	0	159	4	0	163	728
07:45 AM	9	0	2	0	11	4	419	0	0	423	0	0	165	4	0	169	603
Total	32	0	9	0	41	10	1829	0	0	1839	0	0	598	18	0	616	2496
08:00 AM	11	0	3	0	14	5	313	0	0	318	0	0	128	8	0	136	468
08:15 AM	6	0	3	0	9	2	301	0	0	303	0	0	154	7	0	161	473
08:30 AM	10	0	1	0	11	3	286	0	0	289	0	0	158	6	0	164	464
08:45 AM	10	0	2	0	12	2	275	0	0	277	0	0	155	8	0	163	452
Total	37	0	9	0	46	12	1175	0	0	1187	0	0	595	29	0	624	1857
09:00 AM	4	0	2	0	6	2	234	0	0	236	0	0	136	1	0	137	379
09:15 AM	7	0	3	0	10	1	241	0	0	242	0	0	144	4	0	148	400
09:30 AM	2	0	1	0	3	2	277	0	0	279	0	0	162	6	0	168	450
09:45 AM	5	0	4	0	9	1	245	0	0	246	0	0	187	7	0	194	449
Total	18	0	10	0	28	6	997	0	0	1003	0	0	629	18	0	647	1678
10:00 AM	4	0	2	0	6	3	216	0	0	219	0	0	145	5	0	150	375
10:15 AM	8	0	1	0	9	3	271	0	0	274	0	0	165	7	0	172	455
10:30 AM	6	0	0	0	6	1	247	0	0	248	0	0	138	4	0	142	396
10:45 AM	6	0	0	0	6	3	211	0	0	214	0	0	179	9	0	188	408
Total	24	0	3	0	27	10	945	0	0	955	0	0	627	25	0	652	1634
11:00 AM	3	0	3	0	6	0	203	0	0	203	0	0	196	5	0	201	410
11:15 AM	9	0	2	0	11	5	227	0	0	232	0	0	211	3	0	214	457
11:30 AM	6	0	4	0	10	4	209	0	0	213	0	0	214	6	0	220	443
11:45 AM	9	0	3	0	12	1	239	0	0	240	0	0	178	6	0	184	436
Total	27	0	12	0	39	10	878	0	0	888	0	0	799	20	0	819	1746
12:00 PM	12	0	1	0	13	7	196	0	0	203	0	0	203	14	0	217	433
12:15 PM	6	0	2	0	8	2	234	0	0	236	0	0	248	9	0	257	501
12:30 PM	7	0	4	0	11	1	242	0	0	243	0	0	224	10	0	234	488
12:45 PM	7	0	3	0	10	1	237	0	0	238	0	0	220	10	0	230	478
Total	32	0	10	0	42	11	909	0	0	920	0	0	895	43	0	938	1900
01:00 PM	10	0	2	0	12	6	213	0	0	219	0	0	205	8	0	213	444
01:15 PM	10	0	2	0	12	1	227	0	0	228	0	0	210	3	0	213	453
01:30 PM	12	0	2	0	14	2	215	0	0	217	0	0	236	6	0	242	473
01:45 PM	4	0	3	0	7	5	201	0	0	206	0	0	213	8	0	221	434
Total	36	0	9	0	45	14	856	0	0	870	0	0	864	25	0	889	1804

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Site Code : 00000000
Start Date : 11/1/2023
Page No : 2

Groups Printed- Private - Light - Heavy

	Linehan Southbound					US-50 Westbound					Northbound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
02:00 PM	9	0	3	0	12	5	196	0	0	201	0	0	242	5	0	247	460
02:15 PM	7	0	6	0	13	2	212	0	0	214	0	0	243	10	0	253	480
02:30 PM	7	0	3	0	10	2	244	0	0	246	0	0	335	4	0	339	595
02:45 PM	9	0	5	0	14	4	223	0	0	227	0	0	300	7	0	307	548
Total	32	0	17	0	49	13	875	0	0	888	0	0	1120	26	0	1146	2083
03:00 PM	13	0	4	0	17	3	232	0	0	235	0	0	305	8	0	313	565
03:15 PM	5	0	3	0	8	2	255	0	0	257	0	0	346	7	0	353	618
03:30 PM	17	0	9	0	26	1	327	0	0	328	0	0	390	7	0	397	751
03:45 PM	8	0	2	0	10	1	298	0	0	299	0	0	400	11	0	411	720
Total	43	0	18	0	61	7	1112	0	0	1119	0	0	1441	33	0	1474	2654
04:00 PM	4	0	6	0	10	3	263	0	0	266	0	0	457	10	0	467	743
04:15 PM	8	0	5	0	13	2	237	0	0	239	0	0	491	8	0	499	751
04:30 PM	9	0	7	0	16	1	231	0	0	232	0	0	494	9	0	503	751
04:45 PM	8	0	3	0	11	1	218	0	0	219	0	0	487	6	0	493	723
Total	29	0	21	0	50	7	949	0	0	956	0	0	1929	33	0	1962	2968
05:00 PM	2	0	2	0	4	0	230	0	0	230	0	0	484	10	0	494	728
05:15 PM	5	0	2	0	7	1	208	0	0	209	0	0	522	6	0	528	744
05:30 PM	1	0	1	0	2	3	221	0	0	224	0	0	488	6	0	494	720
05:45 PM	2	0	2	0	4	1	166	0	0	167	0	0	380	10	0	390	561
Total	10	0	7	0	17	5	825	0	0	830	0	0	1874	32	0	1906	2753
Grand Total	347	0	128	0	475	120	12654	0	0	12774	0	0	11902	312	0	12214	25463
Apprch %	73.1	0	26.9	0		0.9	99.1	0	0			0	97.4	2.6	0		
Total %	1.4	0	0.5	0	1.9	0.5	49.7	0	0	50.2	0	0	46.7	1.2	0	48	
Private	254	0	92	0	346	82	12163	0	0	12245	0	0	11422	234	0	11656	24247
% Private	73.2	0	71.9	0	72.8	68.3	96.1	0	0	95.9	0	0	96	75	0	95.4	95.2
Light	51	0	6	0	57	3	287	0	0	290	0	0	274	57	0	331	678
% Light	14.7	0	4.7	0	12	2.5	2.3	0	0	2.3	0	0	2.3	18.3	0	2.7	2.7
Heavy	42	0	30	0	72	35	204	0	0	239	0	0	206	21	0	227	538
% Heavy	12.1	0	23.4	0	15.2	29.2	1.6	0	0	1.9	0	0	1.7	6.7	0	1.9	2.1

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Start Date : 11/1/2023
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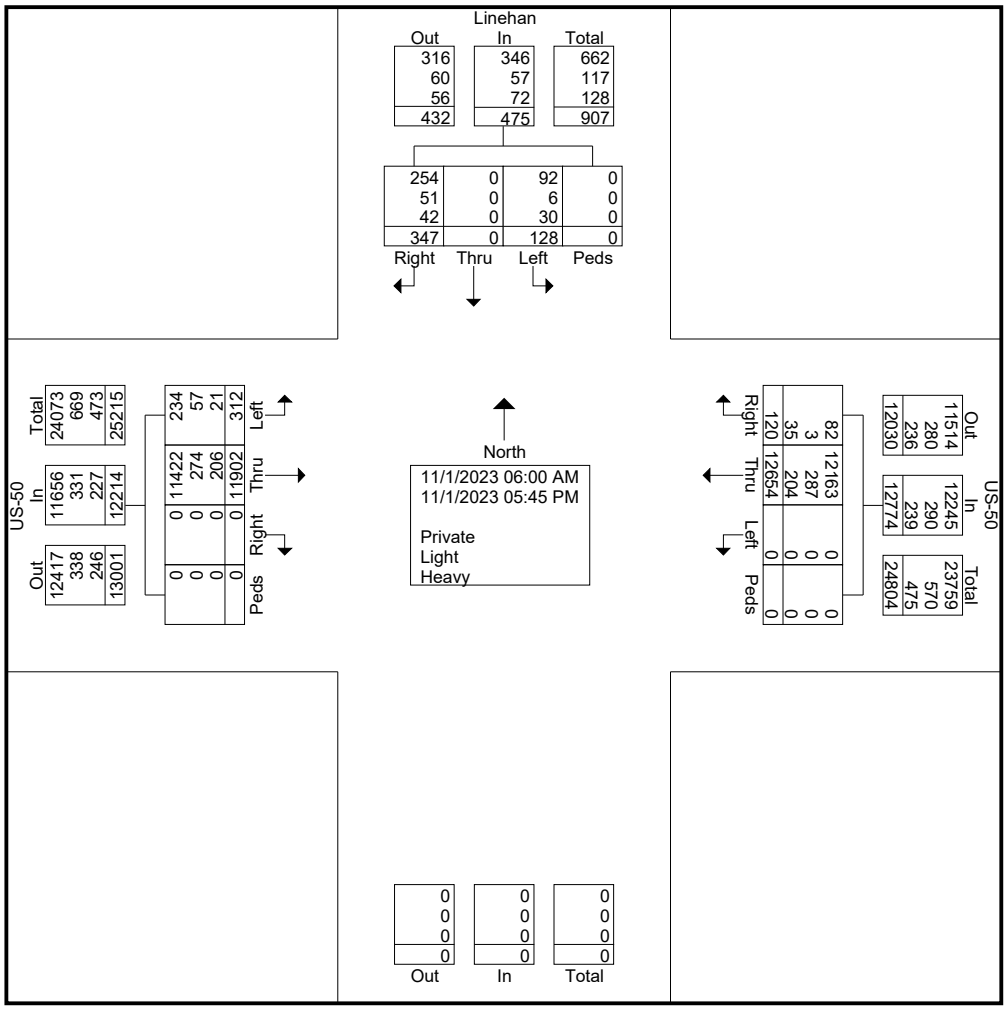

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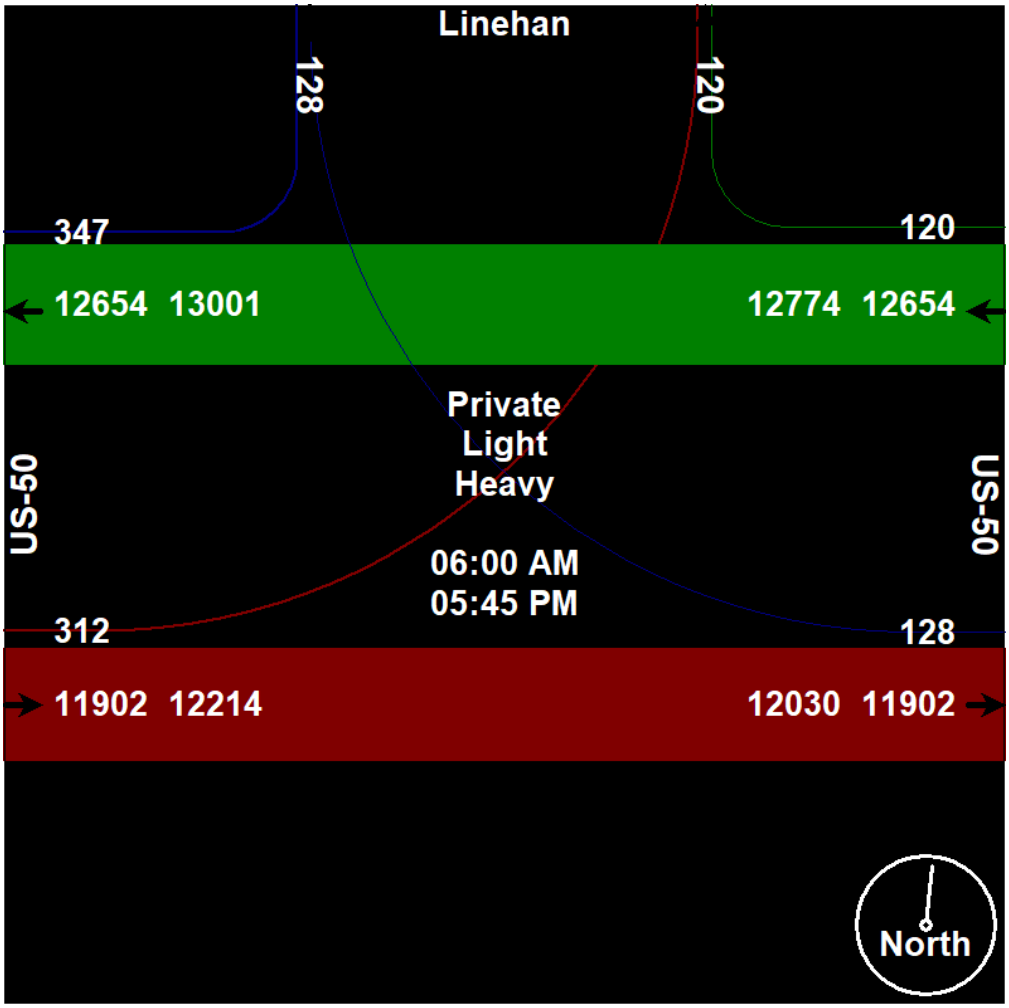

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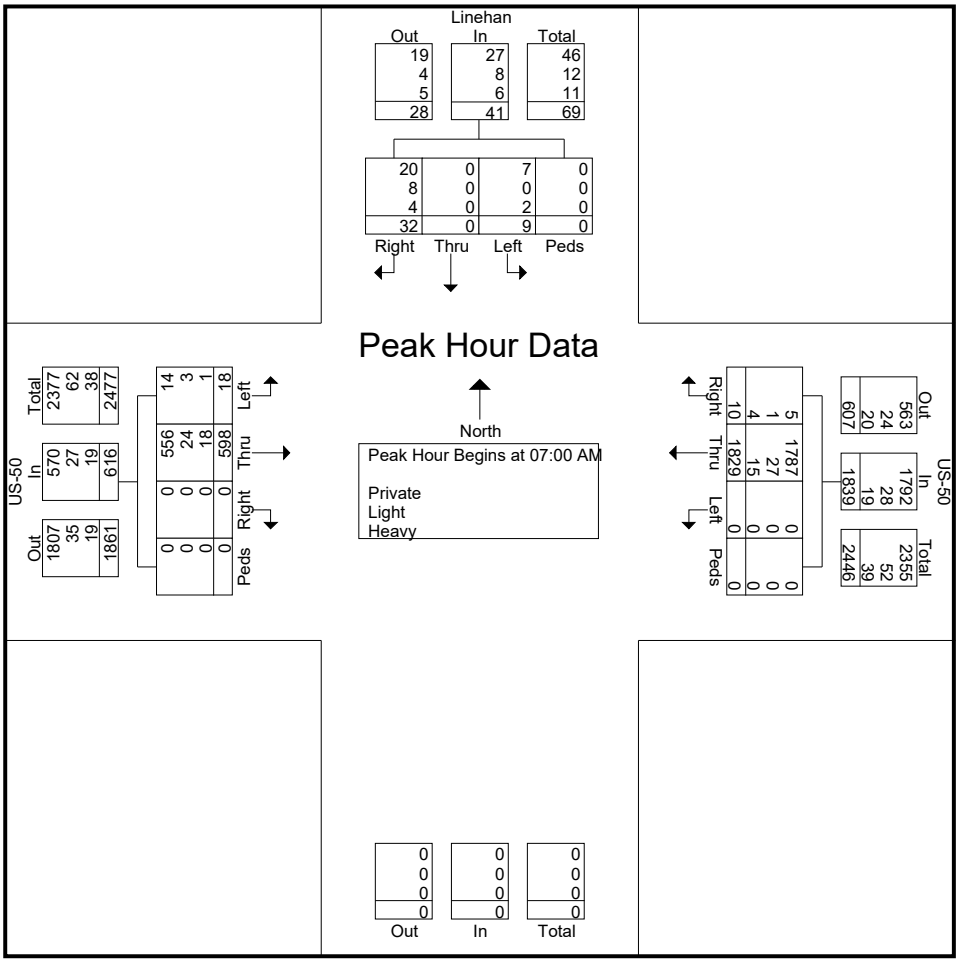
Start Date : 11/1/2023
Page No : 5

	Linehan Southbound					US-50 Westbound					Northbound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	**9**	0	**3**	0	**12**	2	386	0	0	388	0	0	132	4	0	136	536
07:15 AM	7	0	2	0	9	1	471	0	0	472	0	0	142	**6**	0	148	629
07:30 AM	7	0	2	0	9	3	**553**	0	0	**556**	0	0	159	4	0	163	**728**
07:45 AM	9	0	2	0	11	**4**	419	0	0	423	0	0	**165**	4	0	**169**	603
Total Volume	32	0	9	0	41	10	1829	0	0	1839	0	0	598	18	0	616	2496
% App. Total	78	0	22	0		0.5	99.5	0	0			0	97.1	2.9	0		
PHF	.889	.000	.750	.000	.854	.625	.827	.000	.000	.827	.000	.000	.906	.750	.000	.911	.857
Private	20	0	7	0	27	5	1787	0	0	1792	0	0	556	14	0	570	2389
% Private	62.5	0	77.8	0	65.9	50.0	97.7	0	0	97.4	0	0	93.0	77.8	0	92.5	95.7
Light	8	0	0	0	8	1	27	0	0	28	0	0	24	3	0	27	63
% Light	25.0	0	0	0	19.5	10.0	1.5	0	0	1.5	0	0	4.0	16.7	0	4.4	2.5
Heavy	4	0	2	0	6	4	15	0	0	19	0	0	18	1	0	19	44
% Heavy	12.5	0	22.2	0	14.6	40.0	0.8	0	0	1.0	0	0	3.0	5.6	0	3.1	1.8



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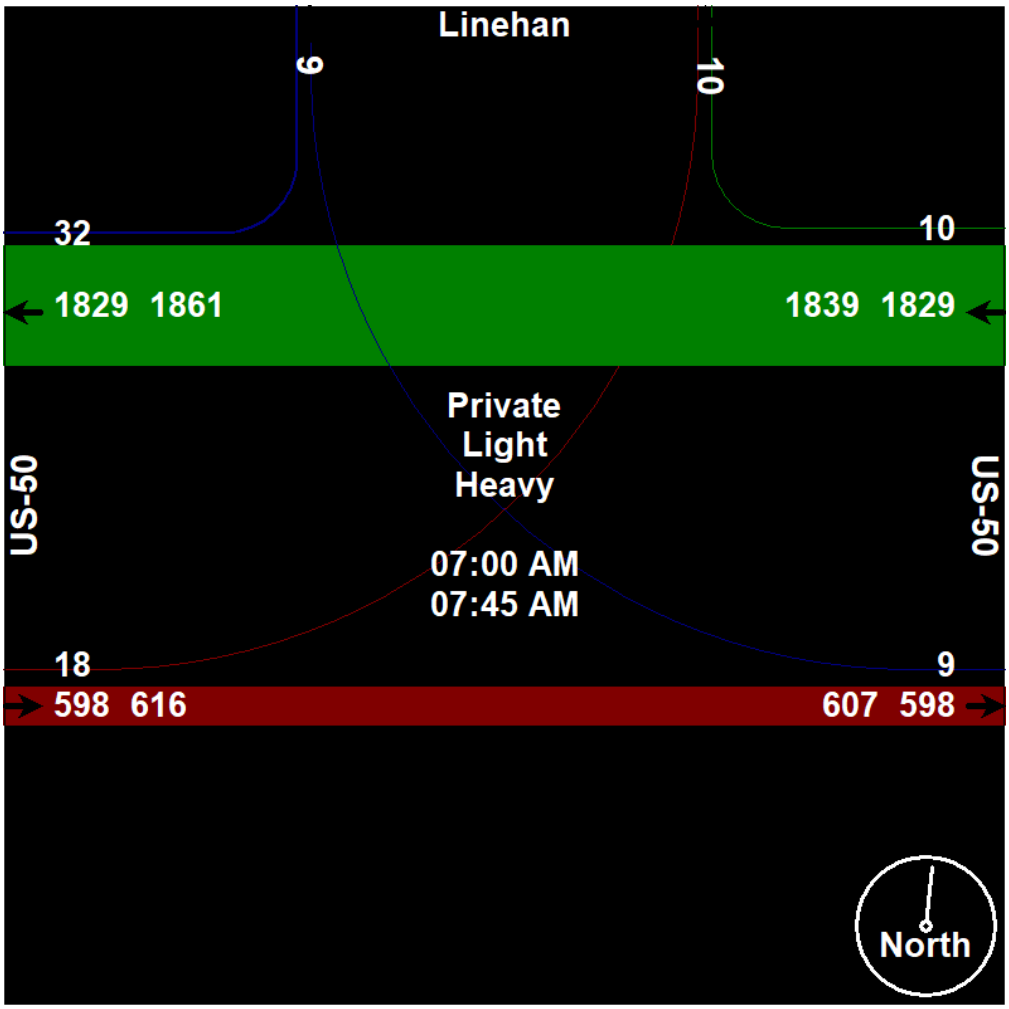

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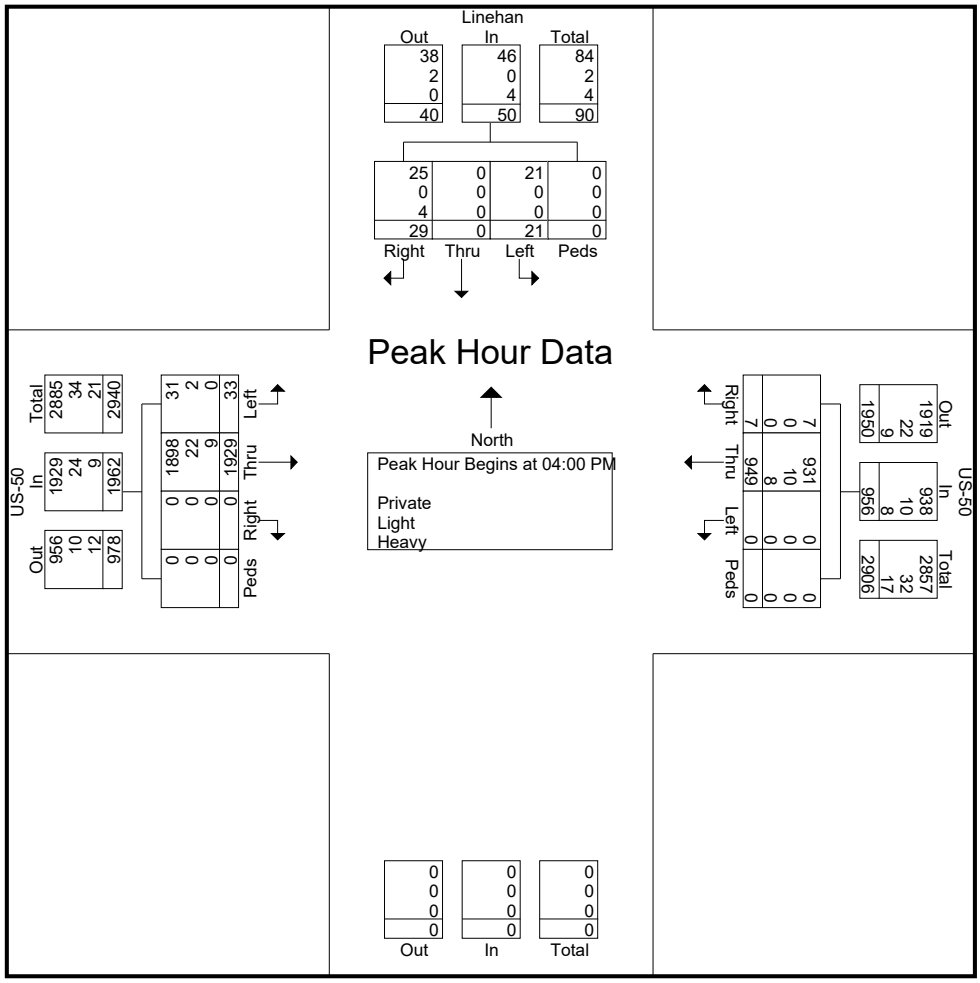
	Linehan Southbound					US-50 Westbound					Northbound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	4	0	6	0	10	**3**	**263**	0	0	**266**	0	0	457	**10**	0	467	743
04:15 PM	8	0	5	0	13	2	237	0	0	239	0	0	491	8	0	499	**751**
04:30 PM	**9**	0	**7**	0	**16**	1	231	0	0	232	0	0	**494**	9	0	**503**	751
04:45 PM	8	0	3	0	11	1	218	0	0	219	0	0	487	6	0	493	723
Total Volume	29	0	21	0	50	7	949	0	0	956	0	0	1929	33	0	1962	2968
% App. Total	58	0	42	0		0.7	99.3	0	0			0	98.3	1.7	0		
PHF	.806	.000	.750	.000	.781	.583	.902	.000	.000	.898	.000	.000	.976	.825	.000	.975	.988
Private	25	0	21	0	46	7	931	0	0	938	0	0	1898	31	0	1929	2913
% Private	86.2	0	100	0	92.0	100	98.1	0	0	98.1	0	0	98.4	93.9	0	98.3	98.1
Light	0	0	0	0	0	0	10	0	0	10	0	0	22	2	0	24	34
% Light	0	0	0	0	0	0	1.1	0	0	1.0	0	0	1.1	6.1	0	1.2	1.1
Heavy	4	0	0	0	4	0	8	0	0	8	0	0	9	0	0	9	21
% Heavy	13.8	0	0	0	8.0	0	0.8	0	0	0.8	0	0	0.5	0	0	0.5	0.7



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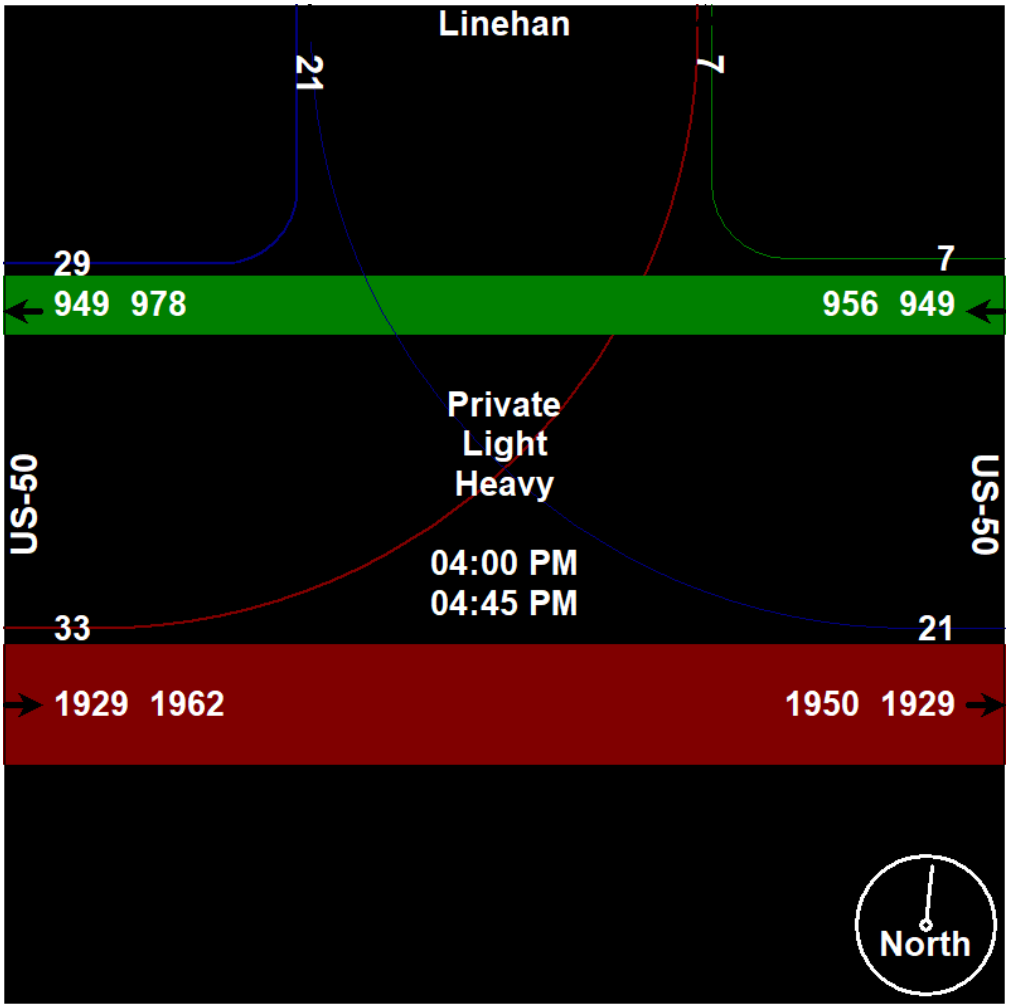

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US-50 E. Carson Complete Streets Study
Turning Movement Classification Count
US-50 & Lompa Lane

File Name : US-50 and Lompa Lane
Site Code : 00000000
Start Date : 10/31/2023
Page No : 1

Groups Printed- Private - Light - Heavy

	Lompa Southbound					US-50 Westbound					Lompa Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	27	6	8	0	41	7	299	3	0	309	2	7	37	0	46	20	143	10	0	173	569
07:15 AM	29	7	7	0	43	9	377	0	0	386	2	8	55	0	65	25	159	8	0	192	686
07:30 AM	22	7	5	0	34	9	346	5	0	360	10	4	35	0	49	24	187	6	0	217	660
07:45 AM	27	9	11	0	47	17	345	1	0	363	7	13	41	0	61	16	158	12	0	186	657
Total	105	29	31	0	165	42	1367	9	0	1418	21	32	168	0	221	85	647	36	0	768	2572
08:00 AM	23	7	10	0	40	9	311	3	0	323	5	5	20	0	30	26	145	6	0	177	570
08:15 AM	20	7	14	0	41	11	258	7	0	276	3	5	35	0	43	17	167	10	0	194	554
08:30 AM	13	6	5	0	24	4	240	3	0	247	6	5	33	0	44	14	155	7	0	176	491
08:45 AM	15	3	11	0	29	10	262	6	0	278	5	2	32	0	39	14	153	6	0	173	519
Total	71	23	40	0	134	34	1071	19	0	1124	19	17	120	0	156	71	620	29	0	720	2134
*** BREAK ***																					
04:00 PM	15	7	18	0	40	18	289	9	0	316	8	5	26	0	39	57	290	17	0	364	759
04:15 PM	25	11	15	0	51	22	260	9	0	291	7	8	42	0	57	48	315	19	0	382	781
04:30 PM	21	11	19	0	51	18	284	4	0	306	7	7	27	0	41	41	364	26	0	431	829
04:45 PM	7	8	21	0	36	11	279	4	0	294	2	11	36	0	49	63	343	25	0	431	810
Total	68	37	73	0	178	69	1112	26	0	1207	24	31	131	0	186	209	1312	87	0	1608	3179
05:00 PM	16	16	18	0	50	22	250	4	0	276	6	18	46	0	70	48	339	21	0	408	804
05:15 PM	19	14	21	0	54	27	257	7	0	291	7	9	31	0	47	44	339	20	0	403	795
05:30 PM	17	8	18	0	43	23	272	9	0	304	3	11	36	0	50	46	287	26	0	359	756
05:45 PM	17	6	11	0	34	22	224	8	0	254	7	12	26	0	45	36	200	12	0	248	581
Total	69	44	68	0	181	94	1003	28	0	1125	23	50	139	0	212	174	1165	79	0	1418	2936
Grand Total	313	133	212	0	658	239	4553	82	0	4874	87	130	558	0	775	539	3744	231	0	4514	10821
Apprch %	47.6	20.2	32.2	0		4.9	93.4	1.7	0		11.2	16.8	72	0		11.9	82.9	5.1	0		
Total %	2.9	1.2	2	0	6.1	2.2	42.1	0.8	0	45	0.8	1.2	5.2	0	7.2	5	34.6	2.1	0	41.7	
Private	313	132	212	0	657	238	4380										3593				10459
% Private	100	99.2	100	0	99.8	99.6	96.2	97.6	0	96.4	96.6	98.5	97.8	0	97.8	97.2	96	99.1	0	96.3	96.7
Light	0	1	0	0	1	1	101	2	0	104	1	2	8	0	11	8	96	2	0	106	222
% Light	0	0.8	0	0	0.2	0.4	2.2	2.4	0	2.1	1.1	1.5	1.4	0	1.4	1.5	2.6	0.9	0	2.3	2.1
Heavy	0	0	0	0	0	0	72	0	0	72	2	0	4	0	6	7	55	0	0	62	140
% Heavy	0	0	0	0	0	0	1.6	0	0	1.5	2.3	0	0.7	0	0.8	1.3	1.5	0	0	1.4	1.3

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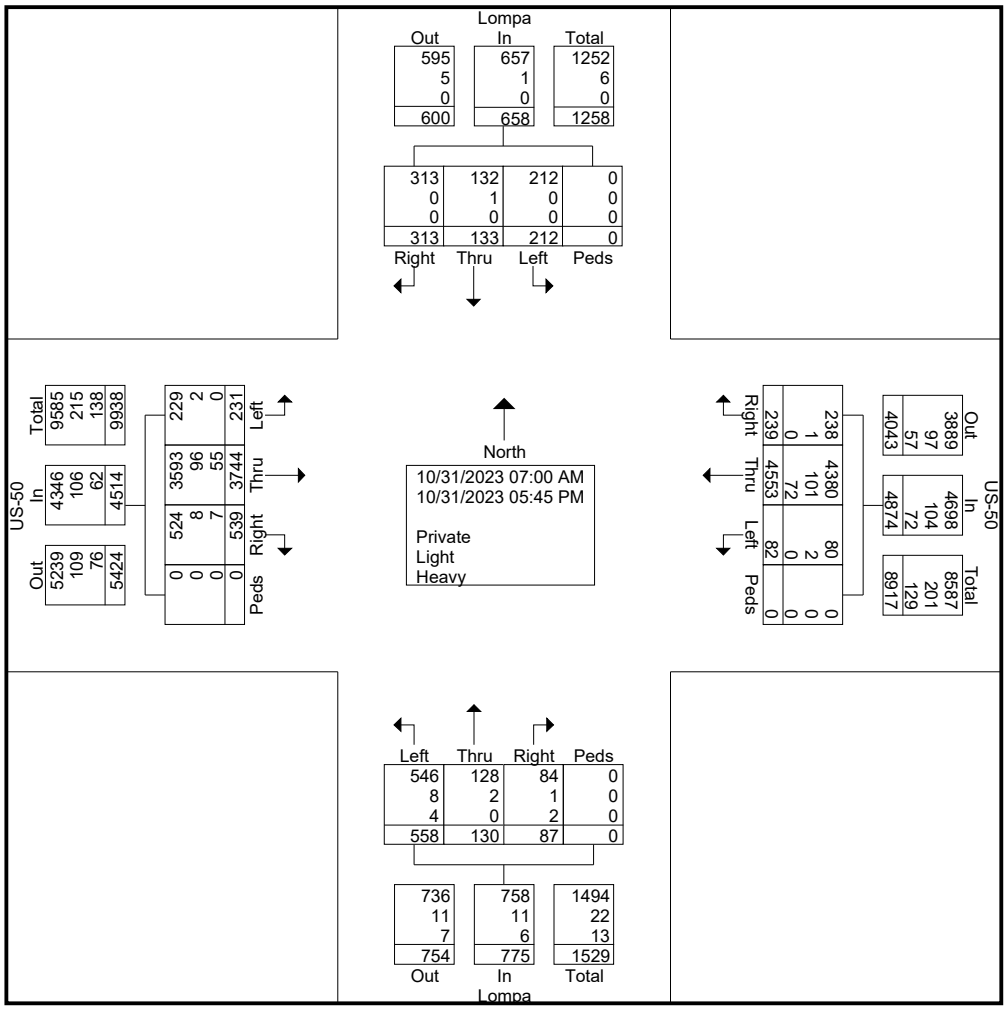

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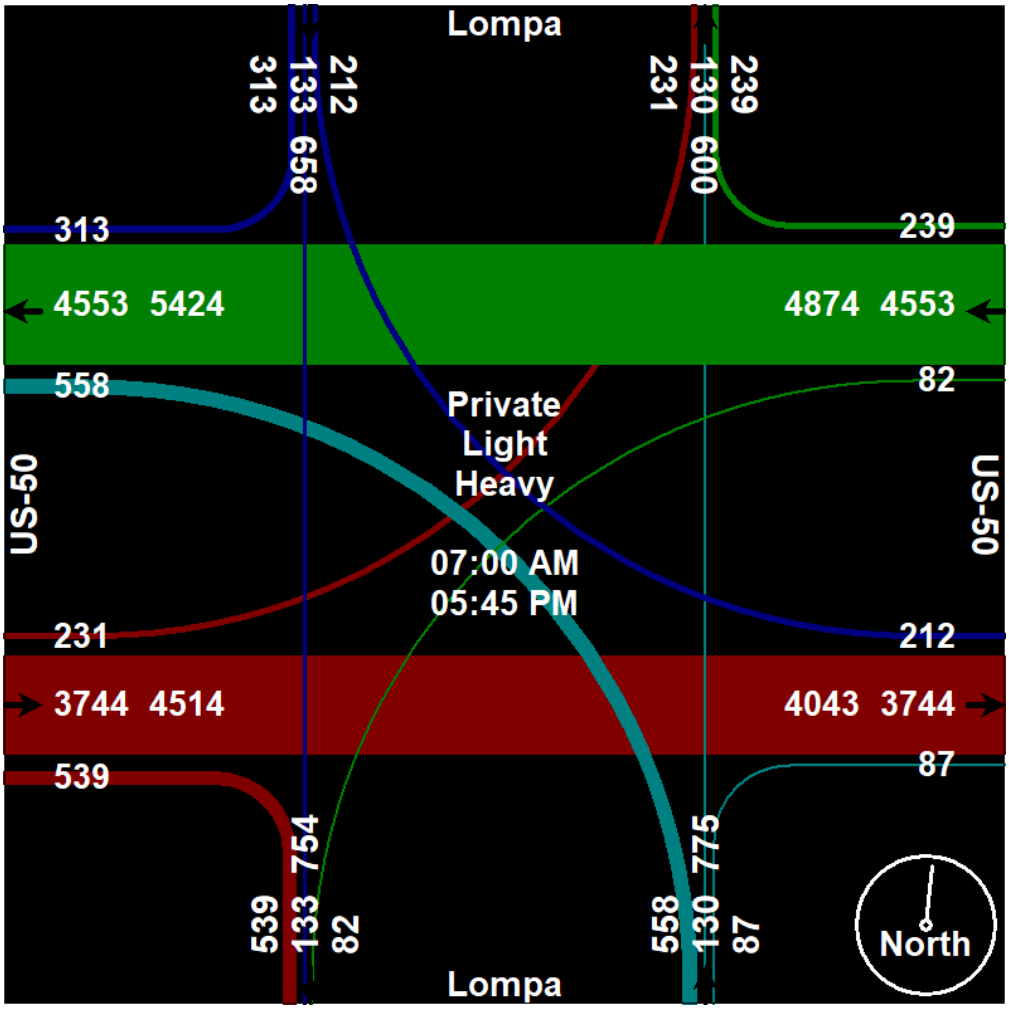
Page No : 3



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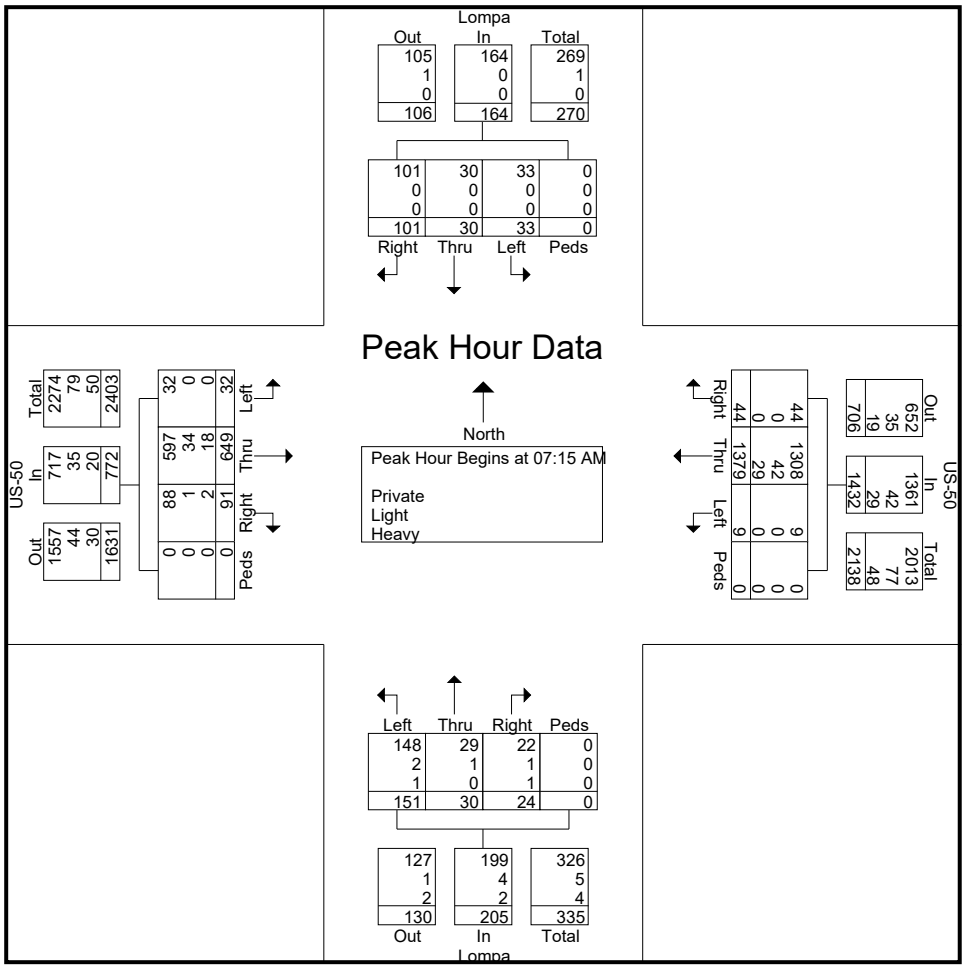
	Lompa Southbound					US-50 Westbound					Lompa Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**29**	7	7	0	43	9	**377**	0	0	**386**	2	8	**55**	0	**65**	25	159	8	0	192	**686**
07:30 AM	22	7	5	0	34	9	346	**5**	0	360	**10**	4	35	0	49	24	**187**	6	0	**217**	660
07:45 AM	27	**9**	**11**	0	**47**	**17**	345	1	0	363	7	**13**	41	0	61	16	158	**12**	0	186	657
08:00 AM	23	7	10	0	40	9	311	3	0	323	5	5	20	0	30	**26**	145	6	0	177	570
Total Volume	101	30	33	0	164	44	1379	9	0	1432	24	30	151	0	205	91	649	32	0	772	2573
% App. Total	61.6	18.3	20.1	0		3.1	96.3	0.6	0		11.7	14.6	73.7	0		11.8	84.1	4.1	0		
PHF	.871	.833	.750	.000	.872	.647	.914	.450	.000	.927	.600	.577	.686	.000	.788	.875	.868	.667	.000	.889	.938
Private	101	30	33	0	164	44	1308														
% Private	100	100	100	0	100	100	94.9	100	0	95.0	91.7	96.7	98.0	0	97.1	96.7	92.0	100	0	92.9	94.9
Light	0	0	0	0	0	0	42	0	0	42	1	1	2	0	4	1	34	0	0	35	81
% Light	0	0	0	0	0	0	3.0	0	0	2.9	4.2	3.3	1.3	0	2.0	1.1	5.2	0	0	4.5	3.1
Heavy	0	0	0	0	0	0	29	0	0	29	1	0	1	0	2	2	18	0	0	20	51
% Heavy	0	0	0	0	0	0	2.1	0	0	2.0	4.2	0	0.7	0	1.0	2.2	2.8	0	0	2.6	2.0



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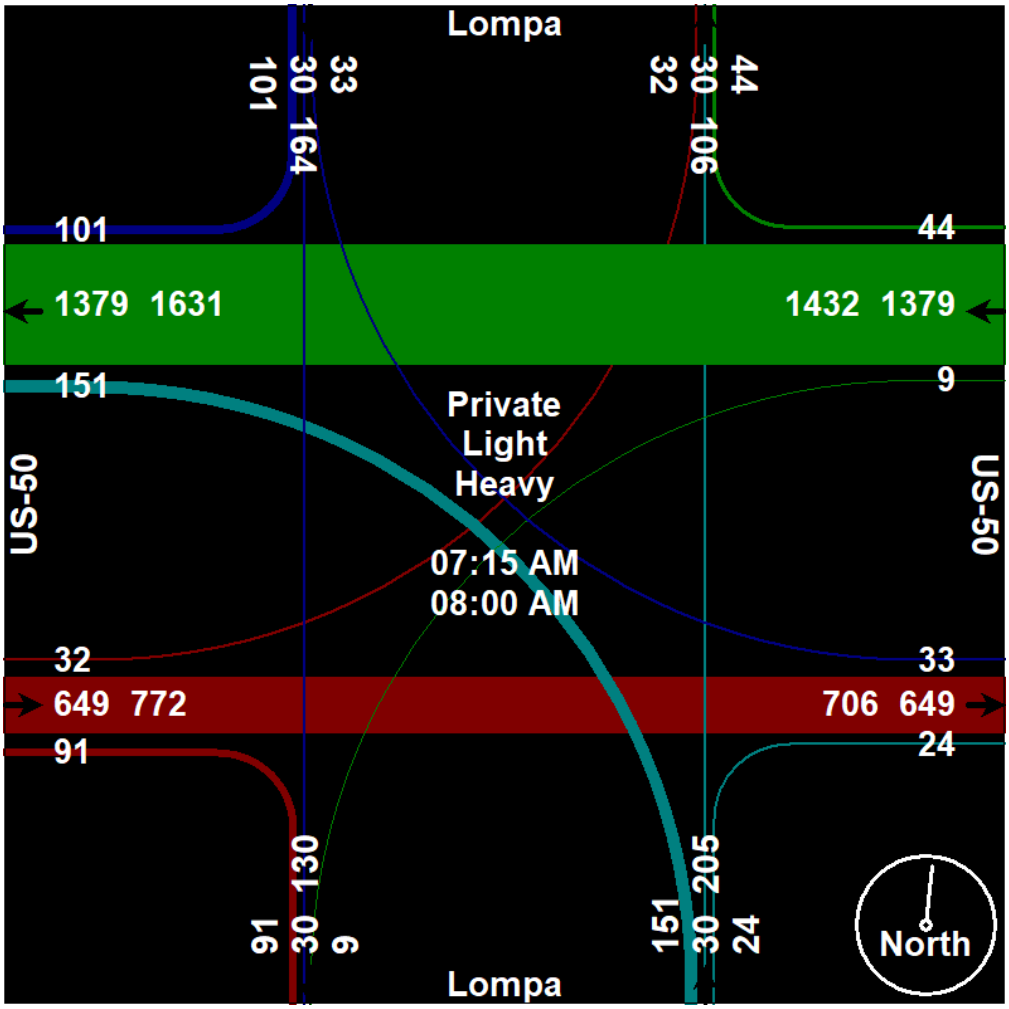
File Name : US-50 and Lompa Lane
Site Code : 00000000
Start Date : 10/31/2023
Page No : 5



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File Name : US-50 and Lompa Lane
Site Code : 00000000
Start Date : 10/31/2023
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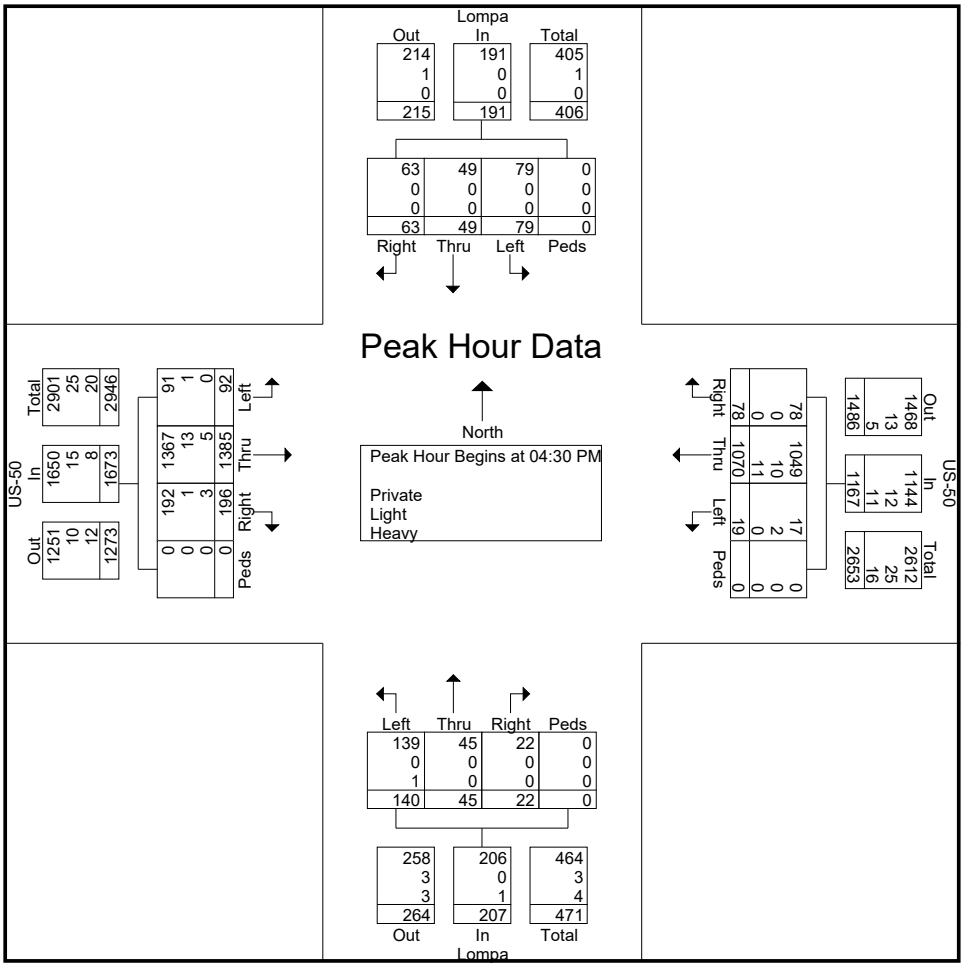
	Lompa Southbound					US-50 Westbound					Lompa Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	**21**	11	19	0	51	18	**284**	4	0	**306**	**7**	7	27	0	41	41	**364**	**26**	0	**431**	**829**
04:45 PM	7	8	**21**	0	36	11	279	4	0	294	2	11	36	0	49	**63**	343	25	0	431	810
05:00 PM	16	**16**	18	0	50	22	250	4	0	276	6	**18**	**46**	0	**70**	48	339	21	0	408	804
05:15 PM	19	14	21	0	**54**	**27**	257	**7**	0	291	7	9	31	0	47	44	339	20	0	403	795
Total Volume	63	49	79	0	191	78	1070	19	0	1167	22	45	140	0	207	196	1385	92	0	1673	3238
% App. Total	33	25.7	41.4	0		6.7	91.7	1.6	0		10.6	21.7	67.6	0		11.7	82.8	5.5	0		
PHF	.750	.766	.940	.000	.884	.722	.942	.679	.000	.953	.786	.625	.761	.000	.739	.778	.951	.885	.000	.970	.976
Private	63	49	79	0	191	78	1049										1367				
% Private	100	100	100	0	100	100	98.0	89.5	0	98.0	100	100	99.3	0	99.5	98.0	98.7	98.9	0	98.6	98.5
Light	0	0	0	0	0	0	10	2	0	12	0	0	0	0	0	1	13	1	0	15	27
% Light	0	0	0	0	0	0	0.9	10.5	0	1.0	0	0	0	0	0	0.5	0.9	1.1	0	0.9	0.8
Heavy	0	0	0	0	0	0	11	0	0	11	0	0	1	0	1	3	5	0	0	8	20
% Heavy	0	0	0	0	0	0	1.0	0	0	0.9	0	0	0.7	0	0.5	1.5	0.4	0	0	0.5	0.6



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Site Code : 00000000
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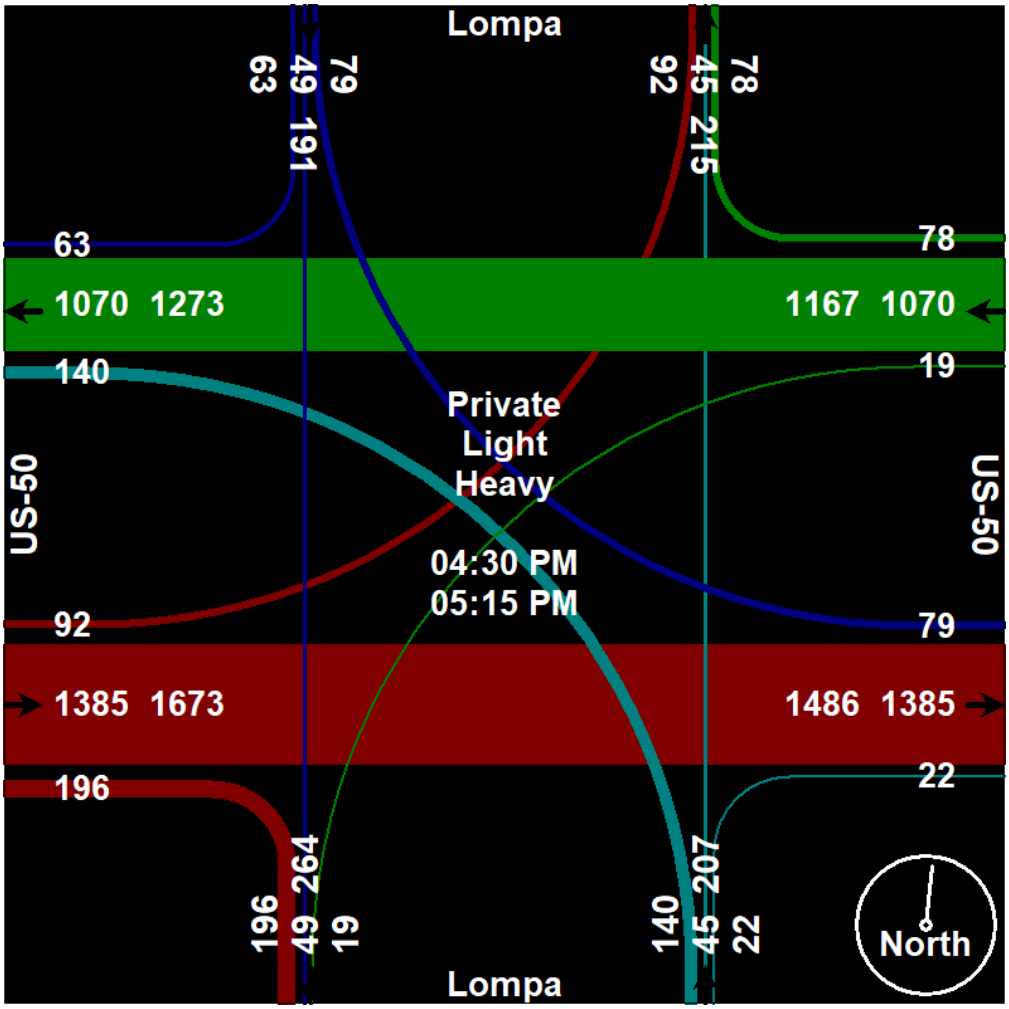

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US-50 E. Carson Complete Streets Study
Turning Movement Classification Count
US-50 & Nye Lane

File Name : US-50 and Nye Lane
Site Code : 00000000
Start Date : 10/31/2023
Page No : 1

Groups Printed- Private - Light - Heavy

	Nye Southbound					US-50 Westbound					Northbound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	2	0	0	0	2	2	380	0	0	382	0	0	169	9	0	178	562
07:15 AM	6	0	0	0	6	3	454	0	0	457	0	0	189	7	0	196	659
07:30 AM	3	0	0	0	3	3	421	0	0	424	0	0	228	5	0	233	660
07:45 AM	3	0	2	0	5	2	465	0	0	467	0	0	216	20	0	236	708
Total	14	0	2	0	16	10	1720	0	0	1730	0	0	802	41	0	843	2589
08:00 AM	5	0	1	0	6	4	318	0	0	322	0	0	190	5	0	195	523
08:15 AM	5	0	0	0	5	3	289	0	0	292	0	0	185	11	0	196	493
08:30 AM	7	0	3	0	10	1	302	0	0	303	0	0	181	5	0	186	499
08:45 AM	3	0	2	0	5	4	311	0	0	315	0	0	156	0	0	156	476
Total	20	0	6	0	26	12	1220	0	0	1232	0	0	712	21	0	733	1991
*** BREAK ***																	
04:00 PM	11	0	1	0	12	7	373	0	0	380	0	0	476	2	0	478	870
04:15 PM	5	0	2	0	7	5	300	0	0	305	0	0	452	5	0	457	769
04:30 PM	15	0	5	0	20	4	329	0	0	333	0	0	498	4	0	502	855
04:45 PM	6	0	2	0	8	7	288	0	0	295	0	0	498	2	0	500	803
Total	37	0	10	0	47	23	1290	0	0	1313	0	0	1924	13	0	1937	3297
05:00 PM	20	0	5	0	25	3	278	0	0	281	0	0	452	6	0	458	764
05:15 PM	10	0	2	0	12	1	258	0	0	259	0	0	465	3	0	468	739
05:30 PM	4	0	2	0	6	1	243	0	0	244	0	0	386	2	0	388	638
05:45 PM	3	0	1	0	4	3	213	0	0	216	0	0	294	7	0	301	521
Total	37	0	10	0	47	8	992	0	0	1000	0	0	1597	18	0	1615	2662
Grand Total	108	0	28	0	136	53	5222	0	0	5275	0	0	5035	93	0	5128	10539
Apprch %	79.4	0	20.6	0		1	99	0	0			0	98.2	1.8	0		
Total %	1	0	0.3	0	1.3	0.5	49.5	0	0	50.1	0	0	47.8	0.9	0	48.7	
Private	108	0	28	0	136	53	5016	0	0	5069	0	0	4831	93	0	4924	10129
% Private	100	0	100	0	100	100	96.1	0	0	96.1	0	0	95.9	100	0	96	96.1
Light	0	0	0	0	0	0	129	0	0	129	0	0	138	0	0	138	267
% Light	0	0	0	0	0	0	2.5	0	0	2.4	0	0	2.7	0	0	2.7	2.5
Heavy	0	0	0	0	0	0	77	0	0	77	0	0	66	0	0	66	143
% Heavy	0	0	0	0	0	0	1.5	0	0	1.5	0	0	1.3	0	0	1.3	1.4

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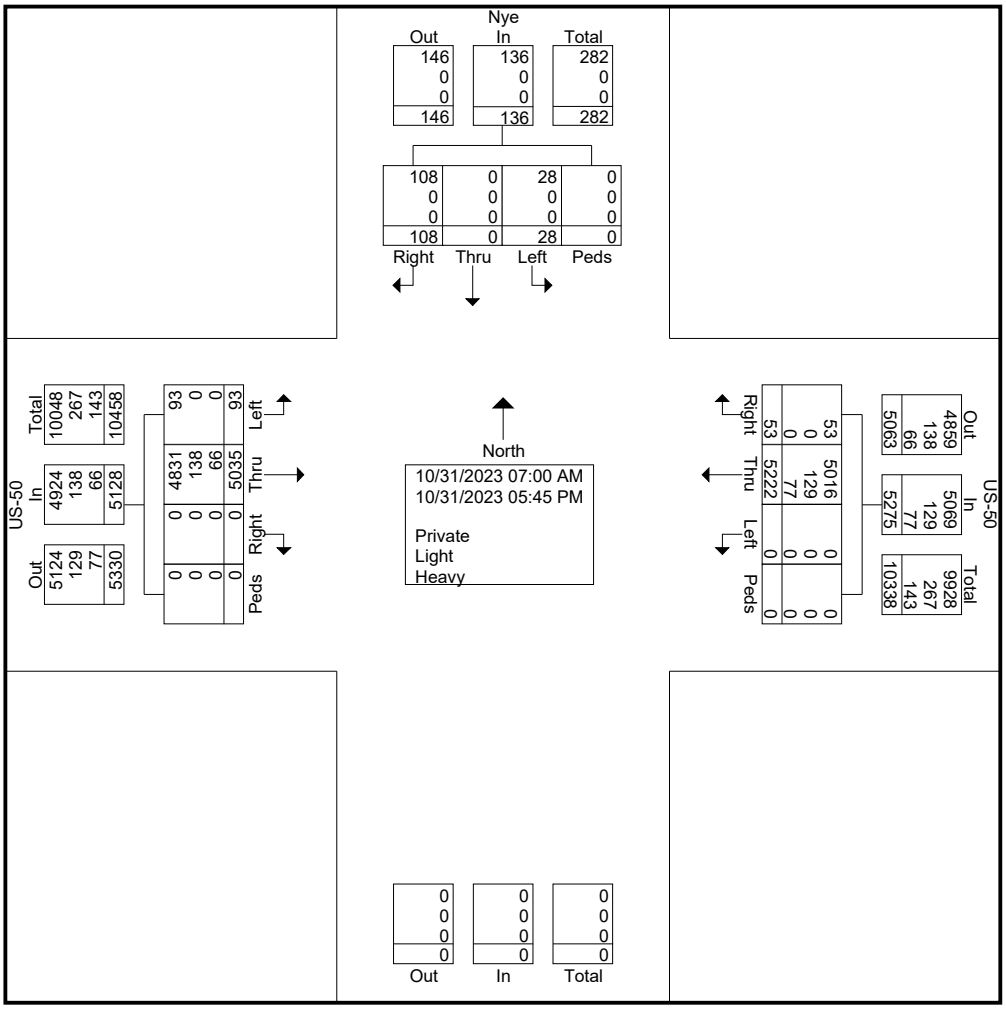
File Name : US-50 and Nye Lane
Site Code : 00000000
Start Date : 10/31/2023
Page No : 2



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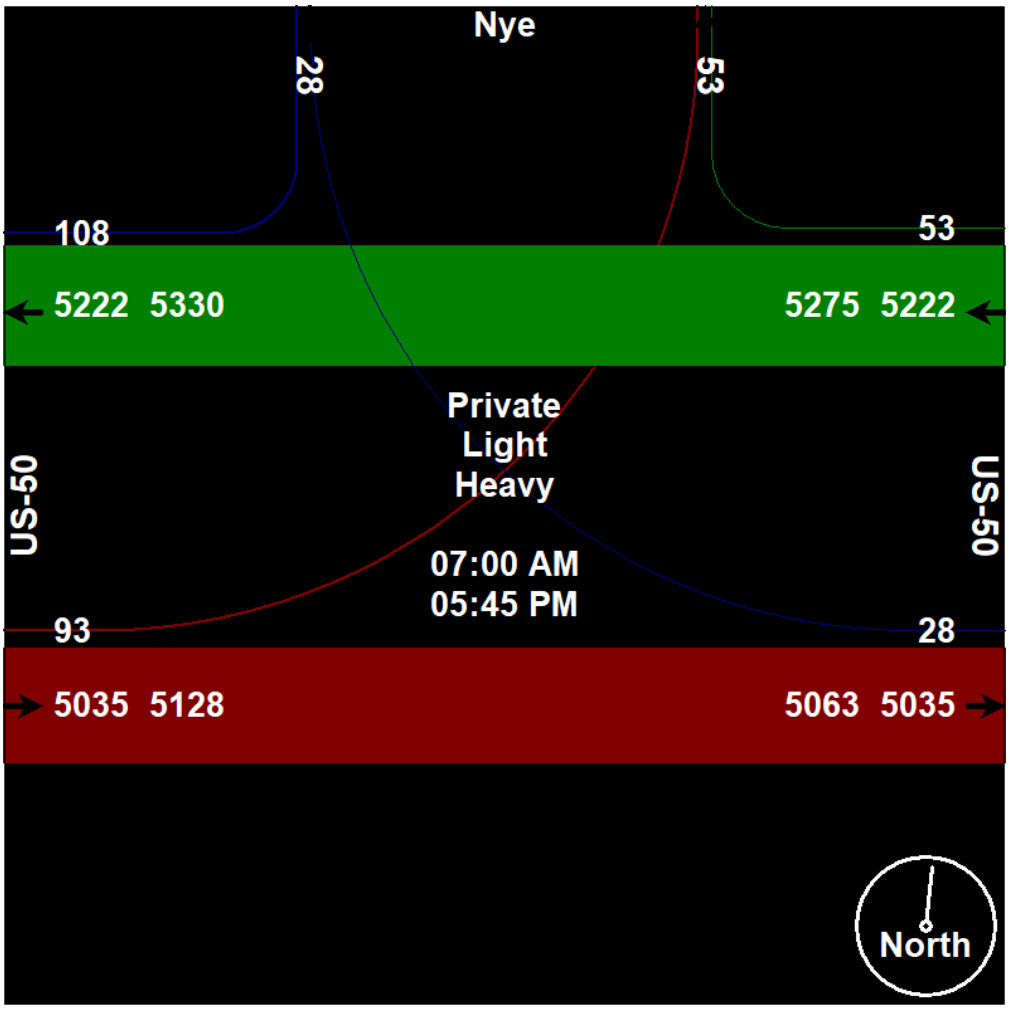
Page No : 3



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File Name : US-50 and Nye Lane
Site Code : 00000000
Start Date : 10/31/2023
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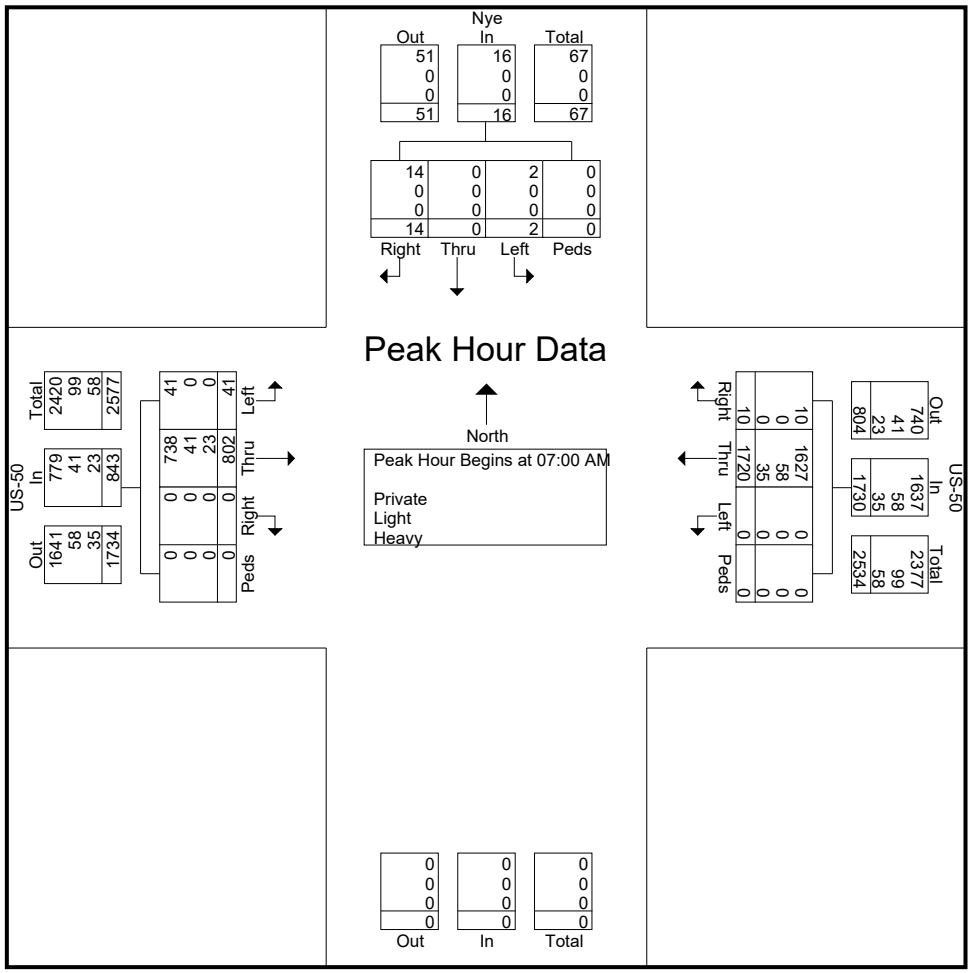
	Nye Southbound					US-50 Westbound					Northbound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	2	0	0	0	2	2	380	0	0	382	0	0	169	9	0	178	562
07:15 AM	**6**	0	0	0	**6**	**3**	454	0	0	457	0	0	189	7	0	196	659
07:30 AM	3	0	0	0	3	3	421	0	0	424	0	0	**228**	5	0	233	660
07:45 AM	3	0	**2**	0	5	2	**465**	0	0	**467**	0	0	216	**20**	0	**236**	**708**
Total Volume	14	0	2	0	16	10	1720	0	0	1730	0	0	802	41	0	843	2589
% App. Total	87.5	0	12.5	0		0.6	99.4	0	0			0	95.1	4.9	0		
PHF	.583	.000	.250	.000	.667	.833	.925	.000	.000	.926	.000	.000	.879	.513	.000	.893	.914
Private	14	0	2	0	16	10	1627	0	0	1637	0	0	738	41	0	779	2432
% Private	100	0	100	0	100	100	94.6	0	0	94.6	0	0	92.0	100	0	92.4	93.9
Light	0	0	0	0	0	0	58	0	0	58	0	0	41	0	0	41	99
% Light	0	0	0	0	0	0	3.4	0	0	3.4	0	0	5.1	0	0	4.9	3.8
Heavy	0	0	0	0	0	0	35	0	0	35	0	0	23	0	0	23	58
% Heavy	0	0	0	0	0	0	2.0	0	0	2.0	0	0	2.9	0	0	2.7	2.2



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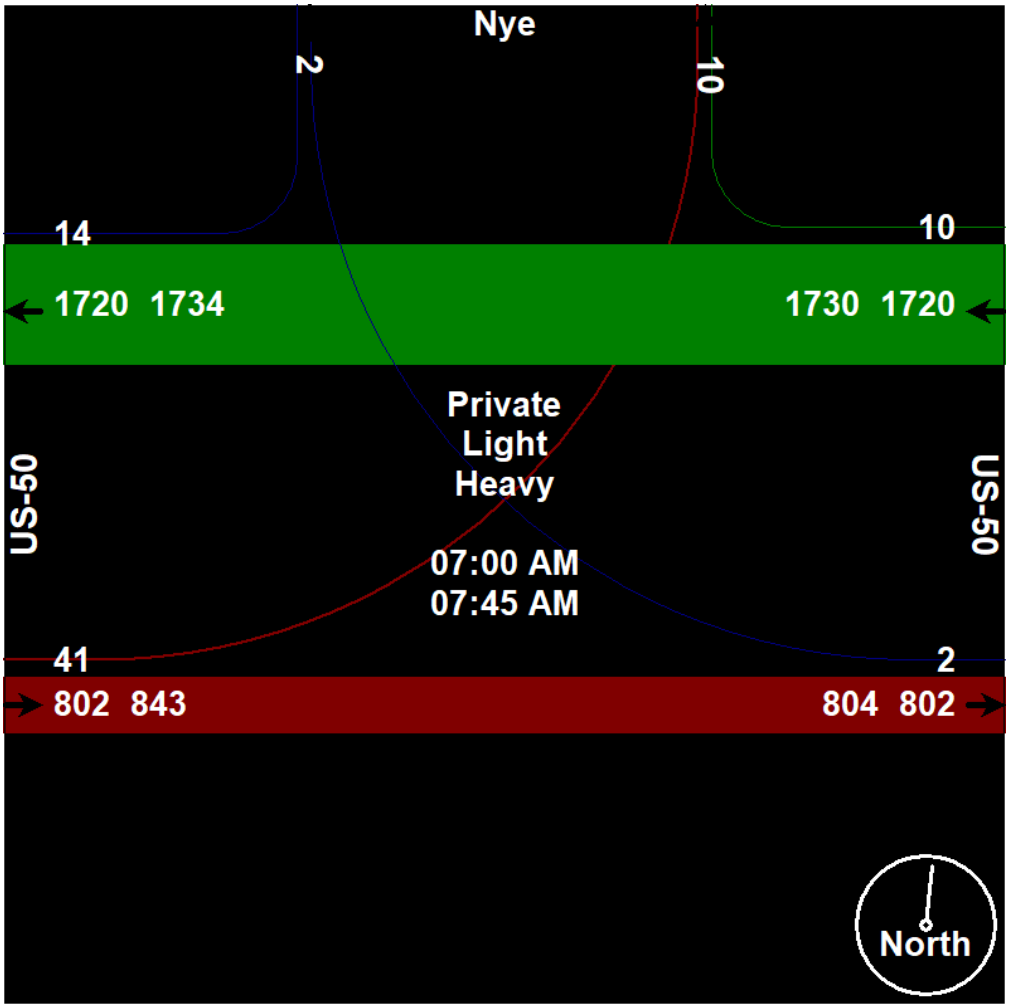
File Name : US-50 and Nye Lane
Site Code : 00000000
Start Date : 10/31/2023
Page No : 5



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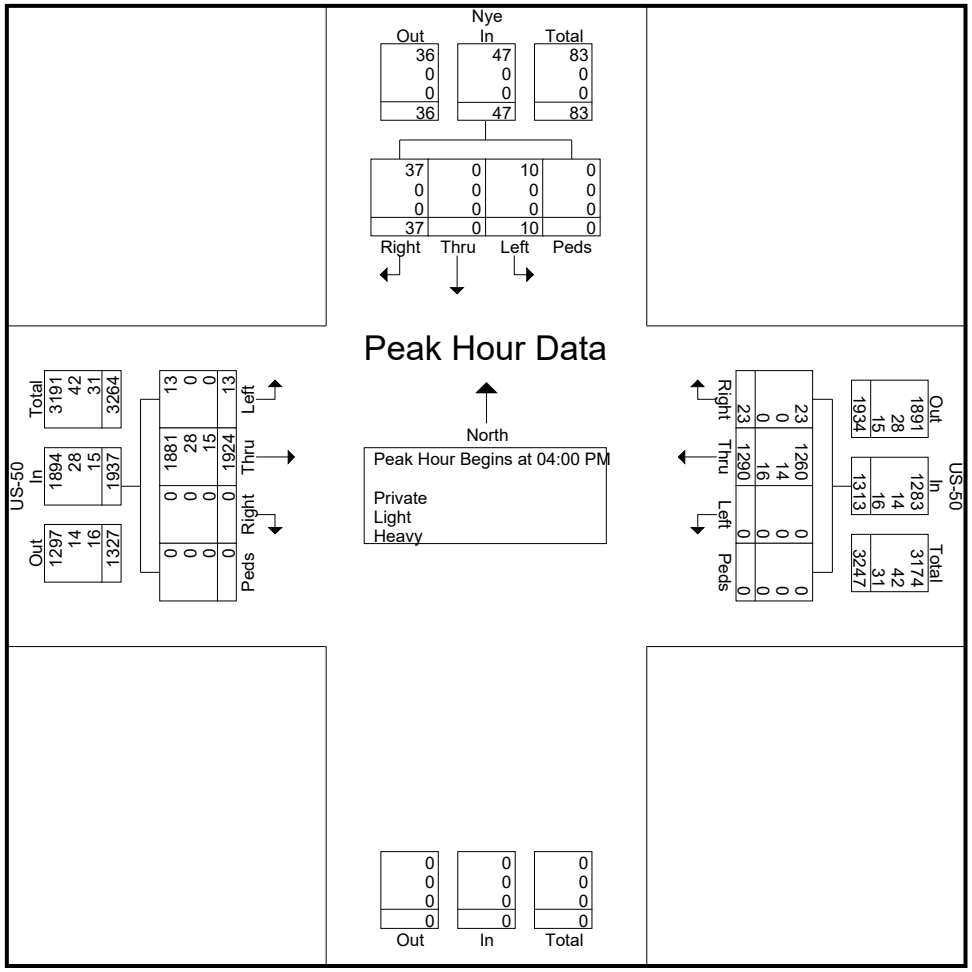
Site Code : 00000000
Start Date : 10/31/2023
Page No : 6

	Nye Southbound					US-50 Westbound					Northbound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	11	0	1	0	12	**7**	**373**	0	0	**380**	0	0	476	2	0	478	**870**
04:15 PM	5	0	2	0	7	5	300	0	0	305	0	0	452	**5**	0	457	769
04:30 PM	**15**	0	**5**	0	**20**	4	329	0	0	333	0	0	**498**	4	0	**502**	855
04:45 PM	6	0	2	0	8	7	288	0	0	295	0	0	498	2	0	500	803
Total Volume	37	0	10	0	47	23	1290	0	0	1313	0	0	1924	13	0	1937	3297
% App. Total	78.7	0	21.3	0		1.8	98.2	0	0			0	99.3	0.7	0		
PHF	.617	.000	.500	.000	.588	.821	.865	.000	.000	.864	.000	.000	.966	.650	.000	.965	.947
Private	37	0	10	0	47	23	1260	0	0	1283	0	0	1881	13	0	1894	3224
% Private	100	0	100	0	100	100	97.7	0	0	97.7	0	0	97.8	100	0	97.8	97.8
Light	0	0	0	0	0	0	14	0	0	14	0	0	28	0	0	28	42
% Light	0	0	0	0	0	0	1.1	0	0	1.1	0	0	1.5	0	0	1.4	1.3
Heavy	0	0	0	0	0	0	16	0	0	16	0	0	15	0	0	15	31
% Heavy	0	0	0	0	0	0	1.2	0	0	1.2	0	0	0.8	0	0	0.8	0.9



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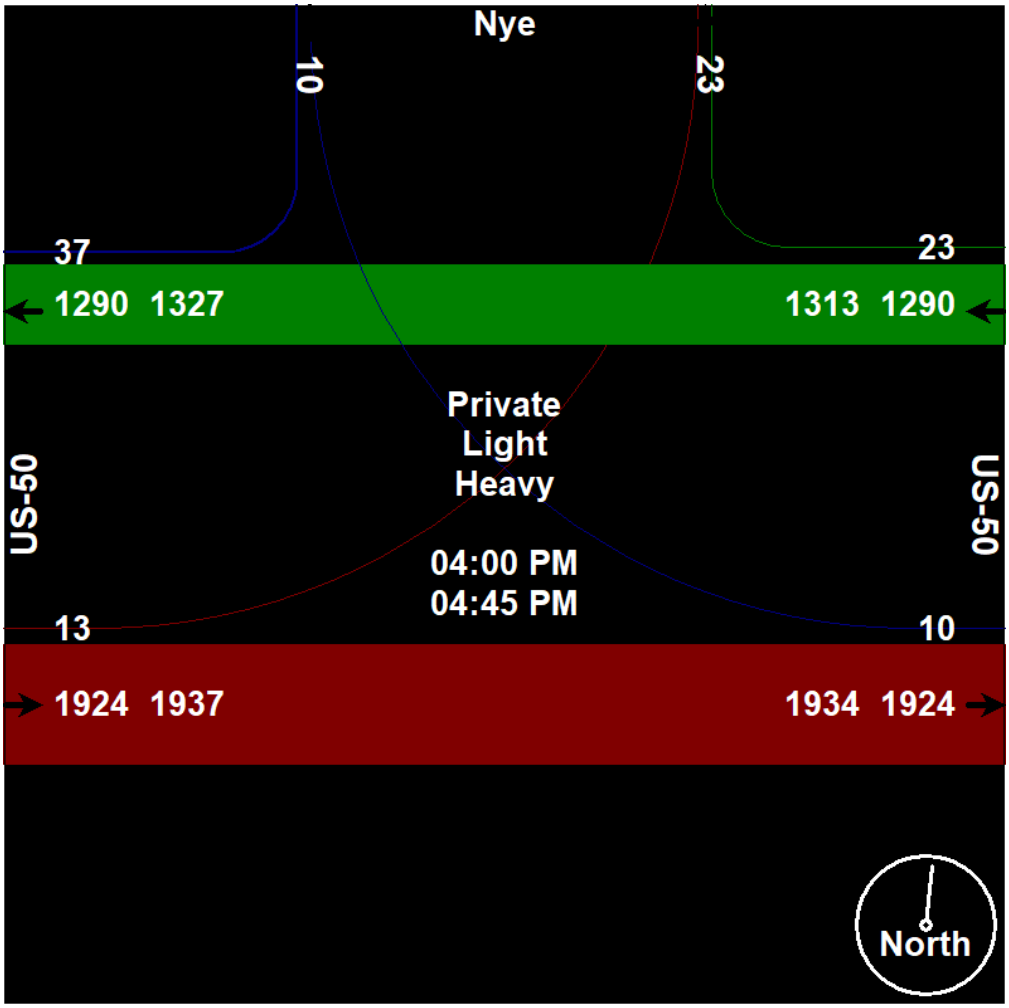
Site Code : 00000000
Start Date : 10/31/2023
Page No : 7



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US-50 E. Carson Complete Streets Study
Turning Movement Classification Count
US-50 & Ramps I-580

File Name : US-50 and Ramps I-580
Site Code : 00000000
Start Date : 10/31/2023
Page No : 1

Groups Printed- Private - Light - Heavy

	Ramps I-580 Southbound					US-50 Westbound					Ramps I-580 Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	62	0	47	0	109	77	177	118	0	372	51	0	20	0	71	38	88	32	0	158	710
07:15 AM	56	0	47	0	103	108	251	91	0	450	40	1	31	0	72	23	115	29	0	167	792
07:30 AM	48	0	46	0	94	91	201	121	0	413	54	0	31	0	85	42	112	45	0	199	791
07:45 AM	79	0	49	0	128	71	226	104	0	401	52	0	39	0	91	16	95	32	0	143	763
Total	245	0	189	0	434	347	855	434	0	1636	197	1	121	0	319	119	410	138	0	667	3056
08:00 AM	54	0	61	0	115	63	205	77	0	345	39	0	28	0	67	21	86	22	0	129	656
08:15 AM	56	0	54	0	110	75	148	89	0	312	51	0	17	0	68	29	98	55	0	182	672
08:30 AM	52	1	27	0	80	62	132	75	0	269	48	0	19	0	67	22	89	28	0	139	555
08:45 AM	54	0	60	0	114	55	148	87	0	290	35	0	36	0	71	25	89	21	0	135	610
Total	216	1	202	0	419	255	633	328	0	1216	173	0	100	0	273	97	362	126	0	585	2493
*** BREAK ***																					
04:00 PM	56	0	79	0	135	81	154	76	0	311	64	0	28	0	92	49	224	60	0	333	871
04:15 PM	56	0	90	0	146	93	167	80	0	340	91	0	17	0	108	35	215	49	0	299	893
04:30 PM	72	0	78	0	150	85	177	74	0	336	149	0	63	0	212	34	221	66	0	321	1019
04:45 PM	68	0	112	0	180	62	162	91	0	315	146	0	52	0	198	47	183	49	0	279	972
Total	252	0	359	0	611	321	660	321	0	1302	450	0	160	0	610	165	843	224	0	1232	3755
05:00 PM	75	0	90	0	165	68	162	87	0	317	115	0	34	0	149	50	211	53	0	314	945
05:15 PM	76	0	85	0	161	68	170	82	0	320	122	0	50	0	172	32	207	55	0	294	947
05:30 PM	63	0	90	0	153	74	160	77	0	311	116	0	51	0	167	29	163	38	0	230	861
05:45 PM	50	0	54	0	104	60	159	60	0	279	85	1	48	0	134	33	115	36	0	184	701
Total	264	0	319	0	583	270	651	306	0	1227	438	1	183	0	622	144	696	182	0	1022	3454
Grand Total	977	1	1069	0	2047	1193	2799	1389	0	5381	1258	2	564	0	1824	525	2311	670	0	3506	12758
Apprch %	47.7	0	52.2	0		22.2	52	25.8	0		69	0.1	30.9	0		15	65.9	19.1	0		
Total %	7.7	0	8.4	0	16	9.4	21.9	10.9	0	42.2	9.9	0	4.4	0	14.3	4.1	18.1	5.3	0	27.5	
Private	977	0	1069			1192	2626	1387			1255						2160				12396
% Private	100	0	100	0	100	99.9	93.8	99.9	0	96.7	99.8	0	97.9	0	99.1	97.1	93.5	99.7	0	95.2	97.2
Light	0	1	0	0	1	1	101	2	0	104	1	2	8	0	11	8	96	2	0	106	222
% Light	0	100	0	0	0	0.1	3.6	0.1	0	1.9	0.1	100	1.4	0	0.6	1.5	4.2	0.3	0	3	1.7
Heavy	0	0	0	0	0	0	72	0	0	72	2	0	4	0	6	7	55	0	0	62	140
% Heavy	0	0	0	0	0	0	2.6	0	0	1.3	0.2	0	0.7	0	0.3	1.3	2.4	0	0	1.8	1.1

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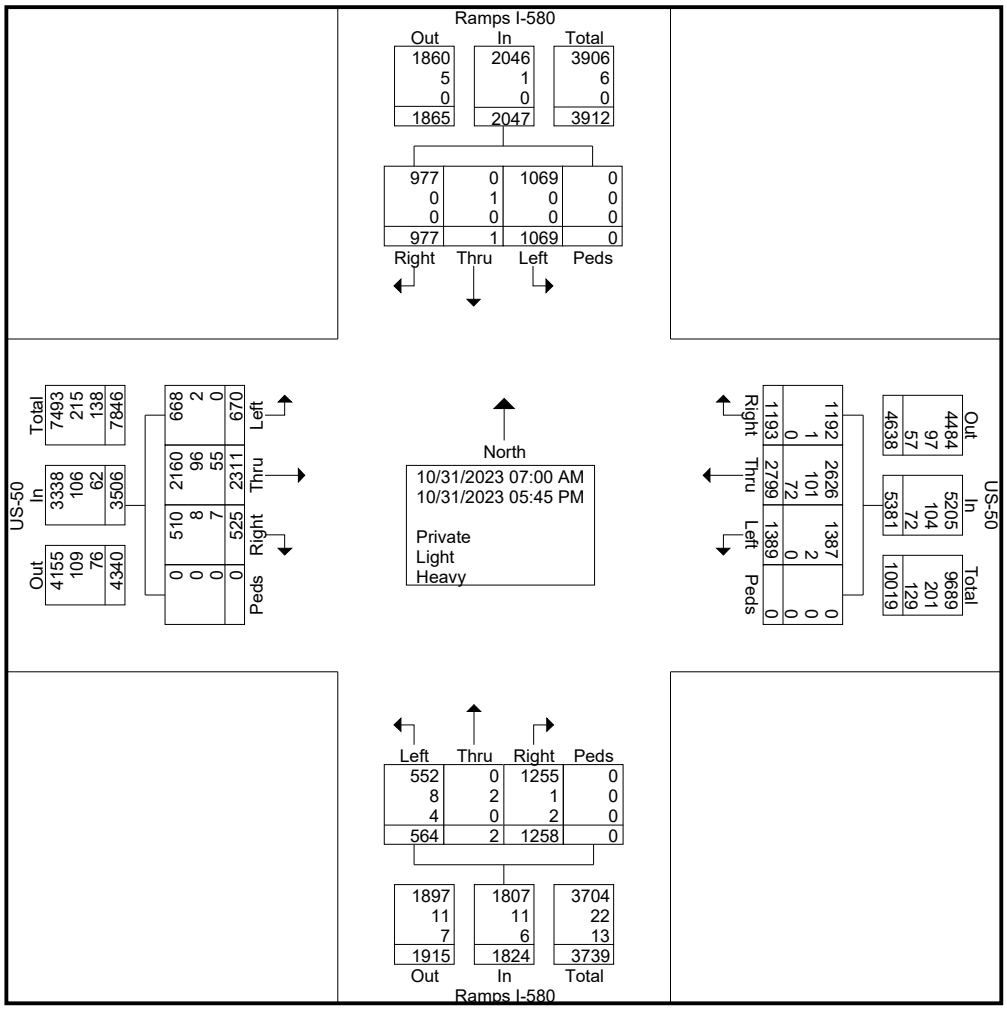
File Name : US-50 and Ramps I-580
Site Code : 00000000
Start Date : 10/31/2023
Page No : 2



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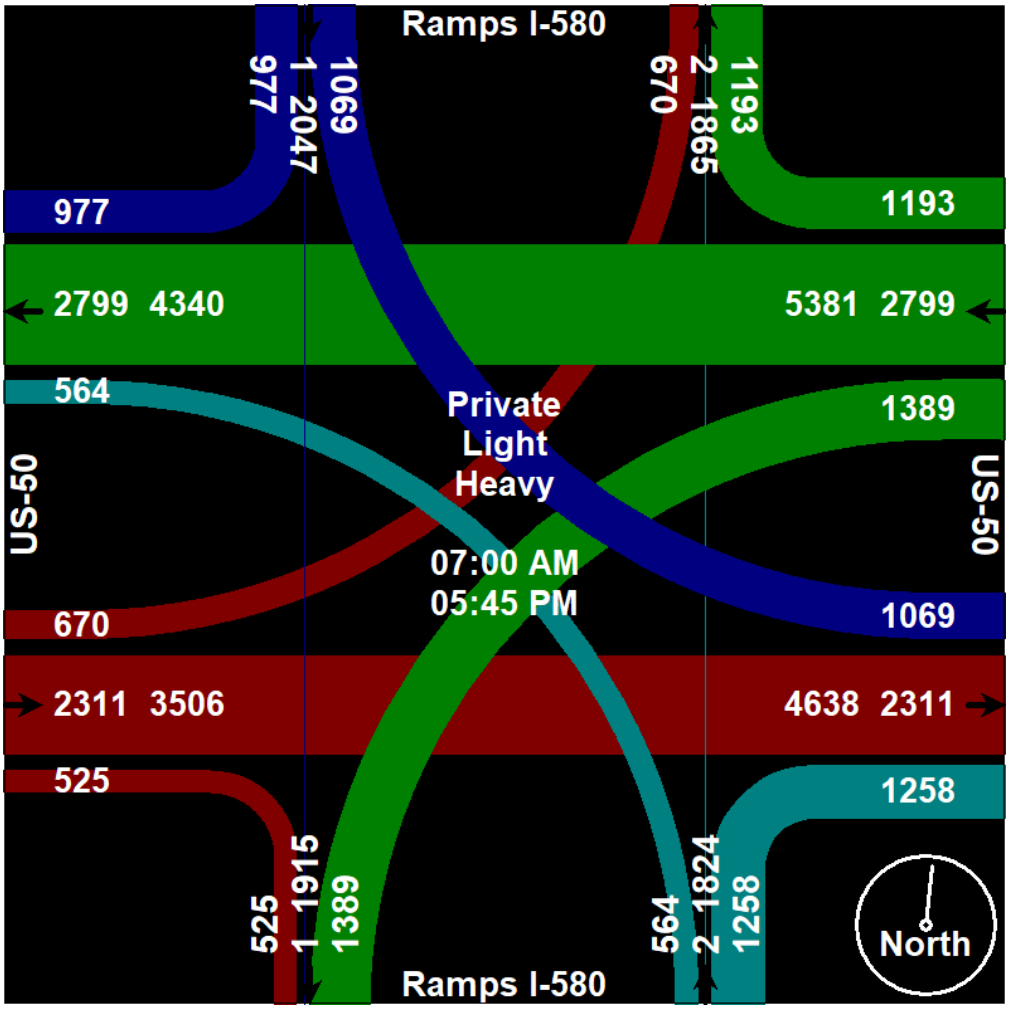
File Name : US-50 and Ramps I-580
Site Code : 00000000
Start Date : 10/31/2023
Page No : 3



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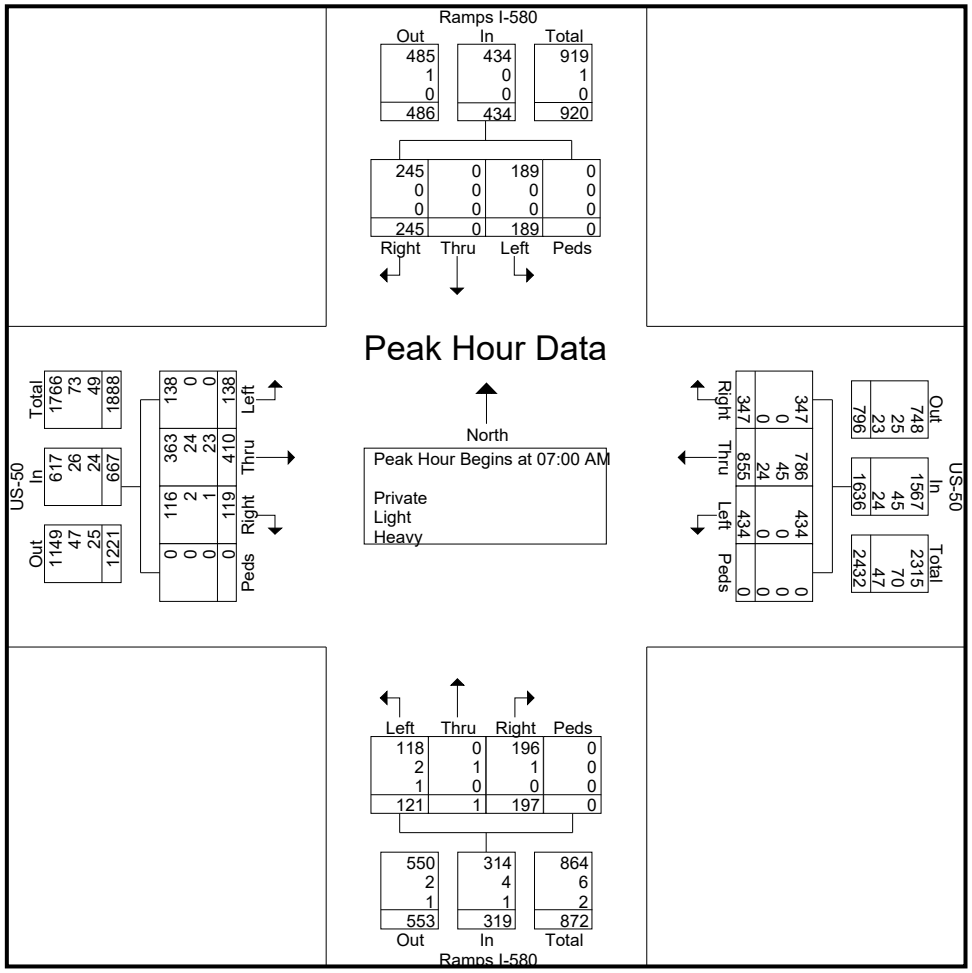
File Name : US-50 and Ramps I-580
Site Code : 00000000
Start Date : 10/31/2023
Page No : 4

	Ramps I-580 Southbound					US-50 Westbound					Ramps I-580 Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	62	0	47	0	109	77	177	118	0	372	51	0	20	0	71	38	88	32	0	158	710
07:15 AM	56	0	47	0	103	**108**	**251**	91	0	**450**	40	**1**	31	0	72	23	**115**	29	0	167	**792**
07:30 AM	48	0	46	0	94	91	201	**121**	0	413	**54**	0	31	0	85	**42**	112	**45**	0	**199**	791
07:45 AM	**79**	0	**49**	0	**128**	71	226	104	0	401	52	0	**39**	0	**91**	16	95	32	0	143	763
Total Volume	245	0	189	0	434	347	855	434	0	1636	197	1	121	0	319	119	410	138	0	667	3056
% App. Total	56.5	0	43.5	0		21.2	52.3	26.5	0		61.8	0.3	37.9	0		17.8	61.5	20.7	0		
PHF	.775	.000	.964	.000	.848	.803	.852	.897	.000	.909	.912	.250	.776	.000	.876	.708	.891	.767	.000	.838	.965
Private	245	0	189	0	434	347	786	434	0	1567	196	0	118	0	314	116	363	138	0	617	2932
% Private	100	0	100	0	100	100	91.9	100	0	95.8	99.5	0	97.5	0	98.4	97.5	88.5	100	0	92.5	95.9
Light	0	0	0	0	0	0	45	0	0	45	1	1	2	0	4	2	24	0	0	26	75
% Light	0	0	0	0	0	0	5.3	0	0	2.8	0.5	100	1.7	0	1.3	1.7	5.9	0	0	3.9	2.5
Heavy	0	0	0	0	0	0	24	0	0	24	0	0	1	0	1	1	23	0	0	24	49
% Heavy	0	0	0	0	0	0	2.8	0	0	1.5	0	0	0.8	0	0.3	0.8	5.6	0	0	3.6	1.6



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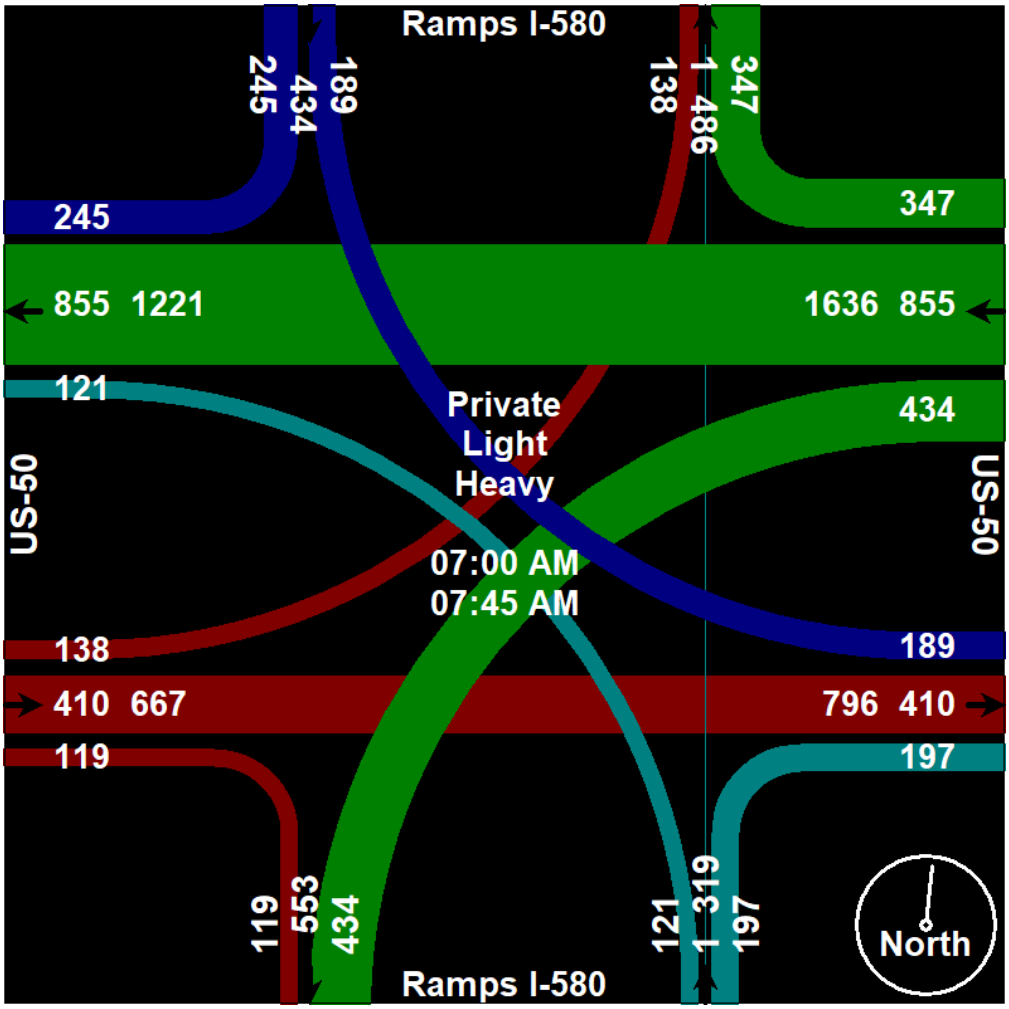
File Name : US-50 and Ramps I-580
Site Code : 00000000
Start Date : 10/31/2023
Page No : 5



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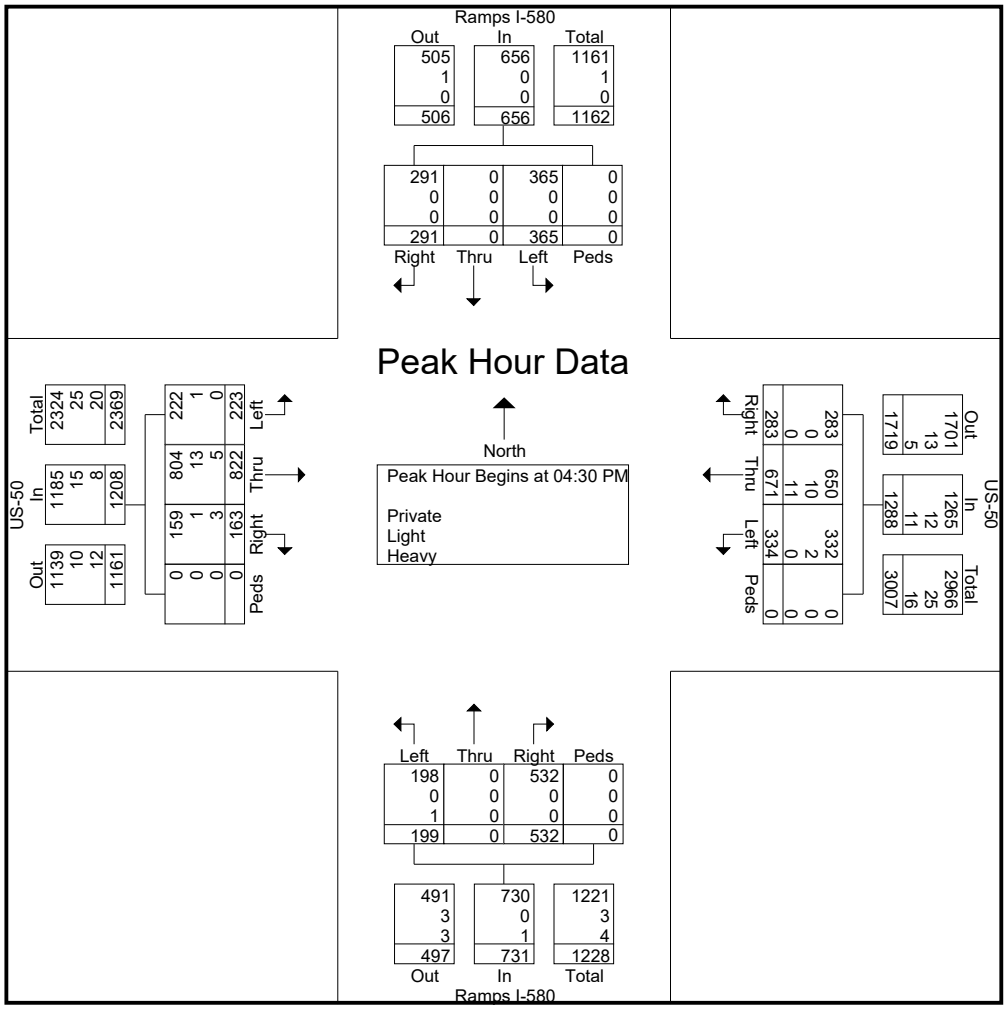
Site Code : 00000000
Start Date : 10/31/2023
Page No : 6

	Ramps I-580 Southbound					US-50 Westbound					Ramps I-580 Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	72	0	78	0	150	**85**	**177**	74	0	**336**	**149**	0	**63**	0	**212**	34	**221**	**66**	0	**321**	**1019**
04:45 PM	68	0	**112**	0	**180**	62	162	**91**	0	315	146	0	52	0	198	47	183	49	0	279	972
05:00 PM	75	0	90	0	165	68	162	87	0	317	115	0	34	0	149	**50**	211	53	0	314	945
05:15 PM	**76**	0	85	0	161	68	170	82	0	320	122	0	50	0	172	32	207	55	0	294	947
Total Volume	291	0	365	0	656	283	671	334	0	1288	532	0	199	0	731	163	822	223	0	1208	3883
% App. Total	44.4	0	55.6	0		22	52.1	25.9	0		72.8	0	27.2	0		13.5	68	18.5	0		
PHF	.957	.000	.815	.000	.911	.832	.948	.918	.000	.958	.893	.000	.790	.000	.862	.815	.930	.845	.000	.941	.953
Private	291	0	365	0	656	283	650	332	0	1265	532	0	198	0	730	159	804	222	0	1185	3836
% Private	100	0	100	0	100	100	96.9	99.4	0	98.2	100	0	99.5	0	99.9	97.5	97.8	99.6	0	98.1	98.8
Light	0	0	0	0	0	0	10	2	0	12	0	0	0	0	0	1	13	1	0	15	27
% Light	0	0	0	0	0	0	1.5	0.6	0	0.9	0	0	0	0	0	0.6	1.6	0.4	0	1.2	0.7
Heavy	0	0	0	0	0	0	11	0	0	11	0	0	1	0	1	3	5	0	0	8	20
% Heavy	0	0	0	0	0	0	1.6	0	0	0.9	0	0	0.5	0	0.1	1.8	0.6	0	0	0.7	0.5



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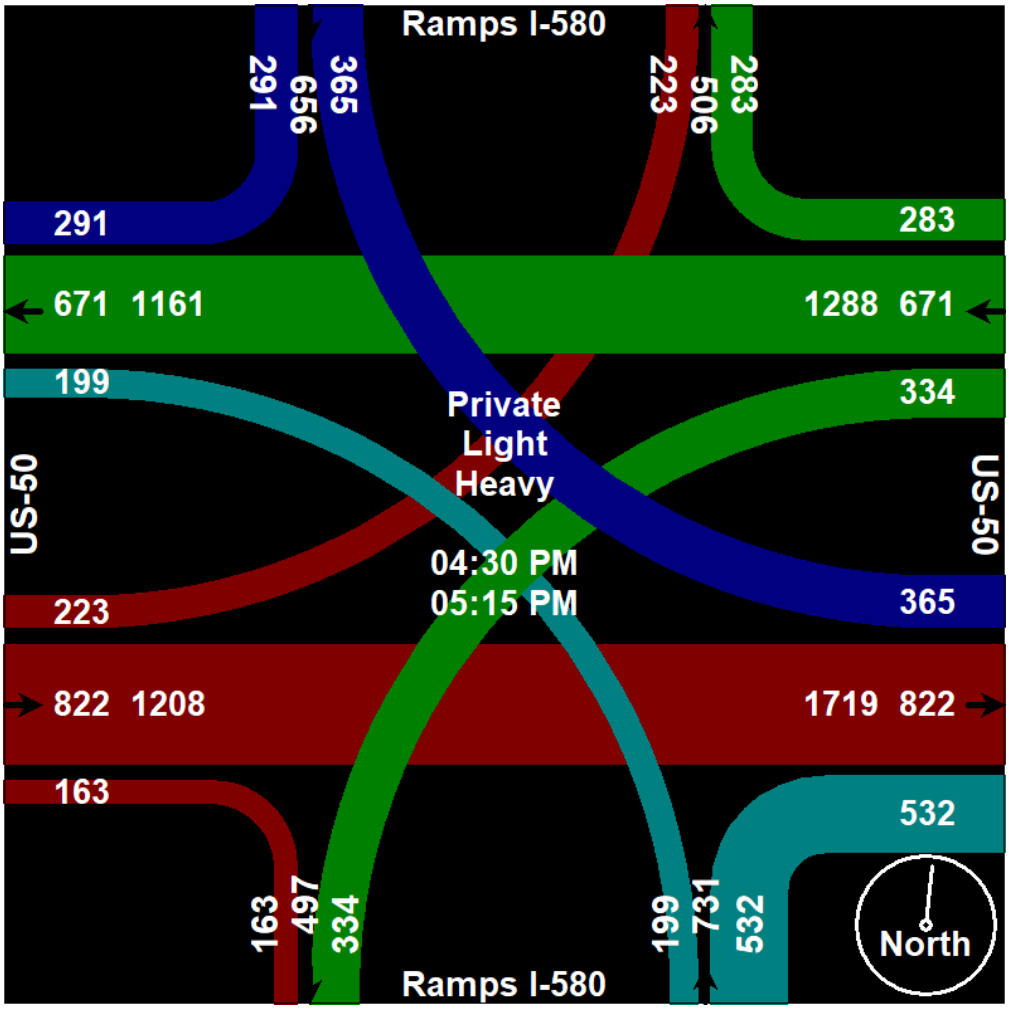
File Name : US-50 and Ramps I-580
Site Code : 00000000
Start Date : 10/31/2023
Page No : 7



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US-50 E. Carson Complete Streets Study
Turning Movement Classification Count
US-50 & Red Rock Road

File Name : US-50 and Red Rock Road
Site Code : 00000000
Start Date : 11/1/2023
Page No : 1

Groups Printed- Private - Light - Heavy

	Red Rock Southbound					US-50 Westbound					Northb ound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	16	0	0	0	16	1	380	0	0	381	0	0	140	6	0	146	543
07:15 AM	13	0	2	0	15	3	464	0	0	467	0	0	138	7	0	145	627
07:30 AM	18	0	3	0	21	2	518	0	0	520	0	0	147	4	0	151	692
07:45 AM	11	0	1	0	12	2	405	0	0	407	0	0	168	6	0	174	593
Total	58	0	6	0	64	8	1767	0	0	1775	0	0	593	23	0	616	2455
08:00 AM	9	0	2	0	11	1	311	0	0	312	0	0	122	7	0	129	452
08:15 AM	8	0	3	0	11	2	286	0	0	288	0	0	151	6	0	157	456
08:30 AM	3	0	2	0	5	1	281	0	0	282	0	0	159	6	0	165	452
08:45 AM	3	0	0	0	3	4	265	0	0	269	0	0	151	7	0	158	430
Total	23	0	7	0	30	8	1143	0	0	1151	0	0	583	26	0	609	1790
*** BREAK ***																	
04:00 PM	12	0	2	0	14	5	253	0	0	258	0	0	437	12	0	449	721
04:15 PM	18	0	2	0	20	2	215	0	0	217	0	0	478	11	0	489	726
04:30 PM	10	0	0	0	10	5	218	0	0	223	0	0	468	18	0	486	719
04:45 PM	10	0	3	0	13	4	195	0	0	199	0	0	474	12	0	486	698
Total	50	0	7	0	57	16	881	0	0	897	0	0	1857	53	0	1910	2864
05:00 PM	10	0	5	0	15	5	214	0	0	219	0	0	437	10	0	447	681
05:15 PM	5	0	1	0	6	3	192	0	0	195	0	0	512	15	0	527	728
05:30 PM	6	0	4	0	10	3	215	0	0	218	0	0	441	17	0	458	686
05:45 PM	4	0	3	0	7	4	152	0	0	156	0	0	351	18	0	369	532
Total	25	0	13	0	38	15	773	0	0	788	0	0	1741	60	0	1801	2627
Grand Total	156	0	33	0	189	47	4564	0	0	4611	0	0	4774	162	0	4936	9736
Apprch %	82.5	0	17.5	0		1	99	0	0			0	96.7	3.3	0		
Total %	1.6	0	0.3	0	1.9	0.5	46.9	0	0	47.4	0	0	49	1.7	0	50.7	
Private	155	0	32	0	187	47	4424	0	0	4471	0	0	4626	160	0	4786	9444
% Private	99.4	0	97	0	98.9	100	96.9	0	0	97	0	0	96.9	98.8	0	97	97
Light	0	0	0	0	0	0	72	0	0	72	0	0	67	0	0	67	139
% Light	0	0	0	0	0	0	1.6	0	0	1.6	0	0	1.4	0	0	1.4	1.4
Heavy	1	0	1	0	2	0	68	0	0	68	0	0	81	2	0	83	153
% Heavy	0.6	0	3	0	1.1	0	1.5	0	0	1.5	0	0	1.7	1.2	0	1.7	1.6

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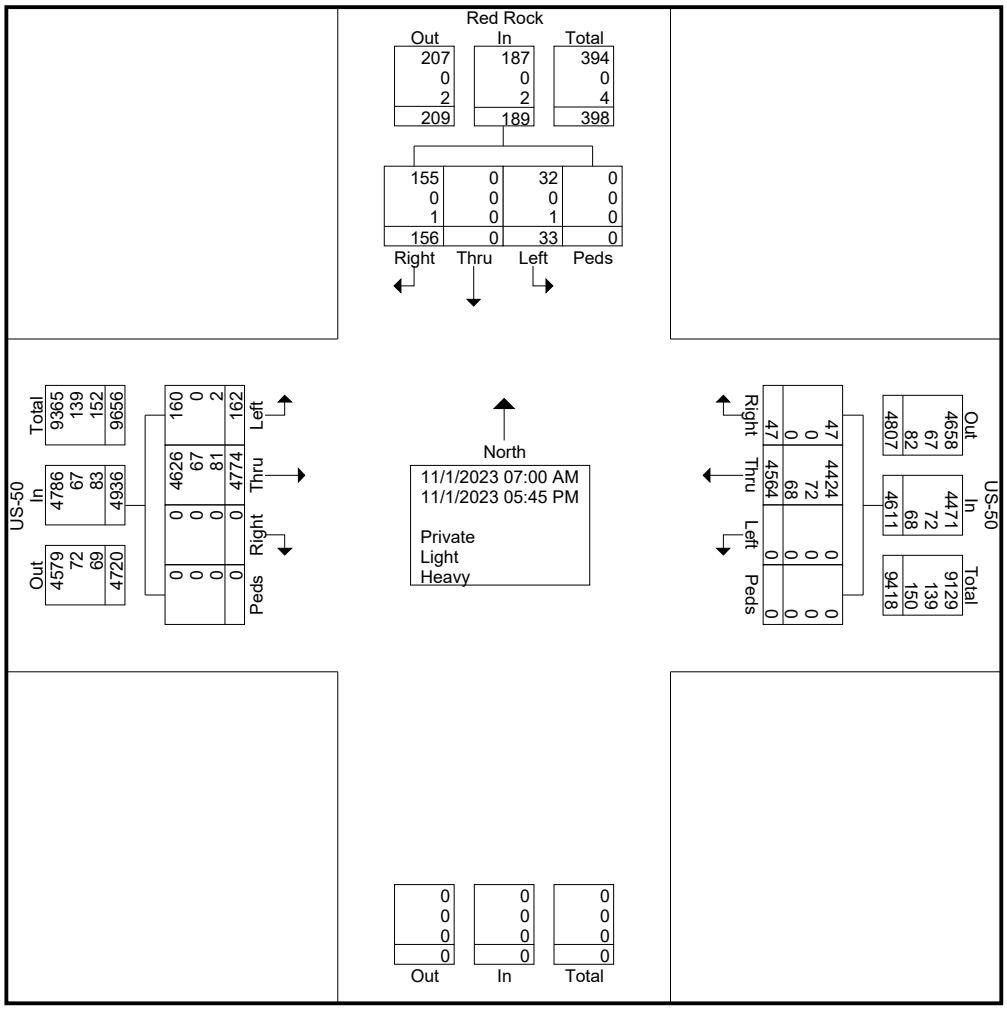
File Name : US-50 and Red Rock Road
Site Code : 00000000
Start Date : 11/1/2023
Page No : 2



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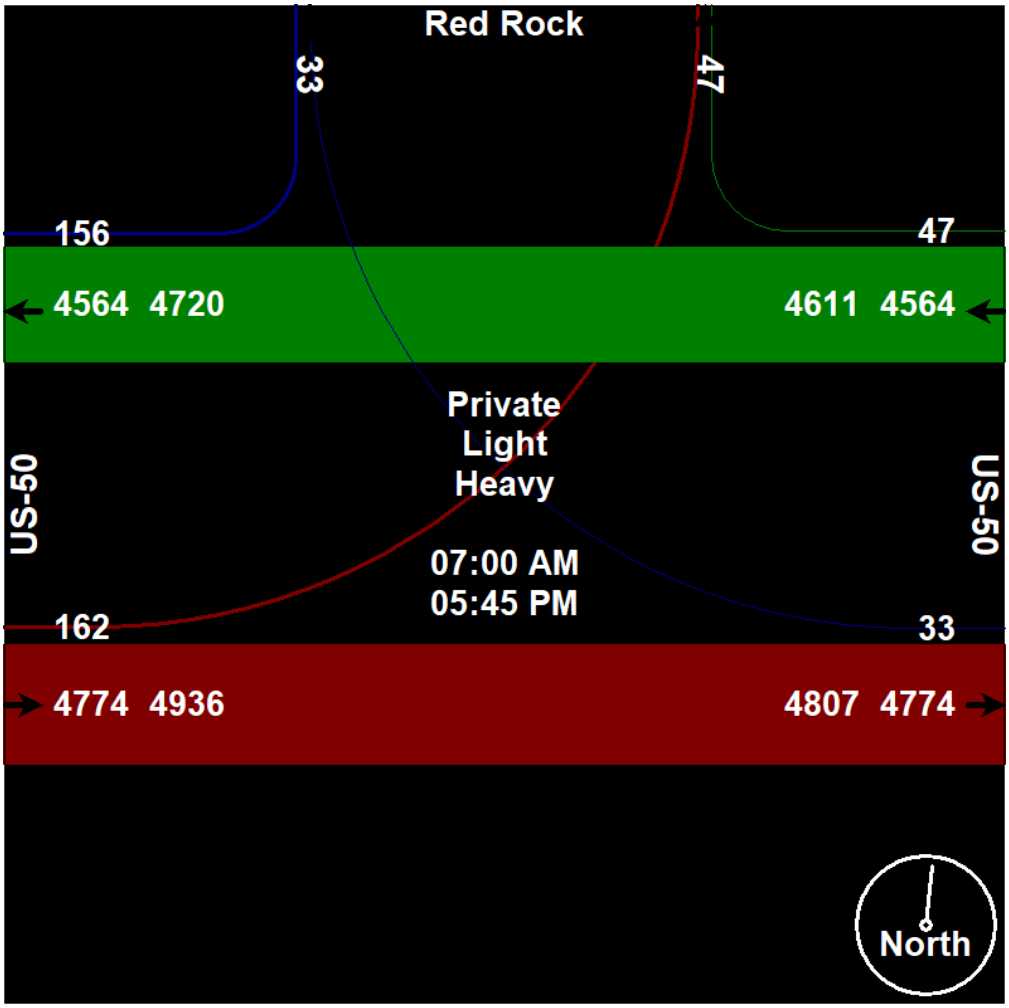
File Name : US-50 and Red Rock Road
Site Code : 00000000
Start Date : 11/1/2023
Page No : 3



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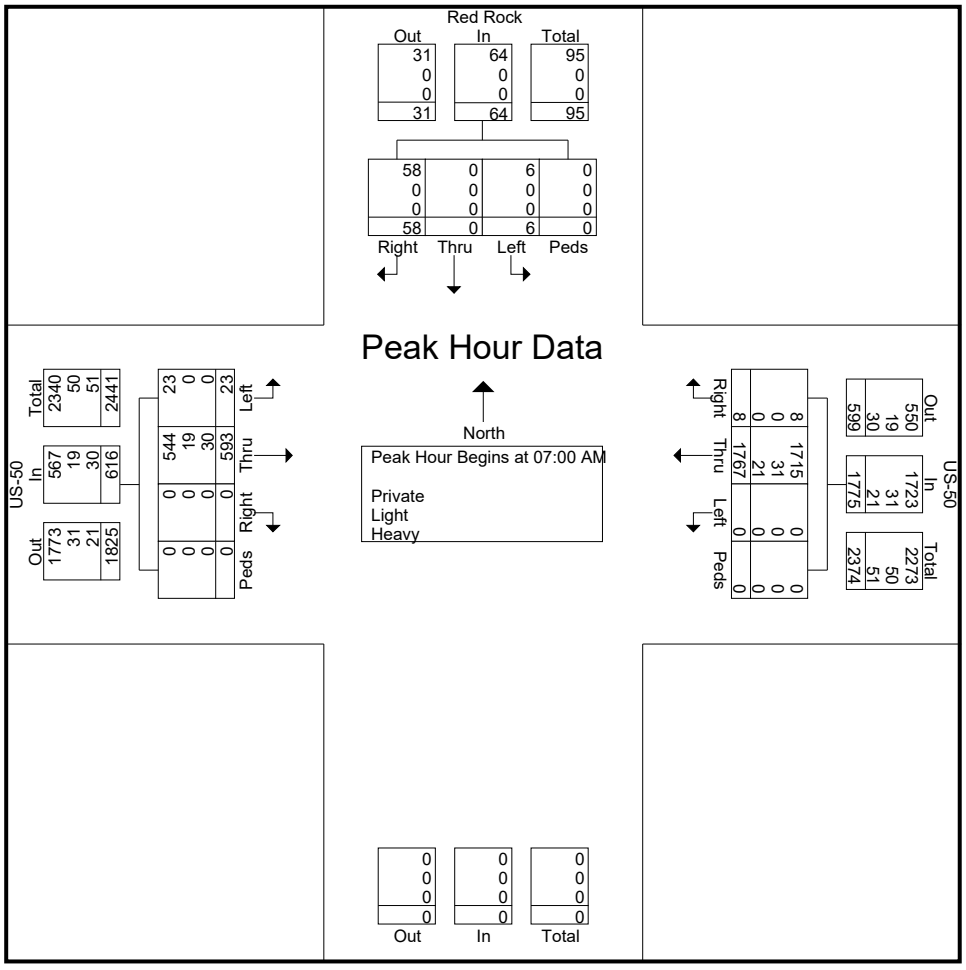
File Name : US-50 and Red Rock Road
Site Code : 00000000
Start Date : 11/1/2023
Page No : 4

	Red Rock Southbound					US-50 Westbound					Northbound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	16	0	0	0	16	1	380	0	0	381	0	0	140	6	0	146	543
07:15 AM	13	0	2	0	15	**3**	464	0	0	467	0	0	138	**7**	0	145	627
07:30 AM	**18**	0	**3**	0	**21**	2	**518**	0	0	**520**	0	0	147	4	0	151	**692**
07:45 AM	11	0	1	0	12	2	405	0	0	407	0	0	**168**	6	0	**174**	593
Total Volume	58	0	6	0	64	8	1767	0	0	1775	0	0	593	23	0	616	2455
% App. Total	90.6	0	9.4	0		0.5	99.5	0	0			0	96.3	3.7	0		
PHF	.806	.000	.500	.000	.762	.667	.853	.000	.000	.853	.000	.000	.882	.821	.000	.885	.887
Private	58	0	6	0	64	8	1715	0	0	1723	0	0	544	23	0	567	2354
% Private	100	0	100	0	100	100	97.1	0	0	97.1	0	0	91.7	100	0	92.0	95.9
Light	0	0	0	0	0	0	31	0	0	31	0	0	19	0	0	19	50
% Light	0	0	0	0	0	0	1.8	0	0	1.7	0	0	3.2	0	0	3.1	2.0
Heavy	0	0	0	0	0	0	21	0	0	21	0	0	30	0	0	30	51
% Heavy	0	0	0	0	0	0	1.2	0	0	1.2	0	0	5.1	0	0	4.9	2.1



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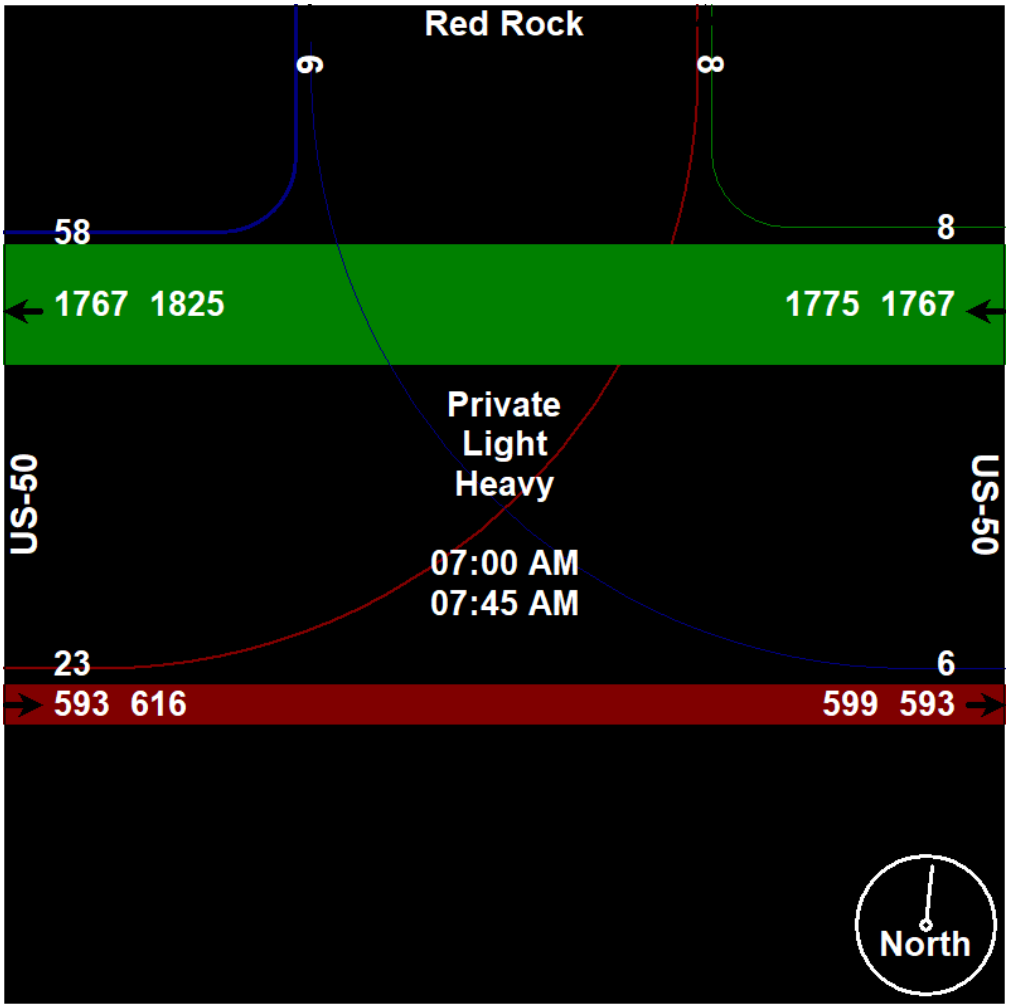
File Name : US-50 and Red Rock Road
Site Code : 00000000
Start Date : 11/1/2023
Page No : 5



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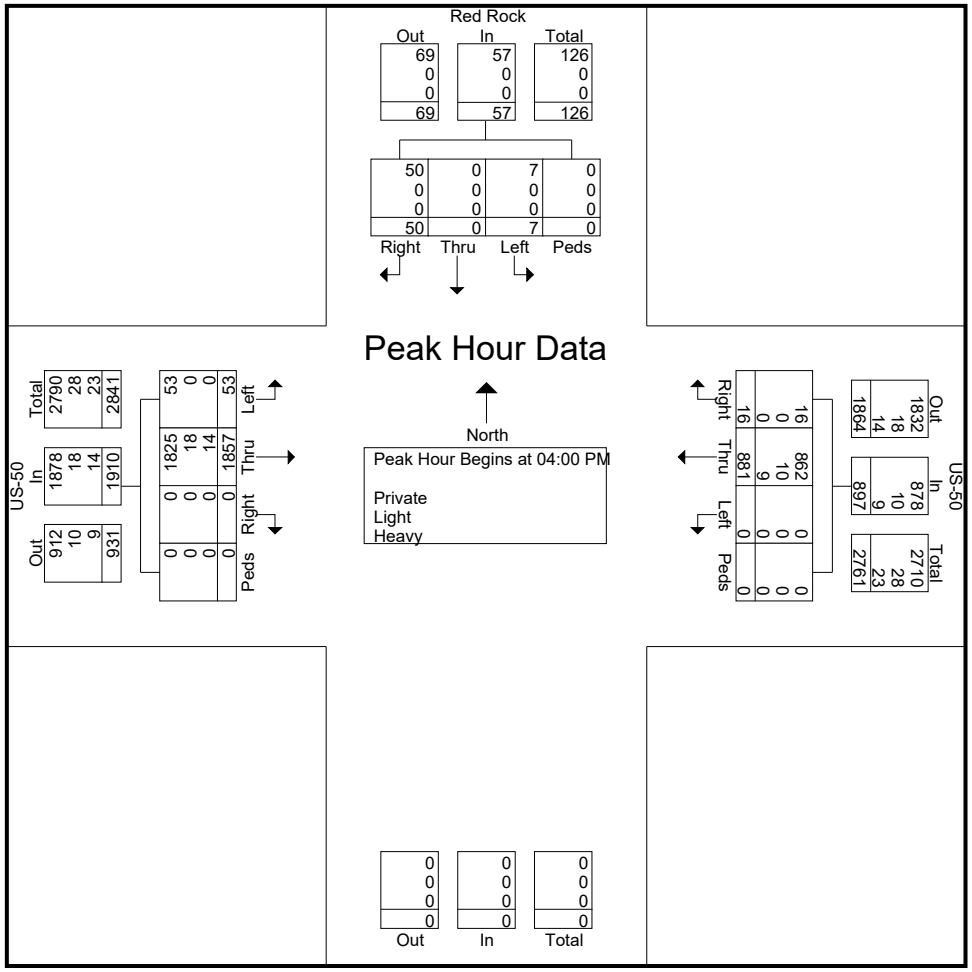
File Name : US-50 and Red Rock Road
Site Code : 00000000
Start Date : 11/1/2023
Page No : 6

	Red Rock Southbound					US-50 Westbound					Northbound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	12	0	2	0	14	**5**	**253**	0	0	**258**	0	0	437	12	0	449	721
04:15 PM	**18**	0	2	0	**20**	2	215	0	0	217	0	0	**478**	11	0	**489**	**726**
04:30 PM	10	0	0	0	10	5	218	0	0	223	0	0	468	**18**	0	486	719
04:45 PM	10	0	**3**	0	13	4	195	0	0	199	0	0	474	12	0	486	698
Total Volume	50	0	7	0	57	16	881	0	0	897	0	0	1857	53	0	1910	2864
% App. Total	87.7	0	12.3	0		1.8	98.2	0	0			0	97.2	2.8	0		
PHF	.694	.000	.583	.000	.713	.800	.871	.000	.000	.869	.000	.000	.971	.736	.000	.976	.986
Private	50	0	7	0	57	16	862	0	0	878	0	0	1825	53	0	1878	2813
% Private	100	0	100	0	100	100	97.8	0	0	97.9	0	0	98.3	100	0	98.3	98.2
Light	0	0	0	0	0	0	10	0	0	10	0	0	18	0	0	18	28
% Light	0	0	0	0	0	0	1.1	0	0	1.1	0	0	1.0	0	0	0.9	1.0
Heavy	0	0	0	0	0	0	9	0	0	9	0	0	14	0	0	14	23
% Heavy	0	0	0	0	0	0	1.0	0	0	1.0	0	0	0.8	0	0	0.7	0.8



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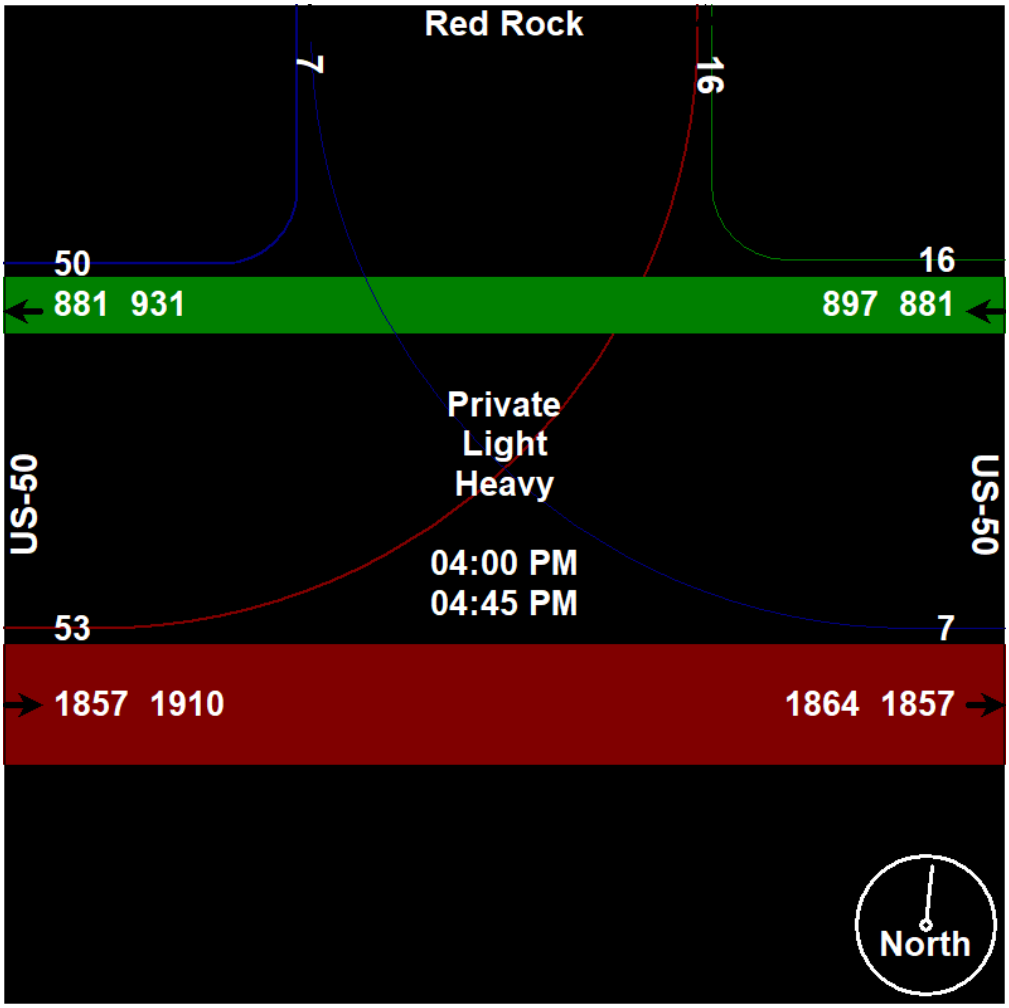
File Name : US-50 and Red Rock Road
Site Code : 00000000
Start Date : 11/1/2023
Page No : 7



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US-50 E. Carson Complete Streets Study
12-Hour Classification Count
US-50 & Sherman Lane

File Name : US-50 and Sherman Lane
Site Code : 00000000
Start Date : 10/31/2023
Page No : 1

Groups Printed- Private - Light - Heavy

	Sherman Southbound					US-50 Westbound					Northbound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	9	0	11	0	20	0	213	0	0	213	0	0	112	2	0	114	347
06:15 AM	5	0	3	0	8	0	299	0	0	299	0	0	190	1	0	191	498
06:30 AM	3	0	5	0	8	0	341	0	0	341	0	0	212	1	0	213	562
06:45 AM	1	0	1	0	2	0	397	0	0	397	0	0	230	0	0	230	629
Total	18	0	20	0	38	0	1250	0	0	1250	0	0	744	4	0	748	2036
07:00 AM	13	0	0	0	13	1	367	0	0	368	0	0	172	0	0	172	553
07:15 AM	7	0	1	0	8	6	458	0	0	464	0	0	203	0	0	203	675
07:30 AM	5	0	3	0	8	7	418	0	0	425	0	0	232	1	0	233	666
07:45 AM	5	0	2	0	7	13	454	0	0	467	0	0	228	0	0	228	702
Total	30	0	6	0	36	27	1697	0	0	1724	0	0	835	1	0	836	2596
08:00 AM	11	0	0	0	11	3	298	0	0	301	0	0	192	0	0	192	504
08:15 AM	9	0	0	0	9	0	283	0	0	283	0	0	202	0	0	202	494
08:30 AM	2	0	0	0	2	2	291	0	0	293	0	0	186	2	0	188	483
08:45 AM	2	0	0	0	2	2	311	0	0	313	0	0	179	0	0	179	494
Total	24	0	0	0	24	7	1183	0	0	1190	0	0	759	2	0	761	1975
09:00 AM	6	0	0	0	6	1	247	0	0	248	0	0	174	0	0	174	428
09:15 AM	3	0	0	0	3	1	274	0	0	275	0	0	188	3	0	191	469
09:30 AM	4	0	0	0	4	0	259	0	0	259	0	0	205	0	0	205	468
09:45 AM	6	0	0	0	6	1	278	0	0	279	0	0	190	1	0	191	476
Total	19	0	0	0	19	3	1058	0	0	1061	0	0	757	4	0	761	1841
10:00 AM	0	0	0	0	0	1	242	0	0	243	0	0	233	0	0	233	476
10:15 AM	1	0	0	0	1	3	253	0	0	256	0	0	224	1	0	225	482
10:30 AM	2	0	0	0	2	2	277	0	0	279	0	0	210	1	0	211	492
10:45 AM	4	0	1	0	5	3	247	0	0	250	0	0	221	2	0	223	478
Total	7	0	1	0	8	9	1019	0	0	1028	0	0	888	4	0	892	1928
11:00 AM	6	0	2	0	8	1	269	0	0	270	0	0	231	2	0	233	511
11:15 AM	2	0	0	0	2	1	250	0	0	251	0	0	257	0	0	257	510
11:30 AM	1	0	0	0	1	0	268	0	0	268	0	0	261	1	0	262	531
11:45 AM	4	0	2	0	6	2	247	0	0	249	0	0	247	0	0	247	502
Total	13	0	4	0	17	4	1034	0	0	1038	0	0	996	3	0	999	2054
12:00 PM	2	0	2	0	4	5	273	0	0	278	0	0	256	1	0	257	539
12:15 PM	1	0	0	0	1	3	279	0	0	282	0	0	276	1	0	277	560
12:30 PM	1	0	1	0	2	2	293	0	0	295	0	0	272	2	0	274	571
12:45 PM	2	0	4	0	6	3	262	0	0	265	0	0	291	2	0	293	564
Total	6	0	7	0	13	13	1107	0	0	1120	0	0	1095	6	0	1101	2234
01:00 PM	2	0	0	0	2	2	255	0	0	257	0	0	258	0	0	258	517
01:15 PM	1	0	1	0	2	4	268	0	0	272	0	0	311	1	0	312	586
01:30 PM	4	0	1	0	5	2	305	0	0	307	0	0	272	1	0	273	585
01:45 PM	4	0	1	0	5	2	259	0	0	261	0	0	277	0	0	277	543
Total	11	0	3	0	14	10	1087	0	0	1097	0	0	1118	2	0	1120	2231

Silver State Traffic Data Collection, LLC

1819 Quarley Place
Henderson, Nevada, 89014
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(702) 898-1968 - Office
(702) 217-1968 - Cell

File Name : US-50 and Sherman Lane
Site Code : 00000000
Start Date : 10/31/2023
Page No : 2

Groups Printed- Private - Light - Heavy

	Sherman Southbound					US-50 Westbound					Northb ound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
02:00 PM	1	0	2	0	3	1	256	0	0	257	0	0	299	2	0	301	561
02:15 PM	4	0	0	0	4	2	274	0	0	276	0	0	337	1	0	338	618
02:30 PM	5	0	0	0	5	1	354	0	0	355	0	0	352	2	0	354	714
02:45 PM	1	0	0	0	1	2	281	0	0	283	0	0	319	2	0	321	605
Total	11	0	2	0	13	6	1165	0	0	1171	0	0	1307	7	0	1314	2498
03:00 PM	5	0	0	0	5	4	313	0	0	317	0	0	376	0	0	376	698
03:15 PM	3	0	1	0	4	2	300	0	0	302	0	0	377	4	0	381	687
03:30 PM	4	0	4	0	8	4	346	0	0	350	0	0	409	2	0	411	769
03:45 PM	7	0	1	0	8	5	391	0	0	396	0	0	427	2	0	429	833
Total	19	0	6	0	25	15	1350	0	0	1365	0	0	1589	8	0	1597	2987
04:00 PM	6	0	1	0	7	3	362	0	0	365	0	0	478	4	0	482	854
04:15 PM	2	0	2	0	4	6	332	0	0	338	0	0	459	3	0	462	804
04:30 PM	5	0	2	0	7	2	346	0	0	348	0	0	486	4	0	490	845
04:45 PM	8	0	1	0	9	5	292	0	0	297	0	0	497	3	0	500	806
Total	21	0	6	0	27	16	1332	0	0	1348	0	0	1920	14	0	1934	3309
05:00 PM	8	0	3	0	11	0	289	0	0	289	0	0	474	6	0	480	780
05:15 PM	7	0	1	0	8	0	291	0	0	291	0	0	457	5	0	462	761
05:30 PM	8	0	1	0	9	1	251	0	0	252	0	0	413	1	0	414	675
05:45 PM	6	0	0	0	6	0	216	0	0	216	0	0	293	2	0	295	517
Total	29	0	5	0	34	1	1047	0	0	1048	0	0	1637	14	0	1651	2733
Grand Total	208	0	60	0	268	111	14329	0	0	14440	0	0	13645	69	0	13714	28422
Apprch %	77.6	0	22.4	0		0.8	99.2	0	0			0	99.5	0.5	0		
Total %	0.7	0	0.2	0	0.9	0.4	50.4	0	0	50.8	0	0	48	0.2	0	48.3	
Private	208	0	59	0	267	111	13510	0	0	13621	0	0	12881	68	0	12949	26837
% Private	100	0	98.3	0	99.6	100	94.3	0	0	94.3	0	0	94.4	98.6	0	94.4	94.4
Light	0	0	1	0	1	0	526	0	0	526	0	0	499	1	0	500	1027
% Light	0	0	1.7	0	0.4	0	3.7	0	0	3.6	0	0	3.7	1.4	0	3.6	3.6
Heavy	0	0	0	0	0	0	293	0	0	293	0	0	265	0	0	265	558
% Heavy	0	0	0	0	0	0	2	0	0	2	0	0	1.9	0	0	1.9	2

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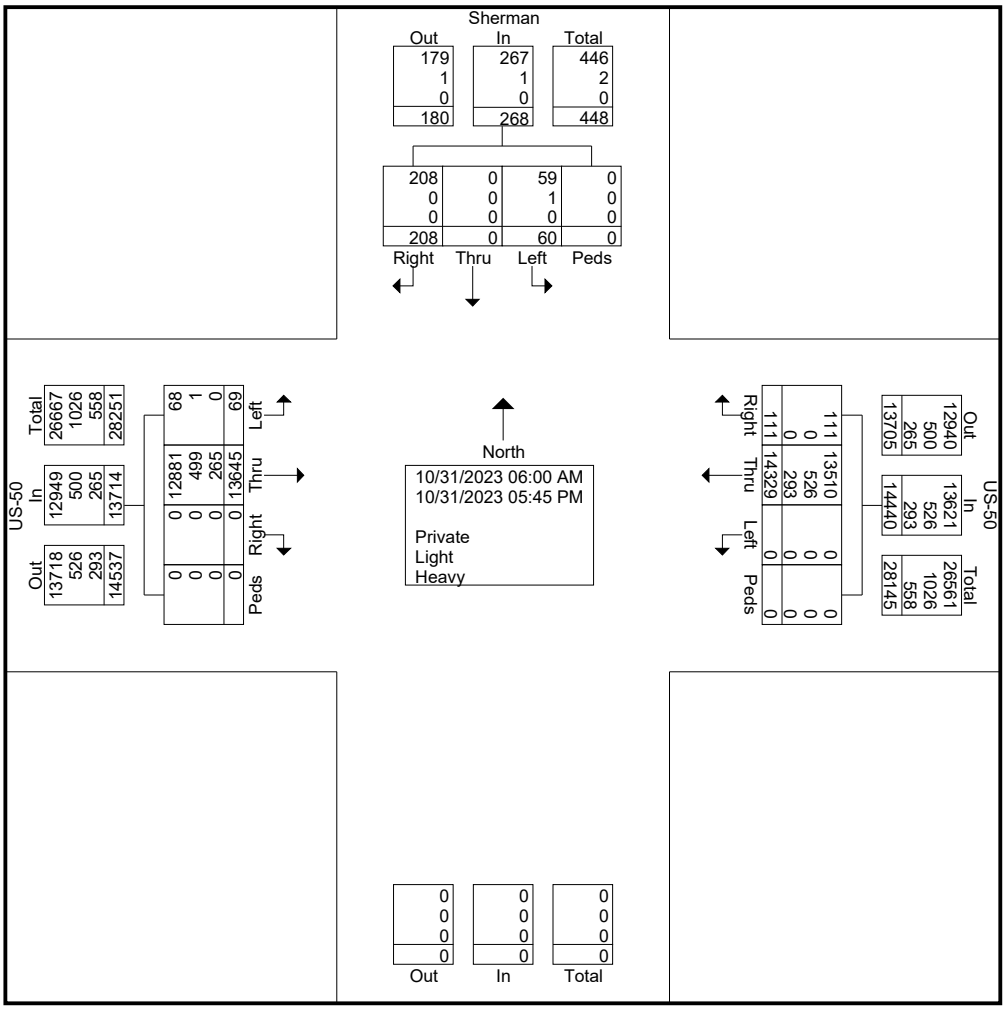
File Name : US-50 and Sherman Lane
Site Code : 00000000
Start Date : 10/31/2023
Page No : 3



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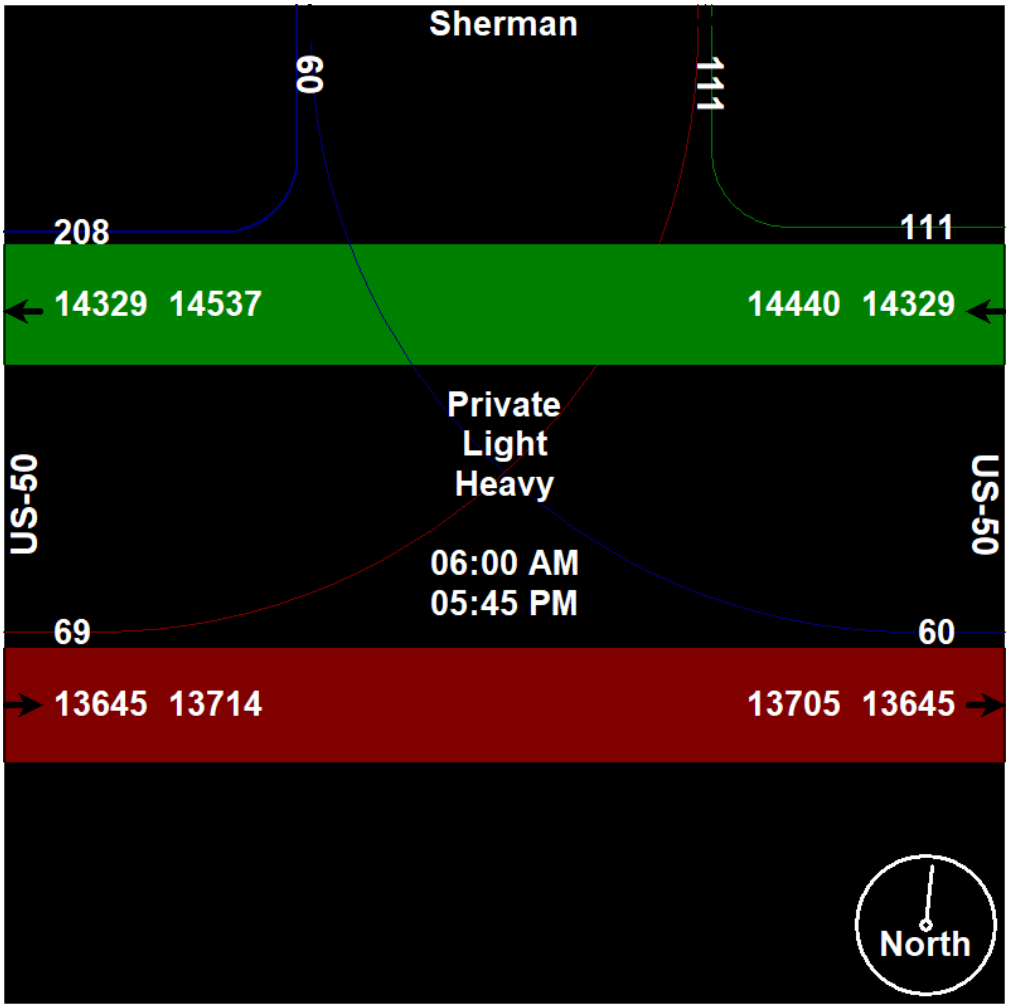
Site Code : 00000000
Start Date : 10/31/2023
Page No : 4



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Site Code : 00000000
Start Date : 10/31/2023
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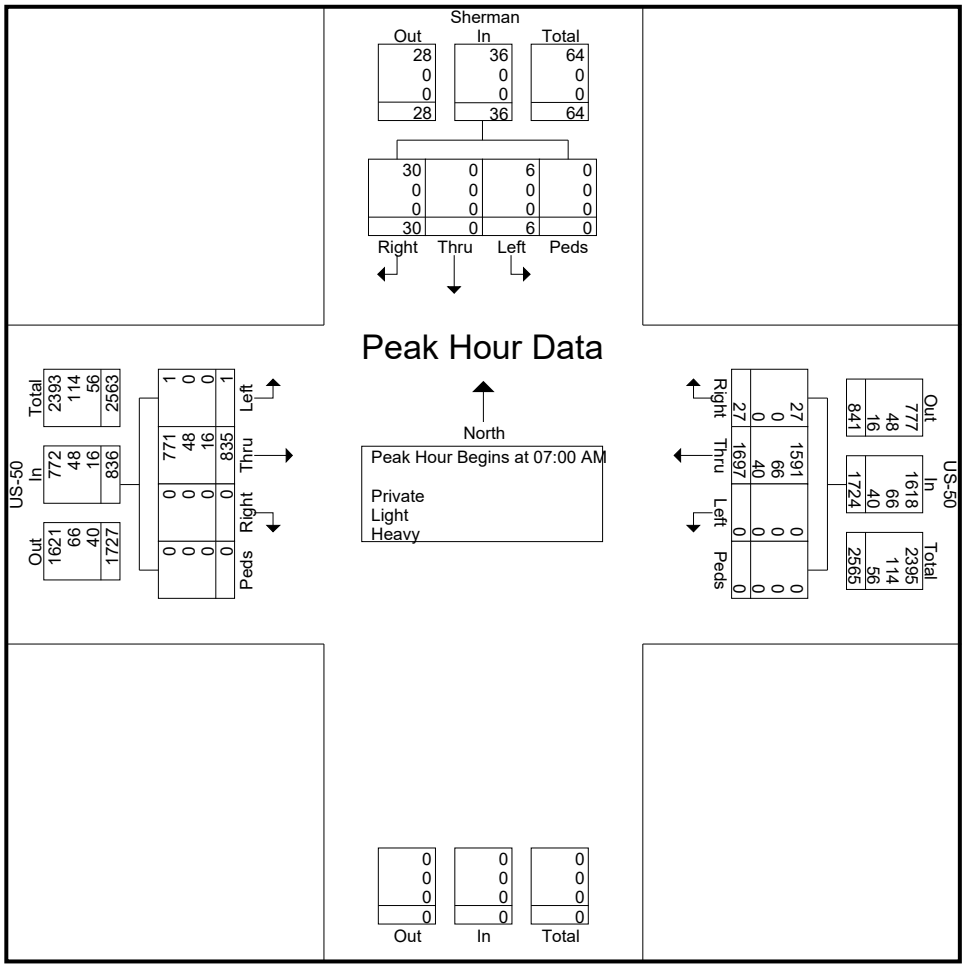
	Sherman Southbound					US-50 Westbound					Northbound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	**13**	0	0	0	**13**	1	367	0	0	368	0	0	172	0	0	172	553
07:15 AM	7	0	1	0	8	6	**458**	0	0	464	0	0	203	0	0	203	675
07:30 AM	5	0	**3**	0	8	7	418	0	0	425	0	0	**232**	**1**	0	**233**	666
07:45 AM	5	0	2	0	7	**13**	454	0	0	**467**	0	0	228	0	0	228	**702**
Total Volume	30	0	6	0	36	27	1697	0	0	1724	0	0	835	1	0	836	2596
% App. Total	83.3	0	16.7	0		1.6	98.4	0	0			0	99.9	0.1	0		
PHF	.577	.000	.500	.000	.692	.519	.926	.000	.000	.923	.000	.000	.900	.250	.000	.897	.925
Private	30	0	6	0	36	27	1591	0	0	1618	0	0	771	1	0	772	2426
% Private	100	0	100	0	100	100	93.8	0	0	93.9	0	0	92.3	100	0	92.3	93.5
Light	0	0	0	0	0	0	66	0	0	66	0	0	48	0	0	48	114
% Light	0	0	0	0	0	0	3.9	0	0	3.8	0	0	5.7	0	0	5.7	4.4
Heavy	0	0	0	0	0	0	40	0	0	40	0	0	16	0	0	16	56
% Heavy	0	0	0	0	0	0	2.4	0	0	2.3	0	0	1.9	0	0	1.9	2.2



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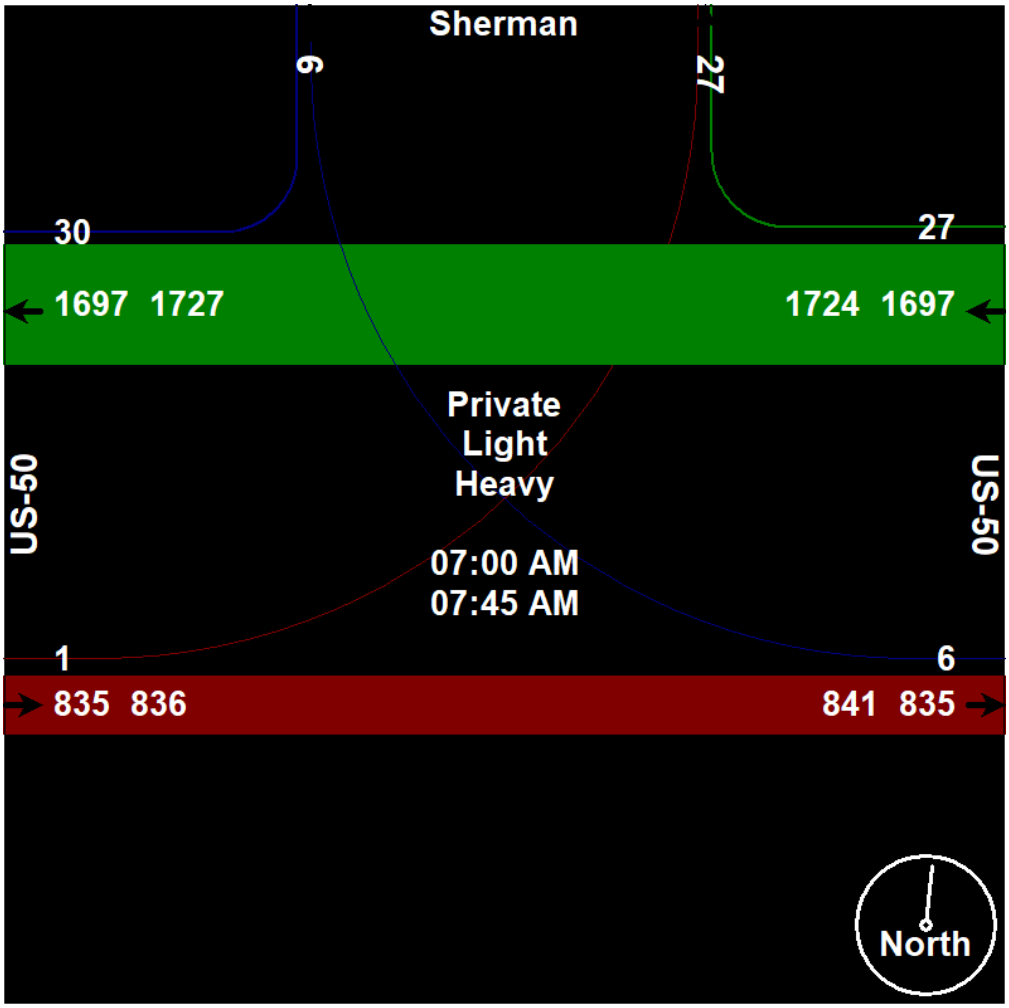
File Name : US-50 and Sherman Lane
Site Code : 00000000
Start Date : 10/31/2023
Page No : 6



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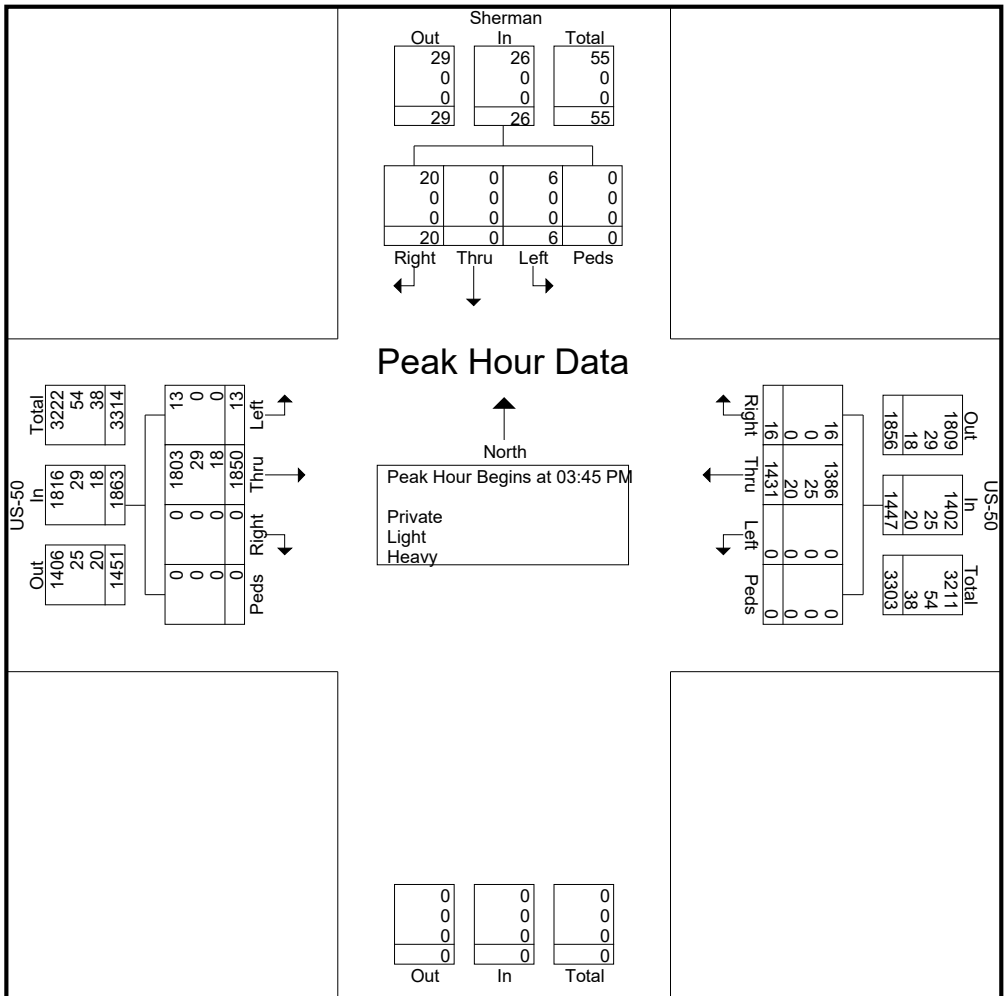
File Name : US-50 and Sherman Lane
Site Code : 00000000
Start Date : 10/31/2023
Page No : 7

	Sherman Southbound					US-50 Westbound					Northb ound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:45 PM																	
03:45 PM	**7**	0	1	0	**8**	5	**391**	0	0	**396**	0	0	427	2	0	429	833
04:00 PM	6	0	1	0	7	3	362	0	0	365	0	0	478	**4**	0	482	**854**
04:15 PM	2	0	**2**	0	4	**6**	332	0	0	338	0	0	459	3	0	462	804
04:30 PM	5	0	2	0	7	2	346	0	0	348	0	0	**486**	4	0	**490**	845
Total Volume	20	0	6	0	26	16	1431	0	0	1447	0	0	1850	13	0	1863	3336
% App. Total	76.9	0	23.1	0		1.1	98.9	0	0			0	99.3	0.7	0		
PHF	.714	.000	.750	.000	.813	.667	.915	.000	.000	.914	.000	.000	.952	.813	.000	.951	.977
Private	20	0	6	0	26	16	1386	0	0	1402	0	0	1803	13	0	1816	3244
% Private	100	0	100	0	100	100	96.9	0	0	96.9	0	0	97.5	100	0	97.5	97.2
Light	0	0	0	0	0	0	25	0	0	25	0	0	29	0	0	29	54
% Light	0	0	0	0	0	0	1.7	0	0	1.7	0	0	1.6	0	0	1.6	1.6
Heavy	0	0	0	0	0	0	20	0	0	20	0	0	18	0	0	18	38
% Heavy	0	0	0	0	0	0	1.4	0	0	1.4	0	0	1.0	0	0	1.0	1.1



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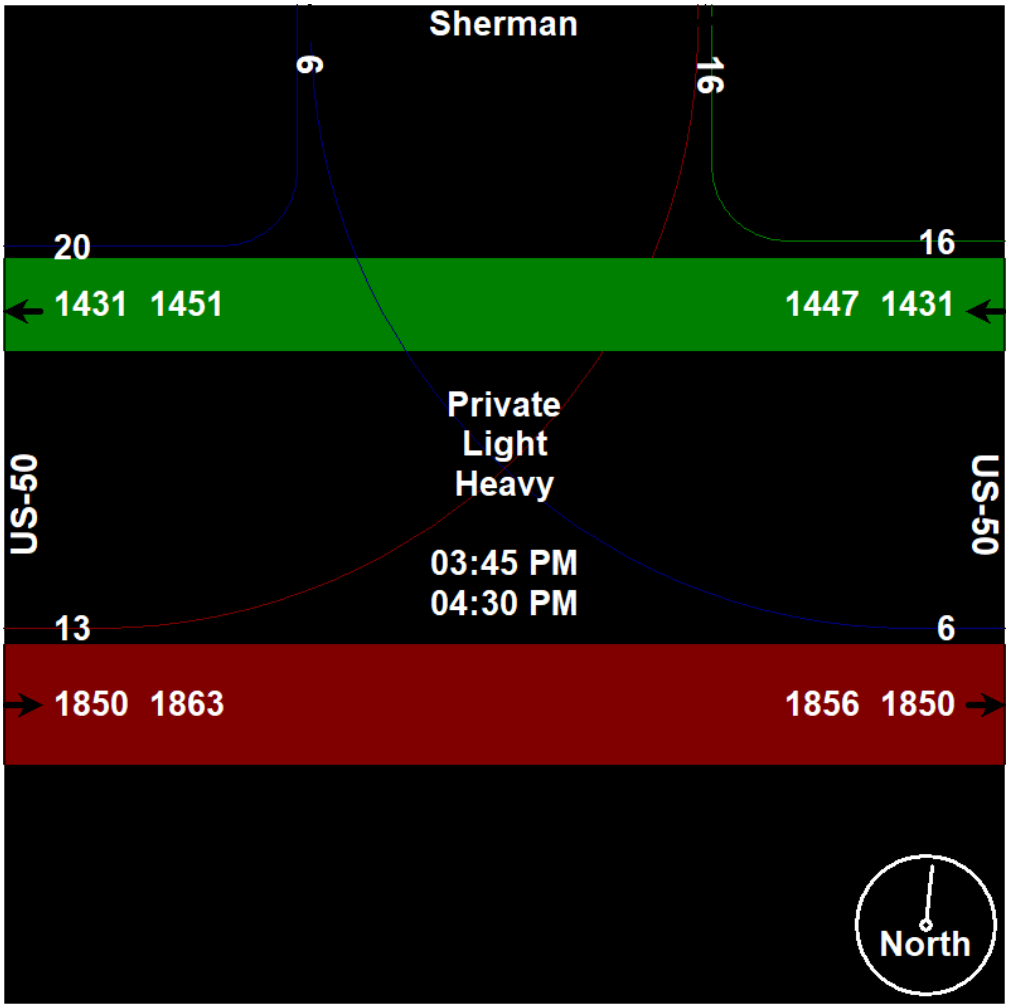
File Name : US-50 and Sherman Lane
Site Code : 00000000
Start Date : 10/31/2023
Page No : 8



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US-50 E. Carson Complete Streets Study
12-Hour Classification Count
US-50 & Silver State Street

File Name : US-50 and Silver State Street
Site Code : 00000000
Start Date : 10/31/2023
Page No : 1

Groups Printed- Private - Light - Heavy

	Silver State Southbound					US-50 Westbound					Northbound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	4	0	0	0	4	1	154	0	0	155	0	0	72	0	0	72	231
06:15 AM	1	0	0	0	1	1	220	0	0	221	0	0	131	0	0	131	353
06:30 AM	3	0	0	0	3	0	225	0	0	225	0	0	145	0	0	145	373
06:45 AM	2	0	0	0	2	0	274	0	0	274	0	0	145	1	0	146	422
Total	10	0	0	0	10	2	873	0	0	875	0	0	493	1	0	494	1379
07:00 AM	8	0	2	0	10	2	263	0	0	265	0	0	133	1	0	134	409
07:15 AM	5	0	1	0	6	2	325	0	0	327	0	0	155	2	0	157	490
07:30 AM	10	0	0	0	10	1	326	0	0	327	0	0	158	7	0	165	502
07:45 AM	5	0	0	0	5	0	315	0	0	315	0	0	186	4	0	190	510
Total	28	0	3	0	31	5	1229	0	0	1234	0	0	632	14	0	646	1911
08:00 AM	3	0	0	0	3	0	254	0	0	254	0	0	137	1	0	138	395
08:15 AM	1	0	0	0	1	2	230	0	0	232	0	0	175	2	0	177	410
08:30 AM	8	0	1	0	9	1	232	0	0	233	0	0	153	2	0	155	397
08:45 AM	4	0	1	0	5	0	233	0	0	233	0	0	156	2	0	158	396
Total	16	0	2	0	18	3	949	0	0	952	0	0	621	7	0	628	1598
09:00 AM	3	0	0	0	3	0	200	0	0	200	0	0	129	3	0	132	335
09:15 AM	1	0	0	0	1	1	208	0	0	209	0	0	146	2	0	148	358
09:30 AM	2	0	0	0	2	0	207	0	0	207	0	0	182	1	0	183	392
09:45 AM	2	0	0	0	2	2	238	0	0	240	0	0	150	4	0	154	396
Total	8	0	0	0	8	3	853	0	0	856	0	0	607	10	0	617	1481
10:00 AM	3	0	0	0	3	2	168	0	0	170	0	0	186	1	0	187	360
10:15 AM	1	0	0	0	1	0	229	0	0	229	0	0	189	1	0	190	420
10:30 AM	4	0	0	0	4	0	207	0	0	207	0	0	187	1	0	188	399
10:45 AM	1	0	0	0	1	0	228	0	0	228	0	0	199	1	0	200	429
Total	9	0	0	0	9	2	832	0	0	834	0	0	761	4	0	765	1608
11:00 AM	3	0	1	0	4	1	204	0	0	205	0	0	165	4	0	169	378
11:15 AM	1	0	1	0	2	1	227	0	0	228	0	0	216	3	0	219	449
11:30 AM	8	0	0	0	8	4	244	0	0	248	0	0	223	5	0	228	484
11:45 AM	7	0	0	0	7	1	245	0	0	246	0	0	224	1	0	225	478
Total	19	0	2	0	21	7	920	0	0	927	0	0	828	13	0	841	1789
12:00 PM	2	0	1	0	3	0	230	0	0	230	0	0	252	3	0	255	488
12:15 PM	2	0	0	0	2	2	238	0	0	240	0	0	222	6	0	228	470
12:30 PM	2	0	0	0	2	0	233	0	0	233	0	0	239	1	0	240	475
12:45 PM	3	0	0	0	3	0	250	0	0	250	0	0	223	1	0	224	477
Total	9	0	1	0	10	2	951	0	0	953	0	0	936	11	0	947	1910
01:00 PM	3	0	0	0	3	1	249	0	0	250	0	0	230	1	0	231	484
01:15 PM	3	0	1	0	4	1	222	0	0	223	0	0	242	4	0	246	473
01:30 PM	3	0	1	0	4	0	244	0	0	244	0	0	223	4	0	227	475
01:45 PM	5	0	1	0	6	0	214	0	0	214	0	0	212	3	0	215	435
Total	14	0	3	0	17	2	929	0	0	931	0	0	907	12	0	919	1867

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File Name : US-50 and Silver State Street
Site Code : 00000000
Start Date : 10/31/2023
Page No : 2

Groups Printed- Private - Light - Heavy

	Silver State Southbound					US-50 Westbound					Northb ound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
02:00 PM	4	0	0	0	4	2	215	0	0	217	0	0	253	1	0	254	475
02:15 PM	4	0	1	0	5	0	227	0	0	227	0	0	270	6	0	276	508
02:30 PM	3	0	0	0	3	2	289	0	0	291	0	0	244	4	0	248	542
02:45 PM	5	0	1	0	6	0	221	0	0	221	0	0	287	5	0	292	519
Total	16	0	2	0	18	4	952	0	0	956	0	0	1054	16	0	1070	2044
03:00 PM	3	0	1	0	4	2	272	0	0	274	0	0	271	3	0	274	552
03:15 PM	2	0	1	0	3	0	214	0	0	214	0	0	280	5	0	285	502
03:30 PM	2	0	0	0	2	1	275	0	0	276	0	0	305	7	0	312	590
03:45 PM	5	0	1	0	6	0	254	0	0	254	0	0	303	5	0	308	568
Total	12	0	3	0	15	3	1015	0	0	1018	0	0	1159	20	0	1179	2212
04:00 PM	5	0	1	0	6	0	276	0	0	276	0	0	287	3	0	290	572
04:15 PM	3	0	2	0	5	0	255	0	0	255	0	0	297	7	0	304	564
04:30 PM	6	0	0	0	6	1	264	0	0	265	0	0	339	9	0	348	619
04:45 PM	6	0	0	0	6	3	229	0	0	232	0	0	328	7	0	335	573
Total	20	0	3	0	23	4	1024	0	0	1028	0	0	1251	26	0	1277	2328
05:00 PM	9	0	0	0	9	3	226	0	0	229	0	0	281	12	0	293	531
05:15 PM	9	0	3	0	12	2	240	0	0	242	0	0	293	3	0	296	550
05:30 PM	9	0	1	0	10	1	235	0	0	236	0	0	280	7	0	287	533
05:45 PM	5	0	0	0	5	0	193	0	0	193	0	0	192	3	0	195	393
Total	32	0	4	0	36	6	894	0	0	900	0	0	1046	25	0	1071	2007
Grand Total	193	0	23	0	216	43	11421	0	0	11464	0	0	10295	159	0	10454	22134
Apprch %	89.4	0	10.6	0		0.4	99.6	0	0			0	98.5	1.5	0		
Total %	0.9	0	0.1	0	1	0.2	51.6	0	0	51.8	0	0	46.5	0.7	0	47.2	
Private	193	0	23	0	216	43	10778	0	0	10821	0	0	9627	159	0	9786	20823
% Private	100	0	100	0	100	100	94.4	0	0	94.4	0	0	93.5	100	0	93.6	94.1
Light	0	0	0	0	0	0	376	0	0	376	0	0	412	0	0	412	788
% Light	0	0	0	0	0	0	3.3	0	0	3.3	0	0	4	0	0	3.9	3.6
Heavy	0	0	0	0	0	0	267	0	0	267	0	0	256	0	0	256	523
% Heavy	0	0	0	0	0	0	2.3	0	0	2.3	0	0	2.5	0	0	2.4	2.4

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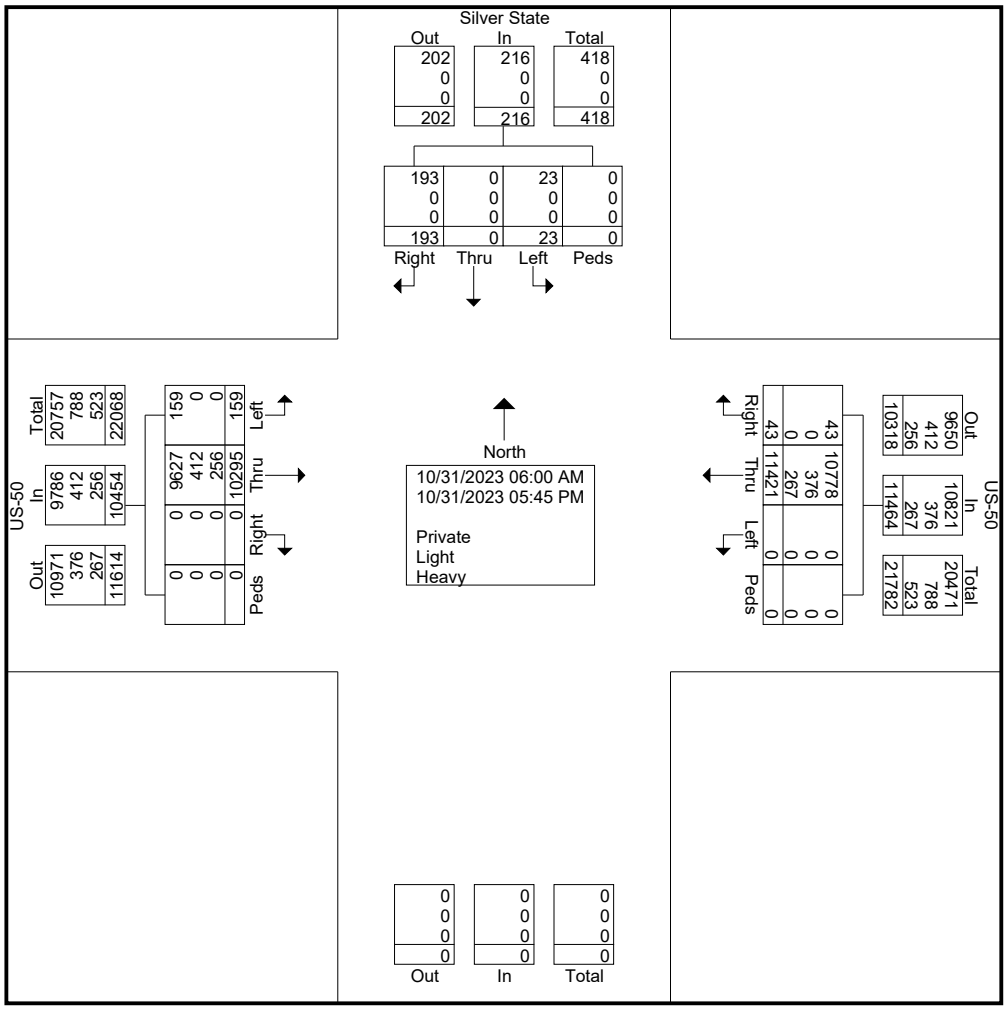
File Name : US-50 and Silver State Street
Site Code : 00000000
Start Date : 10/31/2023
Page No : 3



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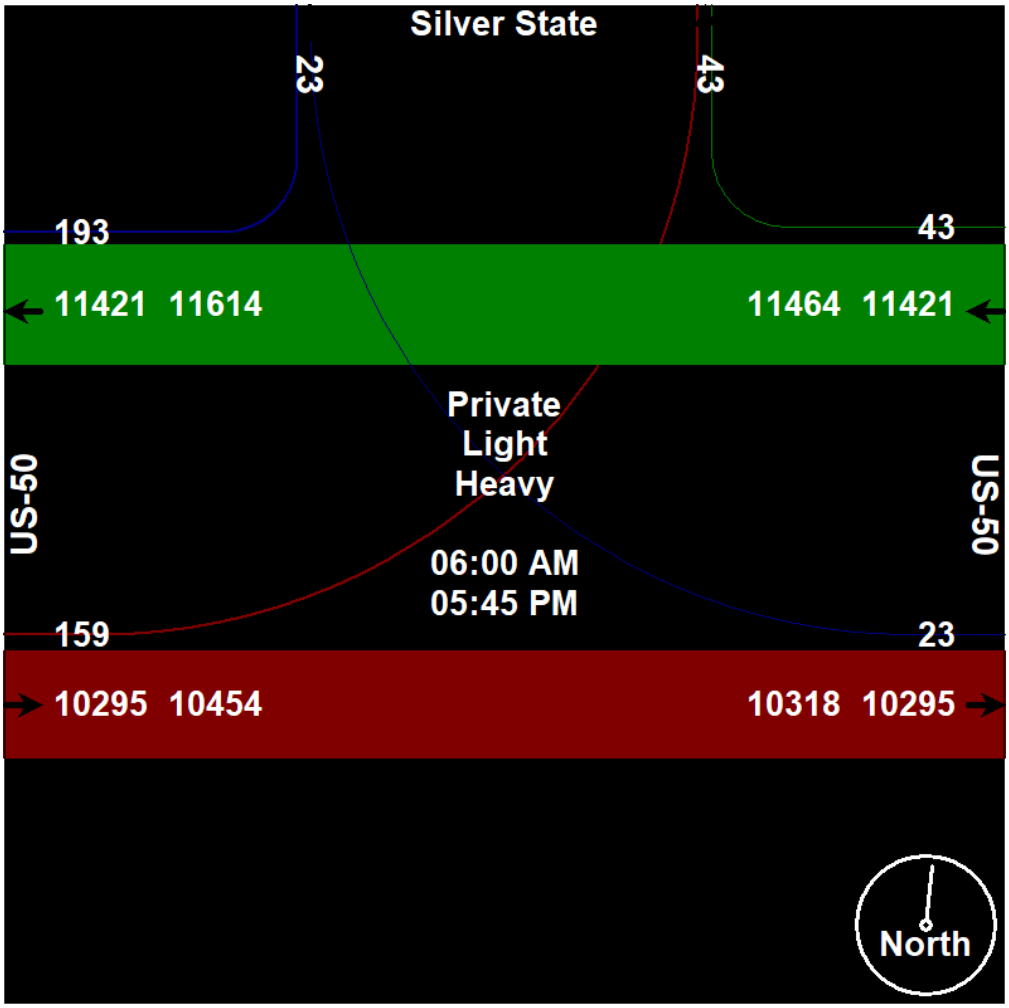
Site Code : 00000000
Start Date : 10/31/2023
Page No : 4



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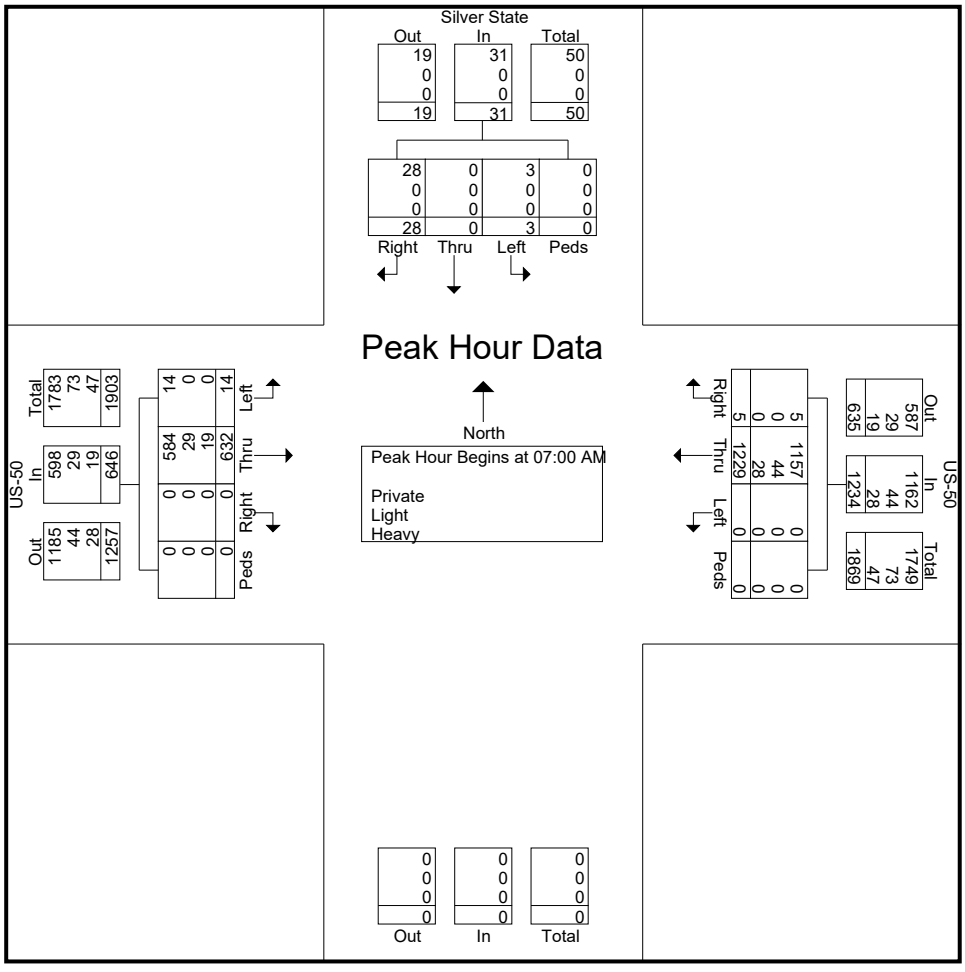
Site Code : 00000000
Start Date : 10/31/2023
Page No : 5

	Silver State Southbound					US-50 Westbound					Northbound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	8	0	**2**	0	**10**	**2**	263	0	0	265	0	0	133	1	0	134	409
07:15 AM	5	0	1	0	6	2	325	0	0	**327**	0	0	155	2	0	157	490
07:30 AM	**10**	0	0	0	10	1	**326**	0	0	327	0	0	158	**7**	0	165	502
07:45 AM	5	0	0	0	5	0	315	0	0	315	0	0	**186**	4	0	**190**	**510**
Total Volume	28	0	3	0	31	5	1229	0	0	1234	0	0	632	14	0	646	1911
% App. Total	90.3	0	9.7	0		0.4	99.6	0	0			0	97.8	2.2	0		
PHF	.700	.000	.375	.000	.775	.625	.942	.000	.000	.943	.000	.000	.849	.500	.000	.850	.937
Private	28	0	3	0	31	5	1157	0	0	1162	0	0	584	14	0	598	1791
% Private	100	0	100	0	100	100	94.1	0	0	94.2	0	0	92.4	100	0	92.6	93.7
Light	0	0	0	0	0	0	44	0	0	44	0	0	29	0	0	29	73
% Light	0	0	0	0	0	0	3.6	0	0	3.6	0	0	4.6	0	0	4.5	3.8
Heavy	0	0	0	0	0	0	28	0	0	28	0	0	19	0	0	19	47
% Heavy	0	0	0	0	0	0	2.3	0	0	2.3	0	0	3.0	0	0	2.9	2.5



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Start Date : 10/31/2023
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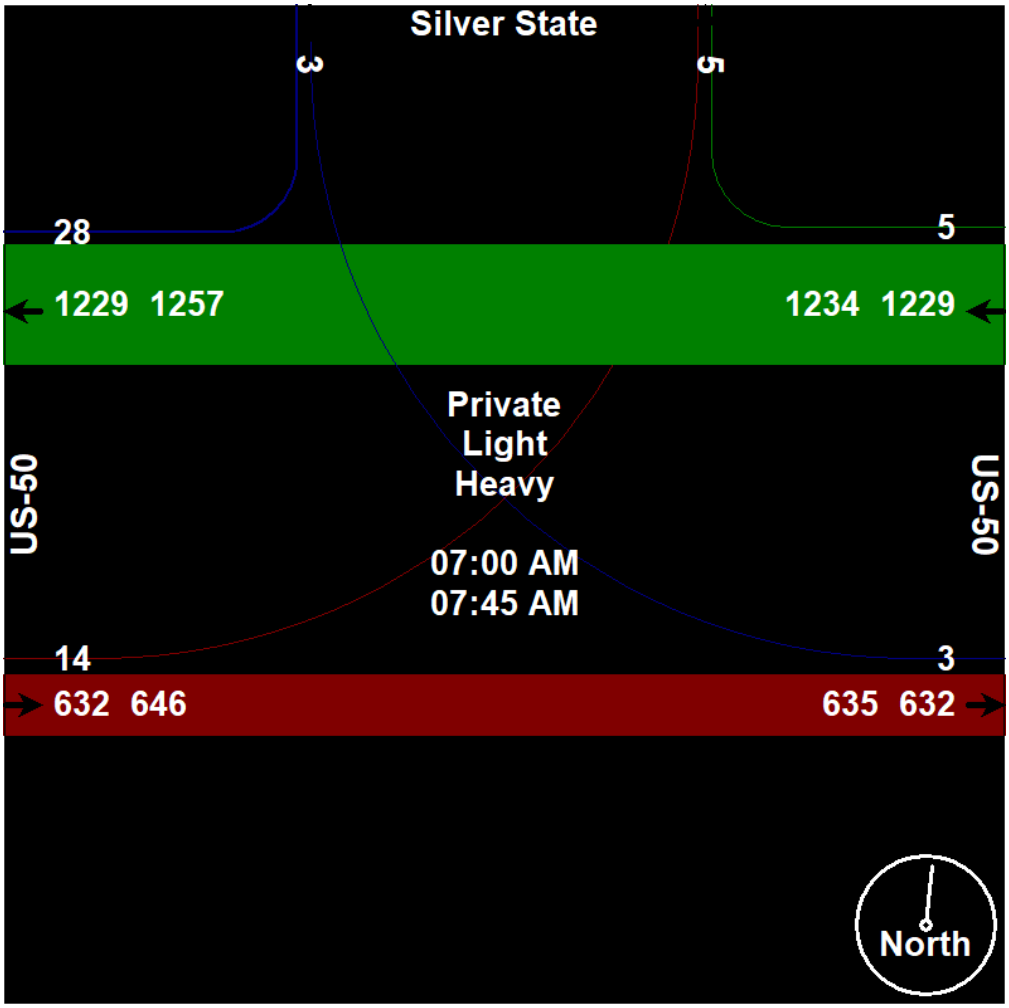

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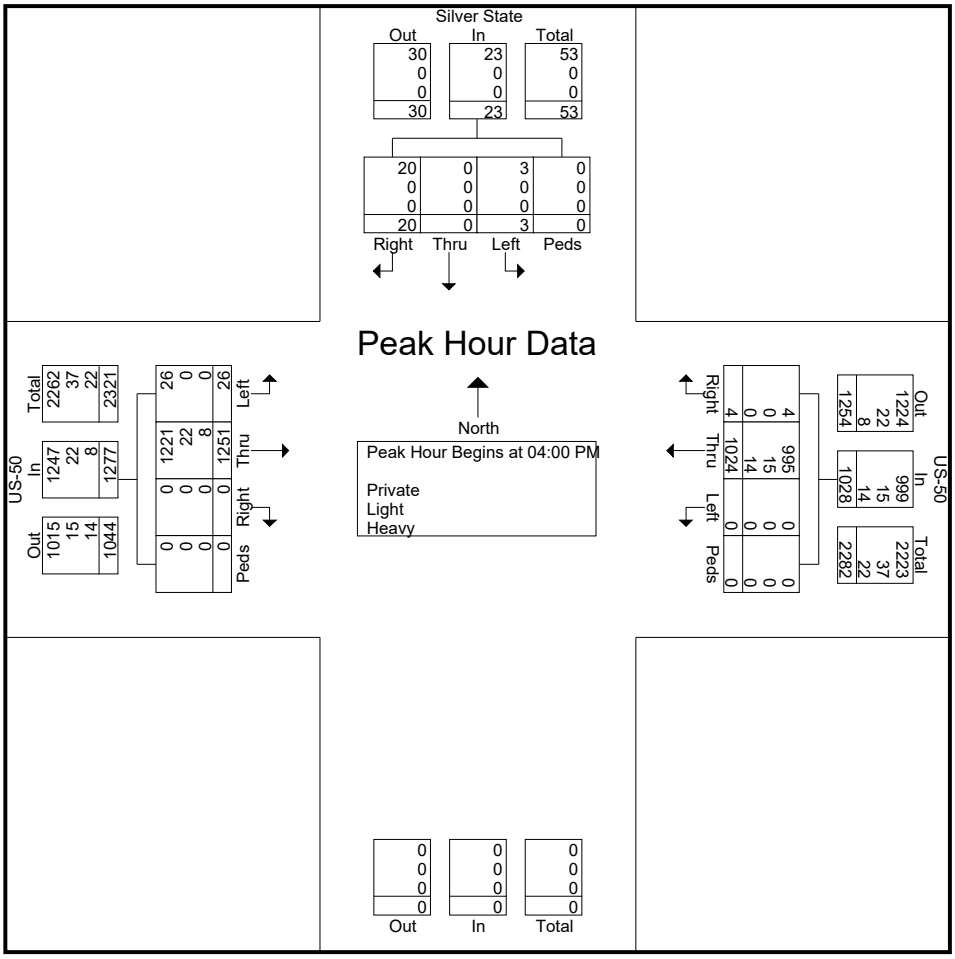
File Name : US-50 and Silver State Street
Site Code : 00000000
Start Date : 10/31/2023
Page No : 7

	Silver State Southbound					US-50 Westbound					Northbound	US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	5	0	1	0	**6**	0	**276**	0	0	**276**	0	0	287	3	0	290	572
04:15 PM	3	0	**2**	0	5	0	255	0	0	255	0	0	297	7	0	304	564
04:30 PM	**6**	0	0	0	6	1	264	0	0	265	0	0	**339**	**9**	0	**348**	**619**
04:45 PM	6	0	0	0	6	**3**	229	0	0	232	0	0	328	7	0	335	573
Total Volume	20	0	3	0	23	4	1024	0	0	1028	0	0	1251	26	0	1277	2328
% App. Total	87	0	13	0		0.4	99.6	0	0			0	98	2	0		
PHF	.833	.000	.375	.000	.958	.333	.928	.000	.000	.931	.000	.000	.923	.722	.000	.917	.940
Private	20	0	3	0	23	4	995	0	0	999	0	0	1221	26	0	1247	2269
% Private	100	0	100	0	100	100	97.2	0	0	97.2	0	0	97.6	100	0	97.7	97.5
Light	0	0	0	0	0	0	15	0	0	15	0	0	22	0	0	22	37
% Light	0	0	0	0	0	0	1.5	0	0	1.5	0	0	1.8	0	0	1.7	1.6
Heavy	0	0	0	0	0	0	14	0	0	14	0	0	8	0	0	8	22
% Heavy	0	0	0	0	0	0	1.4	0	0	1.4	0	0	0.6	0	0	0.6	0.9



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File Name : US-50 and Silver State Street
Site Code : 00000000
Start Date : 10/31/2023
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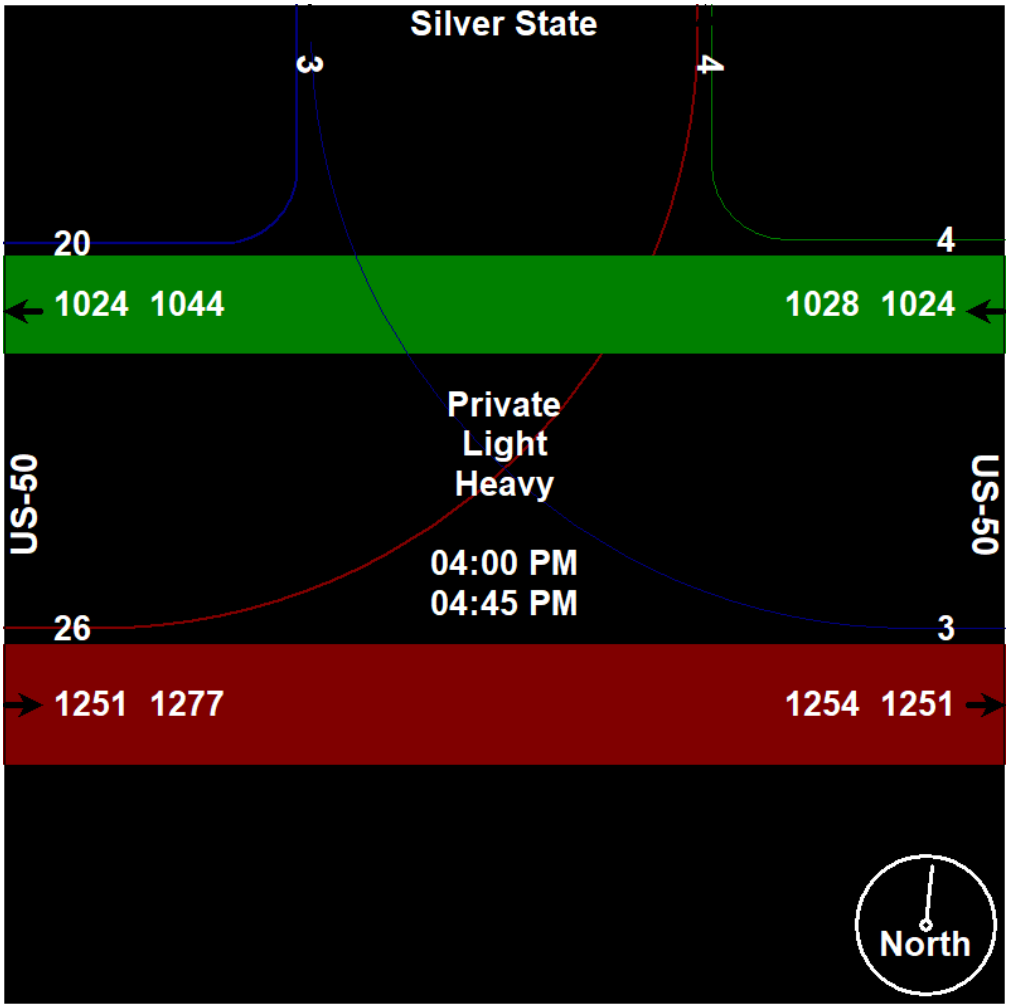

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US-50 E. Carson Complete Streets Study
Turning Movement Classification Count
US-50 & Arrowhead Drive/Deer Run Road

File Name : US-50 and Arrowhead Drive
Site Code : 00000000
Start Date : 10/31/2023
Page No : 1

Groups Printed- Private - Light - Heavy

	Arrowhead Southbound					US-50 Westbound					Deer Run Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	1	5	0	6	39	358	6	0	403	3	5	16	0	24	13	147	1	0	161	594
07:15 AM	0	0	7	0	7	45	464	3	0	512	3	1	5	0	9	11	159	0	0	170	698
07:30 AM	1	1	14	0	16	63	422	7	0	492	3	1	8	0	12	24	183	6	0	213	733
07:45 AM	0	1	11	0	12	83	453	7	0	543	1	3	9	0	13	44	160	2	0	206	774
Total	1	3	37	0	41	230	1697	23	0	1950	10	10	38	0	58	92	649	9	0	750	2799
08:00 AM	1	0	19	0	20	42	297	6	0	345	4	1	7	0	12	26	141	3	0	170	547
08:15 AM	0	2	11	0	13	31	272	4	0	307	2	3	12	0	17	17	151	0	0	168	505
08:30 AM	0	4	5	0	9	28	279	3	0	310	3	2	12	0	17	19	162	1	0	182	518
08:45 AM	1	0	19	0	20	27	293	4	0	324	2	1	17	0	20	18	129	1	0	148	512
Total	2	6	54	0	62	128	1141	17	0	1286	11	7	48	0	66	80	583	5	0	668	2082
*** BREAK ***																					
04:00 PM	3	4	83	0	90	10	332	7	0	349	16	2	32	0	50	6	432	2	0	440	929
04:15 PM	0	2	58	0	60	5	274	4	0	283	11	4	21	0	36	11	436	0	0	447	826
04:30 PM	1	2	73	0	76	9	263	4	0	276	17	7	48	0	72	14	452	3	0	469	893
04:45 PM	3	5	47	0	55	15	251	3	0	269	7	1	19	0	27	9	508	0	0	517	868
Total	7	13	261	0	281	39	1120	18	0	1177	51	14	120	0	185	40	1828	5	0	1873	3516
05:00 PM	5	6	88	0	99	13	273	4	0	290	6	1	17	0	24	6	423	1	0	430	843
05:15 PM	2	1	41	0	44	9	214	5	0	228	7	1	24	0	32	8	444	0	0	452	756
05:30 PM	0	6	29	0	35	8	210	6	0	224	4	1	14	0	19	6	407	2	0	415	693
05:45 PM	0	0	18	0	18	7	199	3	0	209	6	2	7	0	15	8	282	0	0	290	532
Total	7	13	176	0	196	37	896	18	0	951	23	5	62	0	90	28	1556	3	0	1587	2824
Grand Total	17	35	528	0	580	434	4854	76	0	5364	95	36	268	0	399	240	4616	22	0	4878	11221
Apprch %	2.9	6	91	0		8.1	90.5	1.4	0		23.8	9	67.2	0		4.9	94.6	0.5	0		
Total %	0.2	0.3	4.7	0	5.2	3.9	43.3	0.7	0	47.8	0.8	0.3	2.4	0	3.6	2.1	41.1	0.2	0	43.5	
Private	17	33	511	0	561	418	4659										4440				10748
% Private	100	94.3	96.8	0	96.7	96.3	96	82.9	0	95.8	93.7	94.4	91	0	92	91.2	96.2	95.5	0	95.9	95.8
Light	0	1	12	0	13	5	115	6	0	126	6	1	19	0	26	15	118	0	0	133	298
% Light	0	2.9	2.3	0	2.2	1.2	2.4	7.9	0	2.3	6.3	2.8	7.1	0	6.5	6.2	2.6	0	0	2.7	2.7
Heavy	0	1	5	0	6	11	80	7	0	98	0	1	5	0	6	6	58	1	0	65	175
% Heavy	0	2.9	0.9	0	1	2.5	1.6	9.2	0	1.8	0	2.8	1.9	0	1.5	2.5	1.3	4.5	0	1.3	1.6

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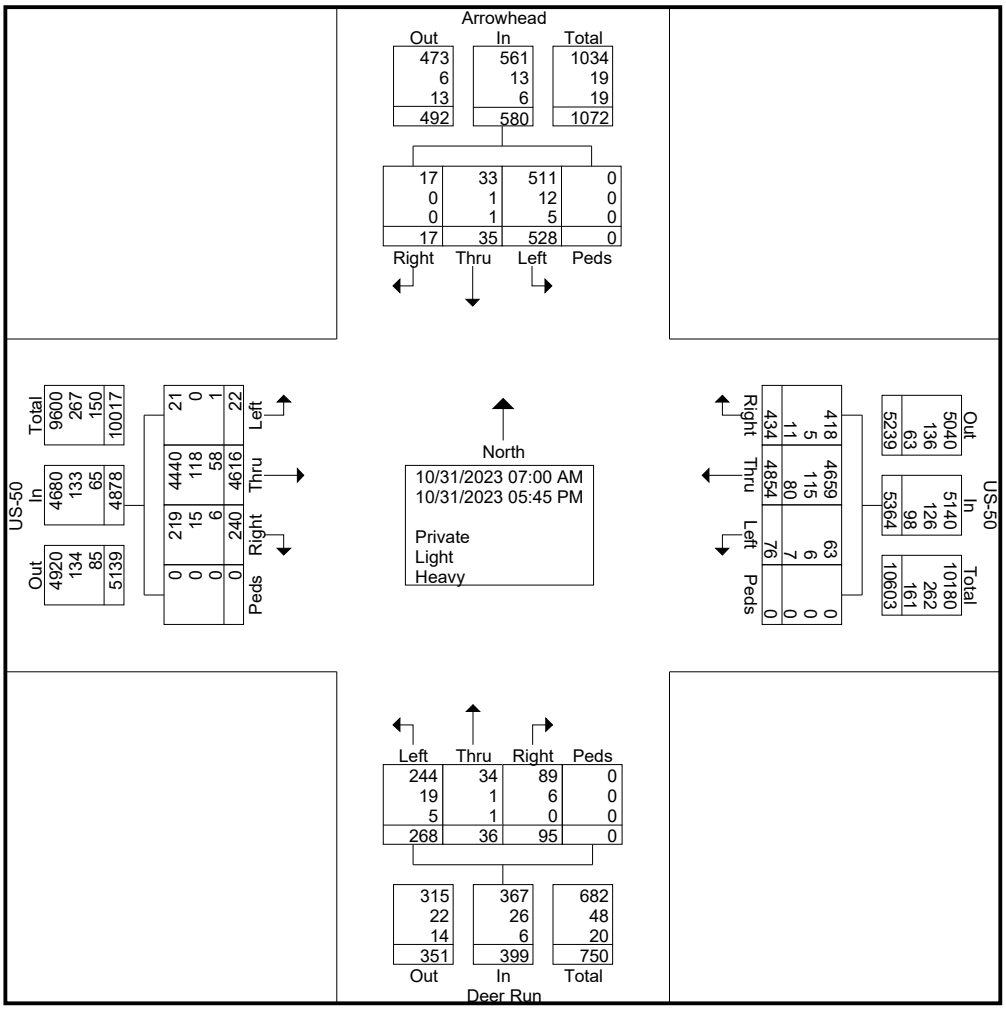
File Name : US-50 and Arrowhead Drive
Site Code : 00000000
Start Date : 10/31/2023
Page No : 2



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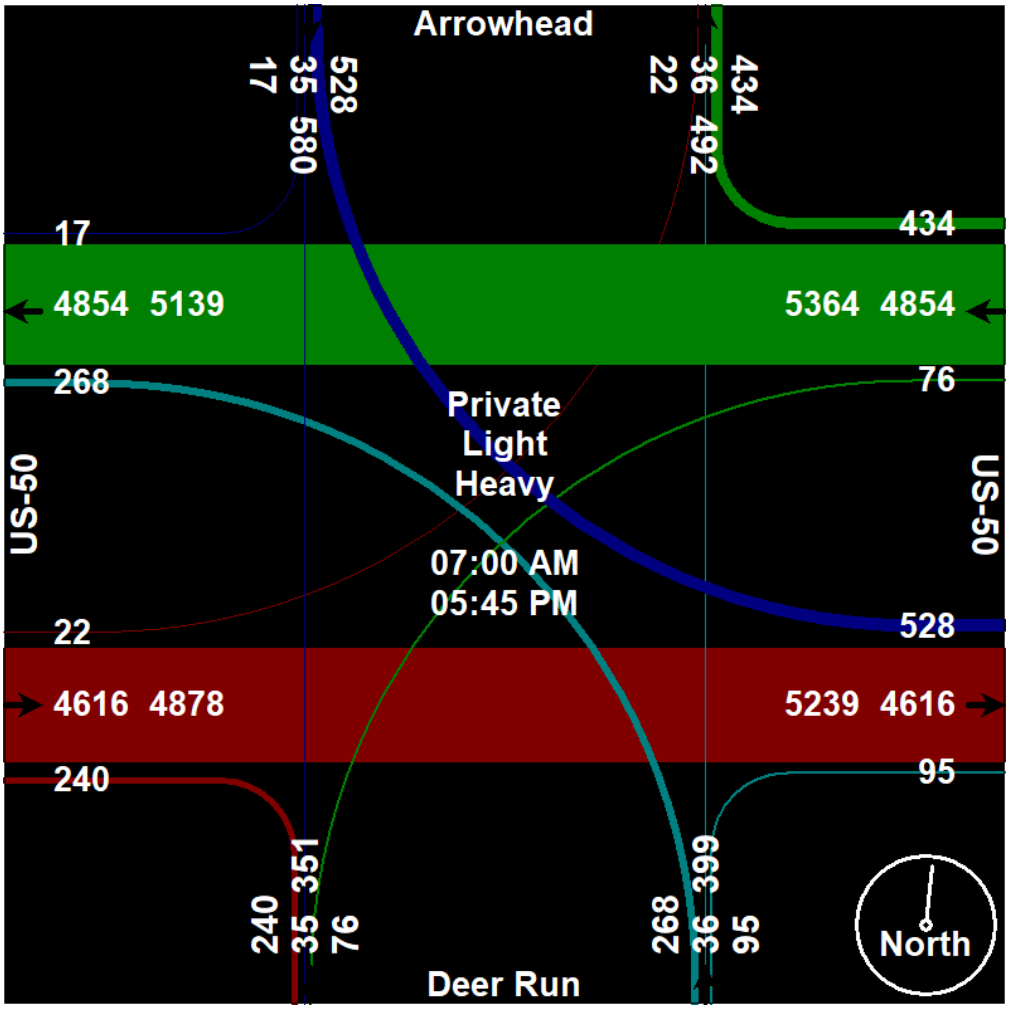

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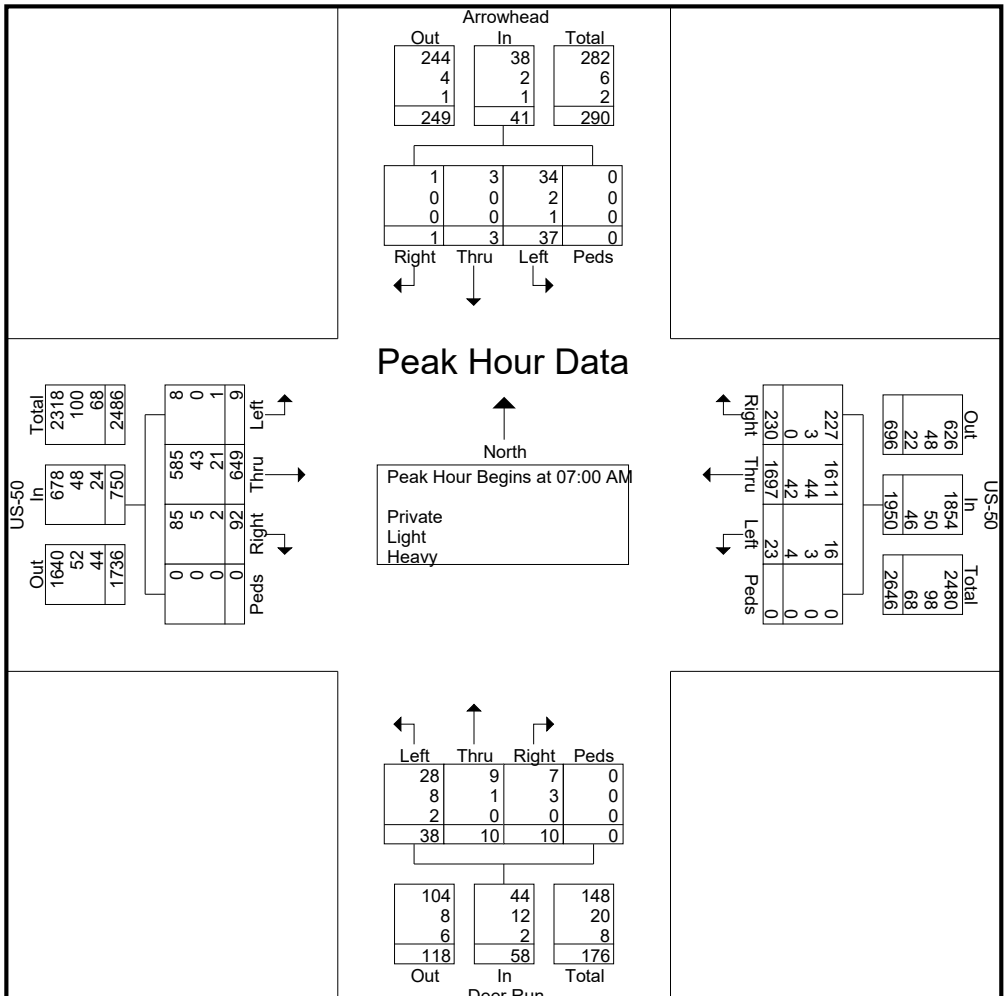
Site Code : 00000000
Start Date : 10/31/2023
Page No : 4

	Arrowhead Southbound					US-50 Westbound					Deer Run Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	**1**	5	0	6	39	358	6	0	403	**3**	**5**	**16**	0	**24**	13	147	1	0	161	594
07:15 AM	0	0	7	0	7	45	**464**	3	0	512	3	1	5	0	9	11	159	0	0	170	698
07:30 AM	**1**	1	**14**	0	**16**	63	422	**7**	0	492	3	1	8	0	12	24	**183**	**6**	0	**213**	733
07:45 AM	0	1	11	0	12	**83**	453	7	0	**543**	1	3	9	0	13	**44**	160	2	0	206	**774**
Total Volume	1	3	37	0	41	230	1697	23	0	1950	10	10	38	0	58	92	649	9	0	750	2799
% App. Total	2.4	7.3	90.2	0		11.8	87	1.2	0		17.2	17.2	65.5	0		12.3	86.5	1.2	0		
PHF	.250	.750	.661	.000	.641	.693	.914	.821	.000	.898	.833	.500	.594	.000	.604	.523	.887	.375	.000	.880	.904
Private	1	3	34	0	38	227	1611														
% Private	100	100	91.9	0	92.7	98.7	94.9	69.6	0	95.1	70.0	90.0	73.7	0	75.9	92.4	90.1	88.9	0	90.4	93.4
Light	0	0	2	0	2	3	44	3	0	50	3	1	8	0	12	5	43	0	0	48	112
% Light	0	0	5.4	0	4.9	1.3	2.6	13.0	0	2.6	30.0	10.0	21.1	0	20.7	5.4	6.6	0	0	6.4	4.0
Heavy	0	0	1	0	1	0	42	4	0	46	0	0	2	0	2	2	21	1	0	24	73
% Heavy	0	0	2.7	0	2.4	0	2.5	17.4	0	2.4	0	0	5.3	0	3.4	2.2	3.2	11.1	0	3.2	2.6



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Site Code : 00000000
Start Date : 10/31/2023
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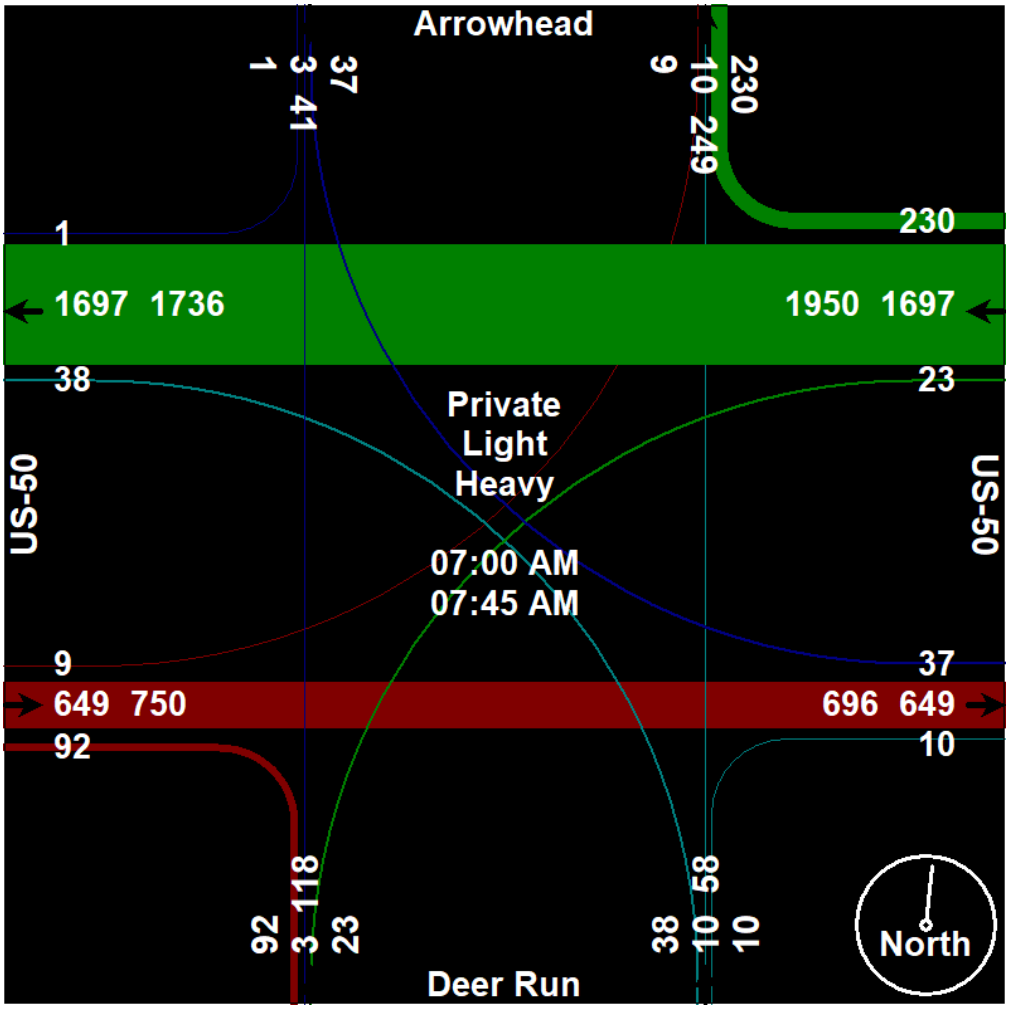

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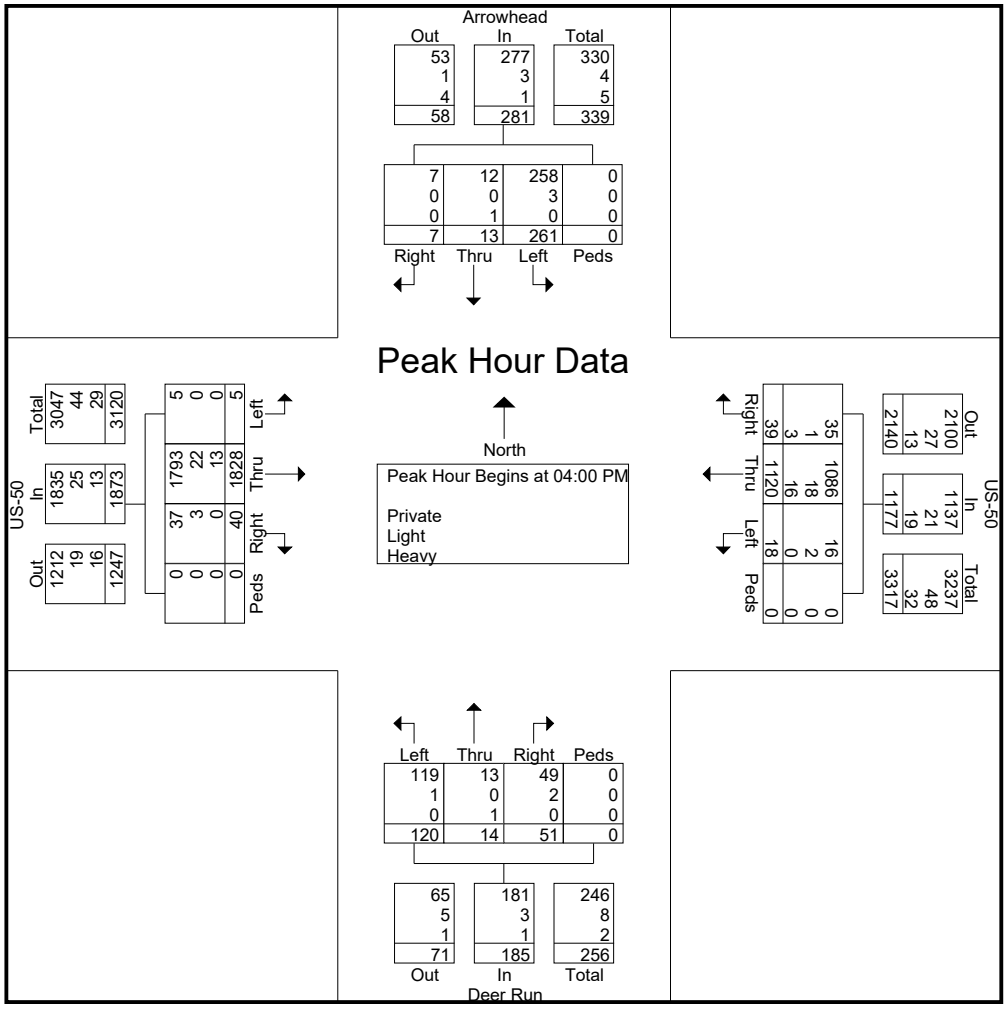
File Name : US-50 and Arrowhead Drive
Site Code : 00000000
Start Date : 10/31/2023
Page No : 6

	Arrowhead Southbound					US-50 Westbound					Deer Run Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	**3**	4	**83**	0	**90**	10	**332**	**7**	0	**349**	16	2	32	0	50	6	432	2	0	440	**929**
04:15 PM	0	2	58	0	60	5	274	4	0	283	11	4	21	0	36	11	436	0	0	447	826
04:30 PM	1	2	73	0	76	9	263	4	0	276	**17**	**7**	**48**	0	**72**	**14**	452	**3**	0	469	893
04:45 PM	3	**5**	47	0	55	**15**	251	3	0	269	7	1	19	0	27	9	**508**	0	0	**517**	868
Total Volume	7	13	261	0	281	39	1120	18	0	1177	51	14	120	0	185	40	1828	5	0	1873	3516
% App. Total	2.5	4.6	92.9	0		3.3	95.2	1.5	0		27.6	7.6	64.9	0		2.1	97.6	0.3	0		
PHF	.583	.650	.786	.000	.781	.650	.843	.643	.000	.843	.750	.500	.625	.000	.642	.714	.900	.417	.000	.906	.946
Private	7	12	258	0	277	35	1086										1793				
% Private	100	92.3	98.9	0	98.6	89.7	97.0	88.9	0	96.6	96.1	92.9	99.2	0	97.8	92.5	98.1	100	0	98.0	97.6
Light	0	0	3	0	3	1	18	2	0	21	2	0	1	0	3	3	22	0	0	25	52
% Light	0	0	1.1	0	1.1	2.6	1.6	11.1	0	1.8	3.9	0	0.8	0	1.6	7.5	1.2	0	0	1.3	1.5
Heavy	0	1	0	0	1	3	16	0	0	19	0	1	0	0	1	0	13	0	0	13	34
% Heavy	0	7.7	0	0	0.4	7.7	1.4	0	0	1.6	0	7.1	0	0	0.5	0	0.7	0	0	0.7	1.0



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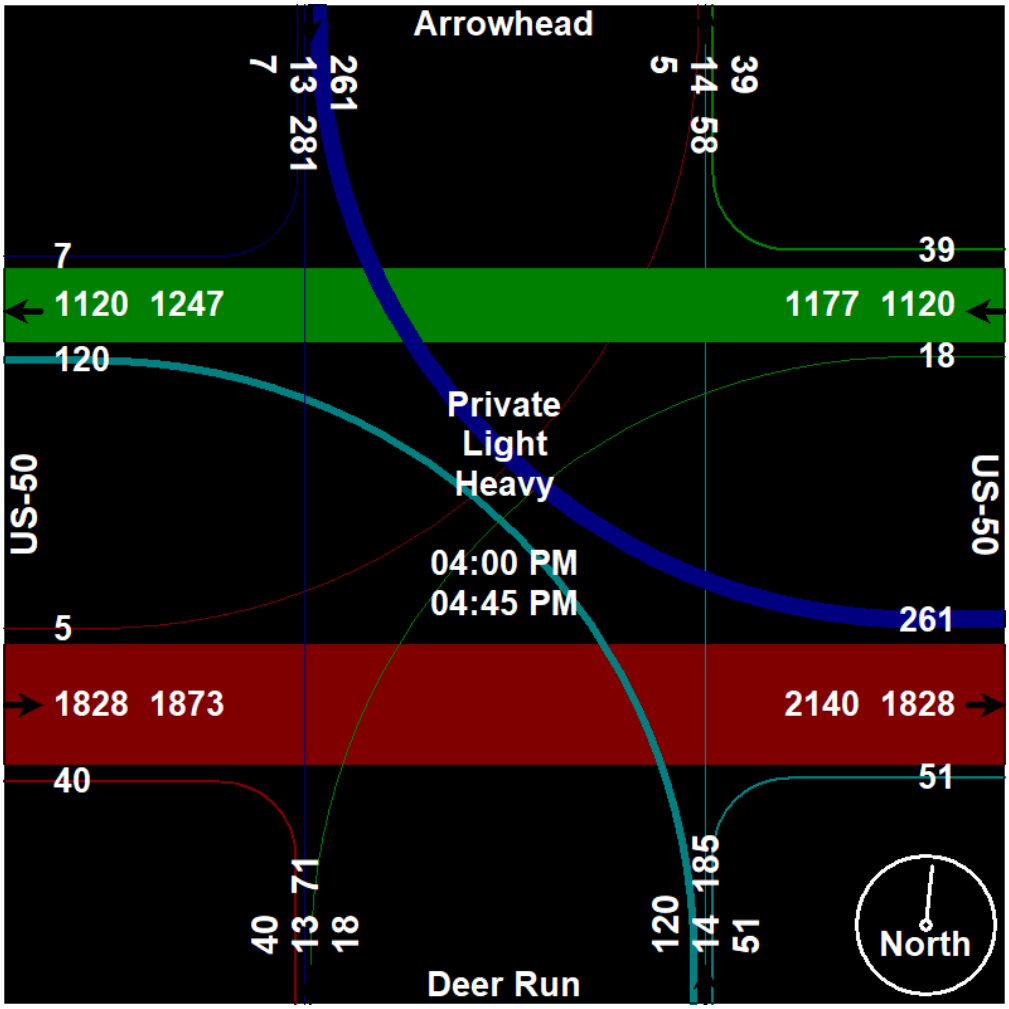

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US-50 E. Carson Complete Streets Study
12-Hour Classification Count
US-50 & Brown Street

File Name : US-50 and Brown Street
Site Code : 00000000
Start Date : 10/31/2023
Page No : 1

Groups Printed- Private - Light - Heavy

	South bound	US-50 Westbound					Brown Northbound					US-50 Eastbound					
Start Time	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:00 AM	0	0	151	4	0	155	0	0	4	0	4	1	67	0	0	68	227
06:15 AM	0	0	212	1	0	213	0	0	4	0	4	2	126	0	0	128	345
06:30 AM	0	0	221	2	0	223	1	0	12	0	13	2	141	0	0	143	379
06:45 AM	0	0	239	4	0	243	1	0	15	0	16	5	140	0	0	145	404
Total	0	0	823	11	0	834	2	0	35	0	37	10	474	0	0	484	1355
07:00 AM	0	0	261	1	0	262	1	0	7	0	8	2	125	0	0	127	397
07:15 AM	0	0	271	5	0	276	0	0	5	0	5	7	138	0	0	145	426
07:30 AM	0	0	323	5	0	328	4	0	11	0	15	9	152	0	0	161	504
07:45 AM	0	0	325	1	0	326	1	0	9	0	10	7	166	0	0	173	509
Total	0	0	1180	12	0	1192	6	0	32	0	38	25	581	0	0	606	1836
08:00 AM	0	0	241	2	0	243	4	0	5	0	9	7	129	0	0	136	388
08:15 AM	0	0	218	3	0	221	2	0	7	0	9	8	158	0	0	166	396
08:30 AM	0	0	224	2	0	226	2	0	8	0	10	2	144	0	0	146	382
08:45 AM	0	0	237	1	0	238	1	0	6	0	7	6	141	0	0	147	392
Total	0	0	920	8	0	928	9	0	26	0	35	23	572	0	0	595	1558
09:00 AM	0	0	199	2	0	201	0	0	2	0	2	4	129	0	0	133	336
09:15 AM	0	0	217	2	0	219	4	0	0	0	4	5	132	0	0	137	360
09:30 AM	0	0	217	2	0	219	0	0	4	0	4	8	167	0	0	175	398
09:45 AM	0	0	228	1	0	229	0	0	8	0	8	9	134	0	0	143	380
Total	0	0	861	7	0	868	4	0	14	0	18	26	562	0	0	588	1474
10:00 AM	0	0	173	2	0	175	1	0	3	0	4	11	167	0	0	178	357
10:15 AM	0	0	221	2	0	223	2	0	9	0	11	11	150	0	0	161	395
10:30 AM	0	0	210	3	0	213	3	0	9	0	12	10	166	0	0	176	401
10:45 AM	0	0	206	4	0	210	4	0	4	0	8	11	180	0	0	191	409
Total	0	0	810	11	0	821	10	0	25	0	35	43	663	0	0	706	1562
11:00 AM	0	0	195	7	0	202	3	0	7	0	10	11	159	0	0	170	382
11:15 AM	0	0	209	1	0	210	5	0	6	0	11	13	198	0	0	211	432
11:30 AM	0	0	235	2	0	237	3	0	13	0	16	18	200	0	0	218	471
11:45 AM	0	0	219	1	0	220	4	0	11	0	15	12	211	0	0	223	458
Total	0	0	858	11	0	869	15	0	37	0	52	54	768	0	0	822	1743
12:00 PM	0	0	209	2	0	211	3	0	9	0	12	21	217	0	0	238	461
12:15 PM	0	0	242	2	0	244	6	0	14	0	20	14	214	0	0	228	492
12:30 PM	0	0	216	2	0	218	3	0	10	0	13	18	218	0	0	236	467
12:45 PM	0	0	225	1	0	226	3	0	16	0	19	17	194	0	0	211	456
Total	0	0	892	7	0	899	15	0	49	0	64	70	843	0	0	913	1876
01:00 PM	0	0	240	1	0	241	4	0	11	0	15	18	200	0	0	218	474
01:15 PM	0	0	216	0	0	216	2	0	7	0	9	20	226	0	0	246	471
01:30 PM	0	0	235	3	0	238	6	0	12	0	18	10	213	0	0	223	479
01:45 PM	0	0	190	3	0	193	2	0	9	0	11	18	195	0	0	213	417
Total	0	0	881	7	0	888	14	0	39	0	53	66	834	0	0	900	1841

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File Name : US-50 and Brown Street
Site Code : 00000000
Start Date : 10/31/2023
Page No : 2

Groups Printed- Private - Light - Heavy

	South bound	US-50 Westbound					Brown Northbound					US-50 Eastbound					
Start Time	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
02:00 PM	0	0	205	5	0	210	1	0	5	0	6	15	215	0	0	230	446
02:15 PM	0	0	222	4	0	226	3	0	12	0	15	11	256	0	0	267	508
02:30 PM	0	0	268	1	0	269	4	0	8	0	12	18	235	0	0	253	534
02:45 PM	0	0	232	0	0	232	8	0	8	0	16	22	249	0	0	271	519
Total	0	0	927	10	0	937	16	0	33	0	49	66	955	0	0	1021	2007
03:00 PM	0	0	240	1	0	241	1	0	16	0	17	13	276	0	0	289	547
03:15 PM	0	0	218	1	0	219	4	0	6	0	10	14	274	0	0	288	517
03:30 PM	0	0	254	2	0	256	2	0	7	0	9	28	288	0	0	316	581
03:45 PM	0	0	292	3	0	295	2	0	9	0	11	15	297	0	0	312	618
Total	0	0	1004	7	0	1011	9	0	38	0	47	70	1135	0	0	1205	2263
04:00 PM	0	0	271	1	0	272	5	0	14	0	19	23	275	0	0	298	589
04:15 PM	0	0	244	1	0	245	2	0	6	0	8	22	271	0	0	293	546
04:30 PM	0	0	252	0	0	252	5	0	11	0	16	18	310	0	0	328	596
04:45 PM	0	0	242	2	0	244	1	0	7	0	8	25	313	0	0	338	590
Total	0	0	1009	4	0	1013	13	0	38	0	51	88	1169	0	0	1257	2321
05:00 PM	0	0	205	2	0	207	2	0	13	0	15	16	267	0	0	283	505
05:15 PM	0	0	221	0	0	221	1	0	3	0	4	10	284	0	0	294	519
05:30 PM	0	0	232	2	0	234	5	0	13	0	18	11	279	0	0	290	542
05:45 PM	0	0	182	3	0	185	3	0	7	0	10	12	190	0	0	202	397
Total	0	0	840	7	0	847	11	0	36	0	47	49	1020	0	0	1069	1963
Grand Total	0	0	11005	102	0	11107	124	0	402	0	526	590	9576	0	0	10166	21799
Apprch %		0	99.1	0.9	0		23.6	0	76.4	0		5.8	94.2	0	0		
Total %	0	0	50.5	0.5	0	51	0.6	0	1.8	0	2.4	2.7	43.9	0	0	46.6	
Private	0	0	10350	100	0	10450	121	0	402	0	523	586	8941	0	0	9527	20500
% Private	0	0	94	98	0	94.1	97.6	0	100	0	99.4	99.3	93.4	0	0	93.7	94
Light	0	0	378	1	0	379	3	0	0	0	3	4	372	0	0	376	758
% Light	0	0	3.4	1	0	3.4	2.4	0	0	0	0.6	0.7	3.9	0	0	3.7	3.5
Heavy	0	0	277	1	0	278	0	0	0	0	0	0	263	0	0	263	541
% Heavy	0	0	2.5	1	0	2.5	0	0	0	0	0	0	2.7	0	0	2.6	2.5

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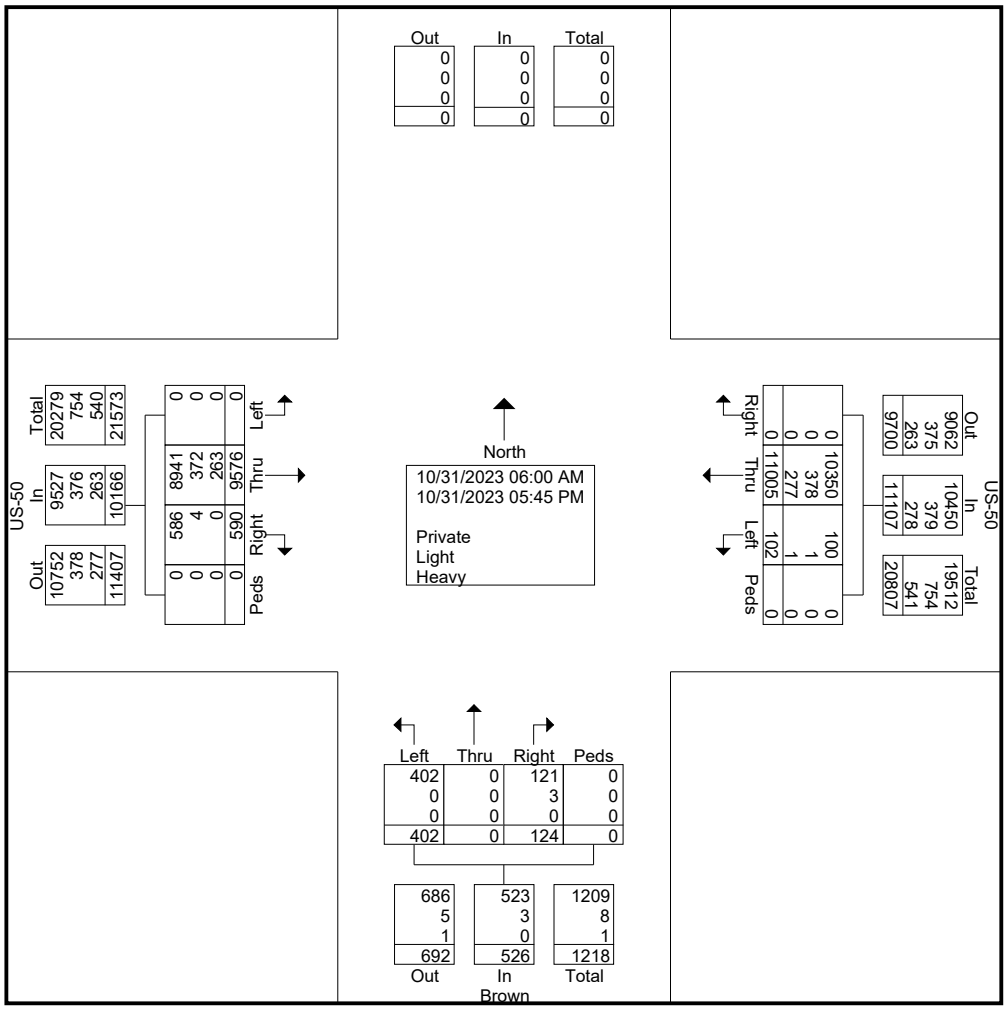
Site Code : 00000000
Start Date : 10/31/2023
Page No : 3



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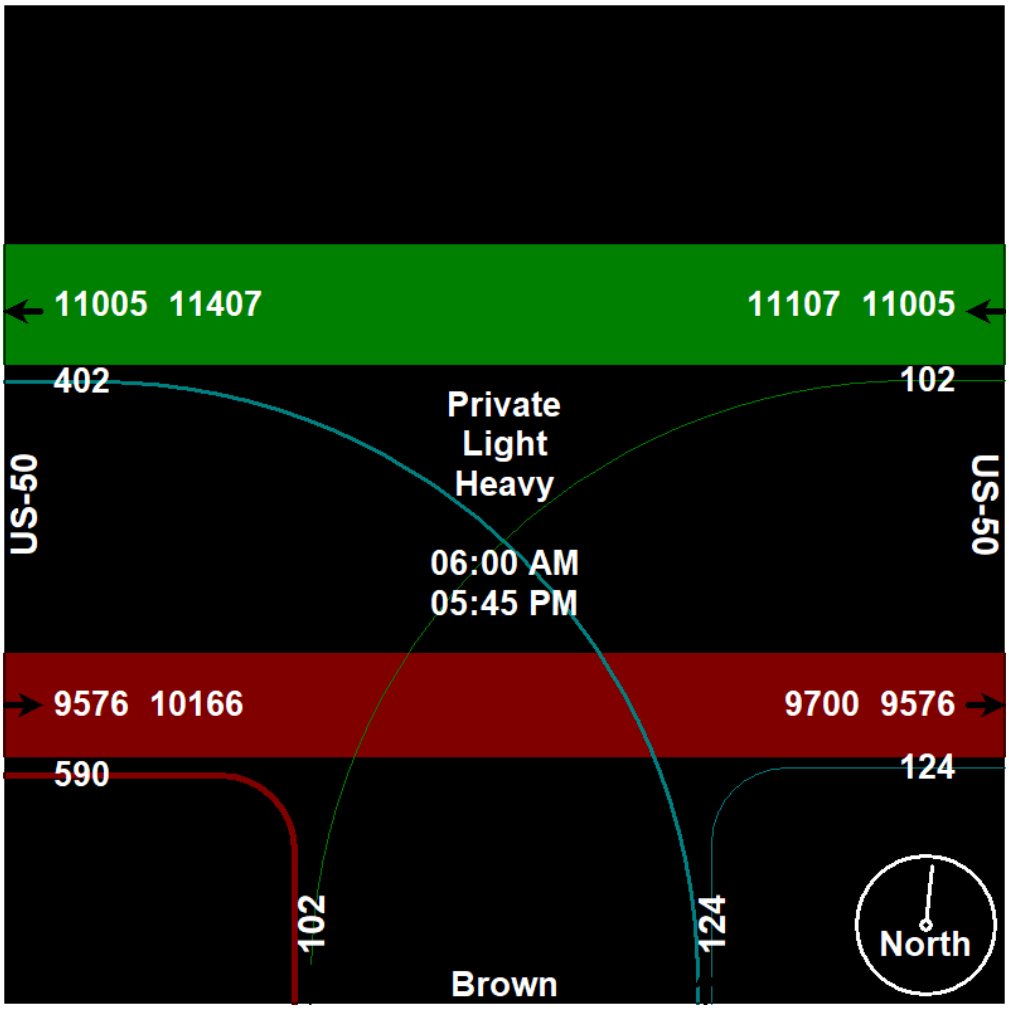

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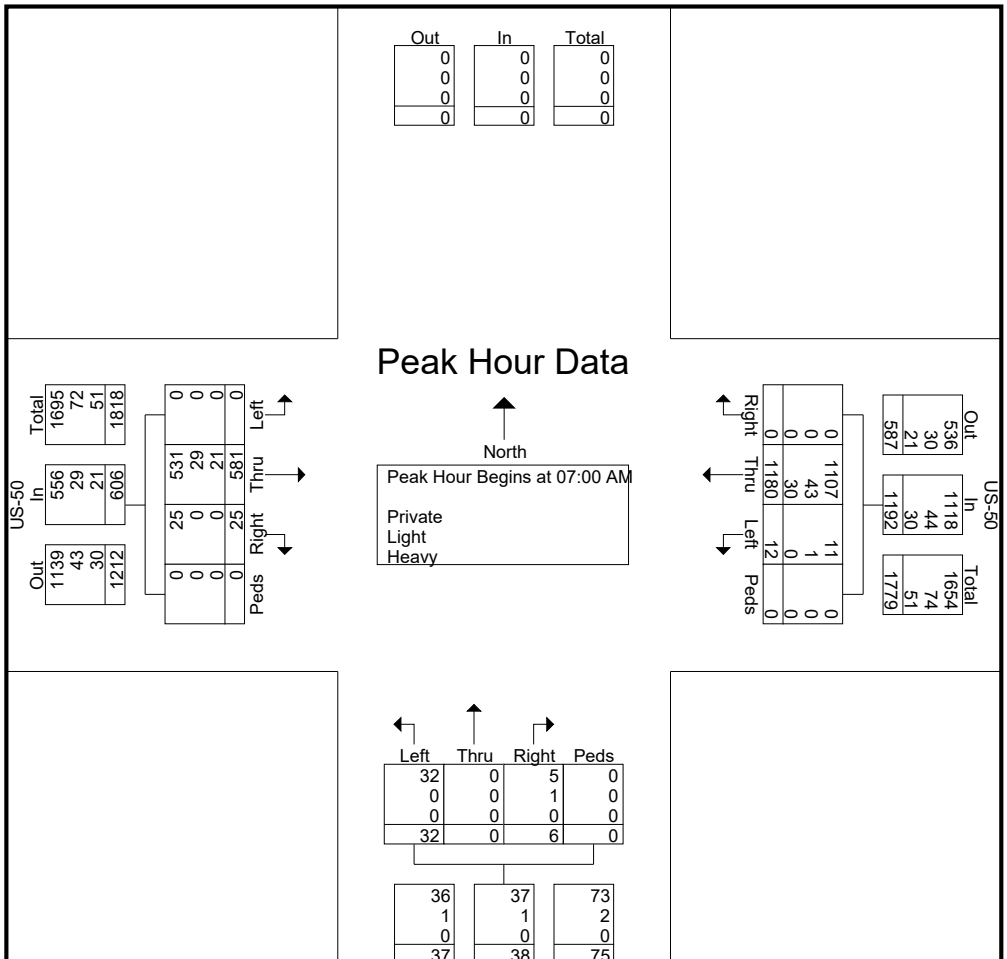
Site Code : 00000000
Start Date : 10/31/2023
Page No : 5

	South bound	US-50 Westbound					Brown Northbound					US-50 Eastbound					
Start Time	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	261	1	0	262	1	0	7	0	8	2	125	0	0	127	397
07:15 AM	0	0	271	**5**	0	276	0	0	5	0	5	7	138	0	0	145	426
07:30 AM	0	0	323	5	0	**328**	**4**	0	**11**	0	**15**	**9**	152	0	0	161	504
07:45 AM	0	0	**325**	1	0	326	1	0	9	0	10	7	**166**	0	0	**173**	**509**
Total Volume	0	0	1180	12	0	1192	6	0	32	0	38	25	581	0	0	606	1836
% App. Total		0	99	1	0		15.8	0	84.2	0		4.1	95.9	0	0		
PHF	.000	.000	.908	.600	.000	.909	.375	.000	.727	.000	.633	.694	.875	.000	.000	.876	.902
Private	0	0	1107	11	0	1118	5	0	32	0	37	25	531	0	0	556	1711
% Private	0	0	93.8	91.7	0	93.8	83.3	0	100	0	97.4	100	91.4	0	0	91.7	93.2
Light	0	0	43	1	0	44	1	0	0	0	1	0	29	0	0	29	74
% Light	0	0	3.6	8.3	0	3.7	16.7	0	0	0	2.6	0	5.0	0	0	4.8	4.0
Heavy	0	0	30	0	0	30	0	0	0	0	0	0	21	0	0	21	51
% Heavy	0	0	2.5	0	0	2.5	0	0	0	0	0	0	3.6	0	0	3.5	2.8



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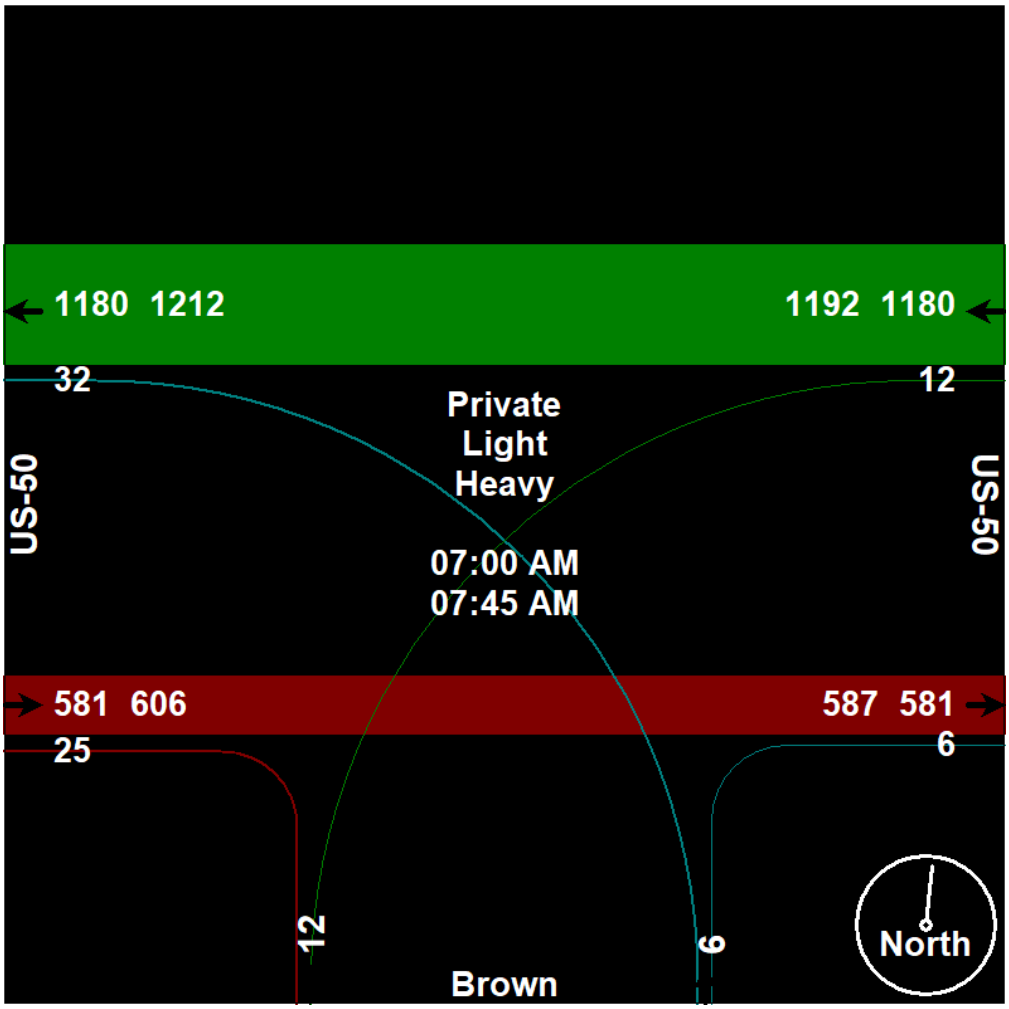

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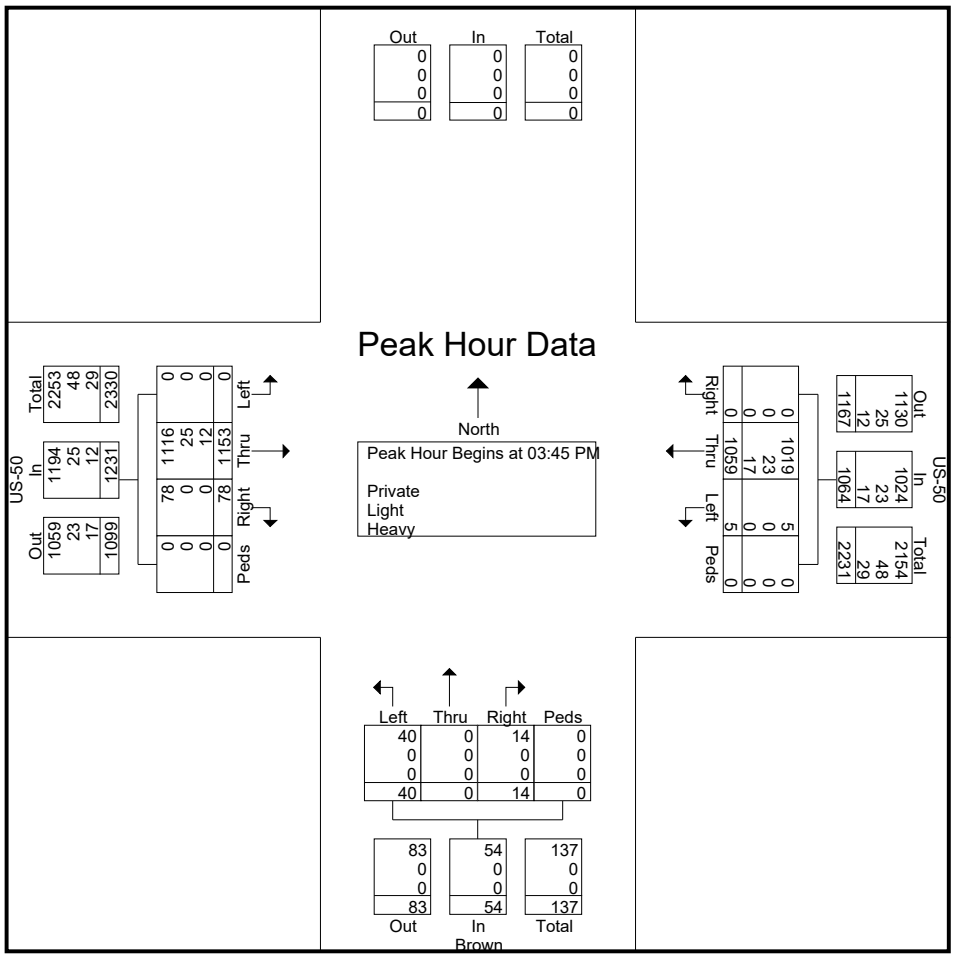
Site Code : 00000000
Start Date : 10/31/2023
Page No : 7

	South bound	US-50 Westbound					Brown Northbound					US-50 Eastbound					
Start Time	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 03:45 PM																	
03:45 PM	0	0	**292**	**3**	0	**295**	2	0	9	0	11	15	297	0	0	312	**618**
04:00 PM	0	0	271	1	0	272	**5**	0	**14**	0	**19**	**23**	275	0	0	298	589
04:15 PM	0	0	244	1	0	245	2	0	6	0	8	22	271	0	0	293	546
04:30 PM	0	0	252	0	0	252	5	0	11	0	16	18	**310**	0	0	**328**	596
Total Volume	0	0	1059	5	0	1064	14	0	40	0	54	78	1153	0	0	1231	2349
% App. Total		0	99.5	0.5	0		25.9	0	74.1	0		6.3	93.7	0	0		
PHF	.000	.000	.907	.417	.000	.902	.700	.000	.714	.000	.711	.848	.930	.000	.000	.938	.950
Private	0	0	1019	5	0	1024	14	0	40	0	54	78	1116	0	0	1194	2272
% Private	0	0	96.2	100	0	96.2	100	0	100	0	100	100	96.8	0	0	97.0	96.7
Light	0	0	23	0	0	23	0	0	0	0	0	0	25	0	0	25	48
% Light	0	0	2.2	0	0	2.2	0	0	0	0	0	0	2.2	0	0	2.0	2.0
Heavy	0	0	17	0	0	17	0	0	0	0	0	0	12	0	0	12	29
% Heavy	0	0	1.6	0	0	1.6	0	0	0	0	0	0	1.0	0	0	1.0	1.2



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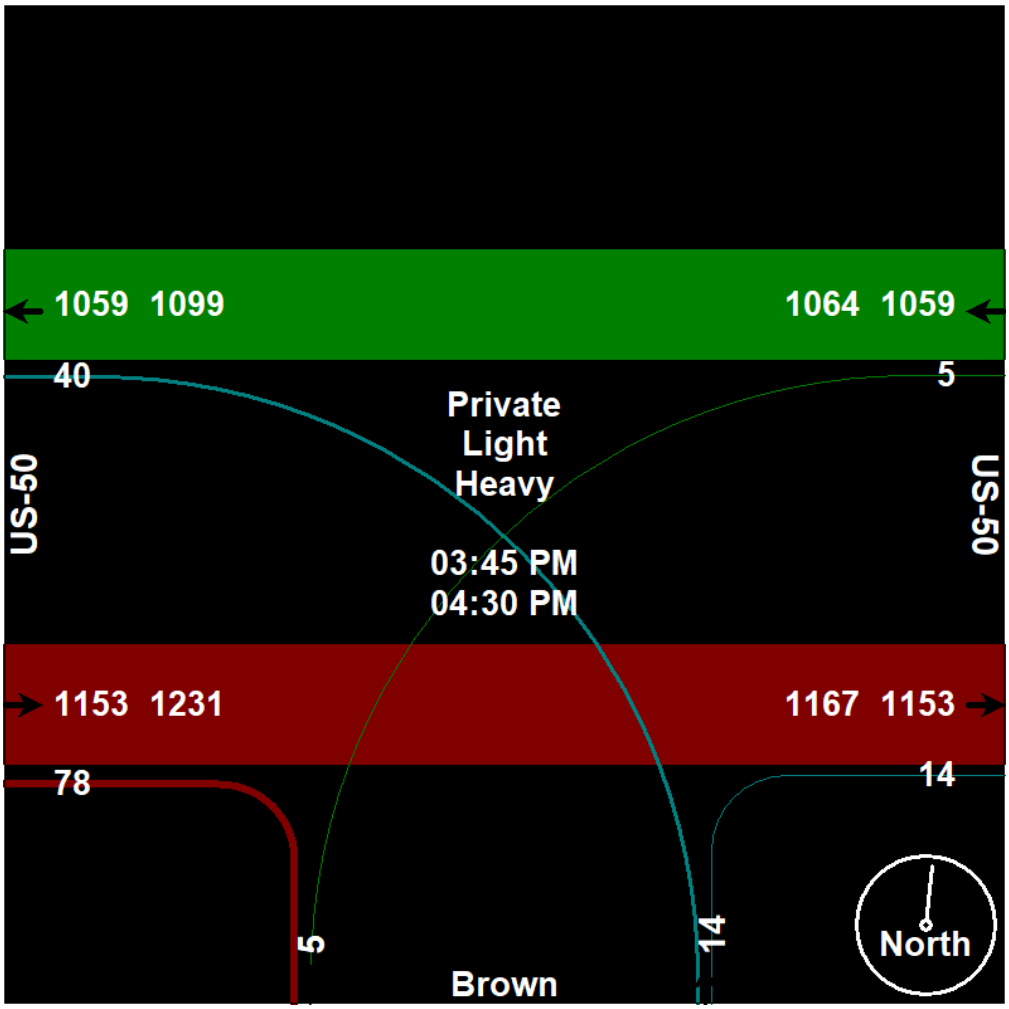
Site Code : 00000000
Start Date : 10/31/2023
Page No : 8



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US-50 E. Carson Complete Streets Study
Turning Movement Classification Count
US-50 & College Parkway/Fairview Drive

File Name : US-50 and College Parkway
Site Code : 00000000
Start Date : 10/31/2023
Page No : 1

Groups Printed- Private - Light - Heavy

	College Southbound					US-50 Westbound					Fairview Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	16	19	30	0	65	58	203	85	0	346	41	32	24	0	97	7	107	8	0	122	630
07:15 AM	19	36	39	0	94	79	277	86	0	442	53	38	37	0	128	10	119	6	0	135	799
07:30 AM	17	30	60	0	107	71	256	74	0	401	58	60	34	0	152	15	134	15	0	164	824
07:45 AM	20	22	44	0	86	89	263	84	0	436	56	55	33	0	144	5	146	12	0	163	829
Total	72	107	173	0	352	297	999	329	0	1625	208	185	128	0	521	37	506	41	0	584	3082
08:00 AM	11	21	46	0	78	46	201	49	0	296	46	22	27	0	95	10	117	14	0	141	610
08:15 AM	14	18	32	0	64	54	172	48	0	274	38	29	23	0	90	9	121	11	0	141	569
08:30 AM	11	15	33	0	59	46	191	37	0	274	41	33	18	0	92	14	131	17	0	162	587
08:45 AM	21	14	30	0	65	57	192	49	0	298	39	22	14	0	75	14	116	15	0	145	583
Total	57	68	141	0	266	203	756	183	0	1142	164	106	82	0	352	47	485	57	0	589	2349
*** BREAK ***																					
04:00 PM	7	45	119	0	171	52	220	80	0	352	130	52	35	0	217	27	232	12	0	271	1011
04:15 PM	8	28	115	0	151	59	192	98	0	349	133	59	33	0	225	20	208	22	0	250	975
04:30 PM	14	57	118	0	189	51	201	81	0	333	135	52	43	0	230	19	260	10	0	289	1041
04:45 PM	8	55	110	0	173	48	190	82	0	320	137	34	38	0	209	28	265	16	0	309	1011
Total	37	185	462	0	684	210	803	341	0	1354	535	197	149	0	881	94	965	60	0	1119	4038
05:00 PM	26	50	106	0	182	45	174	67	0	286	129	40	26	0	195	30	230	11	0	271	934
05:15 PM	10	61	100	0	171	44	186	90	0	320	120	45	22	0	187	27	246	16	0	289	967
05:30 PM	10	41	71	0	122	30	171	52	0	253	107	32	44	0	183	30	230	17	0	277	835
05:45 PM	16	45	61	0	122	35	138	48	0	221	64	44	22	0	130	24	158	18	0	200	673
Total	62	197	338	0	597	154	669	257	0	1080	420	161	114	0	695	111	864	62	0	1037	3409
Grand Total	228	557	1114	0	1899	864	3227	1110	0	5201	1327	649	473	0	2449	289	2820	220	0	3329	12878
Apprch %	12	29.3	58.7	0		16.6	62	21.3	0		54.2	26.5	19.3	0		8.7	84.7	6.6	0		
Total %	1.8	4.3	8.7	0	14.7	6.7	25.1	8.6	0	40.4	10.3	5	3.7	0	19	2.2	21.9	1.7	0	25.9	
Private	200	545	1082				3090	1090			1305						2666				12443
% Private	87.7	97.8	97.1	0	96.2	98.7	95.8	98.2	0	96.8	98.3	98.5	99.2	0	98.5	99.7	94.5	98.2	0	95.2	96.6
Light	11	6	22	0	39	8	84	13	0	105	19	4	3	0	26	1	99	3	0	103	273
% Light	4.8	1.1	2	0	2.1	0.9	2.6	1.2	0	2	1.4	0.6	0.6	0	1.1	0.3	3.5	1.4	0	3.1	2.1
Heavy	17	6	10	0	33	3	53	7	0	63	3	6	1	0	10	0	55	1	0	56	162
% Heavy	7.5	1.1	0.9	0	1.7	0.3	1.6	0.6	0	1.2	0.2	0.9	0.2	0	0.4	0	2	0.5	0	1.7	1.3

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File Name : US-50 and College Parkway
Site Code : 00000000
Start Date : 10/31/2023
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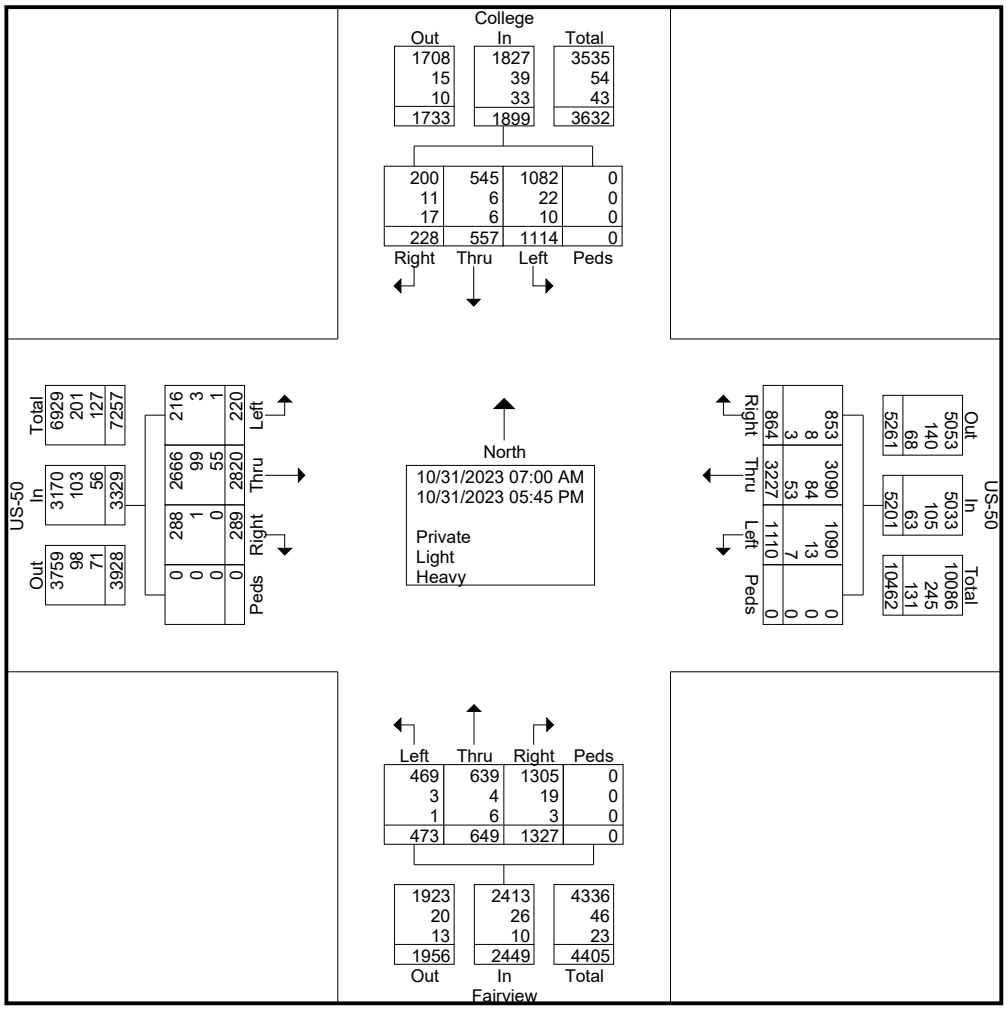

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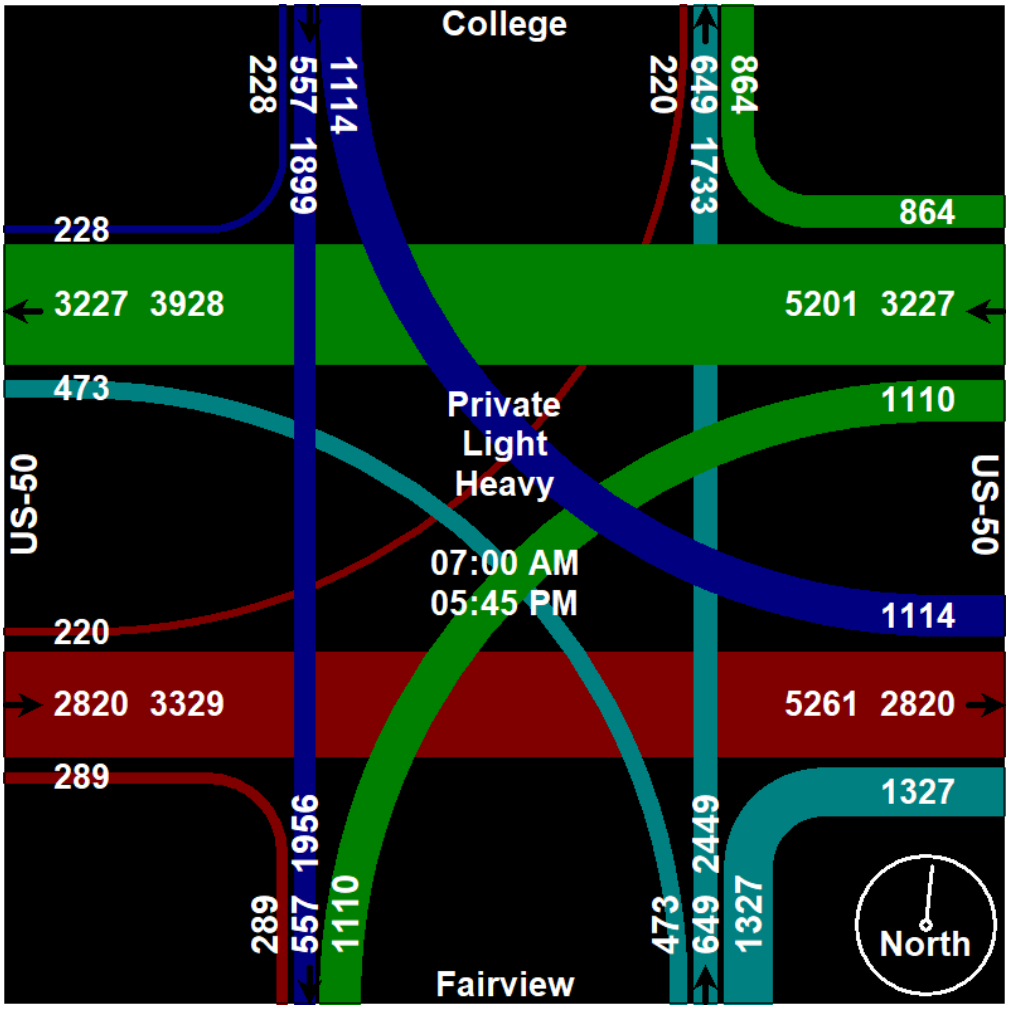
Page No : 3



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Site Code : 00000000
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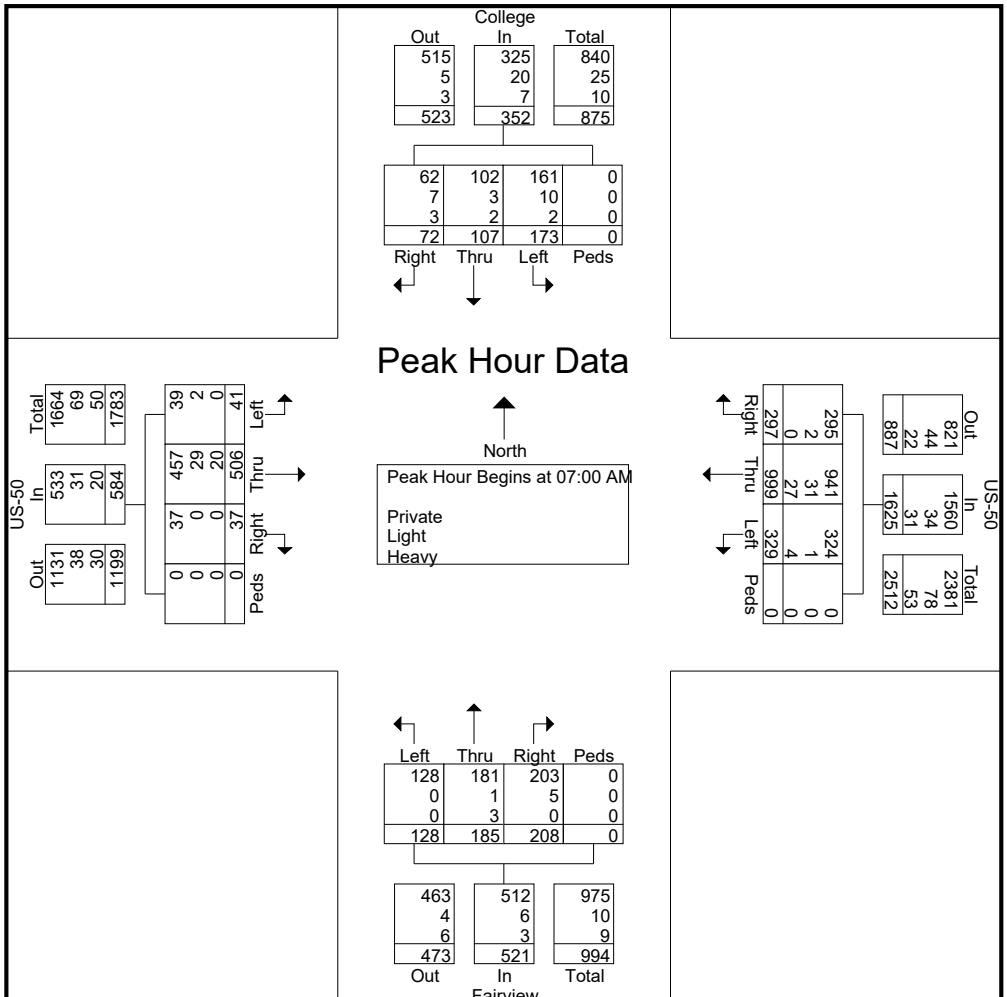
	College Southbound					US-50 Westbound					Fairview Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	16	19	30	0	65	58	203	85	0	346	41	32	24	0	97	7	107	8	0	122	630
07:15 AM	19	**36**	39	0	94	79	**277**	**86**	0	**442**	53	38	**37**	0	128	10	119	6	0	135	799
07:30 AM	17	30	**60**	0	**107**	71	256	74	0	401	**58**	**60**	34	0	**152**	**15**	134	**15**	0	**164**	824
07:45 AM	**20**	22	44	0	86	**89**	263	84	0	436	56	55	33	0	144	5	**146**	12	0	163	**829**
Total Volume	72	107	173	0	352	297	999	329	0	1625	208	185	128	0	521	37	506	41	0	584	3082
% App. Total	20.5	30.4	49.1	0		18.3	61.5	20.2	0		39.9	35.5	24.6	0		6.3	86.6	7	0		
PHF	.900	.743	.721	.000	.822	.834	.902	.956	.000	.919	.897	.771	.865	.000	.857	.617	.866	.683	.000	.890	.929
Private	62	102	161	0	325	295	941	324	0	1560	203	181	128	0	512	37	457	39	0	533	2930
% Private	86.1	95.3	93.1	0	92.3	99.3	94.2	98.5	0	96.0	97.6	97.8	100	0	98.3	100	90.3	95.1	0	91.3	95.1
Light	7	3	10	0	20	2	31	1	0	34	5	1	0	0	6	0	29	2	0	31	91
% Light	9.7	2.8	5.8	0	5.7	0.7	3.1	0.3	0	2.1	2.4	0.5	0	0	1.2	0	5.7	4.9	0	5.3	3.0
Heavy	3	2	2	0	7	0	27	4	0	31	0	3	0	0	3	0	20	0	0	20	61
% Heavy	4.2	1.9	1.2	0	2.0	0	2.7	1.2	0	1.9	0	1.6	0	0	0.6	0	4.0	0	0	3.4	2.0



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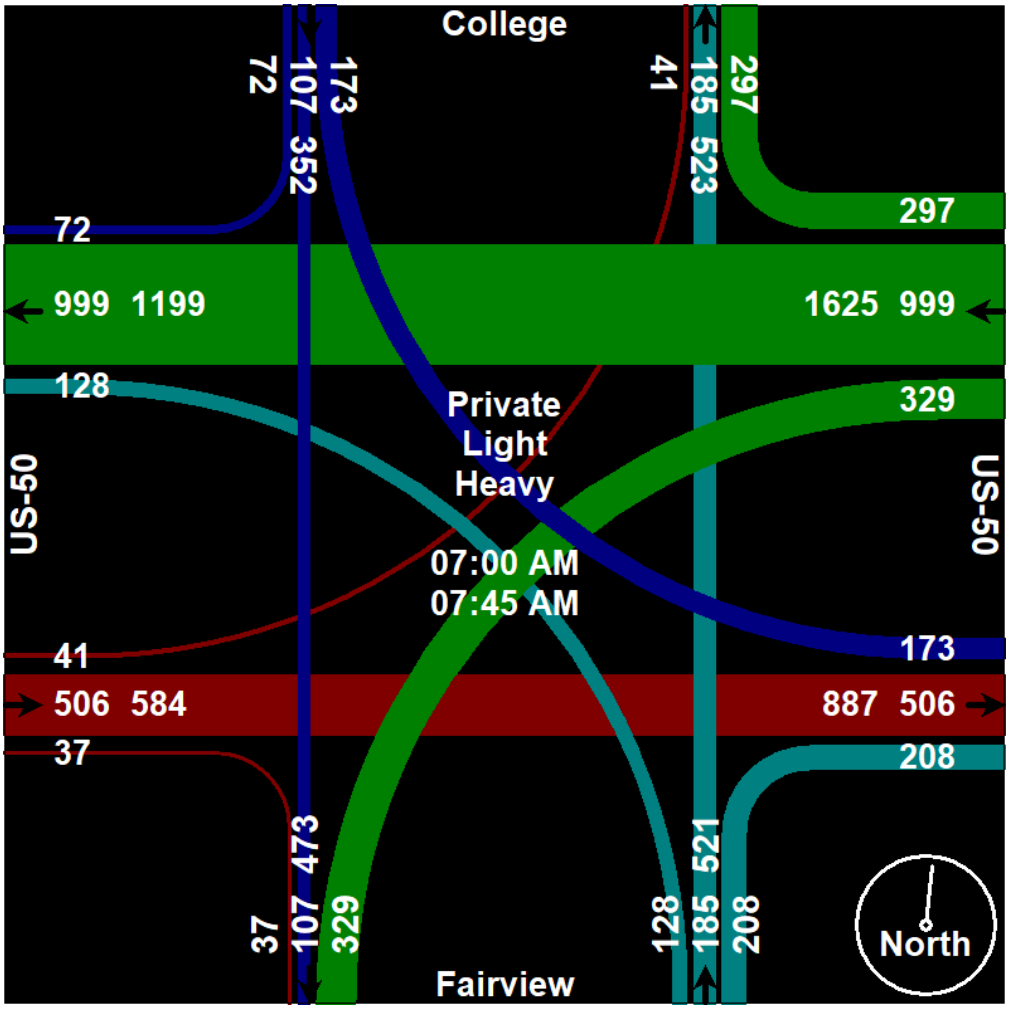
File Name : US-50 and College Parkway
Site Code : 00000000
Start Date : 10/31/2023
Page No : 5



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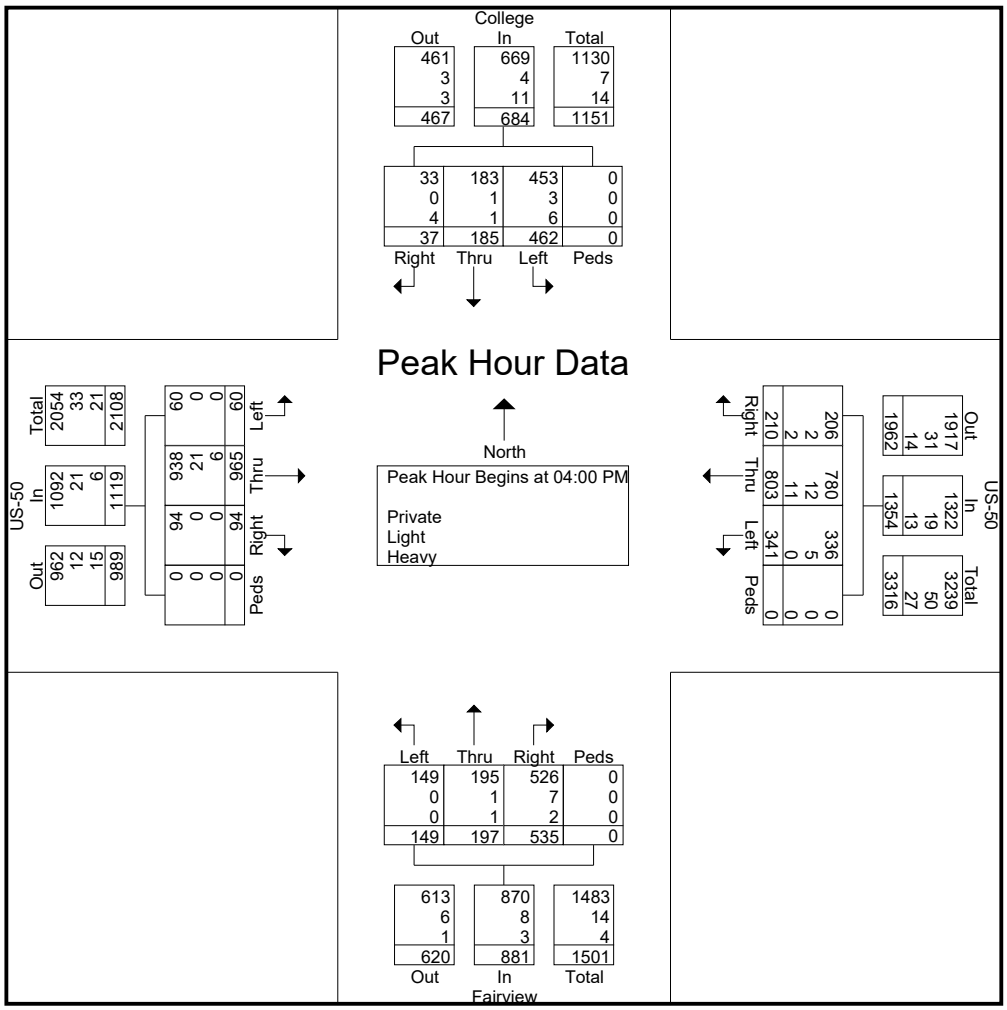
File Name : US-50 and College Parkway
Site Code : 00000000
Start Date : 10/31/2023
Page No : 6

	College Southbound					US-50 Westbound					Fairview Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	7	45	**119**	0	171	52	**220**	80	0	**352**	130	52	35	0	217	27	232	12	0	271	1011
04:15 PM	8	28	115	0	151	**59**	192	**98**	0	349	133	**59**	33	0	225	20	208	**22**	0	250	975
04:30 PM	**14**	**57**	118	0	**189**	51	201	81	0	333	135	52	**43**	0	**230**	19	260	10	0	289	**1041**
04:45 PM	8	55	110	0	173	48	190	82	0	320	**137**	34	38	0	209	**28**	**265**	16	0	**309**	1011
Total Volume	37	185	462	0	684	210	803	341	0	1354	535	197	149	0	881	94	965	60	0	1119	4038
% App. Total	5.4	27	67.5	0		15.5	59.3	25.2	0		60.7	22.4	16.9	0		8.4	86.2	5.4	0		
PHF	.661	.811	.971	.000	.905	.890	.913	.870	.000	.962	.976	.835	.866	.000	.958	.839	.910	.682	.000	.905	.970
Private	33	183	453	0	669	206	780	336	0	1322	526	195	149	0	870	94	938	60	0	1092	3953
% Private	89.2	98.9	98.1	0	97.8	98.1	97.1	98.5	0	97.6	98.3	99.0	100	0	98.8	100	97.2	100	0	97.6	97.9
Light	0	1	3	0	4	2	12	5	0	19	7	1	0	0	8	0	21	0	0	21	52
% Light	0	0.5	0.6	0	0.6	1.0	1.5	1.5	0	1.4	1.3	0.5	0	0	0.9	0	2.2	0	0	1.9	1.3
Heavy	4	1	6	0	11	2	11	0	0	13	2	1	0	0	3	0	6	0	0	6	33
% Heavy	10.8	0.5	1.3	0	1.6	1.0	1.4	0	0	1.0	0.4	0.5	0	0	0.3	0	0.6	0	0	0.5	0.8



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Site Code : 00000000
Start Date : 10/31/2023
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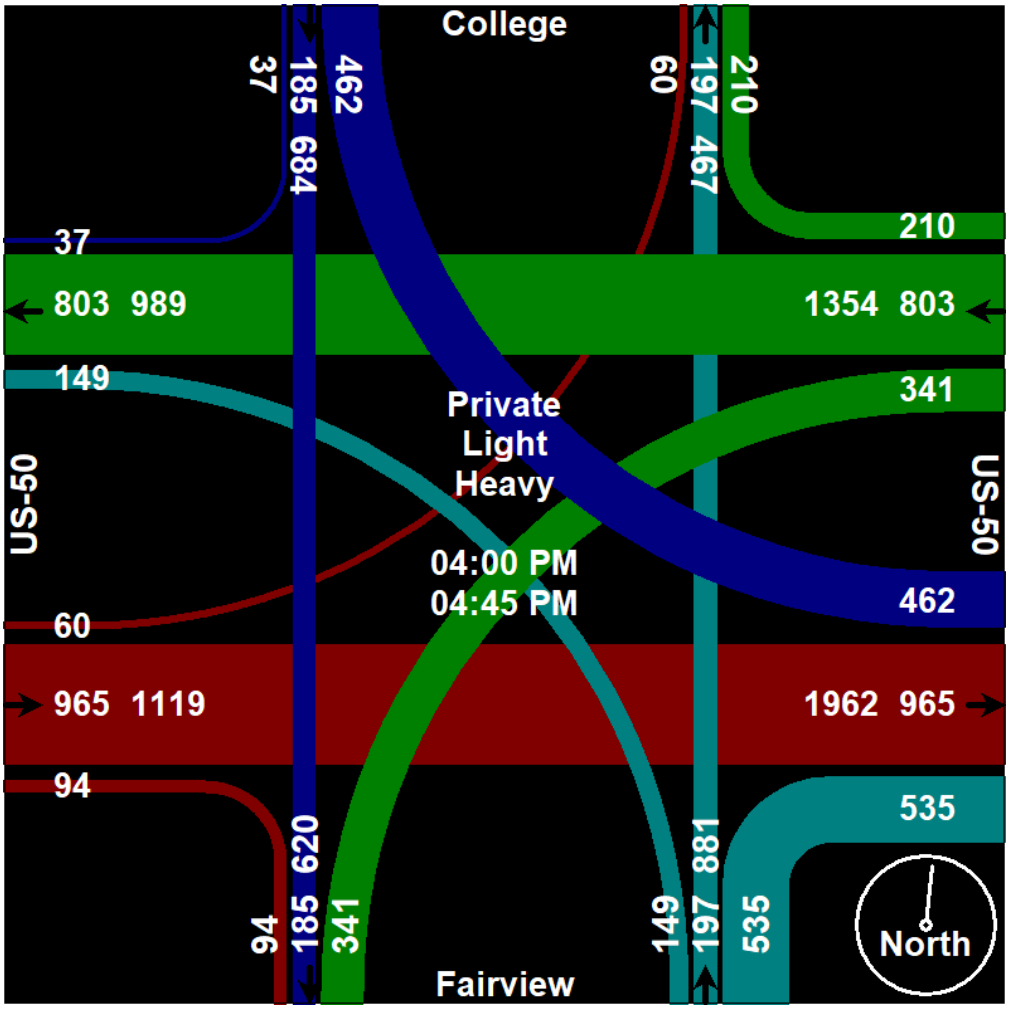

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US-50 E. Carson Complete Streets Study
Turning Movement Classification Count
US-50 & Empire Ranch Road

File Name : US-50 and Empire Ranch Road
Site Code : 00000000
Start Date : 10/31/2023
Page No : 1

Groups Printed- Private - Light - Heavy

	Empire Ranch Southbound					US-50 Westbound					Empire Ranch Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	2	0	0	0	2	1	383	0	0	384	1	0	1	0	2	0	181	0	0	181	569
07:15 AM	4	0	1	0	5	0	473	2	0	475	1	0	2	0	3	5	210	0	0	215	698
07:30 AM	1	0	1	0	2	1	453	2	0	456	0	0	4	0	4	2	236	0	0	238	700
07:45 AM	4	0	0	0	4	1	466	2	0	469	4	0	1	0	5	2	217	2	0	221	699
Total	11	0	2	0	13	3	1775	6	0	1784	6	0	8	0	14	9	844	2	0	855	2666
08:00 AM	1	0	0	0	1	0	321	1	0	322	4	0	0	0	4	2	200	1	0	203	530
08:15 AM	2	0	0	0	2	2	283	2	0	287	5	0	4	0	9	5	191	3	0	199	497
08:30 AM	7	0	1	0	8	0	301	1	0	302	2	0	3	0	5	3	197	3	0	203	518
08:45 AM	3	0	0	0	3	1	308	0	0	309	1	0	2	0	3	6	172	3	0	181	496
Total	13	0	1	0	14	3	1213	4	0	1220	12	0	9	0	21	16	760	10	0	786	2041
*** BREAK ***																					
04:00 PM	10	0	0	0	10	5	358	5	0	368	2	0	1	0	3	8	476	5	0	489	870
04:15 PM	17	1	0	0	18	3	310	4	0	317	4	0	2	0	6	7	448	8	0	463	804
04:30 PM	11	0	1	0	12	2	339	5	0	346	2	0	4	0	6	3	491	3	0	497	861
04:45 PM	9	0	1	0	10	2	284	5	0	291	1	0	2	0	3	7	500	5	0	512	816
Total	47	1	2	0	50	12	1291	19	0	1322	9	0	9	0	18	25	1915	21	0	1961	3351
05:00 PM	5	0	0	0	5	1	271	3	0	275	1	0	6	0	7	6	474	1	0	481	768
05:15 PM	4	0	2	0	6	0	278	4	0	282	1	0	1	0	2	5	448	6	0	459	749
05:30 PM	3	0	1	0	4	0	243	4	0	247	4	0	2	0	6	4	404	1	0	409	666
05:45 PM	4	0	1	0	5	1	212	2	0	215	4	0	3	0	7	3	285	2	0	290	517
Total	16	0	4	0	20	2	1004	13	0	1019	10	0	12	0	22	18	1611	10	0	1639	2700
Grand Total	87	1	9	0	97	20	5283	42	0	5345	37	0	38	0	75	68	5130	43	0	5241	10758
Apprch %	89.7	1	9.3	0		0.4	98.8	0.8	0		49.3	0	50.7	0		1.3	97.9	0.8	0		
Total %	0.8	0	0.1	0	0.9	0.2	49.1	0.4	0	49.7	0.3	0	0.4	0	0.7	0.6	47.7	0.4	0	48.7	
Private	87	1	9	0	97	20	5077										4935				10357
% Private	100	100	100	0	100	100	96.1	100	0	96.1	100	0	100	0	100	100	96.2	100	0	96.3	96.3
Light	0	0	0	0	0	0	128	0	0	128	0	0	0	0	0	0	132	0	0	132	260
% Light	0	0	0	0	0	0	2.4	0	0	2.4	0	0	0	0	0	0	2.6	0	0	2.5	2.4
Heavy	0	0	0	0	0	0	78	0	0	78	0	0	0	0	0	0	63	0	0	63	141
% Heavy	0	0	0	0	0	0	1.5	0	0	1.5	0	0	0	0	0	0	1.2	0	0	1.2	1.3

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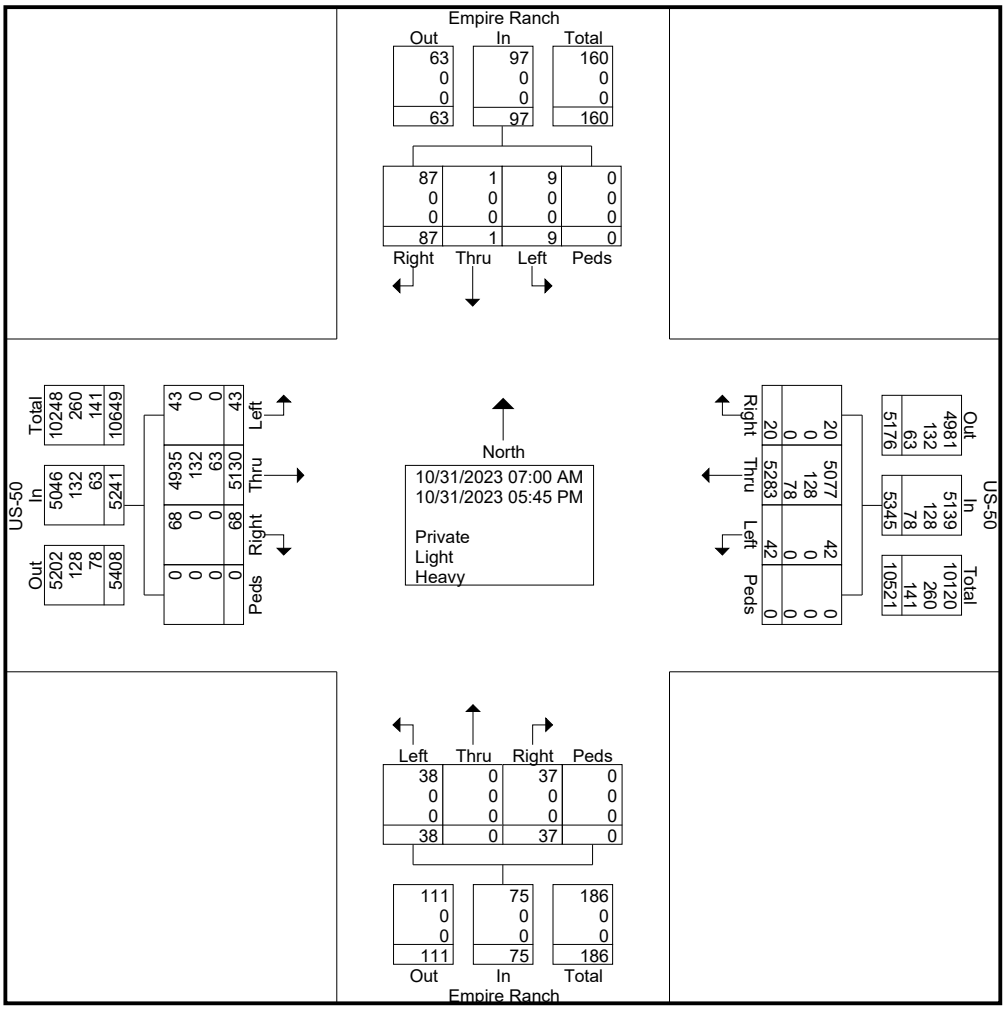
File Name : US-50 and Empire Ranch Road
Site Code : 00000000
Start Date : 10/31/2023
Page No : 2



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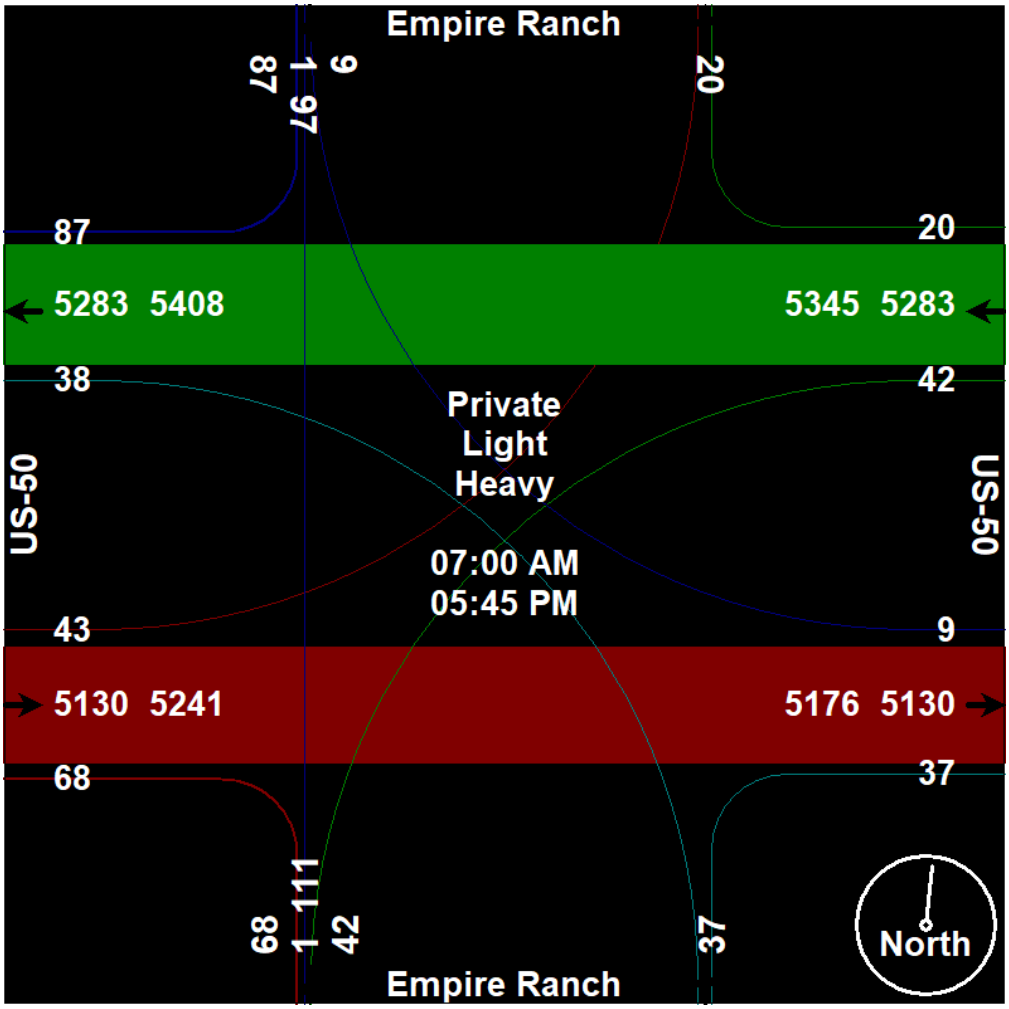
Page No : 3



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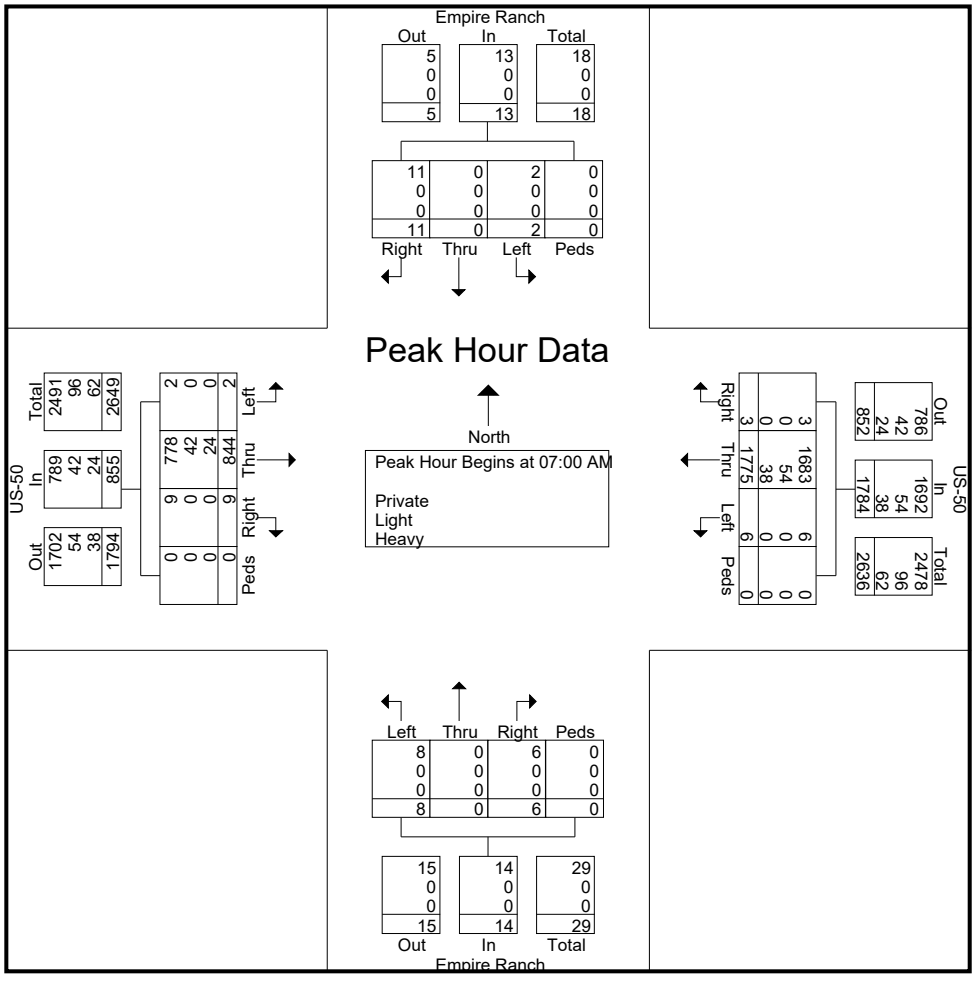
File Name : US-50 and Empire Ranch Road
Site Code : 00000000
Start Date : 10/31/2023
Page No : 4

	Empire Ranch Southbound					US-50 Westbound					Empire Ranch Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	2	0	0	0	2	**1**	383	0	0	384	1	0	1	0	2	0	181	0	0	181	569
07:15 AM	**4**	0	**1**	0	**5**	0	**473**	**2**	0	**475**	1	0	2	0	3	**5**	210	0	0	215	698
07:30 AM	1	0	1	0	2	1	453	2	0	456	0	0	**4**	0	4	2	**236**	0	0	**238**	**700**
07:45 AM	4	0	0	0	4	1	466	2	0	469	**4**	0	1	0	**5**	2	217	**2**	0	221	699
Total Volume	11	0	2	0	13	3	1775	6	0	1784	6	0	8	0	14	9	844	2	0	855	2666
% App. Total	84.6	0	15.4	0		0.2	99.5	0.3	0		42.9	0	57.1	0		1.1	98.7	0.2	0		
PHF	.688	.000	.500	.000	.650	.750	.938	.750	.000	.939	.375	.000	.500	.000	.700	.450	.894	.250	.000	.898	.952
Private	11	0	2	0	13	3	1683														
% Private	100	0	100	0	100	100	94.8	100	0	94.8	100	0	100	0	100	100	92.2	100	0	92.3	94.1
Light	0	0	0	0	0	0	54	0	0	54	0	0	0	0	0	0	42	0	0	42	96
% Light	0	0	0	0	0	0	3.0	0	0	3.0	0	0	0	0	0	0	5.0	0	0	4.9	3.6
Heavy	0	0	0	0	0	0	38	0	0	38	0	0	0	0	0	0	24	0	0	24	62
% Heavy	0	0	0	0	0	0	2.1	0	0	2.1	0	0	0	0	0	0	2.8	0	0	2.8	2.3



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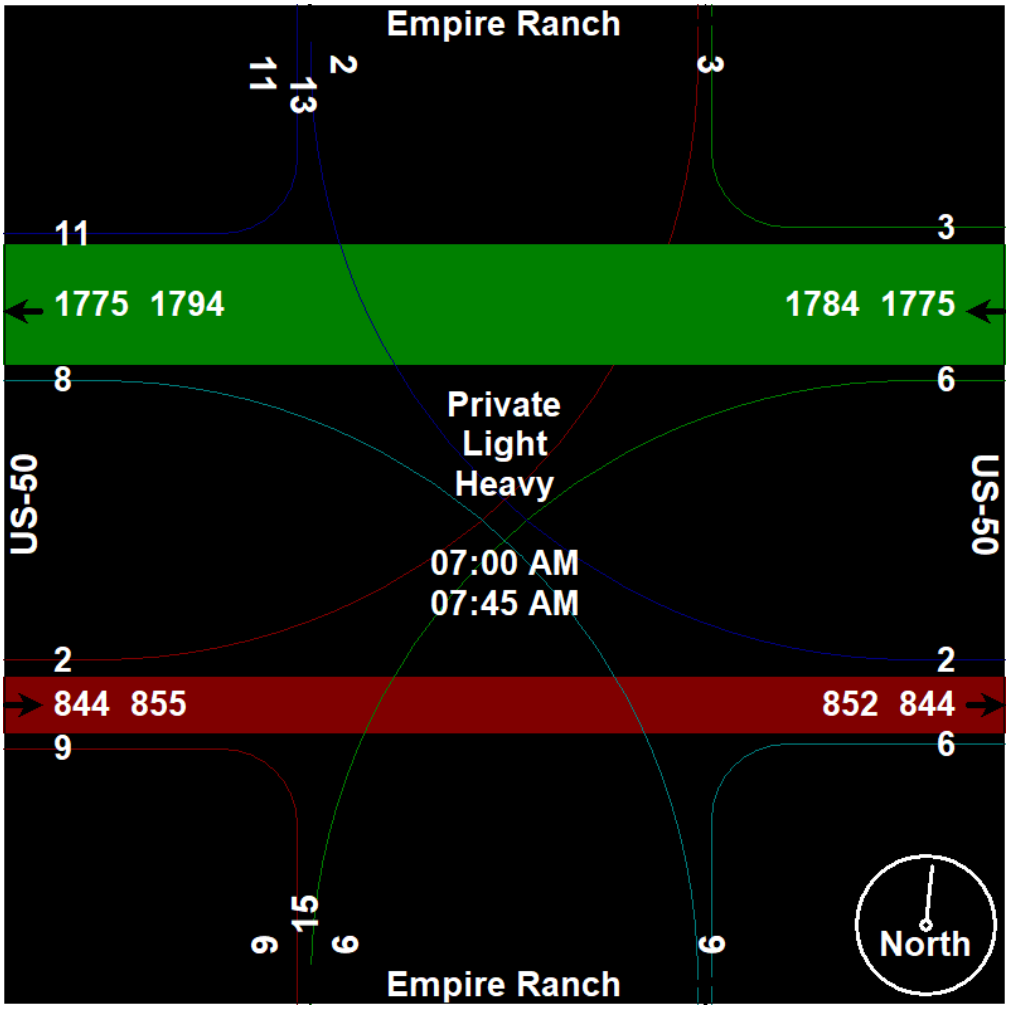
Site Code : 00000000
Start Date : 10/31/2023
Page No : 5



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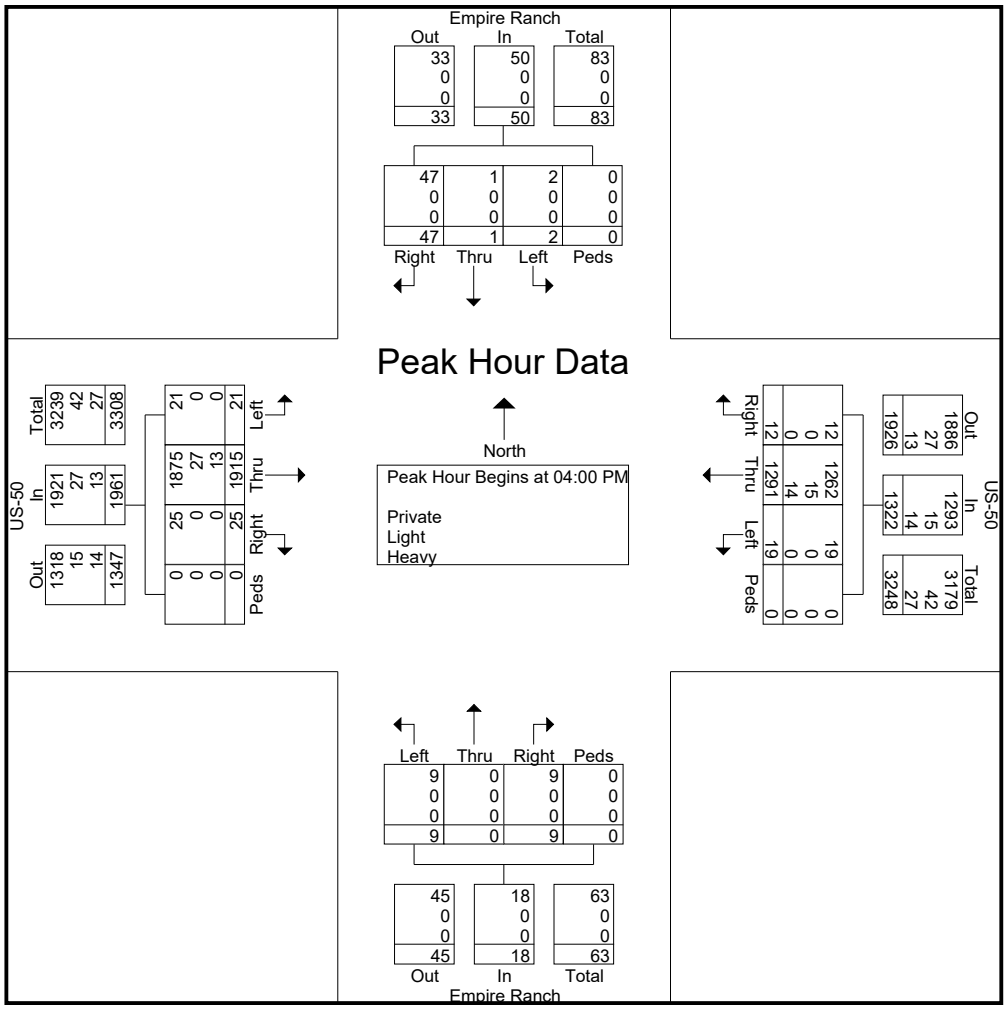
Site Code : 00000000
Start Date : 10/31/2023
Page No : 6

	Empire Ranch Southbound					US-50 Westbound					Empire Ranch Northbound					US-50 Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	10	0	0	0	10	**5**	**358**	**5**	0	**368**	2	0	1	0	3	**8**	476	5	0	489	**870**
04:15 PM	**17**	**1**	0	0	**18**	3	310	4	0	317	**4**	0	2	0	**6**	7	448	**8**	0	463	804
04:30 PM	11	0	**1**	0	12	2	339	5	0	346	2	0	**4**	0	6	3	491	3	0	497	861
04:45 PM	9	0	1	0	10	2	284	5	0	291	1	0	2	0	3	7	**500**	5	0	**512**	816
Total Volume	47	1	2	0	50	12	1291	19	0	1322	9	0	9	0	18	25	1915	21	0	1961	3351
% App. Total	94	2	4	0		0.9	97.7	1.4	0		50	0	50	0		1.3	97.7	1.1	0		
PHF	.691	.250	.500	.000	.694	.600	.902	.950	.000	.898	.563	.000	.563	.000	.750	.781	.958	.656	.000	.958	.963
Private	47	1	2	0	50	12	1262										1875				
% Private	100	100	100	0	100	100	97.8	100	0	97.8	100	0	100	0	100	100	97.9	100	0	98.0	97.9
Light	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	27	0	0	27	42
% Light	0	0	0	0	0	0	1.2	0	0	1.1	0	0	0	0	0	0	1.4	0	0	1.4	1.3
Heavy	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	13	0	0	13	27
% Heavy	0	0	0	0	0	0	1.1	0	0	1.1	0	0	0	0	0	0	0.7	0	0	0.7	0.8



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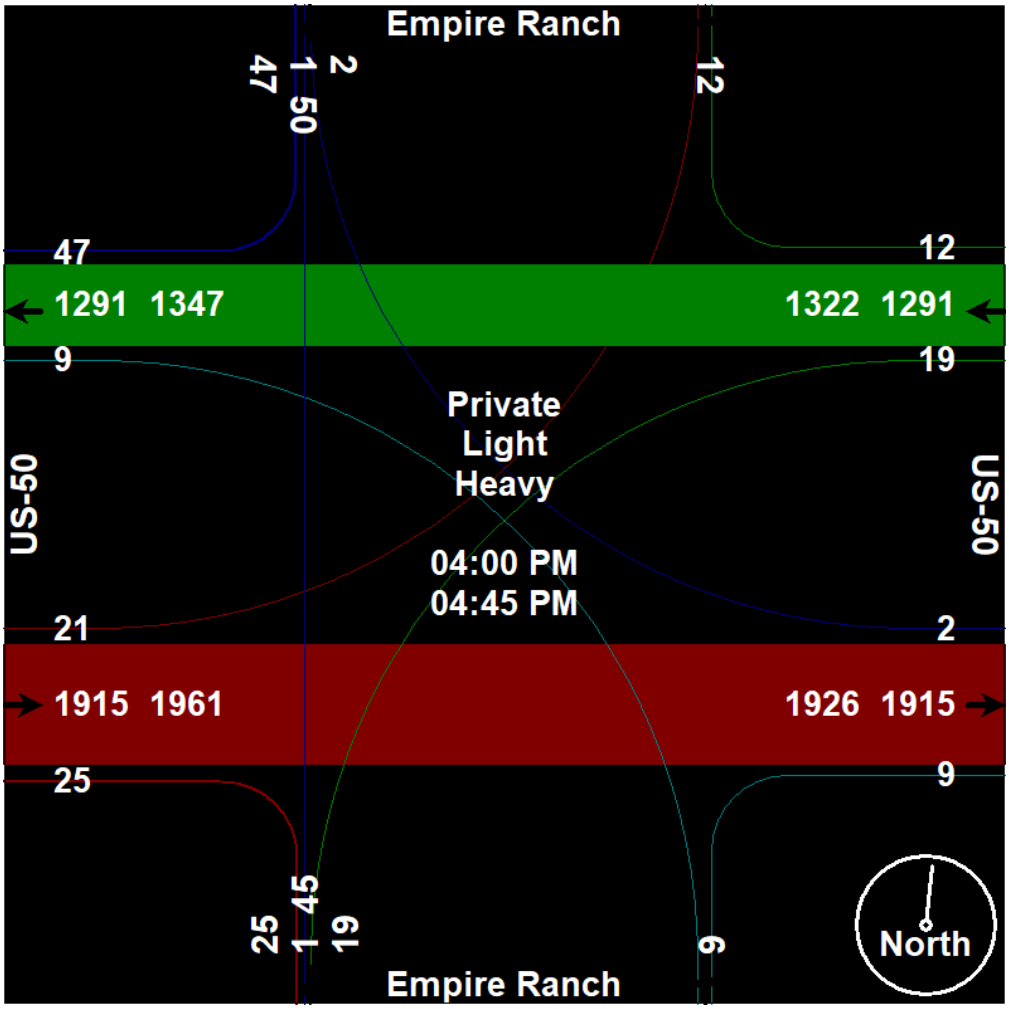

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US-50 E. Carson Complete Streets Study
Turning Movement Classification Count
US-50 & Flint Road

File Name : US-50 and Flint Road
Site Code : 00000000
Start Date : 11/1/2023
Page No : 1

Groups Printed- Private - Light - Heavy

	South bound	US-50 Westbound					Flint Northbound					US-50 Eastbound					
Start Time	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	392	1	0	393	0	0	3	0	3	3	160	0	0	163	559
07:15 AM	0	0	466	0	0	466	0	0	1	0	1	4	144	0	0	148	615
07:30 AM	0	0	548	1	0	549	1	0	1	0	2	8	147	0	0	155	706
07:45 AM	0	0	436	1	0	437	1	0	6	0	7	9	179	0	0	188	632
Total	0	0	1842	3	0	1845	2	0	11	0	13	24	630	0	0	654	2512
08:00 AM	0	0	325	2	0	327	3	0	7	0	10	15	136	0	0	151	488
08:15 AM	0	0	300	2	0	302	2	0	8	0	10	11	166	0	0	177	489
08:30 AM	0	0	304	0	0	304	2	0	10	0	12	9	163	0	0	172	488
08:45 AM	0	0	288	2	0	290	1	0	11	0	12	7	162	0	0	169	471
Total	0	0	1217	6	0	1223	8	0	36	0	44	42	627	0	0	669	1936
*** BREAK ***																	
04:00 PM	0	0	261	1	0	262	1	0	9	0	10	16	456	0	0	472	744
04:15 PM	0	0	246	1	0	247	3	0	18	0	21	16	511	0	0	527	795
04:30 PM	0	0	245	1	0	246	0	0	21	0	21	6	506	0	0	512	779
04:45 PM	0	0	231	0	0	231	1	0	8	0	9	5	474	0	0	479	719
Total	0	0	983	3	0	986	5	0	56	0	61	43	1947	0	0	1990	3037
05:00 PM	0	0	228	0	0	228	4	0	5	0	9	2	485	0	0	487	724
05:15 PM	0	0	220	0	0	220	1	0	6	0	7	2	547	0	0	549	776
05:30 PM	0	0	219	0	0	219	4	0	6	0	10	0	492	0	0	492	721
05:45 PM	0	0	168	0	0	168	0	0	3	0	3	1	382	0	0	383	554
Total	0	0	835	0	0	835	9	0	20	0	29	5	1906	0	0	1911	2775
Grand Total	0	0	4877	12	0	4889	24	0	123	0	147	114	5110	0	0	5224	10260
Apprch %		0	99.8	0.2	0		16.3	0	83.7	0		2.2	97.8	0	0		
Total %	0	0	47.5	0.1	0	47.7	0.2	0	1.2	0	1.4	1.1	49.8	0	0	50.9	
Private	0	0	4711	12	0	4723	21	0	96	0	117	85	4947	0	0	5032	9872
% Private	0	0	96.6	100	0	96.6	87.5	0	78	0	79.6	74.6	96.8	0	0	96.3	96.2
Light	0	0	70	0	0	70	3	0	17	0	20	25	94	0	0	119	209
% Light	0	0	1.4	0	0	1.4	12.5	0	13.8	0	13.6	21.9	1.8	0	0	2.3	2
Heavy	0	0	96	0	0	96	0	0	10	0	10	4	69	0	0	73	179
% Heavy	0	0	2	0	0	2	0	0	8.1	0	6.8	3.5	1.4	0	0	1.4	1.7

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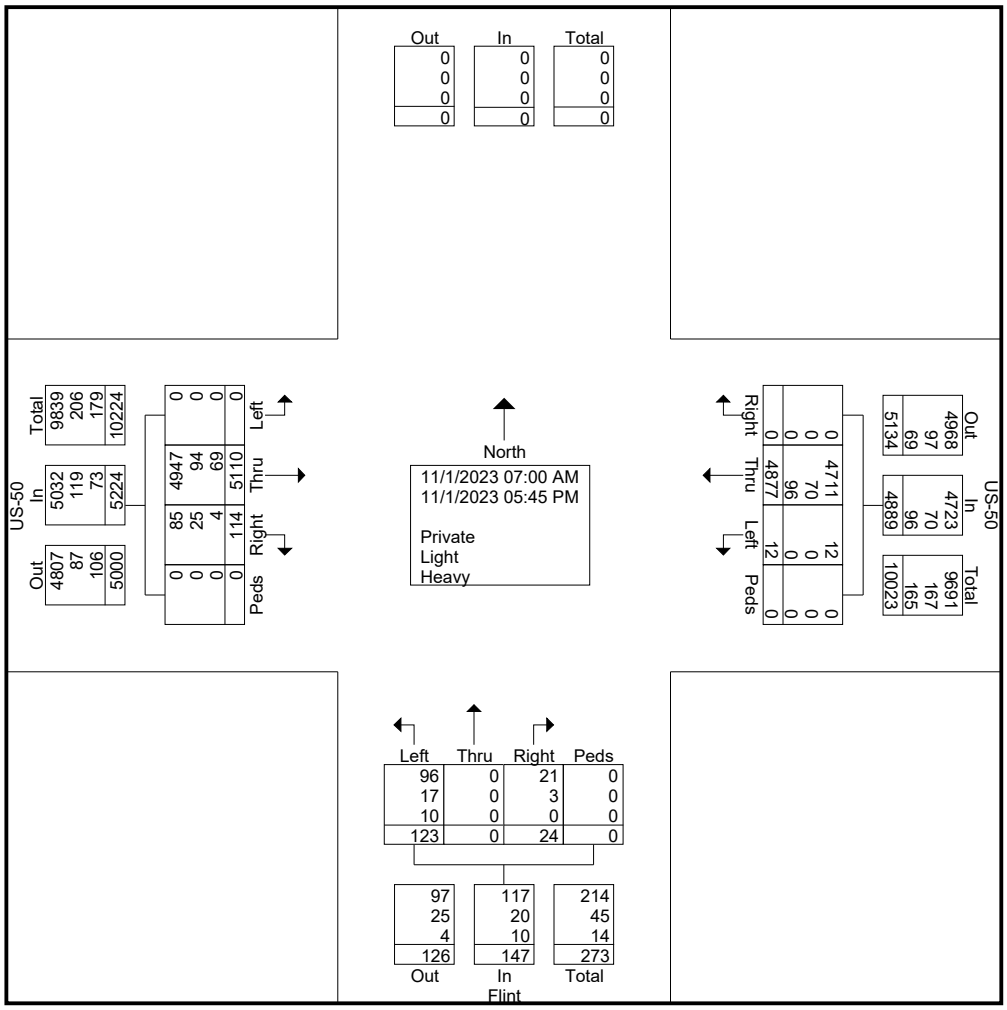
File Name : US-50 and Flint Road
Site Code : 00000000
Start Date : 11/1/2023
Page No : 2



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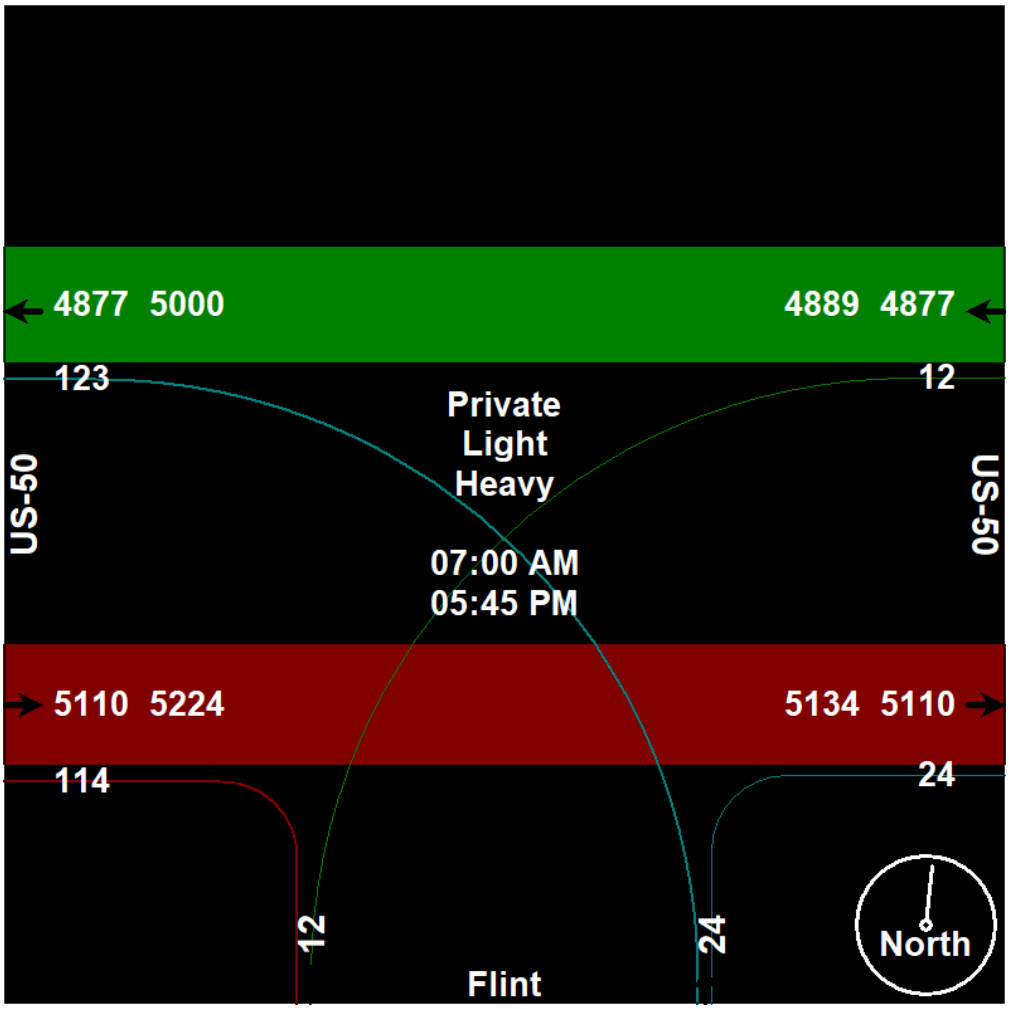

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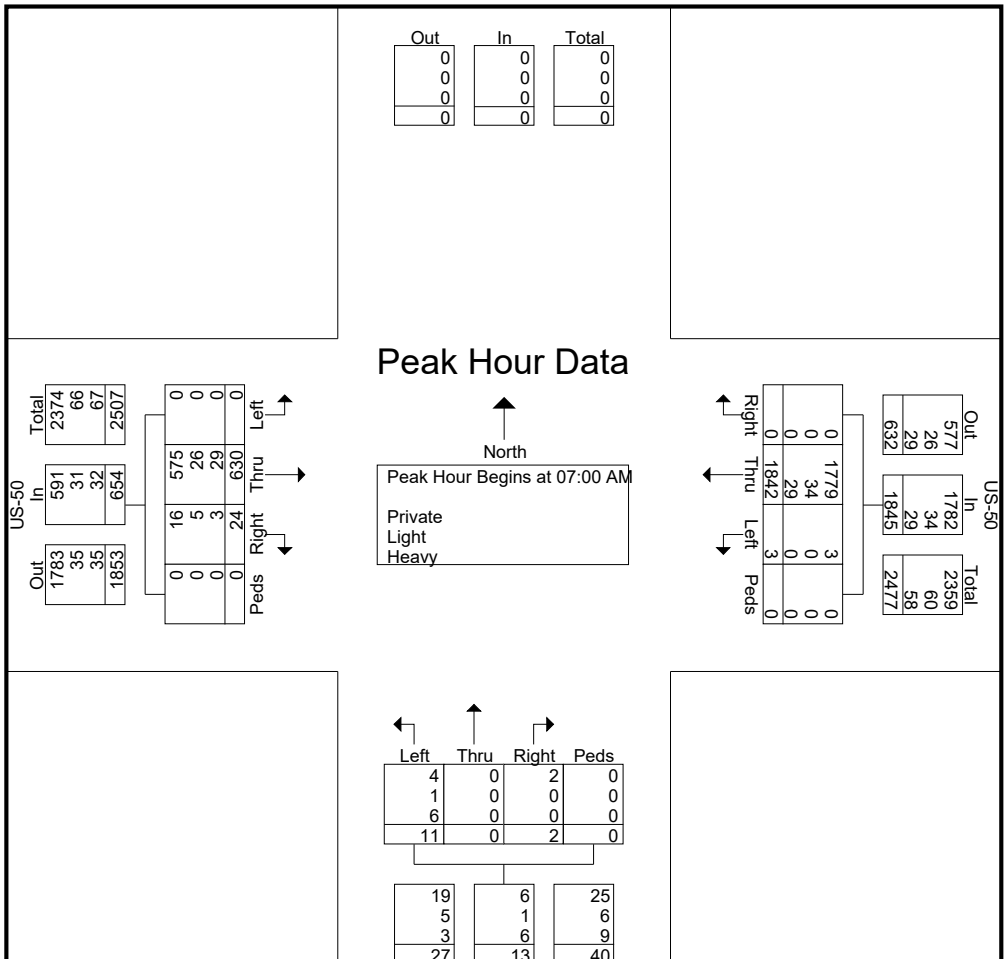
Site Code : 00000000
Start Date : 11/1/2023
Page No : 4

	South bound	US-50 Westbound					Flint Northbound					US-50 Eastbound					
Start Time	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	392	**1**	0	393	0	0	3	0	3	3	160	0	0	163	559
07:15 AM	0	0	466	0	0	466	0	0	1	0	1	4	144	0	0	148	615
07:30 AM	0	0	**548**	1	0	**549**	**1**	0	1	0	2	8	147	0	0	155	**706**
07:45 AM	0	0	436	1	0	437	1	0	**6**	0	**7**	**9**	**179**	0	0	**188**	632
Total Volume	0	0	1842	3	0	1845	2	0	11	0	13	24	630	0	0	654	2512
% App. Total		0	99.8	0.2	0		15.4	0	84.6	0		3.7	96.3	0	0		
PHF	.000	.000	.840	.750	.000	.840	.500	.000	.458	.000	.464	.667	.880	.000	.000	.870	.890
Private	0	0	1779	3	0	1782	2	0	4	0	6	16	575	0	0	591	2379
% Private	0	0	96.6	100	0	96.6	100	0	36.4	0	46.2	66.7	91.3	0	0	90.4	94.7
Light	0	0	34	0	0	34	0	0	1	0	1	5	26	0	0	31	66
% Light	0	0	1.8	0	0	1.8	0	0	9.1	0	7.7	20.8	4.1	0	0	4.7	2.6
Heavy	0	0	29	0	0	29	0	0	6	0	6	3	29	0	0	32	67
% Heavy	0	0	1.6	0	0	1.6	0	0	54.5	0	46.2	12.5	4.6	0	0	4.9	2.7



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Site Code : 00000000
Start Date : 11/1/2023
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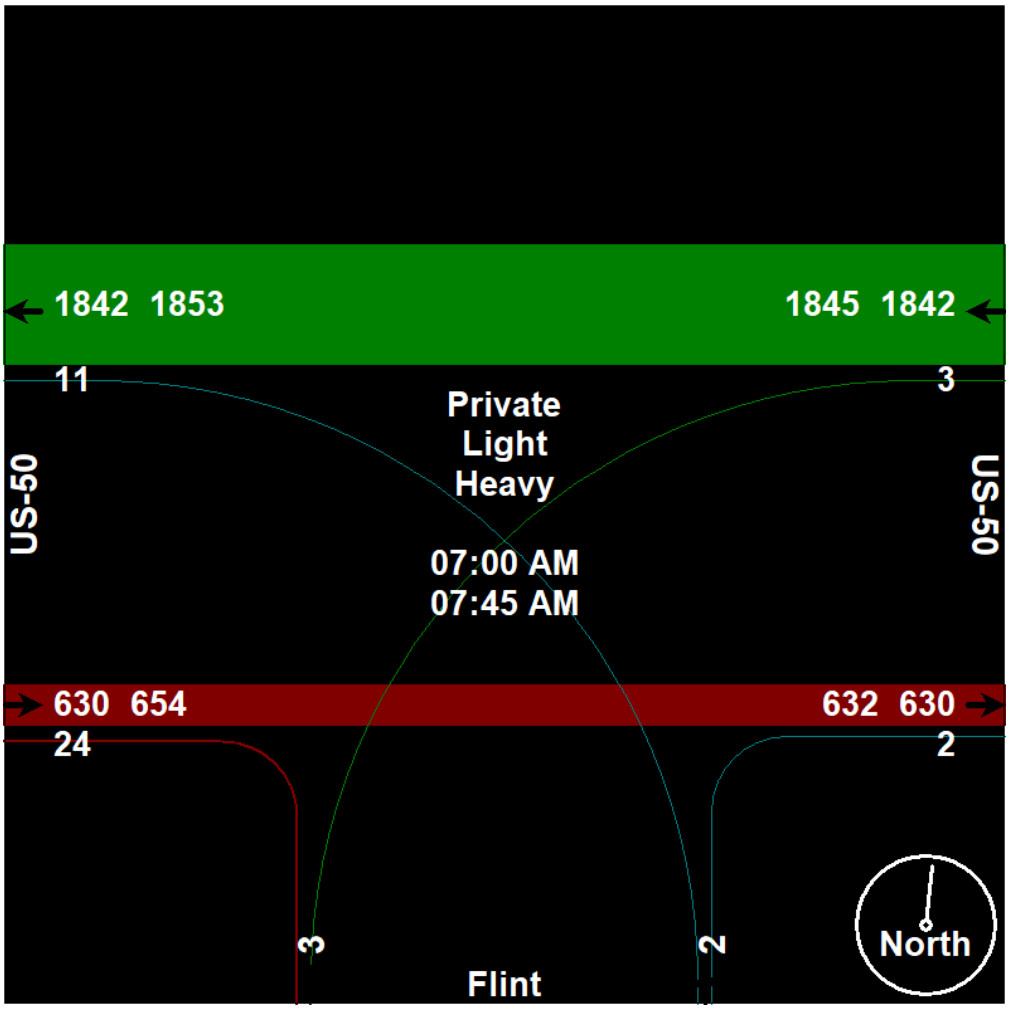

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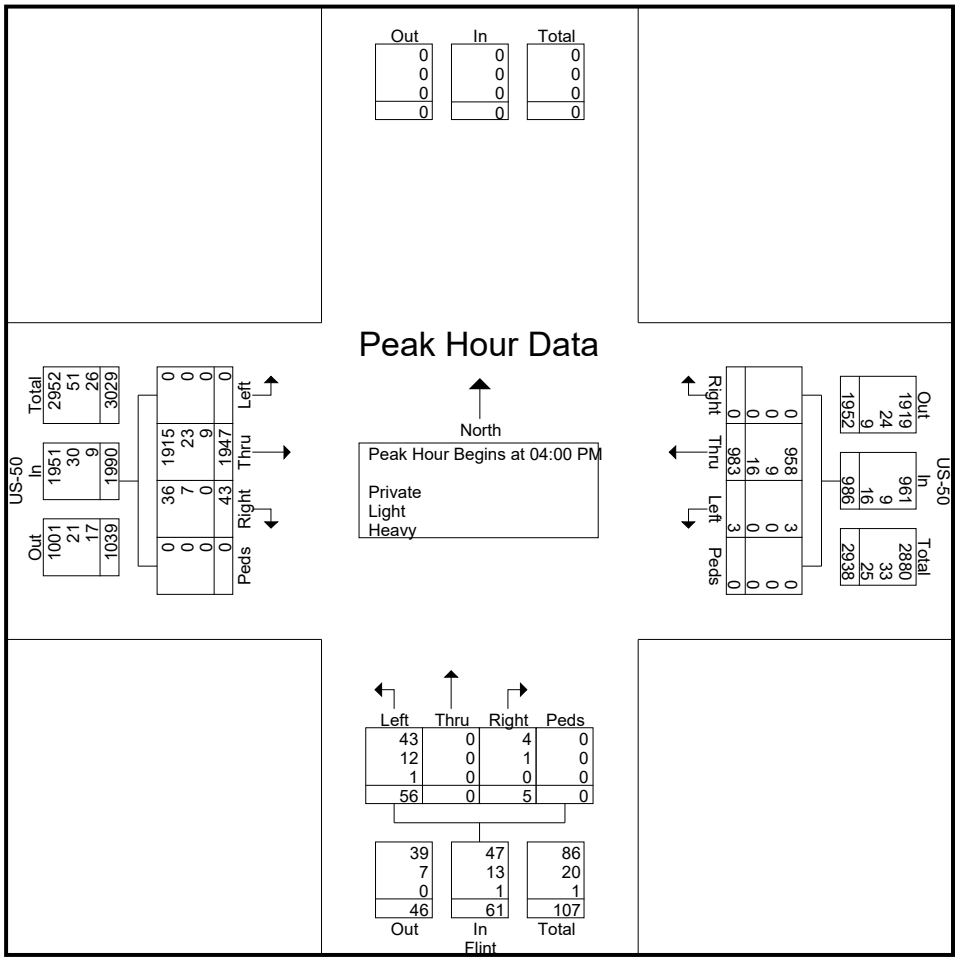
Site Code : 00000000
Start Date : 11/1/2023
Page No : 6

	South bound	US-50 Westbound					Flint Northbound					US-50 Eastbound					
Start Time	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	**261**	**1**	0	**262**	1	0	9	0	10	**16**	456	0	0	472	744
04:15 PM	0	0	246	1	0	247	**3**	0	18	0	**21**	16	**511**	0	0	**527**	**795**
04:30 PM	0	0	245	1	0	246	0	0	**21**	0	21	6	506	0	0	512	779
04:45 PM	0	0	231	0	0	231	1	0	8	0	9	5	474	0	0	479	719
Total Volume	0	0	983	3	0	986	5	0	56	0	61	43	1947	0	0	1990	3037
% App. Total		0	99.7	0.3	0		8.2	0	91.8	0		2.2	97.8	0	0		
PHF	.000	.000	.942	.750	.000	.941	.417	.000	.667	.000	.726	.672	.953	.000	.000	.944	.955
Private	0	0	958	3	0	961	4	0	43	0	47	36	1915	0	0	1951	2959
% Private	0	0	97.5	100	0	97.5	80.0	0	76.8	0	77.0	83.7	98.4	0	0	98.0	97.4
Light	0	0	9	0	0	9	1	0	12	0	13	7	23	0	0	30	52
% Light	0	0	0.9	0	0	0.9	20.0	0	21.4	0	21.3	16.3	1.2	0	0	1.5	1.7
Heavy	0	0	16	0	0	16	0	0	1	0	1	0	9	0	0	9	26
% Heavy	0	0	1.6	0	0	1.6	0	0	1.8	0	1.6	0	0.5	0	0	0.5	0.9



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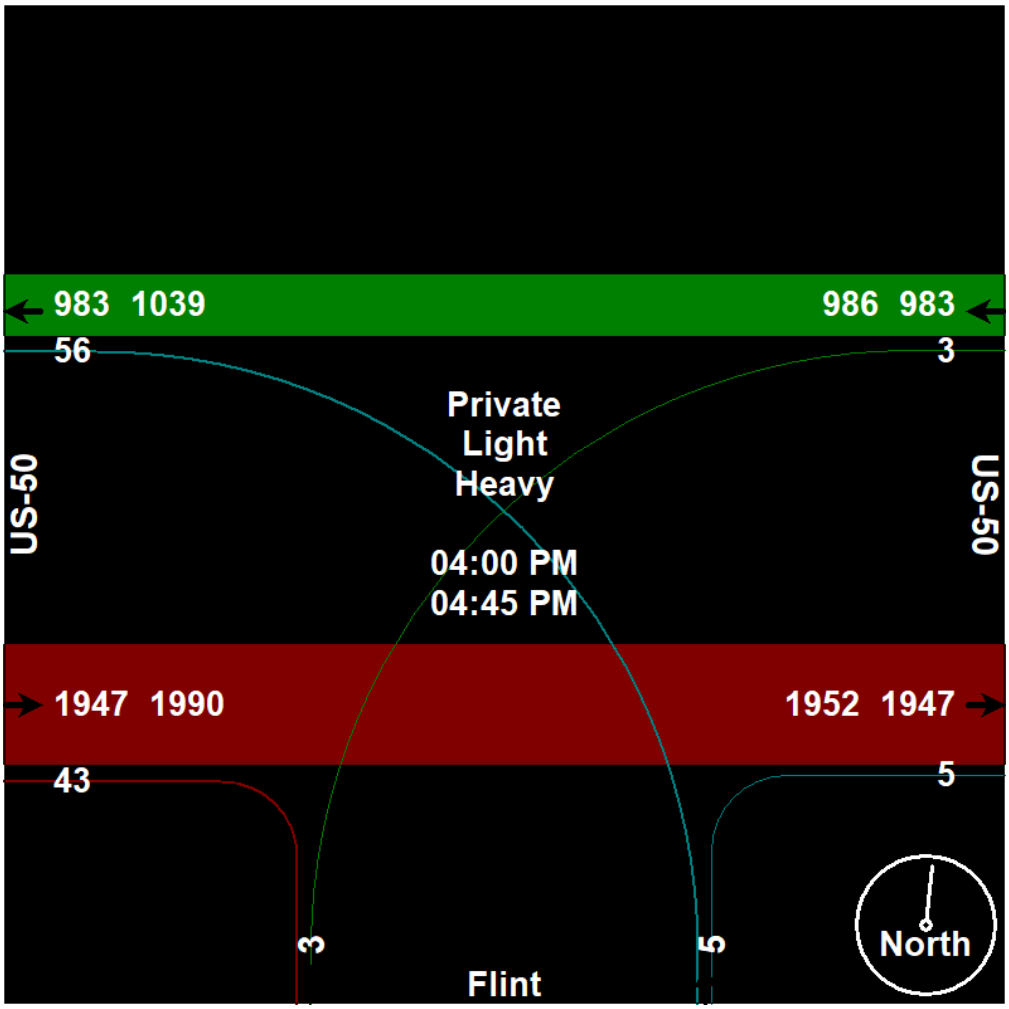
Site Code : 00000000
Start Date : 11/1/2023
Page No : 7



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US-50 E. Carson Complete Streets Study
Turning Movement Classification Count
US-50 & Highlands Drive

File Name : US-50 and Highlands Drive
Site Code : 00000000
Start Date : 11/1/2023
Page No : 1

Groups Printed- Private - Light - Heavy

	South bound	US-50 Westbound					Highlands Northbound					US-50 Eastbound					
Start Time	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	380	4	0	384	2	0	18	0	20	2	140	0	0	142	546
07:15 AM	0	0	464	1	0	465	4	0	16	0	20	3	138	0	0	141	626
07:30 AM	0	0	518	1	0	519	3	0	19	0	22	4	147	0	0	151	692
07:45 AM	0	0	405	1	0	406	5	0	20	0	25	6	168	0	0	174	605
Total	0	0	1767	7	0	1774	14	0	73	0	87	15	593	0	0	608	2469
08:00 AM	0	0	311	1	0	312	5	0	19	0	24	4	122	0	0	126	462
08:15 AM	0	0	286	1	0	287	2	0	8	0	10	4	151	0	0	155	452
08:30 AM	0	0	281	3	0	284	5	0	13	0	18	7	159	0	0	166	468
08:45 AM	0	0	265	3	0	268	3	0	13	0	16	5	151	0	0	156	440
Total	0	0	1143	8	0	1151	15	0	53	0	68	20	583	0	0	603	1822
*** BREAK ***																	
04:00 PM	0	0	253	6	0	259	1	0	6	0	7	10	437	0	0	447	713
04:15 PM	0	0	215	3	0	218	3	0	10	0	13	19	478	0	0	497	728
04:30 PM	0	0	218	5	0	223	1	0	6	0	7	23	468	0	0	491	721
04:45 PM	0	0	195	7	0	202	1	0	7	0	8	20	474	0	0	494	704
Total	0	0	881	21	0	902	6	0	29	0	35	72	1857	0	0	1929	2866
05:00 PM	0	0	214	2	0	216	5	0	8	0	13	28	437	0	0	465	694
05:15 PM	0	0	192	3	0	195	1	0	9	0	10	19	512	0	0	531	736
05:30 PM	0	0	215	3	0	218	4	0	7	0	11	28	441	0	0	469	698
05:45 PM	0	0	152	2	0	154	3	0	9	0	12	23	351	0	0	374	540
Total	0	0	773	10	0	783	13	0	33	0	46	98	1741	0	0	1839	2668
Grand Total	0	0	4564	46	0	4610	48	0	188	0	236	205	4774	0	0	4979	9825
Apprch %		0	99	1	0		20.3	0	79.7	0		4.1	95.9	0	0		
Total %	0	0	46.5	0.5	0	46.9	0.5	0	1.9	0	2.4	2.1	48.6	0	0	50.7	
Private	0	0	4424	45	0	4469	48	0	187	0	235	205	4626	0	0	4831	9535
% Private	0	0	96.9	97.8	0	96.9	100	0	99.5	0	99.6	100	96.9	0	0	97	97
Light	0	0	72	1	0	73	0	0	1	0	1	0	67	0	0	67	141
% Light	0	0	1.6	2.2	0	1.6	0	0	0.5	0	0.4	0	1.4	0	0	1.3	1.4
Heavy	0	0	68	0	0	68	0	0	0	0	0	0	81	0	0	81	149
% Heavy	0	0	1.5	0	0	1.5	0	0	0	0	0	0	1.7	0	0	1.6	1.5

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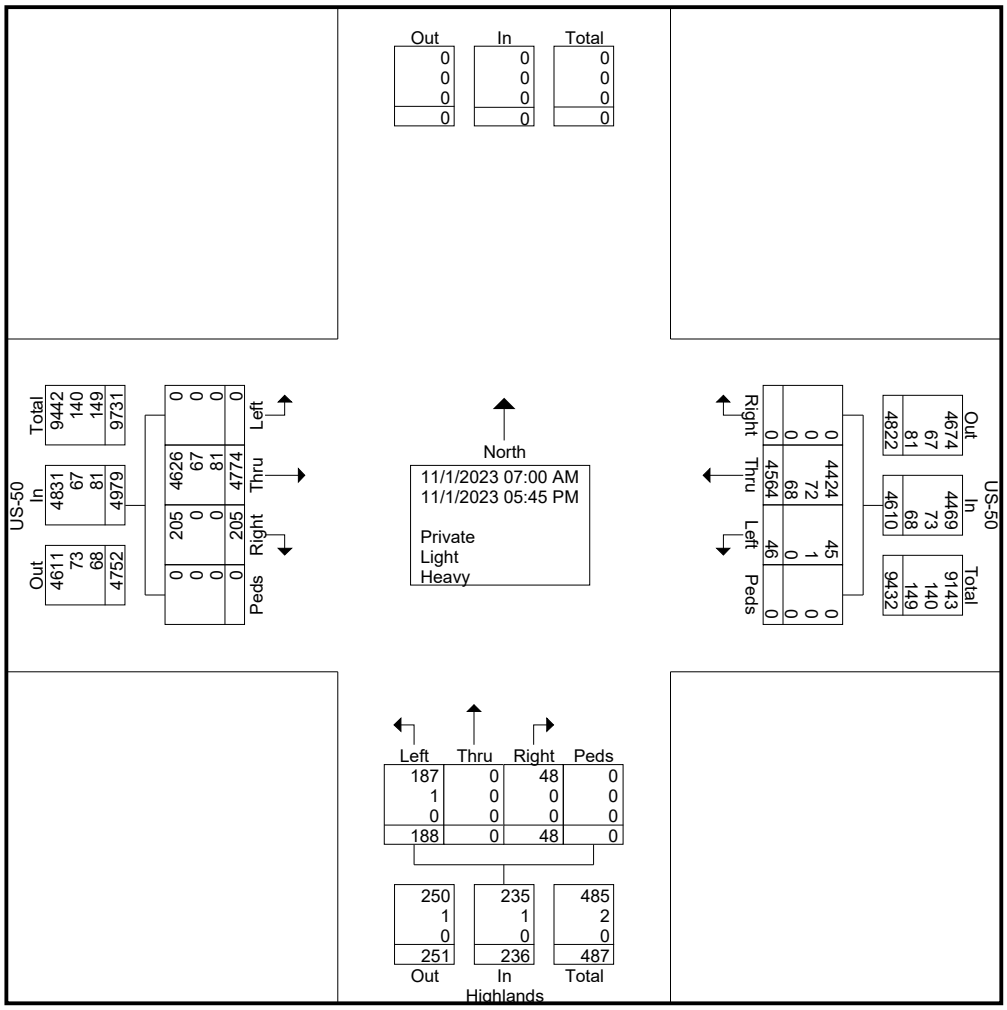
File Name : US-50 and Highlands Drive
Site Code : 00000000
Start Date : 11/1/2023
Page No : 2



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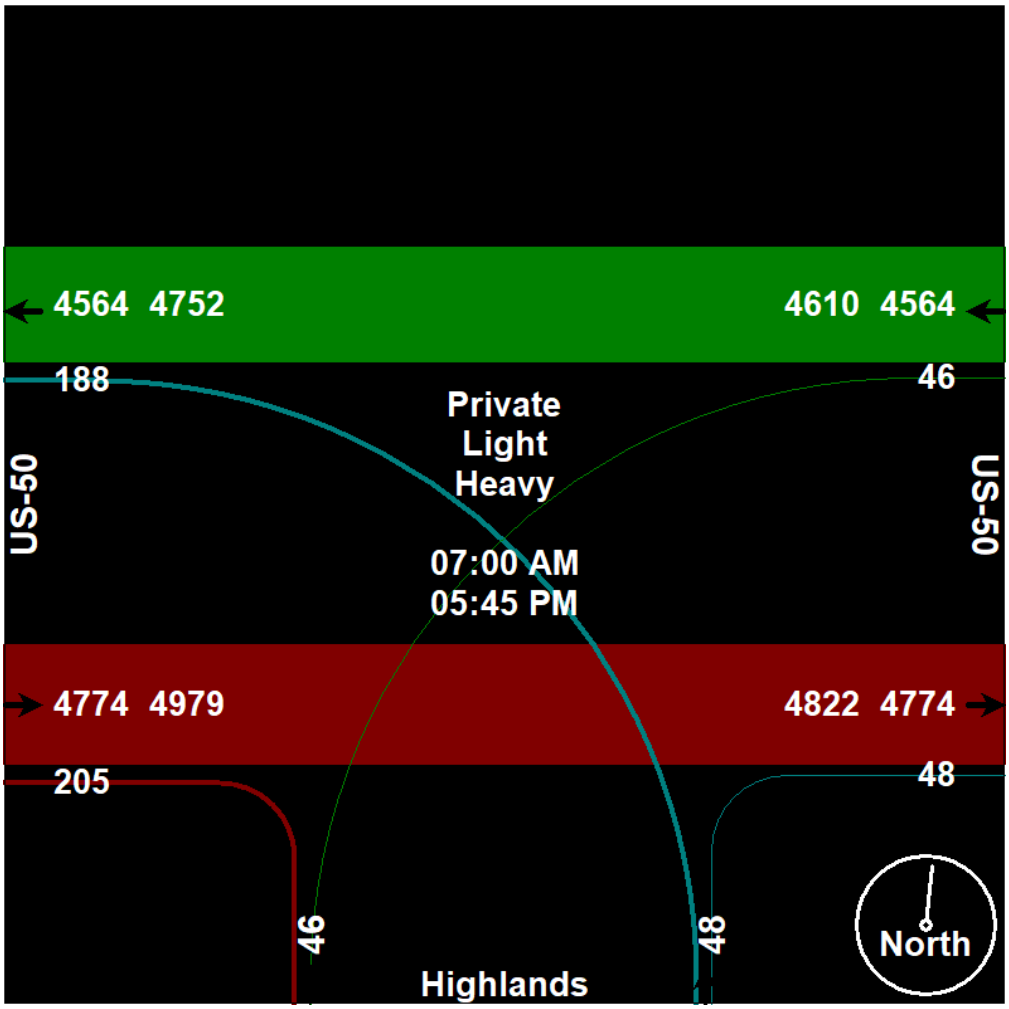
Page No : 3



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File Name : US-50 and Highlands Drive
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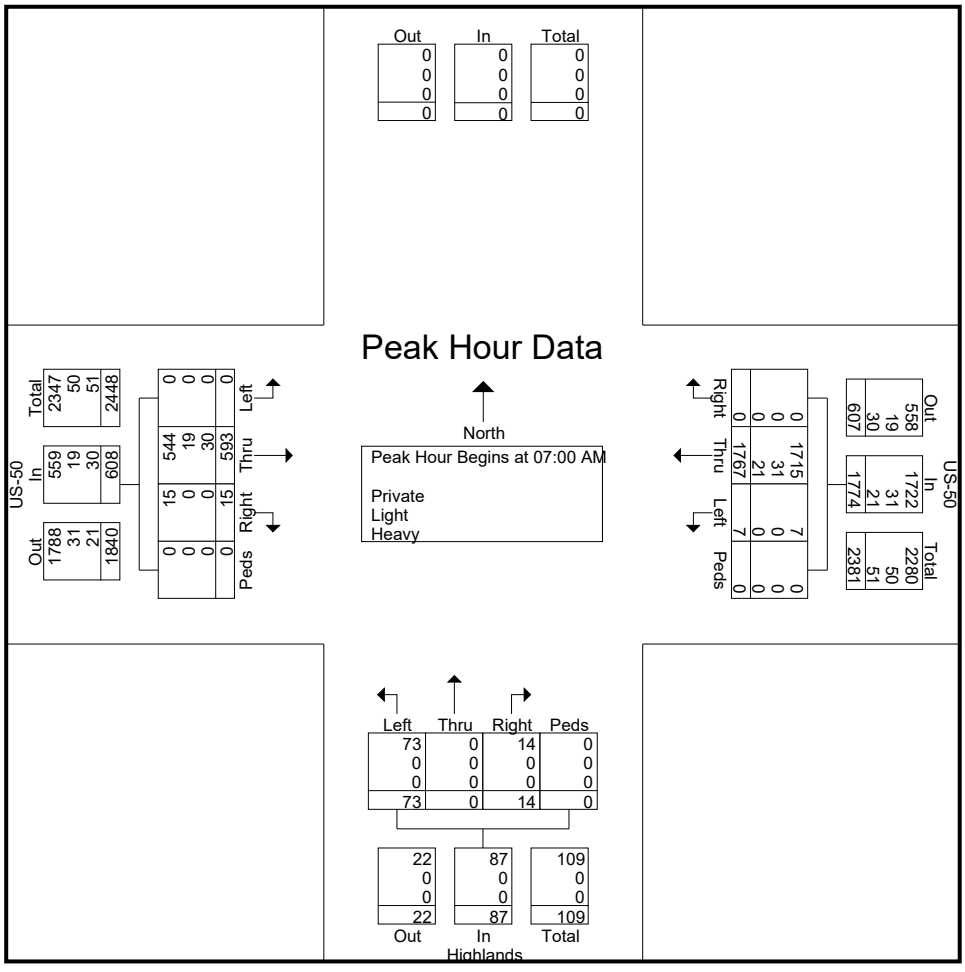
Start Date : 11/1/2023
Page No : 4

	South bound	US-50 Westbound					Highlands Northbound					US-50 Eastbound					
Start Time	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	380	**4**	0	384	2	0	18	0	20	2	140	0	0	142	546
07:15 AM	0	0	464	1	0	465	4	0	16	0	20	3	138	0	0	141	626
07:30 AM	0	0	**518**	1	0	**519**	3	0	19	0	22	4	147	0	0	151	**692**
07:45 AM	0	0	405	1	0	406	**5**	0	**20**	0	**25**	**6**	**168**	0	0	**174**	605
Total Volume	0	0	1767	7	0	1774	14	0	73	0	87	15	593	0	0	608	2469
% App. Total		0	99.6	0.4	0		16.1	0	83.9	0		2.5	97.5	0	0		
PHF	.000	.000	.853	.438	.000	.855	.700	.000	.913	.000	.870	.625	.882	.000	.000	.874	.892
Private	0	0	1715	7	0	1722	14	0	73	0	87	15	544	0	0	559	2368
% Private	0	0	97.1	100	0	97.1	100	0	100	0	100	100	91.7	0	0	91.9	95.9
Light	0	0	31	0	0	31	0	0	0	0	0	0	19	0	0	19	50
% Light	0	0	1.8	0	0	1.7	0	0	0	0	0	0	3.2	0	0	3.1	2.0
Heavy	0	0	21	0	0	21	0	0	0	0	0	0	30	0	0	30	51
% Heavy	0	0	1.2	0	0	1.2	0	0	0	0	0	0	5.1	0	0	4.9	2.1



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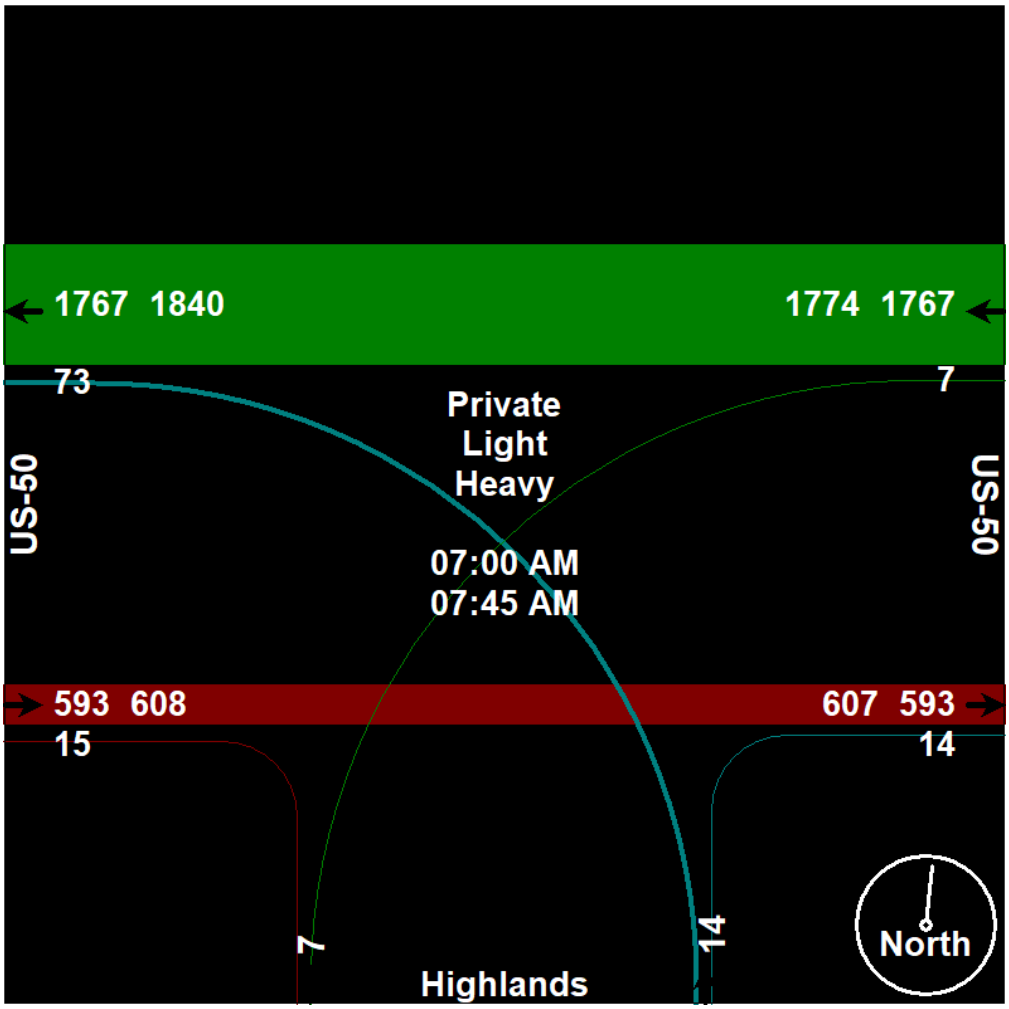
Start Date : 11/1/2023
Page No : 5



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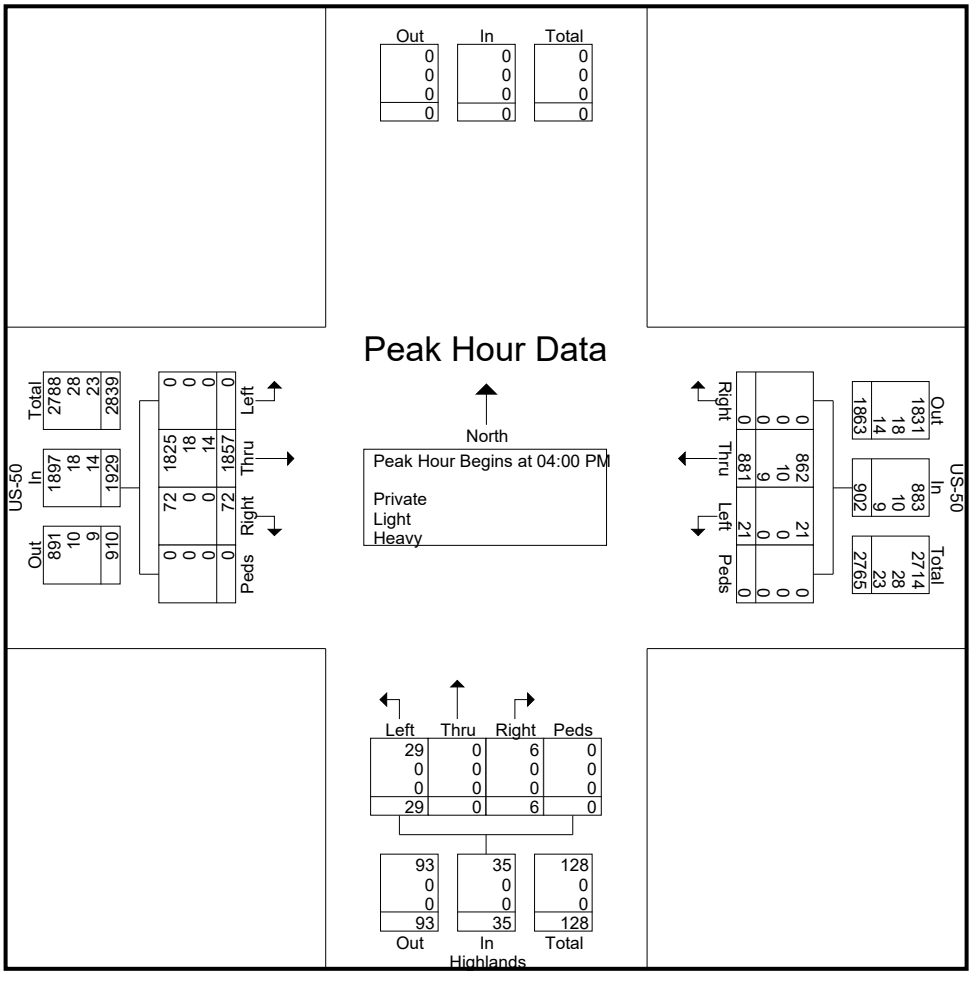
Site Code : 00000000
Start Date : 11/1/2023
Page No : 6

	South bound	US-50 Westbound					Highlands Northbound					US-50 Eastbound					
Start Time	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	**253**	6	0	**259**	1	0	6	0	7	10	437	0	0	447	713
04:15 PM	0	0	215	3	0	218	**3**	0	**10**	0	**13**	19	**478**	0	0	**497**	**728**
04:30 PM	0	0	218	5	0	223	1	0	6	0	7	**23**	468	0	0	491	721
04:45 PM	0	0	195	**7**	0	202	1	0	7	0	8	20	474	0	0	494	704
Total Volume	0	0	881	21	0	902	6	0	29	0	35	72	1857	0	0	1929	2866
% App. Total		0	97.7	2.3	0		17.1	0	82.9	0		3.7	96.3	0	0		
PHF	.000	.000	.871	.750	.000	.871	.500	.000	.725	.000	.673	.783	.971	.000	.000	.970	.984
Private	0	0	862	21	0	883	6	0	29	0	35	72	1825	0	0	1897	2815
% Private	0	0	97.8	100	0	97.9	100	0	100	0	100	100	98.3	0	0	98.3	98.2
Light	0	0	10	0	0	10	0	0	0	0	0	0	18	0	0	18	28
% Light	0	0	1.1	0	0	1.1	0	0	0	0	0	0	1.0	0	0	0.9	1.0
Heavy	0	0	9	0	0	9	0	0	0	0	0	0	14	0	0	14	23
% Heavy	0	0	1.0	0	0	1.0	0	0	0	0	0	0	0.8	0	0	0.7	0.8



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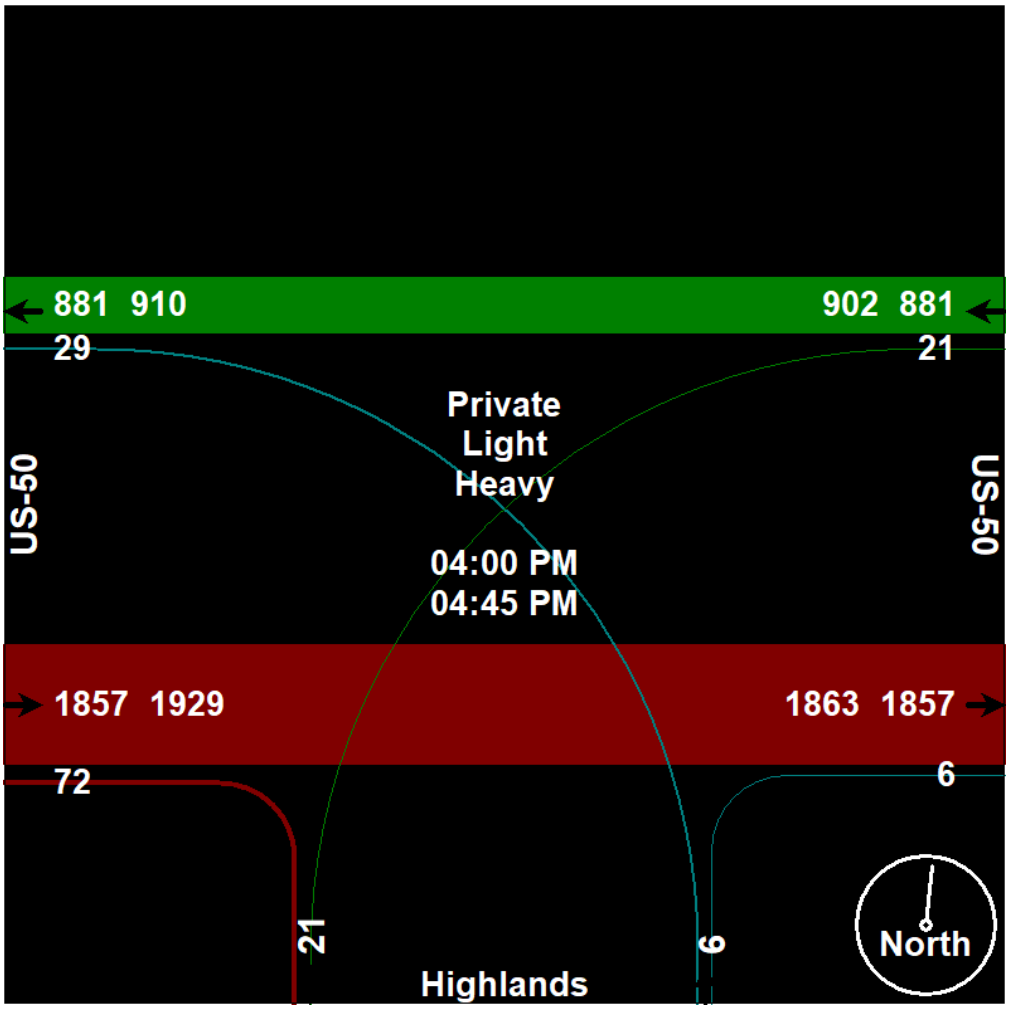
Site Code : 00000000
Start Date : 11/1/2023
Page No : 7



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File Name : US-50 E. Carson Complete Streets Study - US-50 and Linehan Road - Peds and Bikes
Site Code : 00000000
Start Date : 11/1/2023
Page No : 1

Groups Printed- Peds and Bikes

	Linehan Xing on Northside		US-50 Xing on Eastside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
*** BREAK ***							
12:00 PM	0	1	0	0	0	0	1
*** BREAK ***							
Total	0	1	0	0	0	0	1
*** BREAK ***							
04:30 PM	0	0	0	0	1	0	1
*** BREAK ***							
Total	0	0	0	0	1	0	1
05:00 PM	1	0	1	0	0	0	2
*** BREAK ***							
Total	1	0	1	0	0	0	2
Grand Total	1	1	1	0	1	0	4
Apprch %	50	50	100	0	100	0	
Total %	25	25	25	0	25	0	

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File Name : US-50 E. Carson Complete Streets Study - US-50 and Lompa Lane - Peds and Bikes
Site Code : 00000000
Start Date : 10/31/2023
Page No : 1

Groups Printed- Peds and Bikes

	Lompa Xing on Northside		US-50 Xing on Eastside		Lompa Xing on Southside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
07:00 AM	0	1	0	0	0	0	0	0	1
*** BREAK ***									
07:30 AM	0	0	0	2	0	0	0	0	2
*** BREAK ***									
Total	0	1	0	2	0	0	0	0	3
08:00 AM	1	0	1	0	0	0	0	0	2
08:15 AM	0	2	1	1	1	0	0	0	5
*** BREAK ***									
Total	1	2	2	1	1	0	0	0	7
*** BREAK ***									
04:00 PM	0	1	0	1	0	1	0	2	5
04:15 PM	0	1	0	0	1	1	1	1	5
04:30 PM	1	1	2	0	1	0	2	0	7
04:45 PM	0	2	0	1	0	2	0	0	5
Total	1	5	2	2	2	4	3	3	22
05:00 PM	0	1	0	1	0	1	0	0	3
05:15 PM	1	1	1	3	0	0	0	0	6
*** BREAK ***									
05:45 PM	0	0	1	2	1	0	0	0	4
Total	1	2	2	6	1	1	0	0	13
Grand Total	3	10	6	11	4	5	3	3	45
Apprch %	23.1	76.9	35.3	64.7	44.4	55.6	50	50	
Total %	6.7	22.2	13.3	24.4	8.9	11.1	6.7	6.7	

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File Name : US-50 E. Carson Complete Streets Study - US-50 and Nye Lane - Peds and Bikes
Site Code : 00000000
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Groups Printed- Peds and Bikes

	Nye Xing on Northside		US-50 Xing on Eastside		Xing on Southside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
*** BREAK ***									
08:30 AM	0	1	0	0	0	0	0	0	1
08:45 AM	0	1	0	0	0	0	0	0	1
Total	0	2	0	0	0	0	0	0	2
*** BREAK ***									
04:30 PM	0	1	0	0	0	0	0	0	1
04:45 PM	0	1	0	0	0	0	0	0	1
Total	0	2	0	0	0	0	0	0	2
05:00 PM	1	1	1	0	0	0	0	0	3
*** BREAK ***									
05:45 PM	0	0	0	0	0	0	1	0	1
Total	1	1	1	0	0	0	1	0	4
Grand Total	1	5	1	0	0	0	1	0	8
Apprch %	16.7	83.3	100	0	0	0	100	0	
Total %	12.5	62.5	12.5	0	0	0	12.5	0	

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File Name : US-50 E. Carson Complete Streets Study - US-50 and Ramps I-580 - Peds and Bikes
Site Code : 00000000
Start Date : 11/1/2023
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Groups Printed- Peds and Bikes

	Ramps I-580 Xing on Northside		US-50 Xing on Eastside		Ramps I-580 Xing on Southside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
07:00 AM	0	0	0	0	1	0	0	1	2
*** BREAK ***									
Total	0	0	0	0	1	0	0	1	2
08:00 AM	0	0	0	0	0	1	0	1	2
08:15 AM	0	0	0	0	1	0	0	0	1
*** BREAK ***									
Total	0	0	0	0	1	1	0	1	3
*** BREAK ***									
04:00 PM	0	0	0	0	0	2	0	0	2
04:15 PM	0	0	0	0	1	0	1	3	5
04:30 PM	2	0	0	0	1	0	1	0	4
04:45 PM	0	0	0	0	0	2	0	2	4
Total	2	0	0	0	2	4	2	5	15
05:00 PM	0	0	0	0	0	1	0	1	2
05:15 PM	1	0	0	0	0	1	0	1	3
05:30 PM	0	0	0	0	1	0	1	0	2
05:45 PM	0	0	0	0	0	1	0	1	2
Total	1	0	0	0	1	3	1	3	9
Grand Total	3	0	0	0	5	8	3	10	29
Apprch %	100	0	0	0	38.5	61.5	23.1	76.9	
Total %	10.3	0	0	0	17.2	27.6	10.3	34.5	

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File Name : US-50 E. Carson Complete Streets Study - US-50 and Red Rock Road - Peds and Bikes
Site Code : 00000000
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Groups Printed- Peds and Bikes

	Red Rock Xing on Northside		US-50 Xing on Eastside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
*** BREAK ***							
08:45 AM	0	0	0	0	1	0	1
Total	0	0	0	0	1	0	1
*** BREAK ***							
04:30 PM	0	0	0	0	1	0	1
*** BREAK ***							
Total	0	0	0	0	1	0	1
05:00 PM	0	0	1	0	0	0	1
*** BREAK ***							
05:45 PM	0	0	1	0	0	0	1
Total	0	0	2	0	0	0	2
Grand Total	0	0	2	0	2	0	4
Apprch %	0	0	100	0	100	0	
Total %	0	0	50	0	50	0	

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File Name : US-50 E. Carson Complete Streets Study - US-50 and Sherman Lane - Peds and Bikes
Site Code : 00000000
Start Date : 10/31/2023
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Groups Printed- Peds and Bikes

	Sherman Xing on Northside		US-50 Xing on Eastside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
*** BREAK ***							
08:30 AM	1	0	0	0	0	0	1
*** BREAK ***							
Total	1	0	0	0	0	0	1
09:00 AM	0	1	0	0	0	0	1
*** BREAK ***							
Total	0	1	0	0	0	0	1
*** BREAK ***							
10:15 AM	1	0	0	0	0	0	1
*** BREAK ***							
Total	1	0	0	0	0	0	1
11:00 AM	1	1	1	0	0	0	3
*** BREAK ***							
Total	1	1	1	0	0	0	3
*** BREAK ***							
12:45 PM	2	0	2	0	0	0	4
Total	2	0	2	0	0	0	4
*** BREAK ***							
01:30 PM	0	1	0	0	0	0	1
*** BREAK ***							
Total	0	1	0	0	0	0	1
*** BREAK ***							
02:45 PM	0	1	0	0	0	0	1
Total	0	1	0	0	0	0	1
03:00 PM	0	1	0	0	0	0	1
*** BREAK ***							
03:45 PM	2	0	1	0	0	0	3
Total	2	1	1	0	0	0	4
*** BREAK ***							
04:30 PM	0	1	0	0	0	0	1
04:45 PM	0	1	0	0	0	0	1
Total	0	2	0	0	0	0	2
05:00 PM	1	1	1	0	0	0	3
*** BREAK ***							
05:30 PM	0	1	0	0	0	0	1
05:45 PM	1	0	0	0	0	0	1
Total	2	2	1	0	0	0	5

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File Name : US-50 E. Carson Complete Streets Study - US-50 and Sherman Lane - Peds and Bikes
Site Code : 00000000
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Groups Printed- Peds and Bikes

	Sherman Xing on Northside		US-50 Xing on Eastside		US-50 Xing on Westside		
	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
Grand Total	9	9	5	0	0	0	23
Apprch %	50	50	100	0	0	0	
Total %	39.1	39.1	21.7	0	0	0	

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Site Code : 00000000
Start Date : 10/31/2023
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Groups Printed- Peds and Bikes

	Silver State Xing on Northside		US-50 Xing on Eastside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
*** BREAK ***							
06:30 AM	0	2	0	0	0	0	2
06:45 AM	0	0	0	0	0	2	2
Total	0	2	0	0	0	2	4
07:00 AM	0	2	0	0	0	2	4
07:15 AM	0	1	0	0	0	0	1
*** BREAK ***							
07:45 AM	0	2	0	0	0	2	4
Total	0	5	0	0	0	4	9
08:00 AM	0	1	0	0	2	0	3
08:15 AM	0	1	0	0	0	1	2
08:30 AM	1	0	0	0	1	0	2
08:45 AM	0	1	1	0	1	0	3
Total	1	3	1	0	4	1	10
09:00 AM	0	1	0	0	0	0	1
*** BREAK ***							
09:45 AM	0	1	0	0	0	0	1
Total	0	2	0	0	0	0	2
10:00 AM	1	0	1	0	0	0	2
10:15 AM	0	1	0	0	0	0	1
10:30 AM	0	1	0	0	0	1	2
10:45 AM	0	2	1	0	1	0	4
Total	1	4	2	0	1	1	9
11:00 AM	0	1	1	1	0	1	4
11:15 AM	0	1	0	0	0	1	2
11:30 AM	0	0	0	0	0	2	2
11:45 AM	0	2	0	0	0	2	4
Total	0	4	1	1	0	6	12
*** BREAK ***							
12:30 PM	0	1	0	0	0	2	3
12:45 PM	1	0	0	0	0	0	1
Total	1	1	0	0	0	2	4
*** BREAK ***							
01:15 PM	0	0	0	0	1	0	1
*** BREAK ***							
01:45 PM	1	0	0	0	0	0	1
Total	1	0	0	0	1	0	2

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File Name : US-50 E. Carson Complete Streets Study - US-50 and Silver State Street - Peds and Bikes
Site Code : 00000000
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Groups Printed- Peds and Bikes

	Silver State Xing on Northside		US-50 Xing on Eastside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
02:00 PM	0	1	0	0	0	0	1
*** BREAK ***							
02:30 PM	0	0	0	0	0	1	1
02:45 PM	0	0	0	0	1	0	1
Total	0	1	0	0	1	1	3
03:00 PM	0	3	0	0	0	0	3
03:15 PM	0	3	0	0	0	2	5
*** BREAK ***							
03:45 PM	0	1	0	0	0	0	1
Total	0	7	0	0	0	2	9
04:00 PM	1	0	0	0	0	0	1
04:15 PM	0	1	0	0	1	3	5
*** BREAK ***							
04:45 PM	0	1	0	0	0	1	2
Total	1	2	0	0	1	4	8
*** BREAK ***							
05:15 PM	0	1	0	0	0	1	2
05:30 PM	0	2	0	0	1	2	5
*** BREAK ***							
Total	0	3	0	0	1	3	7
Grand Total	5	34	4	1	9	26	79
Apprch %	12.8	87.2	80	20	25.7	74.3	
Total %	6.3	43	5.1	1.3	11.4	32.9	

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File Name : US-50 E. Carson Complete Streets Study - US-50 and Airport Road - Peds and Bikes
Site Code : 00000000
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Groups Printed- Peds and Bikes

	Airport Xing on Northside		US-50 Xing on Eastside		Airport Xing on Southside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
07:00 AM	0	1	0	0	2	0	0	0	3
07:15 AM	0	0	1	0	1	0	0	0	2
07:30 AM	0	0	0	0	0	1	0	0	1
*** BREAK ***									
Total	0	1	1	0	3	1	0	0	6
08:00 AM	0	0	1	0	2	0	1	0	4
*** BREAK ***									
08:30 AM	0	0	1	0	1	0	0	0	2
08:45 AM	0	0	0	0	0	1	0	0	1
Total	0	0	2	0	3	1	1	0	7
*** BREAK ***									
04:00 PM	0	0	4	1	0	0	0	0	5
04:15 PM	0	1	0	2	0	2	0	0	5
04:30 PM	0	1	0	1	0	0	1	0	3
04:45 PM	0	1	0	0	0	1	1	0	3
Total	0	3	4	4	0	3	2	0	16
05:00 PM	0	1	0	0	0	1	1	0	3
05:15 PM	1	1	1	4	0	0	0	0	7
05:30 PM	0	0	0	0	0	0	1	0	1
05:45 PM	0	1	0	0	0	0	0	0	1
Total	1	3	1	4	0	1	2	0	12
Grand Total	1	7	8	8	6	6	5	0	41
Apprch %	12.5	87.5	50	50	50	50	100	0	
Total %	2.4	17.1	19.5	19.5	14.6	14.6	12.2	0	

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File Name : US-50 E. Carson Complete Streets Study - US-50 and Arrowhead - Peds and Bikes
Site Code : 00000000
Start Date : 10/31/2023
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Groups Printed- Peds and Bikes

	Arrowhead Xing on Northside		US-50 Xing on Eastside		Deer Run Xing on Southside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
*** BREAK ***									
05:00 PM	1	0	1	0	0	0	0	0	2
*** BREAK ***									
05:45 PM	0	0	0	0	0	0	1	0	1
Total	1	0	1	0	0	0	1	0	3
Grand Total	1	0	1	0	0	0	1	0	3
Apprch %	100	0	100	0	0	0	100	0	
Total %	33.3	0	33.3	0	0	0	33.3	0	

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File Name : US-50 E. Carson Complete Streets Study - US-50 and Brown Street - Peds and Bikes
Site Code : 00000000
Start Date : 10/31/2023
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Groups Printed- Peds and Bikes

	US-50 Xing on Eastside		Brown Xing on Southside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
*** BREAK ***							
09:15 AM	0	0	0	0	1	0	1
09:30 AM	1	0	1	0	0	0	2
*** BREAK ***							
Total	1	0	1	0	1	0	3
10:00 AM	1	0	0	0	0	0	1
*** BREAK ***							
10:30 AM	0	1	0	2	0	0	3
*** BREAK ***							
Total	1	1	0	2	0	0	4
11:00 AM	1	0	0	0	0	0	1
*** BREAK ***							
Total	1	0	0	0	0	0	1
12:00 PM	0	0	0	1	0	0	1
12:15 PM	0	0	1	0	0	0	1
*** BREAK ***							
12:45 PM	0	1	0	0	0	0	1
Total	0	1	1	1	0	0	3
*** BREAK ***							
01:45 PM	0	0	1	0	0	0	1
Total	0	0	1	0	0	0	1
02:00 PM	0	0	0	1	0	0	1
*** BREAK ***							
02:30 PM	0	0	1	0	1	0	2
02:45 PM	0	0	1	0	1	0	2
Total	0	0	2	1	2	0	5
*** BREAK ***							
03:15 PM	0	0	0	1	0	0	1
03:30 PM	0	0	2	1	0	0	3
03:45 PM	0	0	2	0	0	0	2
Total	0	0	4	2	0	0	6
*** BREAK ***							
04:30 PM	0	0	0	3	0	0	3
04:45 PM	0	0	1	0	0	0	1
Total	0	0	1	3	0	0	4
*** BREAK ***							

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File Name : US-50 E. Carson Complete Streets Study - US-50 and Brown Street - Peds and Bikes
Site Code : 00000000
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Groups Printed- Peds and Bikes

	US-50 Xing on Eastside		Brown Xing on Southside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
05:45 PM	0	0	1	0	1	0	2
Total	0	0	1	0	1	0	2
Grand Total	3	2	11	9	4	0	29
Apprch %	60	40	55	45	100	0	
Total %	10.3	6.9	37.9	31	13.8	0	

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File Name: US-50 E Carson Complete Streets Study - US-50 and College Parkway-Fairview Drive - Peds and Bikes
Site Code: 00000000
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Groups Printed- Peds and Bikes

	College Xing on Northside		US-50 Xing on Eastside		Fairview Xing on Southside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
07:00 AM	0	0	0	0	0	1	0	0	1
07:15 AM	0	1	0	1	0	0	0	1	3
*** BREAK ***									
07:45 AM	0	0	0	0	0	0	0	3	3
Total	0	1	0	1	0	1	0	4	7
*** BREAK ***									
08:15 AM	0	0	0	0	0	1	0	1	2
08:30 AM	1	0	0	0	0	0	1	1	3
08:45 AM	0	2	0	1	0	1	0	3	7
Total	1	2	0	1	0	2	1	5	12
*** BREAK ***									
04:00 PM	1	0	1	0	0	1	0	0	3
04:15 PM	0	2	0	2	0	0	0	2	6
04:30 PM	0	0	0	0	0	0	0	4	4
04:45 PM	0	0	0	0	0	0	0	2	2
Total	1	2	1	2	0	1	0	8	15
05:00 PM	0	1	0	1	0	0	0	0	2
05:15 PM	1	0	1	0	0	0	0	0	2
05:30 PM	0	1	0	0	0	1	0	0	2
05:45 PM	0	0	0	0	0	0	0	1	1
Total	1	2	1	1	0	1	0	1	7
Grand Total	3	7	2	5	0	5	1	18	41
Apprch %	30	70	28.6	71.4	0	100	5.3	94.7	
Total %	7.3	17.1	4.9	12.2	0	12.2	2.4	43.9	

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File Name : US-50 E. Carson Complete Streets Study - US-50 and Empire Ranch Road - Peds and Bikes
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Groups Printed- Peds and Bikes

	Empire Ranch Xing on Northside		US-50 Xing on Eastside		Empire Ranch Xing on Southside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
*** BREAK ***									
08:00 AM	0	0	0	0	0	1	0	0	1
*** BREAK ***									
08:30 AM	0	1	0	0	0	0	0	0	1
08:45 AM	1	1	0	0	0	0	1	0	3
Total	1	2	0	0	0	1	1	0	5
*** BREAK ***									
04:30 PM	0	1	0	0	0	0	0	0	1
04:45 PM	0	2	0	0	0	0	0	0	2
Total	0	3	0	0	0	0	0	0	3
05:00 PM	1	1	1	0	0	0	0	0	3
05:15 PM	0	1	0	0	0	0	0	0	1
*** BREAK ***									
05:45 PM	0	0	1	0	2	0	2	0	5
Total	1	2	2	0	2	0	2	0	9
Grand Total	2	7	2	0	2	1	3	0	17
Apprch %	22.2	77.8	100	0	66.7	33.3	100	0	
Total %	11.8	41.2	11.8	0	11.8	5.9	17.6	0	

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File Name : US-50 E. Carson Complete Streets Study - US-50 and Flint Road - Peds and Bikes
Site Code : 00000000
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Groups Printed- Peds and Bikes

	US-50 Xing on Eastside		Flint Xing on Southside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
*** BREAK ***							
04:15 PM	0	0	0	1	0	0	1
*** BREAK ***							
Total	0	0	0	1	0	0	1
05:00 PM	1	0	0	0	0	0	1
*** BREAK ***							
Total	1	0	0	0	0	0	1
Grand Total	1	0	0	1	0	0	2
Apprch %	100	0	0	100	0	0	
Total %	50	0	0	50	0	0	

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File Name : US-50 E. Carson Complete Streets Study - US-50 and Highlands Drive - Peds and Bikes
Site Code : 00000000
Start Date : 11/1/2023
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Groups Printed- Peds and Bikes

	US-50 Xing on Eastside		Highlands Xing on Southside		US-50 Xing on Westside		
Start Time	Bikes	Peds	Bikes	Peds	Bikes	Peds	Int. Total
*** BREAK ***							
08:45 AM	0	0	0	0	1	0	1
Total	0	0	0	0	1	0	1
*** BREAK ***							
04:30 PM	0	0	0	0	1	0	1
*** BREAK ***							
Total	0	0	0	0	1	0	1
*** BREAK ***							
Grand Total	0	0	0	0	2	0	2
Apprch %	0	0	0	0	100	0	
Total %	0	0	0	0	100	0	

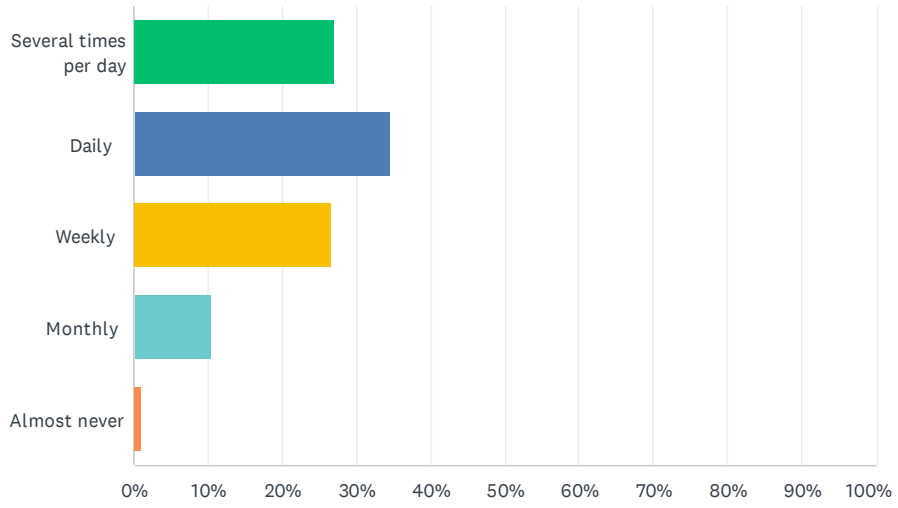
APPENDIX B

Survey & Responses

US 50 Complete Streets Study

Q1 How often do you travel along the study area section of US 50? *Choose one

Answered: 939 Skipped: 1

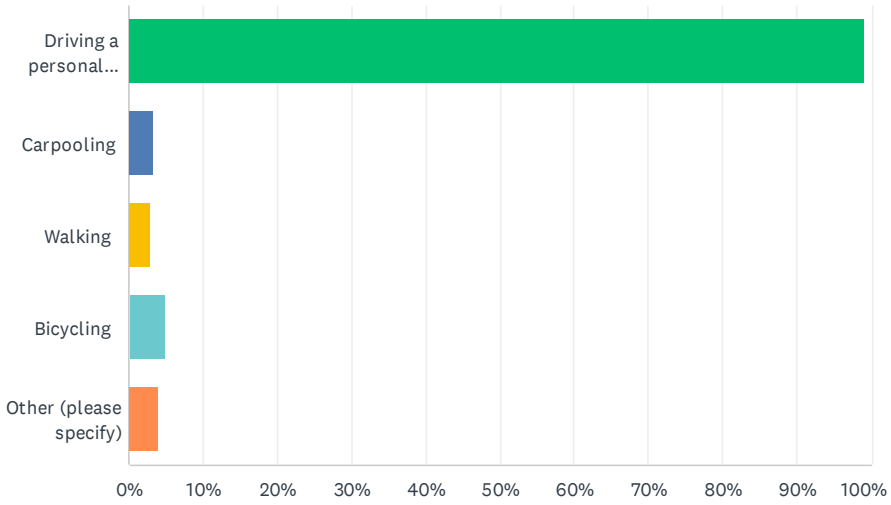


ANSWER CHOICES	RESPONSES	
Several times per day	27.16%	255
Daily	34.50%	324
Weekly	26.62%	250
Monthly	10.54%	99
Almost never	1.17%	11
TOTAL		939

US 50 Complete Streets Study

Q2 When you travel along US 50, which mode(s) of transportation do you typically use? *Check all that apply

Answered: 923 Skipped: 17

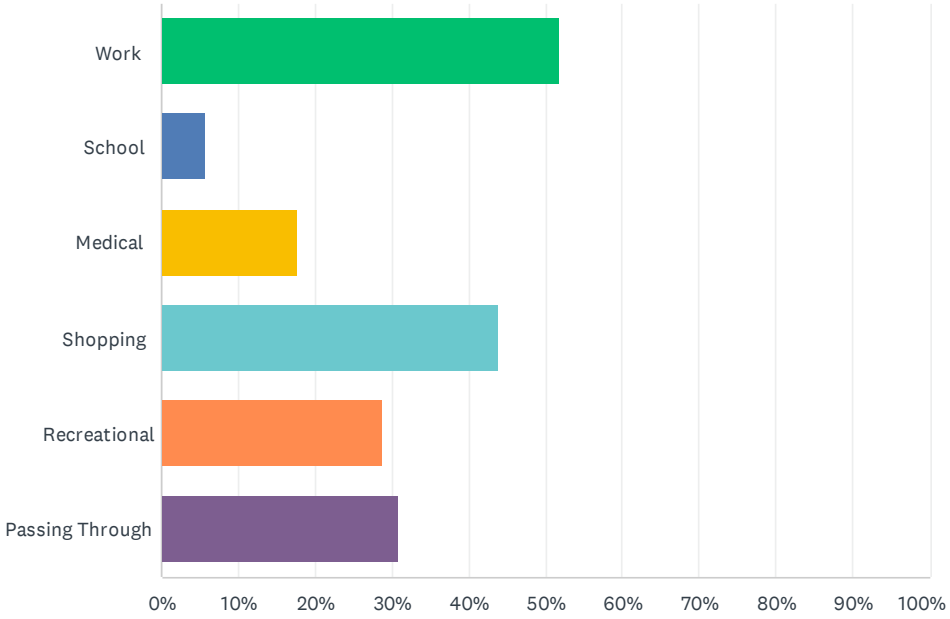


ANSWER CHOICES	RESPONSES	
Driving a personal vehicle	99.13%	915
Carpooling	3.47%	32
Walking	3.03%	28
Bicycling	4.98%	46
Other (please specify)	4.12%	38
Total Respondents: 923		

US 50 Complete Streets Study

Q3 For which of the following trip purposes do you most often travel along the study area section of US 50?

Answered: 938 Skipped: 2

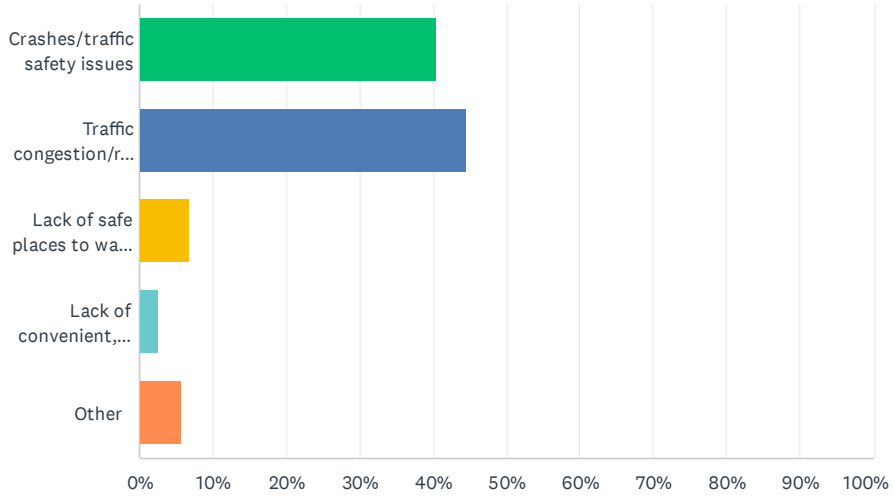


ANSWER CHOICES	RESPONSES	
Work	51.81%	486
School	5.86%	55
Medical	17.80%	167
Shopping	44.03%	413
Recreational	28.89%	271
Passing Through	31.02%	291
Total Respondents: 938		

US 50 Complete Streets Study

Q4 What do you think is currently the biggest problem on or along this section of US 50? *Choose one

Answered: 932 Skipped: 8

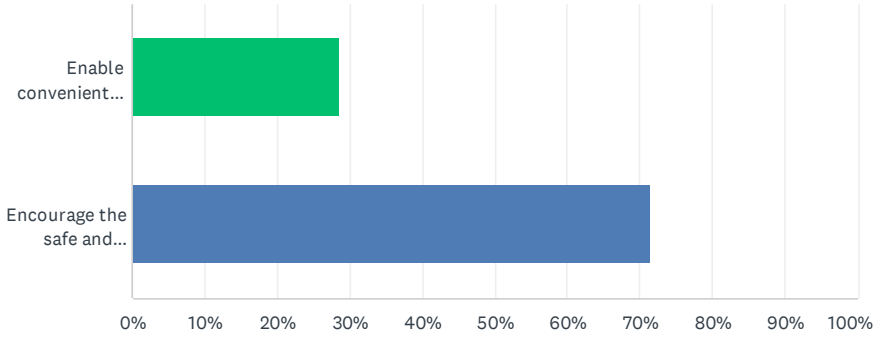


ANSWER CHOICES	RESPONSES	
Crashes/traffic safety issues	40.56%	378
Traffic congestion/reliability	44.53%	415
Lack of safe places to walk or bicycle	6.76%	63
Lack of convenient, accessible transit service	2.47%	23
Other	5.69%	53
TOTAL		932

US 50 Complete Streets Study

Q5 Do you think it is more important for US 50 to:*

Answered: 932 Skipped: 8



ANSWER CHOICES	RESPONSES	
Enable convenient business access and encourage economic development by allowing frequent driveway access points OR	28.65%	267
Encourage the safe and efficient flow of traffic along US 50, with more of a focus on through travel	71.35%	665
TOTAL		932

US 50 Complete Streets Study

Q6 What is your home zip code? Optional

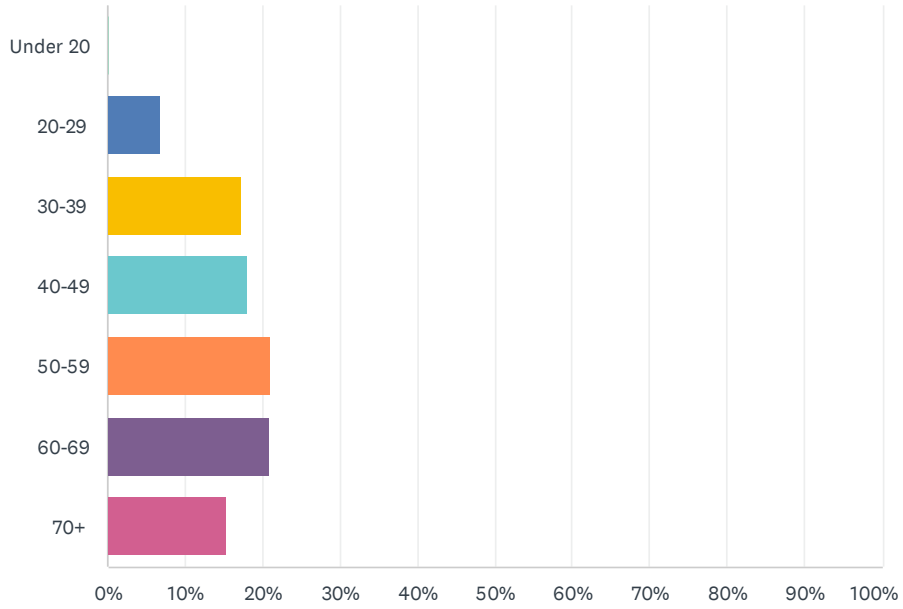
Answered: 765 Skipped: 175

Zip code	Responses
89701	213
89706	207
89403	187
89703	51
89429	26
89705	13
All other	78

US 50 Complete Streets Study

Q7 What is your age range? Optional

Answered: 854 Skipped: 86

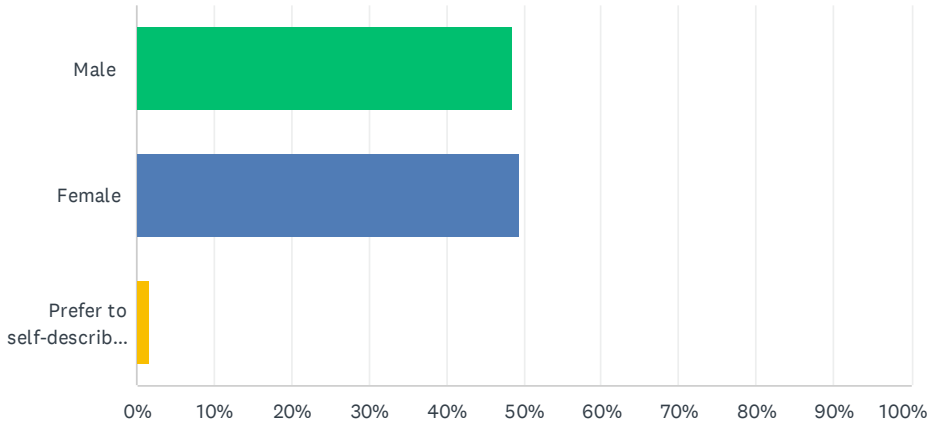


ANSWER CHOICES	RESPONSES	
Under 20	0.12%	1
20-29	6.91%	59
30-39	17.33%	148
40-49	18.03%	154
50-59	21.19%	181
60-69	20.96%	179
70+	15.46%	132
TOTAL		854

US 50 Complete Streets Study

Q8 Gender: How do you identify? Optional

Answered: 819 Skipped: 121

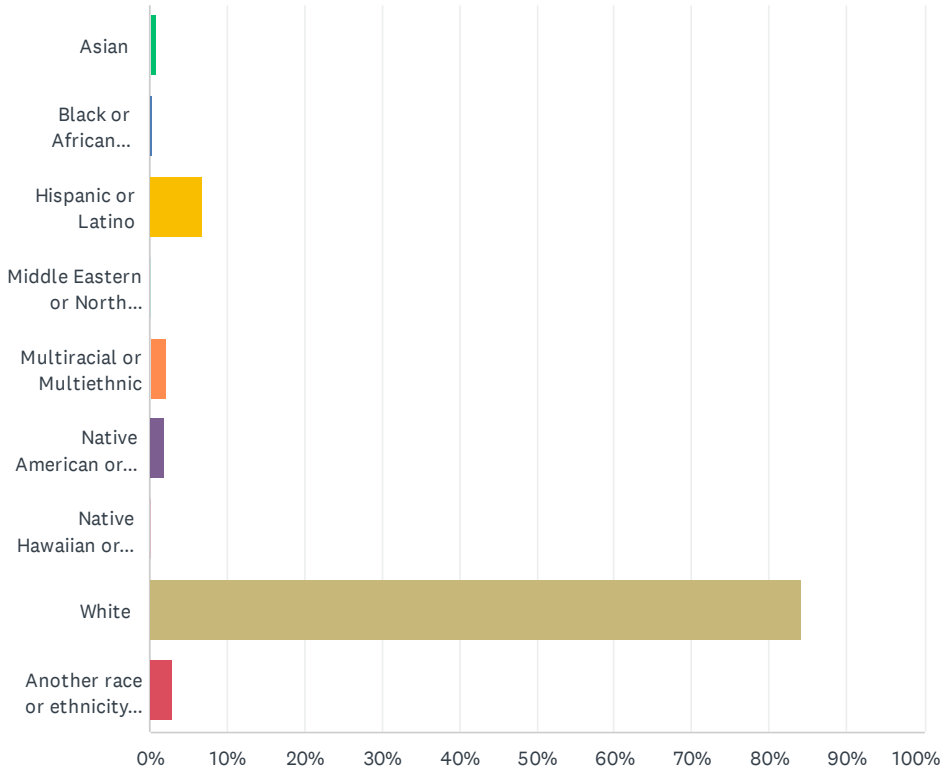


ANSWER CHOICES	RESPONSES	
Male	48.72%	399
Female	49.57%	406
Prefer to self-describe, below	1.71%	14
TOTAL		819

US 50 Complete Streets Study

Q9 What is your race or ethnicity? Optional

Answered: 754 Skipped: 186

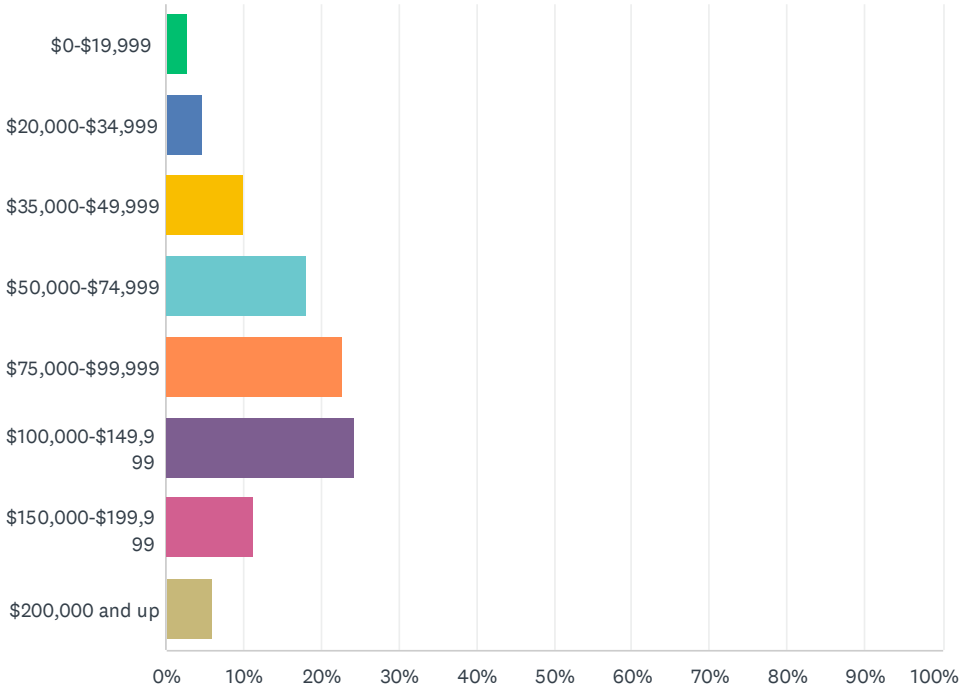


ANSWER CHOICES	RESPONSES	
Asian	0.93%	7
Black or African American	0.40%	3
Hispanic or Latino	6.90%	52
Middle Eastern or North African	0.13%	1
Multiracial or Multiethnic	2.12%	16
Native American or Alaska Native	1.99%	15
Native Hawaiian or other Pacific Islander	0.27%	2
White	84.22%	635
Another race or ethnicity, please describe below	3.05%	23
TOTAL		754

US 50 Complete Streets Study

Q10 What is your approximate average household income? Optional

Answered: 709 Skipped: 231



ANSWER CHOICES	RESPONSES	
$0-$19,999	2.68%	19
$20,000-$34,999	4.65%	33
$35,000-$49,999	10.01%	71
$50,000-$74,999	18.19%	129
$75,000-$99,999	22.71%	161
$100,000-$149,999	24.40%	173
$150,000-$199,999	11.28%	80
$200,000 and up	6.06%	43
TOTAL		709

Comments Received on US 50 Business Walk – 11/29/23

- Lompa & US 50 left turn yielding – some people know how to do this, and some people turn in front of cars going straight (with the right-of-way).
- Maverick parking lot exit, "No Left Turn" – people are still making a left turn north onto US 50 from Maverick.
- There are quite a few open ditches along US 50. Many property owners commented on more lighting, reflectors, or markings to make people aware of ditches and make driveways entrances and exits clearer. (Country Store access a big concern).
- We heard a couple comments on striping. Does NDOT still re-stripe annually? Is there a schedule?
- Is NDOT considering paving driveways that are perpendicular to US 50?
- Drivers sometimes drive along the MUP from Budget Auto Sales to Food Maxx – this is very dangerous. The city put up a new sign, though I suggest there should be a yellow barrier in the middle of the pathway to prevent this.
- Left turns at unsignalized intersections and driveways are very difficult. People said that they turn right onto US50 to drive the "long way home" instead of making a left-hand turn.
- There were reports of people passing in the middle turn lane during congested hours.
- Many people commented there are busy times during the morning commute and after 4pm during traditional commute hours where the highway gets really busy.
- There were many reports of speeding, running yellow, red lights, especially at Deer Run Road.
- Someone called US 50 the "Death Highway"
- Potential acceleration lane needed for trucks turning right off Linehan Rd coming from pit to the north. Many drive along dirt shoulder to try to gain speed and find a break in traffic, run over signs on the shoulder regularly. NDOT is constantly replacing them. Owner of Toy Ranch has seen someone airlifted 4 times at this location since he's been there.
- Vehicles turning left out of Silver Sage Industrial Park (b/t Centennial Park and Sunrise) often have to wait for a red light at Arrowhead to make the turn. Crashes common. Not until last 5 years has EB congestion been an issue. Backup starts at 4.
- Crashes involving wild horses from Centennial Park an issue. Speeds are a concern throughout corridor, but especially w. of Deer Run Rd.

Date Received	Comment	Medium
12/1/2023	Our residence is on Empire Ranch Rd and we would like to have a traffic light at the intersection of 50/empire Ranch to accommodate both the residents and the post office. A side walk on both sides of 50 between Empire Ranch Road and both Fairview and college blvd. Thank you for asking.	Email
12/6/2023	We got your postcard about Hwy. 50 East plans. I wanted to ask you if there is any discussion/planning regarding having a stoplight at Drako Way, especially in light of the planned subdivision/neighborhood at the south end of Drako? Currently, trying to leave Drako and turning left onto Hwy. 50 can cause you to wait a long time for traffic to be clear both ways. To avoid the long wait, people take chances trying to cross the traffic. With at least a couple hundred homes planned in the future (as I understand it), Drako Way will become much more busy.	Email
12/6/2023	I received a comment today from Stephanie Montano who lives in Mound House at the Carson Highlands Mobile Home Park for the last 5.5 years. The mobile home park has 76 residents. The adjacent neighborhood (Highlands) has another 300+ families (her estimation). She requested a stop light to safely turn left onto Highway 50. She spoke of many instances of harassment and aggressive driving along 50. The speed limit is 45mph, yet most drivers drive above the speed limit. Turning into and out of the neighborhood is very stressful.	Phone Call
12/6/2023	Kelly received a call from a resident who who lives along the east (south) side of US50 near Atkins Carpet named Cathy. She would like a retaining sound wall along the highway, citing traffic noise.	Phone Call
12/4/2023	Mound House resident says we need a traffic light in Mound House. Lives near Carson Highlands Drive. Difficult and dangerous to make a left turn onto US 50 from Carson Highlands. Concerns about speeding.	Phone Call
12/4/2023	I've lived off of highlands in Mound House since 1999, there have been many deaths on 50 since that time...When attempting to take a left turn from highlands toward Carson it is difficult at best.. especially at 5 pm when the sun is directly on the horizon in that direction as the oncoming traffic.. You must wait for an opening to get out to the turn lane, then wait for an opening in traffic coming from behind you and merge with traffic. That is only possible if no one is turning onto highlands from either direction. East bound turning vehicles block your view of oncoming traffic behind them, West bound blocks access to the turn lane.. I'm sure you have the data of the accidents in the area. There can certainly be improvements made.	Email
12/10/2023	I just took your survey regarding east Carson/Hwy 50 and I am concerned that your survey creates a false result by not allowing respondents to select multiple priorities. It is poor survey design to make residents choose between safety/crash prevention and equitable transportation (bike/ped/nonmotorized, public transit). CAMPO should be prioritizing the needs of ALL road users as part of a complete and inclusive road safety plan, not making road users choose between safe and efficient driving and alternative modes of transportation.	Email
12/7/2023	JT expressed concern over left turns onto Hwy50. She suggested exit ramps for businesses and specific roadways. She thought an overpasses across Hwy50 was a good idea for larger roads. She does not have a computer at home, so expressed her thoughts in a conversations with the Senior Transportation Planner.	Phone Call

12/31/2023	Hello, I am a resident of Highlands in Mound House. I am responding to your postcard survey, which falls short of questions about what is important to be addressed. Living here in this community for over 16 years, I have seen many accidents and other issues, that are not being addressed by either the DOT, State, County occurring because of the highway as it is. Three issues I personally have is lack of a "No Engine Brakes" sign prior to the block before Highlands. The speed limit changed 1/4 mile back. I have been awakened so many times at three in the morning by trucks with their engine brakes blasting. I get up go into the back yard and watch the road, there are one after the other flat bed trailers with no load using their engine brakes. This has occurred for years, and it has not ended. The road of Highlands Drive crossing highway 50 needs to be realigned and a stop light installed, not only will it stop many accidents and loss of life here, it will slow traffic that is still exceeding the upper speed limit. I confess, I am guilty of such when I am not carefully paying attention. I understand traffic needs flow, the timing and speeds from Deer Run Road do not facilitate gaps at Highland to get onto the highway, especially 3-6 p.m.. Those of us that live here don't want to wait for a undeveloped plat 1/4 east to put a light when they get around to it for them. Yes the developer lives in Carson City, no activity has occurred for years, and Newman lane traffic is not going to stop the exceeding speed at Highlands Drive. I am in possession of the US 50 Corridor Study for Carson City, Churchill County, and Lyon County, these problems are questions in it as well. Sheet 6/53 questions that Red Rock and Highlands may be realigned, but the traffic light here would ensure the safety of residents on both sides of highway 50, a lot more population traffic occurring here, than one proposed at Newman Lane. I Thank You, for considering our input. Richard Davis 215 Miriam Way Mound House NV. 89706-8246 rickdavis604@yahoo.com	Email
1/3/2024	I just received a phone call from Lynne Stillman, who resides in the Carson Highlands Mobile Home Park in Mound House. She heard about the US 50 Corridor Survey from her local news station! Perhaps they picked up the Carson Now article? Lynne does not have internet, so will not be filling out the survey. However, she did express to me that it is “impossible to get in or out to US 50 from Highlands Drive”. She suggested a stop sign, stop light, or roundabout. Lynne discussed how she must leave 45 minutes early to her doctor in Carson City in order not to be late- not knowing how long it will take her to get onto US 50. Lynne is a Senior Citizen, and she noted there are many older residents in her neighborhood that have the same issues merging onto US 50. Lynne said that since NDOT added the center lane, left turns have gotten somewhat easier, though the consistent speed and volume of traffic make it very difficult to even make it to the center lane.	Phone Call
1/6/2024	Thank you for reaching out to me. I would be very happy to attend, and I will most likely invite one of our residents who has been very vocal about the needs for safety in this community. Please provide to us where we would need to meet you and the time. However, if it's a bad snow day it may be hard for us to meet with you. I would also like to add you to a future Mound House Advisory Board meeting. We usually meet the first Tuesday of each month at the Community Center in Mound House at 56 Red Rock Rd. at 7 PM. Please let us know what month would work best for you. Thank you for including us on this important study. What's badly needed in this community is center turn lanes. We have been advised by the Lyon County Sheriff's Department that the most dangerous turns are those that cross three lanes of traffic which result in the majority of serious and fatal traffic accidents. Unfortunately, Mound House has a long history of these types of accidents. On Linehan Rd. there is a large amount of heavy traffic, mining trucks, school buses, and many other types of large vehicles that need to make a left hand turn onto Highway 50. With the increased building east of this community the traffic flow has gotten to the point when it's impossible if not dangerous to make left hand turns. The safety of these turns could be greatly increased with warning signal lights of heavy traffic turning onto the traffic and center turns lanes to assist these drivers making these turns. My biggest fear is a school bus will be broadsided trying to make this turn. We have very few who follow the posted speed limit and in fact tend to speed up as they approach the intersections. On Highlands drive we have a large amount of residential traffic make left hand turns to go towards Carson City. In fact, just last night 1/5/24 we noticed there was yet another accident on Highway 50. I don't know what the nature of the accident was as I could only see the many lights of the emergency vehicles from my house. We also have a problem with no pedestrian crossing at all in the Mound House area which has led to pedestrian deaths. Thank you for reaching out to us. Melinda Cash, Chairman, Mound House Advisory Board, 775 720-4770	Email

1/17/2024	Margaret requested a light, or some kind of mechanism to help Mound House residents enter Highway 50 from Highlands. She also cited that people drive faster than the posted 45mph speed limit.	Phone Call

APPENDIX C

Press Release & Fact Sheet

Carson City Invites the Community to Participate in US 50 Survey

Carson City, NV – Carson City and the Carson Area Metropolitan Planning Organization (CAMPO) invites the community to participate in a brief survey to better understand the transportation needs of users on US 50 in Carson City and Mound House.

CAMPO is currently conducting a corridor study along US 50 between the I-580 interchange in Carson City and Highlands Drive in Mound House. The purpose of this study is to better understand transportation needs and concerns along this corridor related to safety, traffic congestion, business access, and pedestrian and bicycle accommodation. The project will evaluate and recommend safety and operational improvements for all users within the US 50 East Carson corridor.

The survey is available online between November 28, 2023, and January 5, 2024, at https://www.surveymonkey.com/r/CCUS50 or by scanning the QR code at right. Periodic project updates will be posted on CAMPO's web page at carson.org/campo.

-END-

US 50 Complete Streets Study

Project Overview

CAMPO is currently conducting a corridor study along US 50 between the I-580 interchange in Carson City and Highlands Drive in Mound House (see Study Area Map). The purpose of this study is to better understand transportation needs and concerns along this corridor, related to safety, traffic congestion, business access, and pedestrian and bicycle accommodation. The project will evaluate and recommend safety and operational improvements for all users within the US 50 East Carson corridor.

FAQs

Q: Why is this roadway being studied?

A: This study will aim to improve safety for all roadway users along US 50, taking into consideration existing conditions along with projected growth. Over the last 5 years there have been 6 traffic fatalities along this section of roadway, 5 of which were vehicle/ pedestrian crashes.

Q: Which portion of US 50 is being studied?

A: The section of US 50 between the I-580 interchange in Carson City and Highlands Drive in Mound House is being considered in this study (see Study Area Map).

Q: What is the project schedule?

A: This study is being completed in two phases. Phase 1 of the study began in September of 2023, with an expected completion date of May 2024. Pending funding approval, Phase 2 would begin shortly thereafter, and is expected to last an additional 5 months, placing final study completion in late 2024.

Q: How will proposed improvements be funded?

A: Although specific funding sources will not be allocated as part of this planning study, recommendations may be made as to funding types that may be appropriate for different projects. The first step in realizing a project is identifying the need – that is the aim of this study.

Q: Where can I find more information about the project, or share my thoughts?

A: We will be conducting an online public survey between November 28, 2023, and January 5, 2024. The survey is available at https://www.surveymonkey.com/r/CCUS50 or by scanning the QR code at right. Periodic project updates will be posted on CAMPO's web page.

Scan Me!

Q: How can I stay involved and/or receive project updates?

A: The project team will be collecting the email addresses of interested stakeholders and residents and will be sending out periodic updates about project events and input opportunities. You can also check the CAMPO section of Carson City's website for updates.

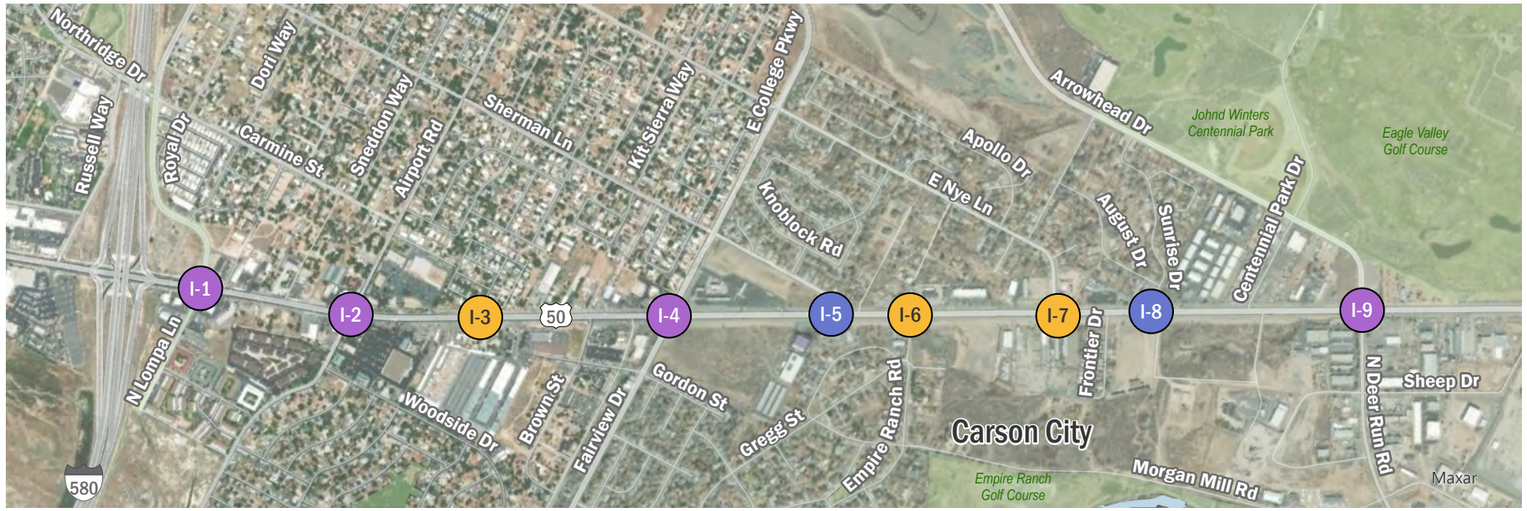
Please fill out a brief survey at https://www.surveymonkey.com/r/CCUS50 to share your thoughts about the corridor or contact Project Manager Kelly Norman at KNorman@carson.org.

APPENDIX D

Corridor Improvements & Plan Sheets

#	Countermeasures	Potential Extents	Quantity	Unit	Cost / Unit ($1000)	Cost ($1000)	Cost Assumptions	Impact to Vehicle Ops	Mode Benefit	Citation
R	**Roadway segments**									
R1	Install lane departure prevention systems like curb and gutter, rumble strips, and/or SafetyEdge, does not include Storm Drain	See Qty Takeoffs - Shoulder Gaps	31,000	LF	$ 0.1	$ 3,100.0	$100 / LF for high cost, curb and gutter or SafetyEdge	No impact	Vehicle	
R2	Construct driveways with curb and gutter	Airport to Arrowhead / Deer Run	38	EA	$ 20	$ 760.0	Driveways est at 500' apart	No impact	Vehicle	
R3	Design the roadway to a lower design speed (lane narrowing to 11') from Lompa to Deer Run	Lompa to Highlands	1	LS	$ 100	$ 100.0	Incorporate into striping work if adopting this policy	Low impact	Vehicle	NDOT Speed Management Plan 2022, Roadways (RE3C)
R4	Install high-visibility roadway striping	Lompa to Highlands	139,000	LF	$ 0.01	$ 1,390.0	$10 / LF; 6 stripes	No impact	Vehicle & Bike	Part of existing NDOT project
R5	Install wide edge lines and/or add buffer striping to the shoulder bike lane, mark driveways with edge line dashing	Lompa to Highlands	46,000	LF	$ 0.01	$ 460.0	$10 / LF; 2 stripes	No impact	Vehicle	FHWA Proven Safety Countermeasures (PSC)
R6	Install roadway lighting	Airport to Arrowhead / Deer Run	110	EA	$ 15	$ 1,650.0	$15K / light spaced at 200' apart	No impact	All	Part of existing NDOT project
R7	Close existing sidewalk / AC path gaps; remove encroachments in the highway right of way, install signs & barriers to prevent vehicle entry	See Qty Takeoffs - AC Path Gaps	10,200	LF	$ 0.2	$ 2,040.0	Assuming 10' wide path/LF x $20/SF	No impact	Walk & Bike	FHWA Proven Safety Countermeasures (PSC)
R8	Install signs and markings at path driveway crossings	Lompa to Arrowhead / Deer Run	44	EA	$ 5	$ 220.0	Path crossings est at 500' apart. Crossing markings, bollards, and signs.	No impact	All	NDOT Speed Management Plan 2022, Intersections (RE3C)
Si	**Signalized intersections**									
Si1	Convert protected-permissive phasing from side streets to protected phasing only.	Airport Road	1	I/S	$ 20	$ 20.0	Signal head (4) replacement and/or reprogramming.	Low impact	All	
Si2	Program leading pedestrian intervals especially where crossing US 50	Lompa, Airport, E. College Parkway / Fairview, & Deer Run	4	I/S	$ 5	$ 20.0	Staff or contractor time to reprogram. May require controller upgrade.	Low impact	Walk & Bike	
Si3	Install Advance Dilemma Zone Detection (ADZD) signal equipment to allow for All Red Extension	Lompa, Airport, E. College Parkway / Fairview, & Deer Run	4	I/S	$ 50	$ 200.0	Requires new detection equipment and possible upgrade to controllers.	No impact	Vehicle	72 percent fewer vehicles in the dilemma zone | ITS Deployment Evaluation (dot.gov)
Si4	Program off-peak Rest in Red operations, install vehicle detection cameras to actuate the signal when vehicles are 10 mph below the speed limit (may be the same as ADZD equipment)	Lompa, Airport, E. College Parkway / Fairview, & Deer Run	4	I/S	$ 20	$ 80.0	Can use loop detectors or ADZD equipment	No impact	Vehicle	PBOT's new pilot program hopes to reduce traffic deaths | kgw.com
Si5	Program signal coordination at 10 mph below the speed limit if existing signals are coordinated.	Lompa, Airport, E. College Parkway / Fairview, & Deer Run	1	LS	$ 100	$ 100.0	Staff or consultant time to reprogram signal timing coordination	Low impact	Vehicle	FHWA Proven Safety Countermeasures (PSC)
Si6	Program signal visibility (signal head louvers) to the design speed stopping sight distance	4 signal heads x 2 approaches x 4 intersections	32	EA	$ 2	$ 64.0	Louvers or lenses may require replacement of entire signal head	Low impact	Vehicle	
Si7	Add near-side signal heads to US 50 approaches	2 approaches x 4 intersections; upgrade all hardware	8	EA	$ 5	$ 40.0	Requires new signal head, mounting hardware, and possibly conductors	No impact	Vehicle	
Si8	Install new signal or PHB at existing intersection	Highlands Drive	1	LS	$ 800	$ 800.0	Cost may include realignment of Red Rock Road but does not account for R/W take	Moderate impact	Walk & Bike	FHWA Proven Safety Countermeasures (PSC)

#	Countermeasures	Potential Extents	Quantity	Unit	Cost / Unit ($1000)	Cost ($1000)	Cost Assumptions	Impact to Vehicle Ops	Mode Benefit	Citation
R	**Roadway segments**									
Sp	**Speed policy**									
Sp1	Install speed safety cameras for observation and data collection	Highlands, Arrowhead / Deer Run, & E. College Parkway	3	EA	$ 50	$ 150.0		No impact	Vehicle	NDOT Speed Management Plan 2022, Roadways (RE3C)
Sp2	Implement variable speed limits based on time of day and congestion	Entire corridor	1	LS	$ 100	$ 100.0	Planning cost only	Low impact	Vehicle	ATM Sign Testing Enters Next Phase Starting January 21 in Clark County | News Releases | Nevada Department of Transportation (nv.gov)
Sp3	Install changeable message signs alerting drivers of congestion ahead	Highlands, Arrowhead / Deer Run, & E. College Parkway	3	EA	$ 100	$ 300.0	Assumes large overhead signs, 2 for WB traffic and 1 for EB traffic	No impact	Vehicle	
MB	**Midblock crossings**									
MB1	Install PHBs at select locations and coordinate with signals to 10 MPH below the speed limit	Silver State St, Empire Ranch Rd, and E Nye Lane	3	EA	$ 500	$ 1,500.0		Moderate impact	Walk & Bike	FHWA Proven Safety Countermeasures (PSC)
MB2	Install signs, beacons, and lighting at select side street locations and large driveways	Airport to Arrowhead	19	EA	$ 20	$ 380.2	Driveways assumed at 1000 apart x both sides	No impact	Vehicle	NDOT Speed Management Plan 2022, Intersections (RE3C)
MB3	Install median curbs and posts to channelize left turns where appropriate	Airport to Arrowhead	10	EA	$ 40	$ 380.2	Driveways assumed at 1000 apart	Low impact	Vehicle	NDOT Speed Management Plan 2022, Roadways (RE3C)
IS	**Intersection geometry**									
IS1	Consider reduced design vehicle (from WB-67 to WB-40 or SU-30). Adjust (reduce) corner curb radii to accommodate a reduced design vehicle and shorten crossing distance.	Lompa, Airport, and Deer Run; exclude E. College Parkway / Fairview	1	LS	$ 50	$ 50.0	Planning cost only. Implementation cost integrated into other projects.	Moderate impact	Walk & Bike	NDOT Speed Management Plan 2022, Intersections (RE3C)
IS2	Study use of lead-lag phasing at opposing left turns to allow for left turn lane / center median consolidation or ped refuge islands.	Lompa (2), E. College Parkway / Fairview (1)	1	LS	$ 50	$ 50.0	Planning cost only. Implementation cost integrated into other projects.	Low impact	Walk & Bike	
IS3	Study reducing corner curb radii, designing right turn slip lane channels to sharper (60 to 75-deg) approach angles, and installing mountable curb aprons	Airport (NE), E. College Parkway / Fairview (NE & SW), Deer Run (SW)	4	EA	$ 25	$ 100.0	Cost for turn template study and preliminary design per intersection	Low impact	All	NDOT Speed Management Plan 2022, Intersections (RE3C)
IS4	Update corner channel islands (pork chops) to ADA standards	Airport (NE&SW)	2	EA	$ 50	$ 100.0		Low impact	Walk & Bike	ADA / PROWAG
IS5	Study a long-term option to convert signals to multilane roundabouts	Lompa, Airport, E. College Parkway / Fairview, Arrowhead / Deer Run	1	LS	$ 100	$ 100.0	Planning cost only. Implementation cost between $2-5M / intersection.	Low impact	All	NDOT Speed Management Plan 2022, Intersections (RE3C)



ID	CROSS STREET / DRIVEWAY	IMPROVEMENT RECOMMENDATION			
		SIGNAL SYSTEM UPGRADES (SI)	SPEED POLICY (SP)	MIDBLOCK CROSSINGS (MB)	INTERSECTION GEOMETRY (IS)
I-1	Lompa Road	Si3-7			IS1,5
I-2	Airport Road	Si3-7			IS1,3,5
I-3	Midblock TBD / Silver State Lane			MB1	
I-4	E College Pkwy / Fairview	Si3-7	Sp 1,3		IS1,3,5
I-5	Sherman Lane			MB2&3	
I-6	Empire Ranch Rd			MB1	
I-7	E Nye Ln			MB1	
I-8	Midblock TBD / Sunrise Dr			MB2&3	
I-9	Arrowhead / N Deer Run	Si3-7	Sp 1,3		IS3,4,5
I-10	Centennial Dr			MB2&3	
I-11	Flint Rd			MB2&3	
I-12	Pick & Pull Drwy			MB2&3	
I-13	Linehan Rd			MB2&3	
I-14	Red Rock Rd			MB2&3	
I-15	Highlands Dr	Si8	Sp 1,3		

IMPROVEMENT INDEX

SIGNALIZED INTERSECTIONS

Si3	Install Advance Dilemma Zone Detection (ADZD) signal equipment to allow for All Red Extension
Si4	Program off-peak Rest in Red operations, install speed detection cameras to actuate the signal when vehicles are 10 mph below the speed limit (Use ADZD equipment, see countermeasure Si3)
Si5	Program signal coordination at 10 mph below the speed limit if existing signals are coordinated. Not contingent on ADZD equipment (Countermeasure Si3)
Si6	Program signal visibility (signal head louvers) to the design speed stopping sight distance
Si7	Add near-side signal heads to US 50 approaches
Si8	Install new signal or PHB at existing intersection

MIDBLOCK CROSSINGS

MB1	Install PHBs at select locations and coordinate with signals to 10 MPH below the speed limit
MB2	Install signs, single-section yellow ball beacon to supplement a yellow diamond warning sign, and lighting at select side street locations and large driveways
MB3	Install median curbs and posts to channelize left turns where appropriate

SPEED POLICY

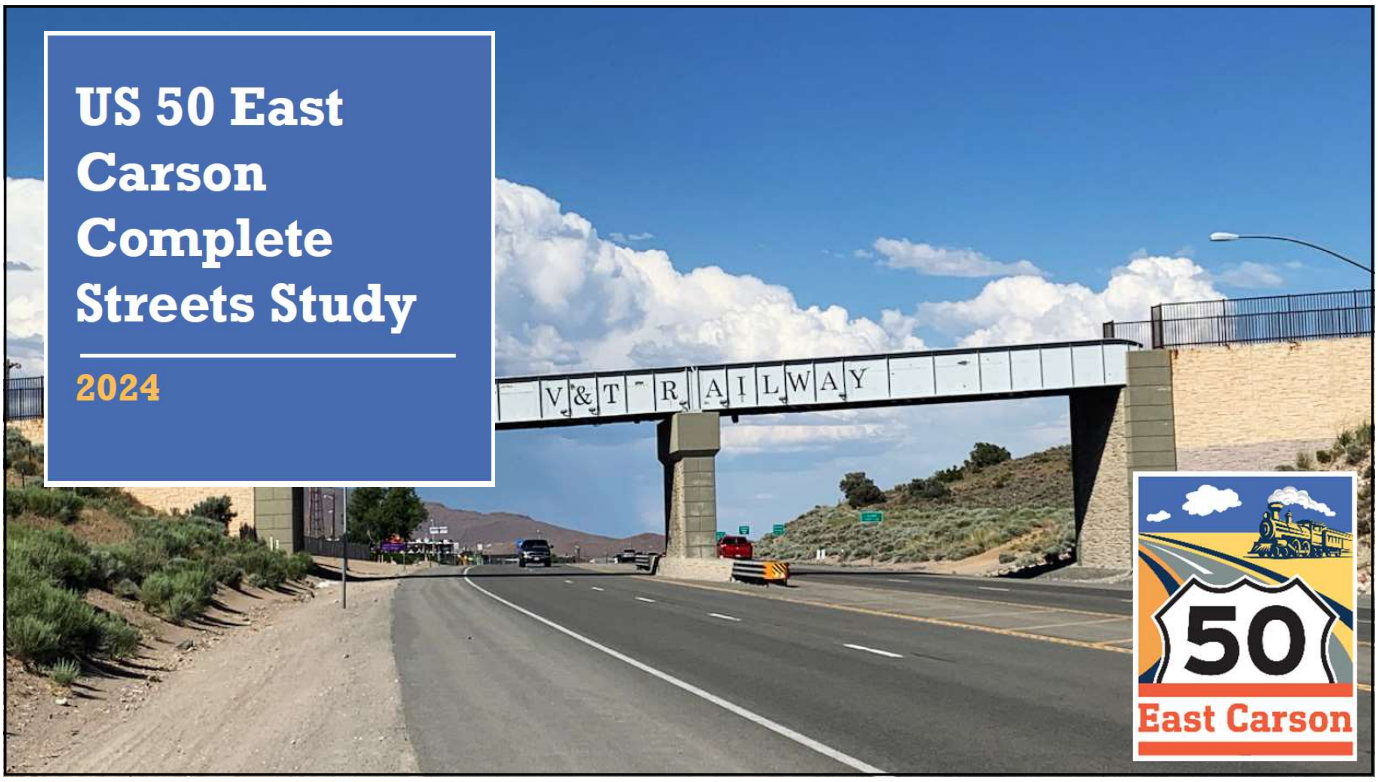
Sp1	Install speed safety cameras for observation and data collection
Sp3	Install changeable message signs alerting drivers of congestion ahead

INTERSECTION GEOMETRY

IS1	Consider reduced design vehicle (from WB-67 to WB-40 or SU-30)
IS3	Study reducing corner curb radii, designing right turn slip lane channels to sharper (60 to 75-deg) approach angles, and installing mountable curb aprons
IS4	Update corner channel islands (pork chops) to ADA standards
IS5	Study a long-term option to convert signals to multilane roundabouts

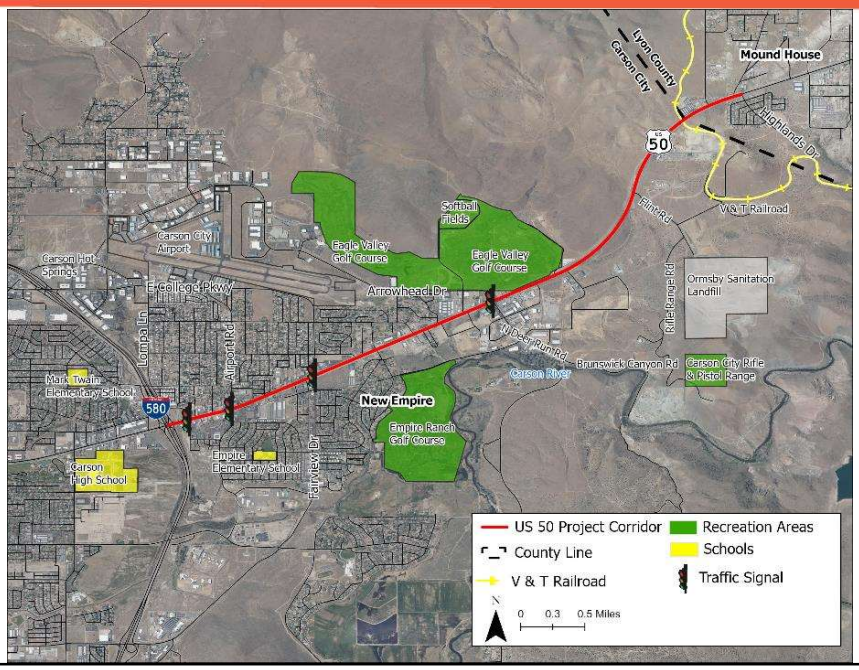
ID	FROM	TO	SIDE	LENGTH (FT)	IMPROVEMENT RECOMMENDATION
ROADWAY, SHOULDERS, AND DRIVEWAY MEASURES					
Entire	Lompa	Highlands	Both	23200	R3-5,8
R-1a	Airport	Fairview / E College	North	1550	R1,2,6,8
RSD-1b	Airport	Fairview / E College	South	1350	R1,2,6,8
RSD-2	Fairview / E College	Sherman	South	1080	R1,2,6,8
RSD-3	Sherman	Arrowhead / Deer Run	South	4950	R1,2,6,8
RSD-4	Fairview / E College	Empire Ranch	North	1560	R1,2,6,8
RSD-5	Empire Ranch	Nye	North	560	R1,2,6,8
RSD-6	Sunrise	Centennial Park	North	1020	R1,2,6,8
RSD-7	Centennial Park	Arrowhead / Deer Run	North	460	R1,2,6,8
RSD-8a	Arrowhead / Deer Run	Centennial	North	2520	R1
RSD-8b	Arrowhead / Deer Run	Flint	South	4180	R1
RSD-9a	Flint	Highlands	South	6070	R1
RSD-9b	Flint	Highlands	North	5410	R1
MULTIUSE PATH SEGMENTS					
AT-1a	Lompa	Airport	North	60	R7
AT-1b	Lompa	Airport	North	365	R7
AT-1c	Lompa	Airport	North	290	R7
AT-2a	Airport	Fairview / E College	North	1600	R7
AT-2b	Airport	Fairview / E College	South	1670	R7
AT-3	Fairview / E College	Sherman	South	1090	R7
AT-4	Sherman	Arrowhead / Deer Run	South	4990	R7
AT-5	Centennial Park	Arrowhead / Deer Run	North	170	R7

IMPROVEMENT INDEX ROADWAY SEGMENTS	
R1	Install lane departure prevention systems like curb and gutter, rumble strips, and/or SafetyEdge, does not include Storm Drain, No rumble strips West of Deer Run Road
R2	Construct driveways with curb and gutter
R3	Design the roadway to a lower design speed (lane narrowing to 11') from Lompa to Deer Run
R4	Install high-visibility roadway striping
R5	Install wide edge lines and/or add buffer striping to the shoulder bike lane, mark driveways with edge line dashing
R6	Install roadway lighting
R7	Close existing sidewalk / AC path gaps; remove encroachments in the highway right of way, install signs & barriers to prevent vehicle entry
R8	Install signs and markings at path driveway crossings



1

Study Area



2

Corridor Goals

GOAL 1: Identify improvements that enhance safety for all corridor users.

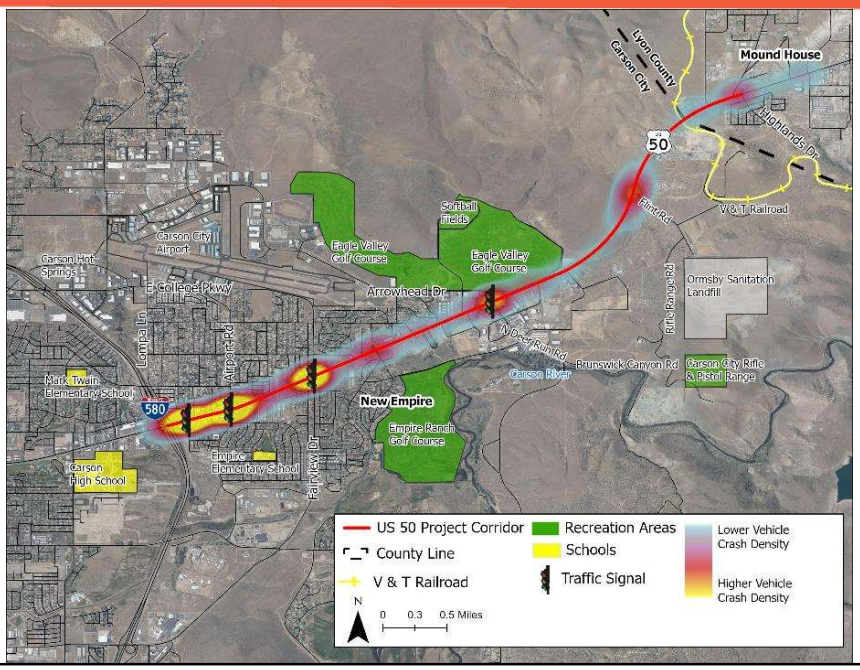
GOAL 2: Plan and deliver roadway safety and traffic projects that meet the needs of local residents, commuters, and business owners.

GOAL 3: Improve multimodal connections between residential areas, essential services, and recreational opportunities.

GOAL 4: Identify improvements that balance mobility needs with business access and economic development objectives.

3

Safety



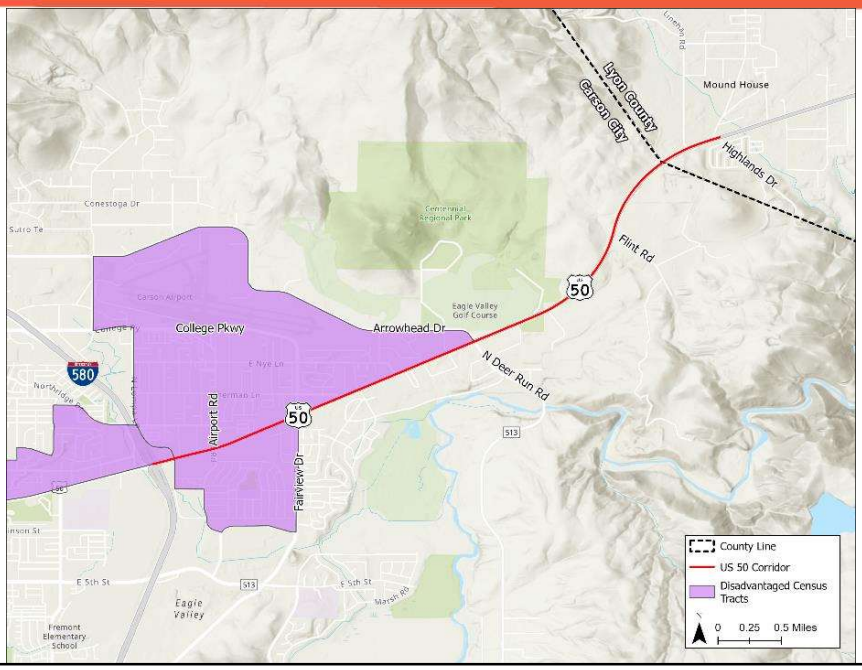
4

Traffic Analysis

Location	Control Type	Existing Scenario - AM Peak			Existing Scenario - PM Peak		
		Delay	LOS	Worst Movement	Delay	LOS	Worst Movement
US-50 & Ramps I-580	Signal	26.3	C	EBL	29.0	C	WBL
US-50 & Lompa Lane	Signal	16.7	B	EBL	14.7	B	EBL
US-50 & Airport Road	Signal	36.1	D	EBL	108.9	F	EBT
US-50 & Silver State Street	Stop	16.0	C	SB	15.5	C	SB
US-50 & Brown Street	Stop	18.7	C	NB	27.1	D	NB
US-50 & College Parkway	Signal	56.0	E	WBL	96.7	F	NBR
US-50 & Sherman Lane	Stop	23.9	C	SB	19.3	C	SB
US-50 & Empire Ranch Road	Stop	169.2	F	SB	4187.9	F	NB
US-50 & Nye Lane	Stop	28.8	D	SB	21.2	C	SB
US-50 & Arrowhead Drive	Signal	13.5	B	EBL	37.5	D	EBL
US-50 & Flint Road	Stop	34.8	D	WB	1782.1	F	WB
US-50 & Linehan Road	Stop	257.2	F	SB	153.6	F	SB
US-50 & Red Rock Road	Stop	31.6	D	SB	15.7	C	SB
US-50 & Highlands Drive	Stop	30.3	D	NB	77.3	F	NB

5

Corridor Demographics



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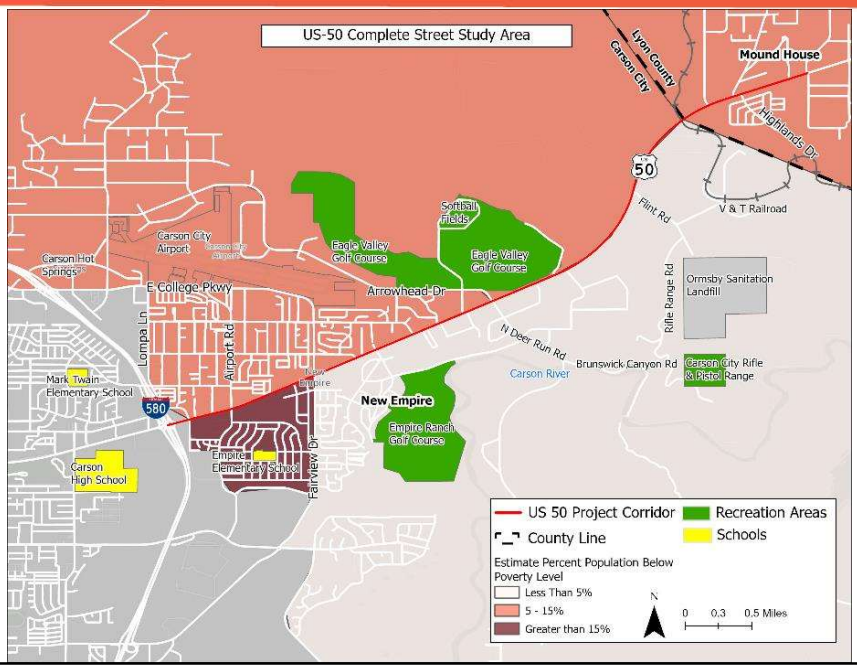
Corridor Demographics



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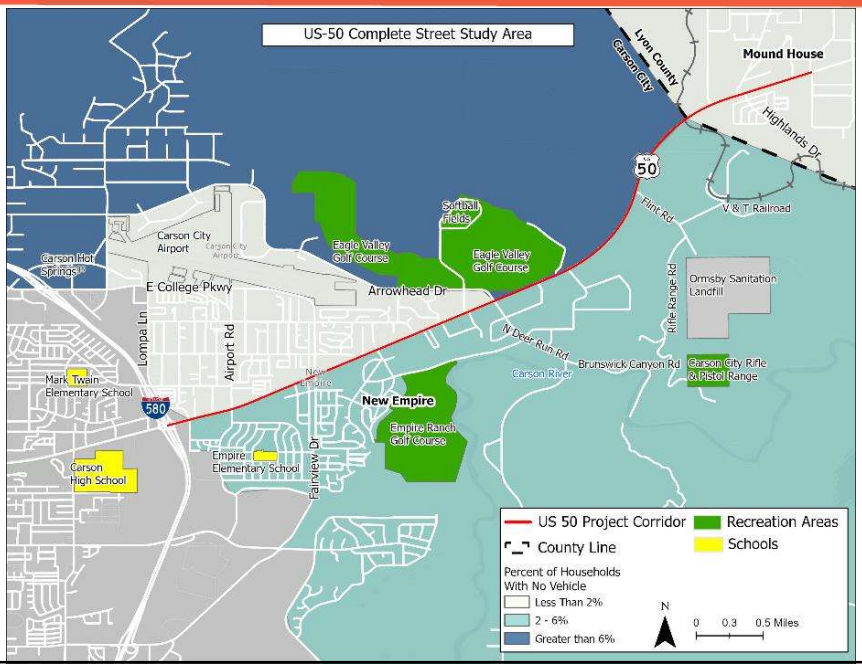
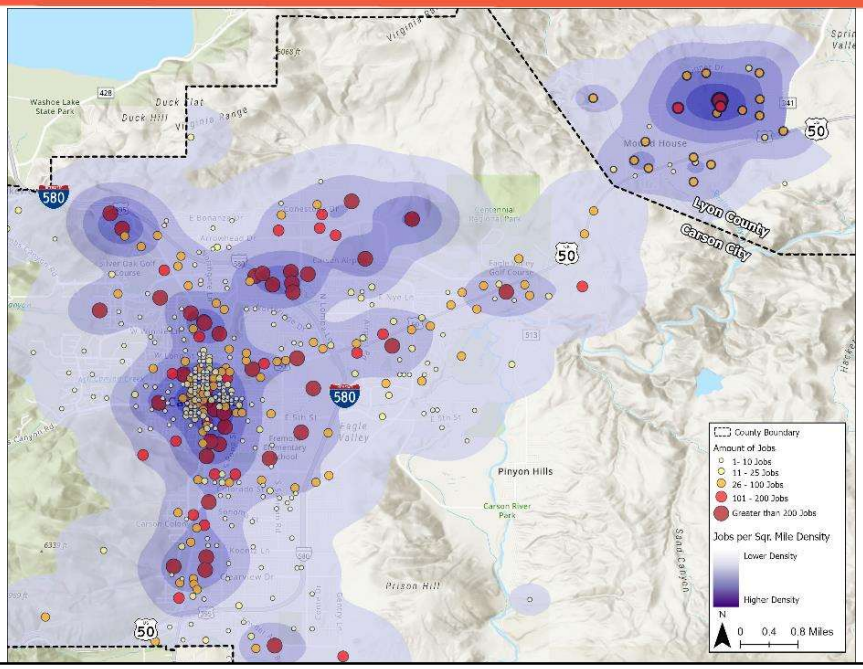
Corridor Demographics



8

Employment



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Public/Stakeholder Outreach

Public Outreach Strategies

- Online Survey
- Emails and Phone Calls
- Social Media
- Website
- Press Release
- Fact Sheet/Flyer

Stakeholder Outreach Strategies

- Business Walk
- Neighborhood Association Coordination
- Board and Committee Presentations
- Nevada Department of Transportation (NDOT)

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Public/Stakeholder Outreach

How often do you travel along the study area section of US 50?

- 27% SEVERAL TIMES PER DAY
- 34% DAILY
- 27% WEEKLY
- 11% MONTHLY
- 1% ALMOST NEVER

When you travel along US 50, which mode(s) of transportation do you typically use?

- 99% DRIVING A PERSONAL VEHICLE
- 3% CARPOOLING
- 3% WALKING
- 5% BICYCLING
- 4% OTHER

Do you think it is more important for US 50 to:

- 29% ENABLE CONVENIENT BUSINESS ACCESS AND ENCOURAGE ECONOMIC DEVELOPMENT BY ALLOWING FREQUENT DRIVEWAY ACCESS POINTS

OR

- 71% ENCOURAGE THE SAFE AND EFFICIENT FLOW OF TRAFFIC ALONG US 50, WITH MORE OF A FOCUS ON THROUGH TRAVEL

For which of the following trip purposes do you most often travel along the study area section of US 50?

- 29% WORK
- 3% SCHOOL
- 10% MEDICAL
- 25% SHOPPING
- 16% RECREATIONAL
- 17% PASSING THROUGH

What do you think is currently the biggest problem on or along this section of US 50?

- 41% CRASHES/TRAFFIC SAFETY ISSUES
- 44% TRAFFIC CONGESTION /RELIABILITY
- 7% LACK OF SAFE PLACES TO WALK OR BICYCLE
- 2% LACK OF CONVENIENT, ACCESSIBLE TRANSIT SERVICE
- 6% OTHER

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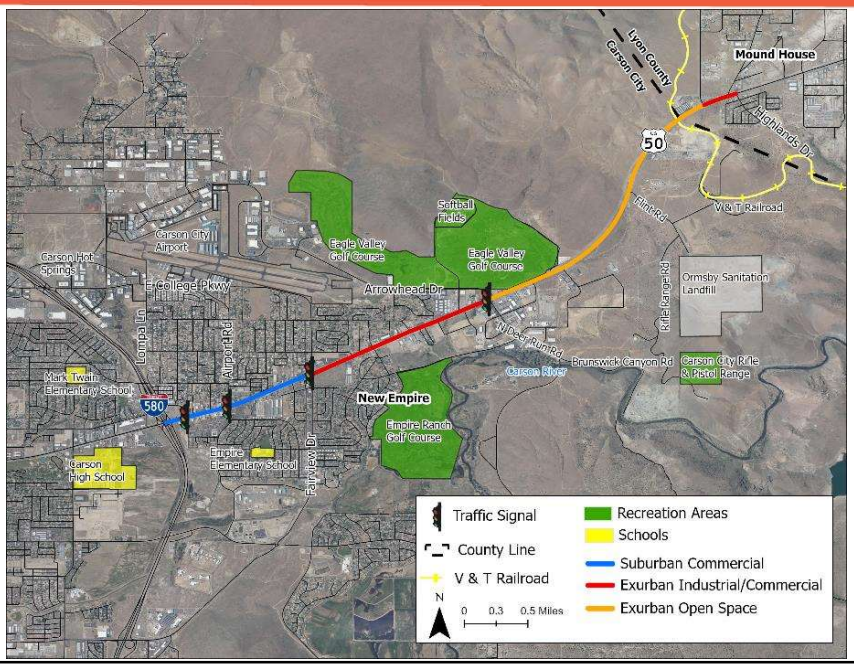
Character Zones



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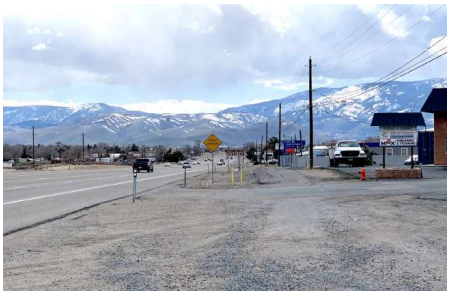
Issues Identified

- Operations: traffic congestion/ reliability concerns
- Safety: relatively high crash rates
- Access Management: frequent driveway access points resulting in high potential for conflict
- Multimodal: inconsistent facility presence and type, lack of ADA compliance
- Equity, Resiliency, and Sustainability: disadvantaged populations affected by lack of viable travel options, high crash rate, emissions, and heat impacts



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Key Recommendations

- Roadway Segments
  - ✓ Curb & gutter
  - ✓ High visibility striping, signage
  - ✓ Lighting
  - ✓ Sidewalk & multiuse path connectivity
- Signalized Intersections
  - ✓ Improved signal coordination
  - ✓ Improved signal visibility
  - ✓ Safety improvements (protective phasing, improved ped crossing)

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Key Recommendations

- Speed Policy
  - ✓ Digital message signs for congestion
  - ✓ Variable speed limits
  - ✓ Improved data collection
- Midblock Crossings
  - ✓ Pedestrian Hybrid Beacons
  - ✓ Median curbs/channelization
- Intersection Geometry
  - ✓ Adjust corner curb radii
  - ✓ "Pork chop" islands/pedestrian refuge

Image credit: Oregon Department of Transportation

Image credit: Austin Transportation and Public Works

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NDOT Coordination

- NDOT owns and maintains US 50 throughout the study area
- NDOT in design of a pavement preservation and safety improvement project between the I-580 interchange and Deer Run Road
- Project elements will include:
  - ✓ Replacement of existing roadway surface, turn lane channelization, and drainage improvements
  - ✓ Multiuse path, pedestrian facilities, and ADA improvements
  - ✓ Corridor lighting, fiberoptic, and traffic signal upgrades
- Construction planned for Q2 of 2027

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Next Steps

- Continued coordination with NDOT on project recommendations and One Nevada planning process
- Explore funding options
- Internal coordination with Carson City Public Works staff for potential traffic signal upgrades

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Table 5.1 CAMPO FY 2023 and FY 2024 UPWP Cost/Funding Summary

Activity					Funding Breakdown, Overall FY 23 & FY 24		
Work Element	**#**	**Description**	**Milestones (Excludes Ongoing/Recurring Milestones)**	**Estimated Completion Date**	**FY 2023**	**FY 2024**	**Total Cost**
1.0 MPO Administration	1.1	MPO Administration and Work Program Oversight			$ 101,180	$112,500	$ 213,680
	1.2	Unified Planning Work Program Oversight and Development	FY 2024/ FY 2025 Monetary Agreements	May 2023; May 2024			
			FY 2025-2026 UPWP (Draft/ Final)	May 2024			
	1.3	Transportation Improvement Program (TIP) Administration	FFY 2023-2026 TIP	January 2023			
			Annual Federal Obligations Report	December 2022; December 2023			
	1.4	Professional Development					
2.0 Outreach and Engagement	2.1	MPO Representation			$ 60,000	$32,000	$ 92,000
	2.2	Public Participation	CAMPO's Public Participation Plan (PPP) Update*	July 2023			
	2.3	Regional Transit Coordination and Engagement	Transit Rider Survey	June 2023			
			Transit Non-Rider Survey	June 2024			
	2.4	Regional Consistency Review*					
3.0 Multimodal Planning	3.1	2050 Regional Transportation Plan (RTP)	RTP Modification and/or Amendment to incorporate completed planning activities and studies	March 2024	$ 64,650	$ 115,000	$ 179,650
	3.2	Transit Planning	JAC ADA Paratransit Eligibility Process	June 2024			
			JAC Fixed-Route Policy	June 2024			
			JAC Title VI Program Update	September 2022			
			CAMPO DBE Program Update	September 2022			
			FY 2022 & 2023 JAC Monitoring Report	September 2023			
	3.3	ITS Planning*	Carson Area Transportation System Management Plan	June 2023			
	3.4	Active Transportation Planning	Review of local ordinances related to e-scooter/e-bicycles	Ongoing			
			Complete Streets Design Guide and Toolbox†	October 2023			
			Updated CAMPO Bicycle Route Map*	June 2024			
	3.5	Updates to Supporting Regional Planning					
4.0 Transportation Performance and Asset Management*	4.1	Performance Measure Implementation and Management	Safety Performance Measure Targets	February 2023; February 2024	$ 116,180	$ 305,820	$422,000
			Public Transit Agency Safety Targets	December 2022; December 2023			
			Transit Asset Management Targets	October 2022; October 2023			
			Supporting NDOT's CMAQ Targets	October 2022; October 2023			
	4.2	Maintain Travel Demand Model*	2023 TDM Update	December 2023			
	4.3	Data Management, Collection, and Performance Measurement	Annual CAMPO Monitoring Report	September 2022; September 2023			
	4.4	Maintain Pavement Management System	Complete pavement survey for Lyon/Douglas County	September 2023			
			Annual performance reporting of pavement condition	July 2022; July 2023			
	4.5	Non-Motorized Asset Management	Expanded ADA inventory of narrowness barriers and ADA Transition Plan Amendment	June 2024			
	4.6	Transit Asset Management	FFY 2023-2026 JAC Transit Asset Management Plan	October 2022			
5.0 Street and Corridor Planning**	5.1	Corridor Studies*	Participation and support for NDOT corridor planning	Ongoing	$ 56,400	$ 165,250	$ 221,650
			Local Road Safety Plan	January 2024			
			US Hwy 50 Corridor Study †	December 2024			
			N Carson Complete Streets Feasibility Study †	December 2025			
	5.2	Infrastructure Sustainability*	Assessment of and maps showing soil conditions within the CAMPO region	October 2023			
				Total UPWP CPG/Local	*$ 398,410*	*$ 730,570*	*$1,128,980*
				Total Other Federal/Local*	*$0*	*$166,095*	*$166,095*
				Total 2-Year UPWP	**$ 398,410**	**$ 896,665**	**$ 1,295,075**

**Consultant involvement is expected; **Other funding sources; † Exempt from Local Match*

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STAFF REPORT

Report To: Carson Area Metropolitan Planning Organization **Meeting Date:** July 10, 2024

Staff Contact: Kelly Norman, Senior Transportation Planner/Analyst

Agenda Title: For Possible Action – Discussion and possible action regarding an application for the distribution of $193,493 in available Federal Transit Administration ("FTA") Section 5310 Program funds to the Carson City Regional Transportation Commission ("RTC") for the capitalized operating expenses of the Jump Around Carson ("JAC") Assist ADA Paratransit program.

Staff Summary: The Carson Area Metropolitan Planning Organization ("CAMPO") received one grant application for FTA Section 5310 funds. The RTC submitted the only application received in response to a call for projects issued by CAMPO for Federal Fiscal Year ("FFY") 2024 Section 5310 funding. The RTC seeks $193,493 in Section 5310 funding to help offset operating expenses for its JAC Assist Paratransit program.

Agenda Action: Formal Action / Motion **Time Requested:** 5 minutes

---

Proposed Motion
I move to award the RTC $193,493 from the FFY 2024 FTA 5310 funds for the capitalized operating expenses of the JAC Assist Paratransit program.

Board's Strategic Goal
N/A

Previous Action
N/A

Background/Issues & Analysis
On May 21, 2024, CAMPO advertised a call for projects and accepted grant applications for the distribution of FFY 2024 formula-based funding from the FTA Section 5310 Program. The FTA Section 5310 Program aims to improve mobility for seniors and individuals with disabilities by removing barriers to transportation services and expanding transportation mobility options. The program supports transportation services planned, designed, and carried out to meet the special transportation needs of seniors and individuals with disabilities.

One application was received, from the RTC. The RTC's application is seeking $193,493 in funding to offset operating expenses for its JAC Assist ADA Paratransit program. Based on the proposed use of funds, the applicant must provide a 20% local match. The RTC has identified sufficient local match

funding within their application.

Staff has reviewed all applicable criteria and eligible activities in relation to the application. In assisting with the determination of award, staff utilized the checklist included in Exhibit 1. Based on staff's review of the applications, the RTC meets the eligibility requirements required by CAMPO to receive FTA Section 5310 Program funding.

The application checklist completed by CAMPO staff is included with Exhibit 2 as a supporting document. The FTA Section 5310 program is the best funding source known to CAMPO staff that allows grant reimbursement, with only a 20% local match, for capitalized operating expenses related to enhancing mobility for seniors and individuals with disabilities. CAMPO staff recommend awarding the full amount to the RTC.

Applicable Statute, Code, Policy, Rule or Regulation
49 U.S.C. Section 5310

Financial Information
Is there a fiscal impact? No

If yes, account name/number:

Is it currently budgeted? No

Explanation of Fiscal Impact: This pass-through grant does not impact CAMPO's budget.

Alternatives
Decline to award FTA Section 5310 funding to the RTC and provide alternative direction to staff.

Attachment(s):
5B_CAMPO_Exhibit 1 - FFY24 5310 CAMPO_Grant Overview.pdf

5B_CAMPO_Exhibit 2 - JAC FFY24 5310 CAMPO_Grant Application.pdf

Motion: _____ 1) _____ Aye/Nay
2) _____ _____
_____
_____
_____
_____

_____
(Vote Recorded By)

Grant Application Packet for Federal Transit Administration Section 5310 Program Apportionment Funding for Federal Fiscal Years (FFY) 2024

Introduction

The Carson Area Metropolitan Planning Organization (CAMPO) is accepting grant applications for the distribution of annual formula-based funding from the Federal Transit Administration (FTA) for Section 5310 Program funds. An overview of program goals, available funding, and applicant eligibility is provided on the following pages.

Funding from the FTA Section 5310 Program occurs in the form of a **reimbursement grant**. A reimbursement grant provides funding to grant recipients after expenses have been incurred. The grantee must follow all FTA procedures to obtain the reimbursement for expenses.

To receive federal funding through this program, an applicant must be eligible, per the federal requirements discussed below, and must comply with all other applicable federal and local regulations. CAMPO, as the direct recipient of 5310 funds, is responsible for overseeing the funds and monitoring subrecipients of these funds. CAMPO is considered a Small Urbanized area of under 200,000 population. Compliance with federal and local regulations does not end with documents required by this grant application. Applicants should reference the resources located in the packet to determine whether they have the technical and financial capacity to manage federal grant funds while maintaining full compliance. CAMPO staff will screen applicants based on information submitted in the application and will verify compliance on an ongoing basis with regular subrecipient monitoring.

For further information or assistance, please contact:

Rebecca Bustos, Grant Analyst
Carson Area Metropolitan Planning Organization
3505 Butti Way
Carson City, NV 89701
Phone: 775-283-7045
E-mail: rbustos@carson.org

Grant applications will be reviewed by staff for application completeness and eligibility. If applications are complete and eligible, applications will be submitted to the CAMPO Board for evaluation and consideration for award at a public hearing. Information on the Carson Area MPO is available online at www.CarsonAreaMPO.com.

Deadline to submit a complete application is June 24, 2024

Grant Program Information

FTA Section 5310 Program - Enhanced Mobility of Seniors & Individuals with Disabilities

The program aims to improve mobility for seniors and individuals with disabilities by removing barriers to transportation services and expanding transportation mobility options. This program supports transportation services planned, designed, and carried out to meet the special transportation needs of seniors and individuals with disabilities.

Eligible Recipients

Eligible recipients include private nonprofit organizations, states or local government authorities, or operators of public transportation.

Eligible Activities/Purchases

The Section 5310 funds are available for capital and operating expenses to support the provision of transportation services to address the specific needs of seniors and individuals with disabilities. All projects must either be situated in the CAMPO Area or may originate in a rural area and provide service with the CAMPO area.

Traditional Section 5310 project examples include (55% of program funds must be used on traditional projects. Up to 10% may be used for program administration):

- buses and vans – additional requirements apply.
- wheelchair lifts, ramps, and securement devices
- transit-related information technology systems, including scheduling/routing/one-call systems
- mobility management programs
- acquisition of transportation services under a contract, lease, or other arrangement

Nontraditional Section 5310 project examples include:

- travel training
- volunteer driver programs
- building an accessible path to a bus stop, including curb-cuts, sidewalks, accessible pedestrian signals or other accessible features
- improving signage, or way-finding technology
- incremental cost of providing same day service or door-to-door service
- purchasing vehicles to support new accessible taxi, rides sharing and/or vanpooling programs

Projects must be included as part of local Coordinated Human Services Transportation Plan (or similar) and must be planned, designed, and carried out to meet the specific needs of senior persons and individuals with disabilities. Additional eligibility requirements can be found in FTA Circular C 9070.1G. https://www.transit.dot.gov/regulations-and-guidance/fta-circulars/enhanced-mobility-seniors-and-individuals-disabilities

Match

The federal share of eligible capital or capitalized costs may not exceed 80 percent, and 50 percent for standard operating assistance. The 10 percent that is eligible to fund program administrative costs including administration, planning, and technical assistance may be funded at 100 percent federal share. The federal share may exceed 80 percent for certain projects related to ADA and Clean Air Act (CAA) compliance.

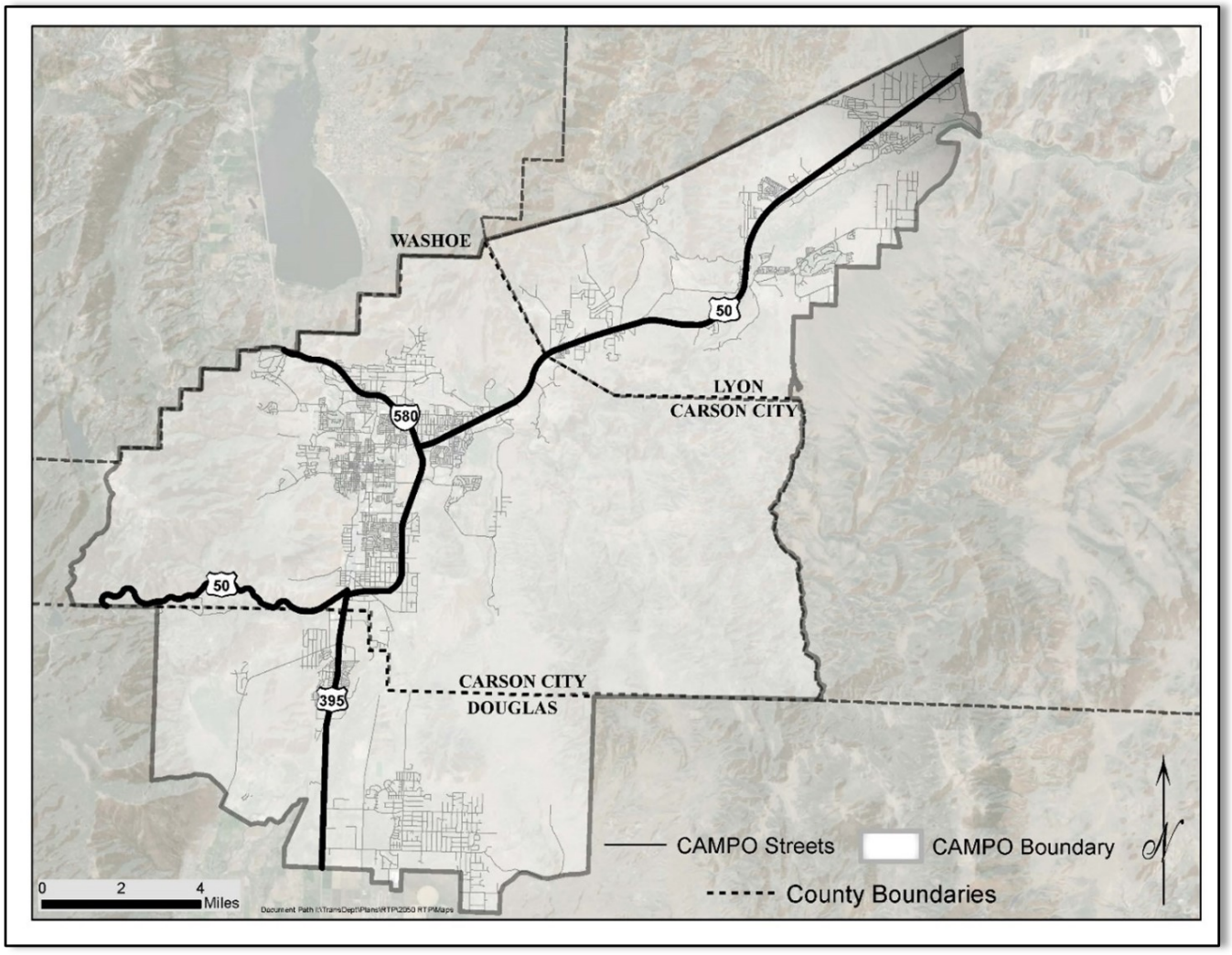
Available Funding

- Federal Fiscal Year 2024 - $193,493

Statutory References

49 U.S.C. Section 5310 / Fixing America's Surface Transportation Act 3006 (FAST) / Infrastructure, Investment and Jobs Act (IIJA). Additional grant information available online:
https://www.transit.dot.gov/funding/grants/enhanced-mobility-seniors-individuals-disabilities-section-5310
https://www.transit.dot.gov/funding/grants/coronavirus-response-and-relief-supplemental-appropriations-act-2021
https://www.transit.dot.gov/funding/american-rescue-plan-act-2021

Map of CAMPO



Application Process

Completed applications should be submitted to:

Rebecca Bustos
rbustos@carson.org
Email Subject: Grant Application for Federal Transit Administration Section 5310 Program – *Organization Name*

Applications can be completed either as a Microsoft Word Document or a PDF.

Grant applications must be submitted by 5:00 pm on the noticed deadline of June 21, 2024. Applications received will be screened for completeness and eligibility prior to evaluation and consideration of award.

Application Schedule:

- Release Date - May 21, 2024
- Grant Application Submission Due – June 21, 2024
- Anticipated Award by CAMPO – July 10, 2024

Required Information

To determine eligibility and for the CAMPO Board to evaluate grant applications, applicants must complete the attached application.

CAMPO will use the following criteria to evaluate submitted grant applications:

Evaluation Criteria

- Eligibility of Organization
- Ability of applicant to administer proposed project
- Ability of applicant to comply with FTA regulations
- Availability of federal funds
- Service area being served
- Project cost estimate and availability of applicant to provide local match, if required
- Demonstration of project need
- Existence of similar projects in the identified service area
- Number of persons estimated to be served
- For replacement and new vehicles, applicant's ability to manage asset
- For new or additional vehicles, factors necessitating additional equipment
- Availability of the equipment/asset to the general public

Upon completion of the selection process, CAMPO will coordinate with the project applicant to submit the necessary FTA documentation.

APPLICATION ELIGIBILITY CHECKLIST

Fund Type: _____

Applicant's Name: _____ _____ **Applicant's Request: $**_____

ELIGIBILITY DOCUMENTATION REQUIRED	Page	
DETERMINATION OF ELIGIBILITY		
FTA FUNDING SOURCES		
APPLICANT INFORMATION		
PROJECT INFORMATION		
VEHICLE REQUEST FORM (if applicable)		
BUDGET SUMMARY		
MATCH SOURCE DOCUMENTATION		
AUTHORIZING RESOLUTION		

ADDITIONAL REVIEW CRITIERA	NOTES	NEW APPLICANT	DOCUMENT ON FILE
SAFETY PLAN / PTASP		☐	☐
PROJECT TPYE/NEED IN TRANSIT PLAN		☐	☐
TRANSIT ASSET MANAGEMENT PLAN		☐	☐
TITLE VI PLAN		☐	☐
DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM AND GOAL		☐	☐
VEHICLE MAINTENANCE POLICY (vehicle purchases)		☐	☐
TRAINING POLICY		☐	☐
DRUG AND ALCOHOL POLICY (Vehicle Purchases or 5339 Grants Only)		☐	☐
ADA POLICY (vehicle/passengers' information)		☐	☐
RIDER POLICIES and INFORMATION (vehicle purchases)		☐	☐
EQUAL EMPLOYMENT OPPORTUNITY PLAN		☐	☐
COPY OF VEHICLE INSURANCE POLICY (Evidencing Commercial Liability, General Liability, Collision, and Comprehensive Liability Insurance, with a limit of not less than One Million and no/100 Dollars ($1,000,000.00) per occurrence.)		☐	☐
OTHER (Use of funding, benefit/impact to CAMPO, other potential funding opportunities, misc.)			

Grant Application
for
Federal Transit Administration
Section 5310 Program
Apportionment Funding

General Information

Brief Project Description:

Jump Around Carson is seeking funding to assist in the payment of capitalized operating expenses for JAC Assist, an origin-to-destination ADA paratransit service.

Name of Organization: JAC currently operates four buses on four distinct fixed-routes in

Type of Organization:

☐ Private Non-Profit ☒ Operator of Public Transportation Services

☒ State/Local Governmental Entity ☐ Tribal Agency (Sovereign Nation)

☐ Other

Applicants should provide documentation that they are an eligible organization.

Funding Category & Amount

Please check only one funding category below. If multiple funding categories are requested, please submit a separate application for each. The FTA provides for different match requirements by funding source and category.

FTA Section 5310 Program Grant for Enhanced Mobility for Seniors & Individuals with Disabilities

☒ **5310 Capital Funds (general)**
Amount Requested: $193,493

☐ **5310 Capital Funds (compliance with ADA)**

Amount Requested:

☐ **5310 Capital Funds (compliance with Clean Air Act)**

Amount Requested:

☐ **5310 Operating Funds**

Amount Requested:

☒ The requested funding will be used to address needs from CAMPO's Transit Development and Coordinated Human Service Plan (available here: https://www.carson.org/home/showpublisheddocument?id=68984).

Applicant/Organization Information

Physical Address:
3770 Butti Way, Carson City NV 89701

Mailing Address (if different from physical address):

Contact Person: Dan Kelsey
Title: Transit Cooridinator
Phone Number: 775-283-7583
Email Address: Dkelsey@carson.org

Applicant Federal ID#: 6825

Applicant UEI#: DTBPJMA2QFC8

Organization's mission statement and/or describe the organization's vision:

The mission of Jump Around Carson (JAC) is to provide safe, dependable and friendly transit service to the residents and visitors of Carson City. JAC's vision is to continue to improve the transit system and to work through funding challenges through creative and coordinated planning.

Detailed description of your organization:

JAC is Carson City's public transit system serving the community with a fleet of bright white, purple and green busses. JAC began operating in October 2005 and is governed by the Carson City Regional Transportation Commission, RTC. JAC operations has two systems. The JAC fixed-route which is open to the general public and the JAC Assist which is an origin-to-destination program that provides transportation for eligible persons with disabilities.

Detailed description of your existing transportation program/services:

JAC currently operates four buses on four distinct fixed-routes in Carson City. JAC also operates JAC Assist, an origin-to-destination complementary ADA paratransit service. JAC buses run Monday through Friday from 6:30am to 7:30pm, and on Saturdays from 8:30am to 4:30pm. JAC Assist is a dial-a-ride service providing scheduled rides across Carson City upon Client scheduling.

Describe any current connectivity/coordination efforts with surrounding area transit providers:

JAC partners with area transit providers in various ways. JAC currently partners with RTC Washoe to operate the Regional Connector service that travels to/from Reno and Carson City. The Regional Connector service shares many stops with JAC in Carson City and riders are able to transfer from the Regional Connector to JAC at no extra charge. JAC also partners with Tahoe Transportation District's Valley Express Daily service. The Valley Express Daily's route 19x travels between Minden/Gardnerville and Carson City. The 19X route also shares many stops with the JAC service and is free to transfer between services.

Project Information

Project Description:

These 5310 grant funds will be used to continue transportation services at the system's current levels. The Carson City RTC provides bus service in two forms: JAC fixed-route and JAC Assist complementary paratransit. Both services include buses that are ADA compliant, providing easy access to transportation for seniors and disabled individuals. The grant funds would be used towards capitalized operating expenses for JAC Assist complementary ADA paratransit services which serve our aging and disabled community.

Type of Service funding is requested for:

☐ Senior Center/Disabled Workshop
☐ Deviated Fixed Route
☐ Fixed Route
■ Demand Response (Dial-a-Ride, Door-to-Door)
☐ Other (describe)

Clientele served by service/purchase/program (check all that apply):

☐ Elderly (60+ years old)
☐ Low Income/Welfare
■ Persons with disabilities
☐ General Public
☐ Other

Area Served (check all that apply):

■ Small Urbanized Area (50,000 – 200,000 population)
☐ Lyon County
☐ Non-Urbanized Area (Rural under 50,000 population)
■ Carson City
☐ Douglas County
☐ Other

Does the project include vehicle purchases?:

☐ Yes (Additional Form Required)
■ No

■ Federal transit law requires that projects selected for funding under the Enhanced Mobility for Individuals and Individuals with Disabilities (Section 5310) Program be "included in a locally developed, coordinated public transit-human services transportation plan".

Vehicle Purchase Information

Applicants must complete if requesting funds for vehicle purchase or replacement. Applicants will be required to procure requested vehicle(s) after review of procurement documents by CAMPO staff. Actual price will be based on bids received.

Quantity	Vehicle Description (including size, capacity, wheelchair positions, etc.)			Estimated Cost
	N/A			
	Total Quantity		**Total Estimated Cost**	

Procurement must follow CAMPO's Policies and Procedures Manual, available upon request of CAMPO.

Project Budget

Applicants must complete the applicable budget sheets. A separate application is required for each funding source.

For operations programs, projected farebox revenue must be included. Revenue functions different than local match as revenue offsets the overall budget, reducing the total project cost and required local match. It can be in the form of farebox contributions, advertising revenue, donations, or agency financial assistance from service groups, businesses, charities, etc.

Required local match differs by expenses type and provides the required non-federal share of the project cost. The source of the matching funds must be verifiable. A letter or other documentation stating the monetary commitment from the contributing agency/entity must be included within the submitted application packet. Typically, local match reduces the funding amount reimbursed to the applicant from the FTA as part of the reimbursement grant process.

Budget Work Sheet			
Operating Expenses		**Local Match**	
Description	**Amount**	**Description**	**Amount**
Total Expenses	**Total Revenue**	**Total Expenses minus Revenue**	**Optional Match**
	Anticipated Fare Revenue $18,331		
Capital Expenses		**Local Match (20% General / 15% ADA / 10% Clean Air)**	
Description	**Amount**	**Description**	**Amount**
Requested Capitalized Operating Amount, FEDERAL	$193,493	General Fund Match	$48,373
Total Capital	$193,493	**Total Match**	$48,373
Administrative Expenses		**Optional Local Match**	
Description	**Amount**	**Description**	**Amount**

Required Documentation for 5310 or 5339 Funding

Applicants may attach a copy of the required document to the application, provide a link to the document, or ensure the document is available upon request.

Safety Plan

Applicants currently receiving financial assistance under 49 U.S.C. § 5307 that operate a public transportation system are required to submit a safety plan. An operator of a public transportation system that only receives financial assistance under the Formula Grants for Enhanced Mobility of Seniors and Individuals with Disabilities Program (49 U.S.C. § 5310) and/or Formula Grants for Rural Areas Program (49 U.S.C. § 5311) is exempt from this requirement.

Performance Targets/Transit Asset Management Plan

CAMPO subrecipients for Sections 5310 and 5339(a) funding must comply with applicable provisions of 49 C.F.R. Part 625. All subrecipients of Federal financial assistance under 49 U.S.C. Chapter 53 that own, operate, or manage capital assets used in the provision of public transportation must prepare a Transit Asset Management (TAM) Plan and establish performance targets on an annual basis for use in National Transit Database (NTD) reporting. This is done with the goal of helping achieve and maintain a state of good repair for the nation's public transportation systems. The plan must discuss the maintenance and safety of assets. The purpose is to ensure proper utilization of FTA assets and to help ensure success of the program/project. The plan should include vehicle maintenance information such as a detailed repair schedule (for routine maintenance) and the approach for unscheduled maintenance activities. A TAM Plan and annual performance targets must be submitted with this application. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

Title VI Plan

CAMPO subrecipients for Sections 5310 and 5339(a) funding must comply with applicable provisions of 49 C.F.R. Part 21. These provisions prohibit discrimination based on race, color, and national origin, including the denial of meaningful access of limited English proficient (LEP) persons. Applicants must submit a Title VI Plan with this application. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

Disadvantaged Business Enterprise (DBE) Program and DBE Goal

CAMPO subrecipients of Sections 5310 and 5339(a) funding must comply with applicable provisions of 49 C.F.R. Part 26. These provisions ensure nondiscrimination in the award and administration of US Department of Transportation (US DOT)-assisted contracts. Subrecipients also must create a level playing field on which DBEs can compete fairly for US DOT-assisted contracts. Applicants must submit a DBE Program and DBE Goal with this application. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

Vehicle Policy and Information

Applicants requesting funding for vehicle(s) must provide a description of the desired vehicle. Application must note if the vehicle is a replacement or an expansion of the existing vehicle fleet and if any special vehicle options are requested (i.e. 4-wheel drive, bike racks, etc.). Vehicle maintenance and safety policies must be included in the application to be considered for award. Rider policy information must be included, which will describe how to ride, complaint procedures, fare structure, and etc.

A Certificate of Insurance will need to be provided. City/CAMPO requires full coverage for the vehicle as long as City/CAMPO holds lien. The standard insurance for a paratransit vehicle under this program is Liability and Property Damage Insurance with a limit of $1,000,000 for each occurrence, for bodily injury, and property damage, naming Carson City/CAMPO as an additional insured. This shall be maintained through the useful life of the vehicle and until Carson City/CAMPO releases lien of the title.

Training Policy

Organization's employee training policy is required, which should include, at a minimum, the frequency, type, and who will be trained in safety, substance abuse awareness, passenger sensitivity, and customer service.

Drug and Alcohol Policy (5339(a) only)

Subrecipients of 5339(a) FTA funds are required to comply with regulations issued by the FTA on drug and alcohol testing, 49 C.F.R. Part 655. Among other requirements, these regulations require that all safety sensitive employees be tested for drug and alcohol use, pre-employment (drug only), random, reasonable suspicion and post-accident, that certifications be made, and reports submitted. There are limited exceptions to the testing requirements for contract maintenance workers under Section 5339(a) and for volunteers. Annual reporting of the testing results must be submitted to CAMPO by subrecipients on Management Information System (MIS) forms. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

Americans with Disabilities Act Policy

Subrecipients of 5310 and 5339(a) FTA funds are required to comply with applicable provisions of 49 C.F.R. Parts 38 and 39. The Americans with Disabilities Act of 1990 (ADA) prohibits discrimination and ensures equal opportunity and access for persons with disabilities. The FTA works to ensure nondiscriminatory transportation in support of its mission to enhance the social and economic quality of life for all Americans. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

Equal Employment Opportunities Program

Subrecipients of 5310 and 5339(a) FTA funds are required to comply with applicable provisions of 49 U.S.C. 5332. The FTA requires entities meeting certain thresholds to either submit or prepare and maintain an EEO Program. An EEO Program is a detailed set of procedures and employment information designed to ensure entities meet the EEO requirements. The FTA's Office of Civil Rights helps FTA recipients develop, implement, and monitor an effective Equal Employment Opportunity Program to ensure that recipients do not discriminate against any employees or applicants for employment because of race, color, religion, sex, disability, age or national origin. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

Public Notice

Subrecipients of 5310 and 5339(a) FTA funds are required to comply with applicable provisions of 49 U.S.C. 5323(b). The FTA requires applicants to provide notice and adequate opportunity for comment on projects impacting the public transportation service of a community. Any required public noticing conducted by the applicant shall be incorporated into application submittal.

Annual Certifications and Assurances

Successful applicants for Federal Section 5310 and 5339(a) funds must complete and sign the latest certifications and assurances prior to award of any federal assistance. Category 01 applies to all applicants. Category 02 applies to all applications for federal assistance in excess of $100,000, unless the applicant is a Native American tribe or organization, or a tribal organization. Categories 03 through 21 will apply to some, but not all, applicants and projects. This process ONLY excludes the submittal of documents with your application, NOT from collecting documents and having them on file. Certifications and assurances are special pre-award requirements specifically prescribed by federal law or regulation and do not encompass all federal laws, regulations, and directives that may apply to the applicant or its project. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

Authorizing Resolution

A signed resolution authorizing the appropriate applicant representative to execute and file an application with CAMPO on behalf of the agency must be submitted (see Appendix B).

Appendix A
Links to Resources and Required Documentation

Certifications and Assurances
Chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.transit.dot.gov/sites/fta.dot.gov/files/2024-03/FY24-certifications.pdf

Fixing America's Surface Transportation (FAST) Act
https://www.transit.dot.gov/FAST

United States Department of Transportation (USDOT)
www.dot.gov

Federal Transit Administration (FTA)
www.fta.dot.gov

Title 49 USC Chapter 53 Grant Programs
https://www.transit.dot.gov/grants

Best Practices Procurement Manual
https://www.transit.dot.gov/funding/procurement/best-practices-procurement-manual

OMB "Super Circular" or 2 C.F.R. 200 *https://www.federalregister.gov/articles/2013/12/26/2013-30465/uniform-administrative- requirements-cost-principles-and-audit-requirements-for-federal-awards*

Civil Rights (ADA, DBE, Title VI, EEO)
www.fta.dot.gov/civil_rights.html

Drug and Alcohol Regulations
https://www.federalregister.gov/articles/2001/08/09/01-19234/prevention-of-alcohol-misuse- and-prohibited-drug-use-in-transit-operations

United States of American Department of Transportation FTA Master Agreement *https://www.transit.dot.gov/funding/grantee-resources/sample-fta-agreements/fta-grant-agreements*

Transit Asset Management
https://www.transit.dot.gov/TAM

SAM.GOV Register or Update the Unique Entity Identifier (UEI)
https://sam.gov/content/home

RESOLUTION NO: 2024-RTC-R-1
A RESOLUTION AUTHORIZING THE FILING OF AN APPLICATION FOR A FEDERAL TRANSIT ADMINISTRATION / CARSON AREA METROPOLITAN PLANNING ORGANIZATION GRANT UNDER 49 USC CHAPTER 53.

WHEREAS, the U.S. Department of Transportation is authorized to make grants to metropolitan planning organizations through the Federal Transit Administration to support transportation projects under 49 USC Chapter 53; and

WHEREAS, the Carson Area Metropolitan Planning Organization ("CAMPO") has been designated to administer certain transportation projects under 49 USC Chapter 53; and

WHEREAS, the contract for financial assistance will impose certain obligations upon the APPLICANT, including provisions by it of the local share of project costs;

NOW, THEREFORE, the Carson City Regional Transportation Commission ("RTC") resolves that:

(1) The RTC Chairperson is authorized to execute and file an application with CAMPO on behalf of our agency to aid in the financing of capital, and / or operating costs pursuant to 49 USC Chapter 53; and

(2) The Carson City Transit Coordinator is authorized to furnish such additional information as CAMPO may require in connection with the application or the project.

Upon motion by Commissioner Gregory Novak, seconded by Commissioner Lucia Maloney, the foregoing Resolution was passed and adopted this 12th day of June, 2024 by the following vote.

VOTE: AYES: Chair Lori Bagwell
Vice Chair Lisa Schuette
Commissioner Jim Dodson
Commissioner Greg Novak
Commissioner Lucia Maloney

NAYS: None

ABSENT: None

ABSTAIN: None

The undersigned certifies that the foregoing is a true and correct statement.

Lori Bagwell, Chair

APPLICATION ELIGIBILITY CHECKLIST

Fund Type: 5310

Applicant's Name: Carson City RTC – Jump Around Carson **Applicant's Request:** $ 193,493

ELIGIBILITY DOCUMENTATION REQUIRED	Page	
DETERMINATION OF ELIGIBILITY	1	Local Government and Operator of Public Transportation
FTA FUNDING SOURCES	1	5310
APPLICANT INFORMATION	2	UEI# DTBPJMA2QFC8 Carson City
PROJECT INFORMATION	3	Capitalized Operating for JAC Assist paratransit
VEHICLE REQUEST FORM (if applicable)	4	N/A
BUDGET SUMMARY	5	Provided
MATCH SOURCE DOCUMENTATION	5	Indicated City General Fund
AUTHORIZING RESOLUTION	Last Page	Yes, signed by RTC Chair

ADDITIONAL REVIEW CRITIERA	NOTES	NEW APPLICANT	DOCUMENT ON FILE
SAFETY PLAN / PTASP		☐	☒
PROJECT TPYE/NEED IN TRANSIT PLAN	Coordinated Human Services Plan	☐	☒
TRANSIT ASSET MANAGEMENT PLAN		☐	☒
TITLE VI PLAN		☐	☒
DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM AND GOAL		☐	☒
VEHICLE MAINTENANCE POLICY (vehicle purchases)	N/A	☐	☐
TRAINING POLICY	N/A	☐	☐
DRUG AND ALCOHOL POLICY (Vehicle Purchases or 5339 Grants Only)	N/A	☐	☐
ADA POLICY (vehicle/passengers' information)		☐	☒
RIDER POLICIES and INFORMATION (vehicle purchases)		☐	☒
EQUAL EMPLOYMENT OPPORTUNITY PLAN		☐	☒
COPY OF VEHICLE INSURANCE POLICY (Evidencing Commercial Liability, General Liability, Collision, and Comprehensive Liability Insurance, with a limit of not less than One Million and no/100 Dollars ($1,000,000.00) per occurrence.)	N/A	☐	☐
OTHER (Use of funding, benefit/impact to CAMPO, other potential funding opportunities, misc.)	5310 fuding will be used exclusivly in the CAMPO Region for paratransit services serving seniors and people with disablities. 5307 funds could be used to fund paratransit as an atternative using a combination of 80% and 50% local match, as allowed by the grant.		

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STAFF REPORT

Report To: Carson Area Metropolitan Planning Organization **Meeting Date:** July 10, 2024

Staff Contact: Kelly Norman, Senior Transportation Planner/Analyst

Agenda Title: For Possible Action – Discussion and possible action regarding an application for the distribution of $262,928 in available Federal Transit Administration ("FTA") Section 5339(a) Program funds to the Carson City Regional Transportation Commission ("RTC") for maintenance and improvements of bus and bus stop facilities and the replacement of an Americans with Disabilities Act ("ADA") accessible transit vehicle for Jump Around Carson ("JAC").

Staff Summary: The Carson Area Metropolitan Planning Organization ("CAMPO") received one grant application for FTA Section 5339(a) funds, from the RTC, in response to a call for projects for the balance of FTA Section 5339(a) funds for Federal Fiscal Years ("FFY") 2022 and 2023, as well as the full amount of FFY 2024 funds, totaling $262,928. The RTC's application seeks $262,928 in FTA Section 5339(a) funds for maintenance and improvements of bus and bus stop facilities and the replacement of an ADA accessible transit vehicle for JAC.

Agenda Action: Formal Action / Motion **Time Requested:** 5 minutes

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Proposed Motion
I move to award the RTC $262,928 in FFY 2022, 2023, and 2024 FTA 5339(a) funds for maintenance and improvements of bus and bus stop facilities and the purchase of an ADA accessible transit vehicle.

Board's Strategic Goal
N/A

Previous Action
July 12, 2023 (Item 5.E) - CAMPO awarded $85,000 in FFY 2022 and 2023 FTA Section 5339(a) funds to Douglas County for the purchase of an ADA accessible transport van for the Douglas Area Rural Transit program.

Background/Issues & Analysis
On May 21, 2024, CAMPO advertised a call for projects for the remaining balance of the FFY 2022 and 2023 FTA 5339(a) funds, as well as the full amount of FFY 2024 FTA 5339(a) funds, for a cumulative total of $262,928.

The FTA Section 5339 program aims to improve the condition of capital transit assets by providing

funds to transit operators to replace, rehabilitate, or purchase buses or bus-related facilities. Eligible recipients include designated recipients that operate fixed-route bus service, or that allocate funding to fixed-route bus operators, and State or local governmental entities within the CAMPO region that operate fixed-route bus service that are eligible to receive direct grants under Sections 5307 and 5311.

One application was received, from the RTC. The RTC's application is seeking $144,458 to go towards the replacement of an ADA accessible bus that is less than or equal to 30-feet and $118,470 for bus and bus stop facility maintenance and improvements, which totals the full amount available of $262,928.

The vehicle replacement would require a 15% match and the bus and bus stop facility maintenance and improvements portion would require a 20% match. The RTC has identified sufficient local match funding within their application.

Staff has reviewed all applicable criteria and eligible activities in relation to the application. Staff utilized the checklist included in Exhibit 1 to evaluate the application. Based on staff's review, the RTC application meets CAMPO's eligibility requirements to receive FTA Section 5339(a) Program funding. CAMPO staff recommends awarding the full amount to the RTC.

Applicable Statute, Code, Policy, Rule or Regulation
49 U.S.C. Section 5339

Financial Information
Is there a fiscal impact? No

If yes, account name/number:

Is it currently budgeted? No

Explanation of Fiscal Impact: This pass-through grant does not impact CAMPO's budget.

Alternatives
Decline to award FTA Section 5339(a) funding to the RTC and provide alternative direction to staff.

Attachment(s):
5C_CAMPO_Exhibit 1 - FFY22,23,&24 5339 CAMPO_Grant Overview.pdf

5C_CAMPO_Exhibit 2 - JAC FFY22,23,&24 5339 CAMPO_Grant Application.pdf

Motion: _____ 1) _____ Aye/Nay
2) _____ _____
_____
_____
_____
_____

_____
(Vote Recorded By)

Grant Application Packet for Federal Transit Administration Section 5339(a) Program Apportionment Funding for Federal Fiscal Years (FFY) 2022, 2023, and 2024

Introduction

The Carson Area Metropolitan Planning Organization (CAMPO) is accepting grant applications for the distribution of annual formula-based funding from the Federal Transit Administration (FTA) for Section 5339(a) Program funds. An overview of program goals, available funding, and applicant eligibility is provided on the following pages.

Funding from the FTA Section 5339(a) Program occurs in the form of a **reimbursement grant**. A reimbursement grant provides funding to grant recipients after expenses have been incurred. The grantee must follow all FTA procedures to obtain the reimbursement for expenses.

To receive federal funding through this program, an applicant must be eligible, per the federal requirements discussed below, and must comply with all other applicable federal and local regulations. CAMPO, as the direct recipient of 5339(a) funds, is responsible for overseeing the funds and monitoring subrecipients of these funds. CAMPO is considered a Small Urbanized area of under 200,000 population. Compliance with federal and local regulations does not end with documents required by this grant application. Applicants should reference the resources located in the packet to determine whether they have the technical and financial capacity to manage federal grant funds while maintaining full compliance. CAMPO staff will screen applicants based on information submitted in the application and will verify compliance on an ongoing basis with regular subrecipient monitoring.

For further information or assistance, please contact:

Rebecca Bustos, Grant Analyst
Carson Area Metropolitan Planning Organization
3505 Butti Way
Carson City, NV 89701
Phone: 775-283-7045
E-mail: rbustos@carson.org

Grant applications will be reviewed by staff for application completeness and eligibility. If applications are complete and eligible, applications will be submitted to the CAMPO Board for evaluation and consideration for award at a public hearing. Information on the Carson Area MPO is available online at www.CarsonAreaMPO.com.

Deadline to submit a complete application is June 24, 2024

Grant Program Information

Grants for Buses and Bus Facilities Formula Program – 5339(a)
The program aims to improve the condition of capital transit assets by providing funds to transit operators to replace, rehabilitate, or purchase buses or bus-related facilities.

Eligible Recipients
Eligible Recipients include designated recipients that operate fixed route bus service or that allocate funding to fixed route bus operators; and State or local governmental entities within the CAMPO Region that operate fixed route bus service that are eligible to receive direct grants under 5307 and 5311.

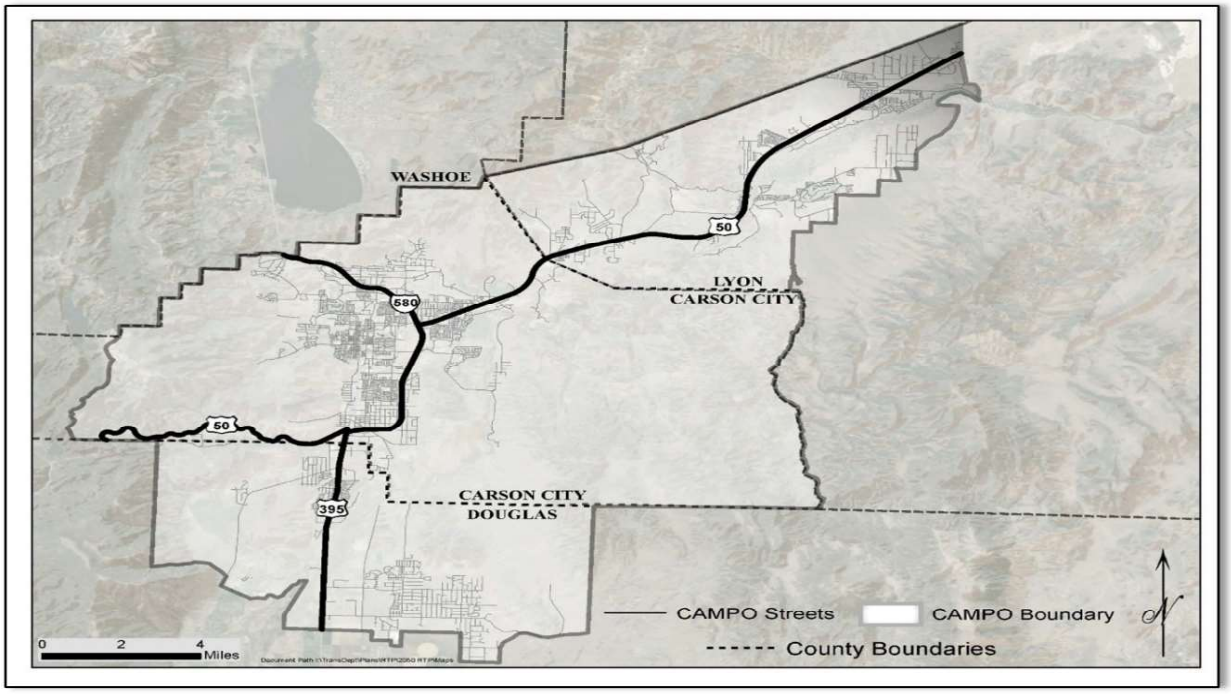
Eligible Activities/Purchases
Capital projects to replace, rehabilitate and purchase buses, vans, and related equipment, and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities. (Note: additional competitive grants are available under FTA Section 5339(b) and 5339(c). Please contact CAMPO if interested in these grant programs.)

Match
The federal share of eligible capital costs may not exceed 80 percent, except for the purchase of certain low/no-emission vehicles or vehicles for compliance with ADA or the Clean Air Act (CAA) (85%), or for certain bus-related equipment and facilities related to the ADA, the Clean Air Act (CAA), (90%).

Available Funding
- Federal Fiscal Year 2022 - $28,018
- Federal Fiscal Year 2023 - $116,440
- Federal Fiscal Year 2024 - $118,470

Statutory References 49
U.S.C. Section 5339(a)
49 U.S.C. Section 5323

Map of CAMPO



Application Process

Completed applications should be submitted to:

Rebecca Bustos
rbustos@carson.org
Email Subject: Grant Application for FTA Section 5339(a) Program – *Organization Name*

Applications can be completed either as a Microsoft Word Document or a PDF.

Grant applications must be submitted by 5:00 pm on the noticed deadline of June 24, 2024. Applications received will be screened for completeness and eligibility prior to evaluation and consideration of award.

Application Schedule:

- Release Date – May 21, 2024
- Grant Application Submission Due – June 24, 2024
- Anticipated Award by CAMPO – July 10, 2024

Required Information

To determine eligibility and for the CAMPO Board to evaluate grant applications, applicants must complete the attached application.

CAMPO will use the following criteria to evaluate submitted grant applications:

Evaluation Criteria

- Eligibility of Organization
- Ability of applicant to administer proposed project
- Ability of applicant to comply with FTA regulations
- Service area being served
- Project cost estimate and availability of applicant to provide local match, if required
- Demonstration of project need
- Existence of similar projects in the identified service area
- For replacement and new vehicles, applicant's ability to manage asset
- For new or additional vehicles, factors necessitating additional equipment

Upon completion of the selection process, CAMPO will coordinate with the project applicant to submit the necessary FTA documentation.

APPLICATION ELIGIBILITY CHECKLIST

Fund Type: _____

Applicant's Name: _____ _____ **Applicant's Request: $**_____

ELIGIBILITY DOCUMENTATION REQUIRED	Page	
DETERMINATION OF ELIGIBILITY		
FTA FUNDING SOURCES		
APPLICANT INFORMATION		
PROJECT INFORMATION		
VEHICLE REQUEST FORM (if applicable)		
BUDGET SUMMARY		
MATCH SOURCE DOCUMENTATION		
AUTHORIZING RESOLUTION		

ADDITIONAL REVIEW CRITIERA	NOTES	NEW APPLICANT	DOCUMENT ON FILE
SAFETY PLAN / PTASP		☐	☐
PROJECT TPYE/NEED IN TRANSIT PLAN		☐	☐
TRANSIT ASSET MANAGEMENT PLAN		☐	☐
TITLE VI PLAN		☐	☐
DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM AND GOAL		☐	☐
VEHICLE MAINTENANCE POLICY (vehicle purchases)		☐	☐
TRAINING POLICY		☐	☐
DRUG AND ALCOHOL POLICY (Vehicle Purchases or 5339 Grants Only)		☐	☐
ADA POLICY (vehicle/passengers' information)		☐	☐
RIDER POLICIES and INFORMATION (vehicle purchases)		☐	☐
EQUAL EMPLOYMENT OPPORTUNITY PLAN		☐	☐
COPY OF VEHICLE INSURANCE POLICY (Evidencing Commercial Liability, General Liability, Collision, and Comprehensive Liability Insurance, with a limit of not less than One Million and no/100 Dollars ($1,000,000.00) per occurrence.)		☐	☐
OTHER (Use of funding, benefit/impact to CAMPO, other potential funding opportunities, misc.)			

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Grant Application
for
Federal Transit Administration
Section 5339(a) Program
Apportionment Funding

General Information

Brief Project Description: Funding to be used toward the replacement of a paratransit vehicle and transit center facility upgrades.

Name of Organization: Jump Around Carson

Type of Organization:

☐ Private Non-Profit
☒ Operator of Public Transportation Services
☒ State/Local Governmental Entity
☐ Tribal Agency (Sovereign Nation)
☐ Other

Applicants should provide documentation that they are an eligible organization.

Funding Category & Amount

Please check only one funding category below. If multiple funding categories are requested, please submit a separate application for each. The FTA provides for different match requirements by funding source and category.

FTA Section 5339(a) Program Grant for Buses and Bus Facilities Formula Program

☒ **5339(a) General Capital or Vehicle Purchases (20% match required)**

Amount Requested: $118,470

☐ **5339(a) Vehicle Purchases for Compliance with ADA or Clean Air Act (15% match required per 49 U.S.C. 5323)**

Amount Requested: $144,458

☐ **5339(a) Capital for Vehicle Related Equipment of Facilities for Compliance with ADA or Clear Air Act (10% match required)**

Amount Requested:

☒ The requested funding will be used to address needs from CAMPO's Transit Development and Coordinated Human Service Plan (available here: https://www.carson.org/home/showpublisheddocument?id=68984).

Applicant/Organization Information

Physical Address: 3770 Butti Way, Carson City, Nevada 89701

Mailing Address (if different from physical address):

Contact Person: Dan Kelsey
Title: Transit Coordinator
Phone Number: 775-283-7583
Email Address: Dkelsey@carson.org

Applicant Federal ID#: 6825

Applicant UEI / DUNS#: DTBPJMA2QFC8

Organization's mission statement and/or describe the organization's vision:
The mission of Jump Around Carson (JAC) is to provide safe, dependable and friendly transit service to the residents and visitors of Carson City. JAC's vision is to continue to improve the transit system and to work through funding challenges through creative and coordinated planning.

Detailed description of your organization:
JAC is Carson City's public transit system serving the community with a fleet of bright white, purple and green buses. JAC began operating in October 2005 and is governed by the Carson City Regional Transportation Commission, RTC.

Detailed description of your existing transportation program/services: JAC currently operates four buses on four distinct fixed-routes in Carson City. JAC also operates JAC Assist, an origin-to-destination complementary ADA paratransit service. JAC buses run Monday through Friday from 6:30am to 7:30pm, and on Saturdays from 8:30am to 4:30pm. JAC Assist is a dial-a-ride service providing scheduled rides across Carson City.

Describe any current connectivity/coordination efforts with surrounding area transit providers: JAC partners with area transit providers in various ways. JAC currently partners with RTC Washoe to operate the Regional Connector service that travels to/from Reno and Carson City. The Regional Connector service shares many stops with JAC in Carson City and riders are able to transfer from the Regional Connector to JAC at no extra charge.

Project Information

Project Description:

A portion of the funding will be used for replacement rolling stock that will have met its useful life and is eligible for replacement, and will be used to fund costs associated with facility maintenance and improvements to bus and bus stops in redevelopment areas of Carson City including the downtown transit center. Bus and bus stop facility improvements can include items such as ADA compliance, new or replacement shelters, shading, fencing, signing, and lighting.

Type of Service funding is requested for:

☐ Senior Center/Disabled Workshop
☐ Deviated Fixed Route
■ Fixed Route
☐ Demand Response (Dial-a-Ride, Door-to-Door)
☐ Other (describe)

Clientele served by service/purchase/program (check all that apply):

■ Elderly (60+ years old)
☐ Low Income/Welfare
■ Persons with disabilities
■ General Public
☐ Other

Area Served (check all that apply):

■ Small Urbanized Area (50,000 – 200,000 population)
☐ Lyon County
☐ Non-Urbanized Area (Rural under 50,000 population)
■ Carson City
☐ Douglas County
☐ Other

Does the project include vehicle purchases?:

■ Yes (Additional Form Required)
☐ No

Vehicle Purchase Information

Applicants must complete if requesting funds for vehicle purchase or replacement. Applicants will be required to procure requested vehicle(s) after review of procurement documents by CAMPO staff. Actual price will be based on bids received.

Quantity	Vehicle Description (including size, capacity, wheelchair positions, etc.)			Estimated Cost
1	ADA Accessible Bus less than or equal to 30-feet.			Fed = $144,458 15% Match=$25,493
	Total Quantity	1	**Total Estimated Cost**	$169,951

Procurement must follow CAMPO's Policies and Procedures Manual, available upon request of CAMPO.

Project Budget

Applicants must complete the applicable budget sheets. A separate application is required for each funding source.

For operations programs, projected farebox revenue must be included. Revenue functions different than local match as revenue offsets the overall budget, reducing the total project cost and required local match. It can be in the form of farebox contributions, advertising revenue, donations, or agency financial assistance from service groups, businesses, charities, etc.

Required local match differs by expenses type and provides the required non-federal share of the project cost. The source of the matching funds must be verifiable. A letter or other documentation stating the monetary commitment from the contributing agency/entity must be included within the submitted application packet. Typically, local match reduces the funding amount reimbursed to the applicant from the FTA as part of the reimbursement grant process.

Budget Work Sheet			
Capital Expenses		**Local Match (Match Varies per Above)**	
Description	**Amount**	**Description**	**Amount**
Federal portion for Project Expense	$ 118,470.00	Local portion/Match General fund	$ 29,618.00
Vehicle Purchase	$ 144,458.00	Local Match	$ 25,493.00
Total Capital Request	$ 262,928.00	**Total Match Request**	$ 55,111.00

Required Documentation for Section 5310 or 5339(a) Funding

Applicants may attach a copy of the required document to the application, provide a link to the document, or ensure the document is available upon request.

Safety Plan

Applicants currently receiving financial assistance under 49 U.S.C. § 5307 that operate a public transportation system are required to submit a safety plan. An operator of a public transportation system that only receives financial assistance under the Formula Grants for Enhanced Mobility of Seniors and Individuals with Disabilities Program (49 U.S.C. § 5310) and/or Formula Grants for Rural Areas Program (49 U.S.C. § 5311) is exempt from this requirement.

Performance Targets/Transit Asset Management Plan

CAMPO subrecipients for Sections 5310 and 5339(a) funding must comply with applicable provisions of 49 C.F.R. Part 625. All subrecipients of Federal financial assistance under 49 U.S.C. Chapter 53 that own, operate, or manage capital assets used in the provision of public transportation must prepare a Transit Asset Management (TAM) Plan and establish performance targets on an annual basis for use in National Transit Database (NTD) reporting. This is done with the goal of helping achieve and maintain a state of good repair for the nation's public transportation systems. The plan must discuss the maintenance and safety of assets. The purpose is to ensure proper utilization of FTA assets and to help ensure success of the program/project. The plan should include vehicle maintenance information such as a detailed repair schedule (for routine maintenance) and the approach for unscheduled maintenance activities. A TAM Plan and annual performance targets must be submitted with this application. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

Title VI Plan

CAMPO subrecipients for Sections 5310 and 5339(a) funding must comply with applicable provisions of 49 C.F.R. Part 21. These provisions prohibit discrimination based on race, color, and national origin, including the denial of meaningful access of limited English proficient (LEP) persons. Applicants must submit a Title VI Plan with this application. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

Disadvantaged Business Enterprise (DBE) Program and DBE Goal

CAMPO subrecipients of Sections 5310 and 5339(a) funding must comply with applicable provisions of 49 C.F.R. Part 26. These provisions ensure nondiscrimination in the award and administration of US Department of Transportation (US DOT)-assisted contracts. Subrecipients also must create a level playing field on which DBEs can compete fairly for US DOT-assisted contracts. Applicants must submit a DBE Program and DBE Goal with this application. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

Vehicle Policy and Information

Applicants requesting funding for vehicle(s) must provide a description of the desired vehicle. Application must note if the vehicle is a replacement or an expansion of the existing vehicle fleet and if any special vehicle options are requested (i.e. 4-wheel drive, bike racks, etc.). Vehicle maintenance and safety policies must be included in the application to be considered for award. Rider policy information must be included, which will describe how to ride, complaint procedures, fare structure, and etc.

A Certificate of Insurance will need to be provided. City/CAMPO requires full coverage for the vehicle as long as City/CAMPO holds lien. The standard insurance for a paratransit vehicle under this program is Liability and Property Damage Insurance with a limit of $1,000,000 for each occurrence, for bodily injury, and property damage, naming Carson City/CAMPO as an additional insured. This shall be maintained through the useful life of the vehicle and until Carson City/CAMPO releases lien of the title.

Training Policy

Organization's employee training policy is required, which should include, at a minimum, the frequency, type, and who will be trained in safety, substance abuse awareness, passenger sensitivity, and customer service.

Drug and Alcohol Policy (5339(a) only)

Subrecipients of 5339(a) FTA funds are required to comply with regulations issued by the FTA on drug and alcohol testing, 49 C.F.R. Part 655. Among other requirements, these regulations require that all safety sensitive employees be tested for drug and alcohol use, pre-employment (drug only), random, reasonable suspicion and post-accident, that certifications be made, and reports submitted. There are limited exceptions to the testing requirements for contract maintenance workers under Section 5339(a) and for volunteers. Annual reporting of the testing results must be submitted to CAMPO by subrecipients on Management Information System (MIS) forms. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

Americans with Disabilities Act Policy

Subrecipients of 5310 and 5339(a) FTA funds are required to comply with applicable provisions of 49 C.F.R. Parts 38 and 39. The Americans with Disabilities Act of 1990 (ADA) prohibits discrimination and ensures equal opportunity and access for persons with disabilities. The FTA works to ensure nondiscriminatory transportation in support of its mission to enhance the social and economic quality of life for all Americans. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

Equal Employment Opportunities Program

Subrecipients of 5310 and 5339(a) FTA funds are required to comply with applicable provisions of 49 U.S.C. 5332. The FTA requires entities meeting certain thresholds to either submit or prepare and maintain an EEO Program. An EEO Program is a detailed set of procedures and employment information designed to ensure entities meet the EEO requirements. The FTA's Office of Civil Rights helps FTA recipients develop, implement, and monitor an effective Equal Employment Opportunity Program to ensure that recipients do not discriminate against any employees or applicants for employment because of race, color, religion, sex, disability, age or national origin. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

Public Notice

Subrecipients of 5310 and 5339(a) FTA funds are required to comply with applicable provisions of 49 U.S.C. 5323(b). The FTA requires applicants to provide notice and adequate opportunity for comment on projects impacting the public transportation service of a community. Any required public noticing conducted by the applicant shall be incorporated into application submittal.

Annual Certifications and Assurances

Successful applicants for Federal Section 5310 and 5339(a) funds must complete and sign the latest certifications and assurances prior to award of any federal assistance. Category 01 applies to all applicants. Category 02 applies to all applications for federal assistance in excess of $100,000, unless the applicant is a Native American tribe or organization, or a tribal organization. Categories 03 through 21 will apply to some, but not all, applicants and projects. This process ONLY excludes the submittal of documents with your application, NOT from collecting documents and having them on file. Certifications and assurances are special pre-award requirements specifically prescribed by federal law or regulation and do not encompass all federal laws, regulations, and directives that may apply to the applicant or its project. More information available on the *Links to Resources and Required Documentation* page (see Appendix A).

Authorizing Resolution

A signed resolution authorizing the appropriate applicant representative to execute and file an application with CAMPO on behalf of the agency must be submitted (see Appendix B for draft). Alternative resolution forms maybe accepted.

Appendix A
Links to Resources and Required Documentation

Certifications and Assurances
https://www.transit.dot.gov/funding/grantee-resources/certifications-and-assurances/certifications-assurances

Fixing America's Surface Transportation (FAST) Act
https://www.transit.dot.gov/FAST

United States Department of Transportation (USDOT)
www.dot.gov

Federal Transit Administration (FTA)
www.fta.dot.gov

Title 49 USC Chapter 53 Grant Programs
https://www.transit.dot.gov/grants

Best Practices Procurement Manual
https://www.transit.dot.gov/funding/procurement/best-practices-procurement-manual

OMB "Super Circular" or 2 C.F.R. 200 https://www.federalregister.gov/ articles/2013/12/26/2013-30465/uniform-administrative- requirements-cost-principles-and-audit-requirements-for-federal-awards
Civil Rights (ADA, DBE, Title VI, EEO)
www.fta.dot.gov/civil_rights.html

Drug and Alcohol Regulations
https://www.federalregister.gov/articles/2001/08/09/01-19234/prevention-of-alcohol-misuse- and-prohibited-drug-use-in-transit-operations

United States of American Department of Transportation FTA Master Agreement
https://www.transit.dot.gov/funding/grantee-resources/sample-fta-agreements/fta-grant-agreements

Transit Asset Management
https://www.transit.dot.gov/TAM

Data Universal Numbering System (DUNS) information
https://www.dnb.com/duns-number.html

Coronavirus Response and Relief Supplemental Appropriations Act of 2021
https://www.transit.dot.gov/funding/grants/coronavirus-response-and-relief-supplemental-appropriations-act-2021

American Rescue Plan Act of 2021
https://www.transit.dot.gov/funding/american-rescue-plan-act-2021

RESOLUTION NO: 2024-RTC-R-2

A RESOLUTION AUTHORIZING THE FILING OF AN APPLICATION FOR A FEDERAL TRANSIT ADMINISTRATION / CARSON AREA METROPOLITAN PLANNING ORGANIZATION GRANT UNDER 49 USC CHAPTER 53.

WHEREAS, the U.S. Department of Transportation is authorized to make grants to metropolitan planning organizations through the Federal Transit Administration to support transportation projects under 49 USC Chapter 53; and

WHEREAS, the Carson Area Metropolitan Planning Organization ("CAMPO") has been designated to administer certain transportation projects under 49 USC Chapter 53; and

WHEREAS, the contract for financial assistance will impose certain obligations upon the APPLICANT, including provisions by it of the local share of project costs;

NOW, THEREFORE, the Carson City Regional Transportation Commission ("RTC") resolves that:

(1) The RTC Chairperson is authorized to execute and file an application with CAMPO on behalf of our agency to aid in the financing of capital, and / or operating costs pursuant to 49 USC Chapter 53; and

(2) The Carson City Transit Coordinator is authorized to furnish such additional information as CAMPO may require in connection with the application or the project.

Upon motion by Commissioner Lucia Maloney, seconded by Commissioner Greg Novak, the foregoing Resolution was passed and adopted this 12 th day of ~~June~~, 2024 by the following vote.

VOTE: AYES: Chair Lori Bagwell
Vice Chair Lisa Schuette
Commissioner Jim Dodson
Commissioner Lucia Maloney
Commissioner Greg Novak

NAYS: None

ABSENT: None

ABSTAIN: None

The undersigned certifies that the foregoing is a true and correct statement.

Lori Bagwell, Chair

APPLICATION ELIGIBILITY CHECKLIST		Fund Type: 5339	
Applicant's Name: Carson City RTC – Jump Around Carson		Applicant's Request: $262,928	
ELIGIBILITY DOCUMENTATION REQUIRED	Page		
DETERMINATION OF ELIGIBILITY	1	Local Government and Operator of Public Transportation	
FTA FUNDING SOURCES	1	5339	
APPLICANT INFORMATION	2	UEI# DTBPJMA2QFC8 Carson City	
PROJECT INFORMATION	3	Rolling Stock & facility maintenance/bus stop improvements	
VEHICLE REQUEST FORM (if applicable)	4	ADA Accessible Bus < 30ft	
BUDGET SUMMARY	5	Provided	
MATCH SOURCE DOCUMENTATION	5	Indicated City General Fund	
AUTHORIZING RESOLUTION	Last Page	Yes, signed by RTC Chair	
ADDITIONAL REVIEW CRITIERA			
	NOTES	NEW APPLICANT	DOCUMENT ON FILE
SAFETY PLAN / PTASP		☐	☒
PROJECT TPYE/NEED IN TRANSIT PLAN	TAM Plan	☐	☒
TRANSIT ASSET MANAGEMENT PLAN		☐	☒
TITLE VI PLAN		☐	☒
DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM AND GOAL		☐	☒
VEHICLE MAINTENANCE POLICY (vehicle purchases)		☐	☒
TRAINING POLICY		☐	☒
DRUG AND ALCOHOL POLICY (Vehicle Purchases or 5339 Grants Only)		☐	☒
ADA POLICY (vehicle/passengers' information)		☐	☒
RIDER POLICIES and INFORMATION (vehicle purchases)		☐	☒
EQUAL EMPLOYMENT OPPORTUNITY PLAN		☐	☒
COPY OF VEHICLE INSURANCE POLICY (Evidencing Commercial Liability, General Liability, Collision, and Comprehensive Liability Insurance, with a limit of not less than One Million and no/100 Dollars ($1,000,000.00) per occurrence.)	City of Carson City	☐	☒
OTHER (Use of funding, benefit/impact to CAMPO, other potential funding opportunities, misc.)			

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STAFF REPORT

Report To:	Carson Area Metropolitan Planning Organization	**Meeting Date:**	July 10, 2024
Staff Contact:	Chris Martinovich, Transportation Manager		
Agenda Title:	Transportation Manager's Report		
Agenda Action:	Other / Presentation	**Time Requested:**	5 minutes

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Proposed Motion
N/A

Board's Strategic Goal
N/A

Previous Action

Background/Issues & Analysis

Applicable Statute, Code, Policy, Rule or Regulation

Financial Information
Is there a fiscal impact? No

If yes, account name/number:

Is it currently budgeted? No

Explanation of Fiscal Impact:

Alternatives

Motion: _____ 1) _____ Aye/Nay
2) _____ _____
_____
_____
_____
_____

_____
(Vote Recorded By)

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STAFF REPORT

Report To: Carson Area Metropolitan Planning Organization **Meeting Date:** July 10, 2024

Staff Contact: Chris Martinovich, Transportation Manager

Agenda Title: Other Comments and Reports

Staff Summary: This item may include future agenda items, status review of additional projects, internal communications and administrative matters, correspondence to CAMPO, project status reports, and comments or other reports from the CAMPO members or staff.

Agenda Action: Other / Presentation **Time Requested:** 5 minutes

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Proposed Motion
N/A

Board's Strategic Goal
N/A

Previous Action

Background/Issues & Analysis

Applicable Statute, Code, Policy, Rule or Regulation

Financial Information
Is there a fiscal impact? No

If yes, account name/number:

Is it currently budgeted? No

Explanation of Fiscal Impact:

Alternatives

Motion: _____ 1) _____ Aye/Nay
2) _____ _____
_____
_____
_____

_____

_____
(Vote Recorded By)