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Meadowlake Industrial Park
Master Traffic Impact Study
PCD File No. CS221, I221, I222
(LSC #S214950)
July 29, 2022

Traffic Engineer's Statement

This traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.



Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

A handwritten signature in black ink, appearing to read 'Jeffrey C. Hodgson'.

8/18/2022

Date

Meadowlake Industrial Park

Master Traffic Impact Study

Prepared for:
Meadowlake Developments, LLC
P.O. Box 1385
Colorado Springs, CO 80901

Contact: Kevin O'Neil

JULY 29, 2022

LSC Transportation Consultants
Prepared by: Jeffrey C. Hodsdon, P.E.

LSC #S214950
PCD File No. CS221, I221, I222



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July 29, 2022

Mr. Kevin O'Neil
Meadowlake Developments, LLC
P.O. Box 1385
Colorado Springs, CO 80901

RE: Meadowlake Industrial Park
El Paso County, CO
Master Traffic Impact Study
PCD File No. CS221, I221, I222
LSC #S214950

Dear Mr. O'Neil,

LSC Transportation Consultants, Inc. has prepared this master traffic impact study for the proposed Meadowlake Industrial Park to be located in El Paso County, Colorado. Located at El Paso County parcel IDs 4300000548, 4300000551, 4300000552, and 4300000553, the site is located northwest of the intersection of Falcon Highway/Curtis Road. Three site access points are proposed (one to Falcon Highway and two on Curtis Road). This report has been prepared to accompany a rezone submittal to El Paso County.

REPORT CONTENTS

The preparation of this report included the following:

- An inventory of existing roadway and traffic conditions on major thoroughfares adjacent to the site, including surface conditions, functional classification, widths, pavement markings, traffic control signs, posted speed limits, intersection and access spacing, roadway and intersection alignments, roadway grades, and auxiliary turn lanes;
- Weekday peak-hour turning movement traffic counts at several of the major intersections in the area;
- Estimated average weekday traffic (ADT) volumes on Falcon Highway, Curtis Road, Meridian Road, Judge Orr Road, and US Highway 24 (US Hwy 24);
- Projections of 20-year background traffic volumes on Falcon Highway, Curtis Road, Meridian Road, Judge Orr Road, and US Hwy 24;
- The proposed site land use and access plan;

- Estimates of average weekday and weekday peak-hour trip generation for the proposed industrial park and the estimated directional distribution of site-generated vehicle trips on roadways and intersections adjacent to and in the vicinity of the site;
- Projected site-generated and resulting total peak-hour intersection traffic volumes at the following “study area” intersections:
 - Falcon Highway/proposed three-quarter site access
 - Curtis Road/north site access (full-movement)
 - Curtis Road/Minden Drive south site access (right-in/right-out (RIRO))
 - Falcon Highway/Curtis Road
 - Curtis Road/Judge Orr Road
 - US Highway 24/Stapleton Road
 - US Highway 24/Judge Orr Road
 - US Highway 24/Meridian Road
- Projected total daily and peak-hour traffic volumes at the study-area intersections;
- Intersection level of service analysis at the study-area intersections;
- Evaluation of the long-term projected intersection volumes to determine potential requirements for any auxiliary right-/left-turn lanes at the proposed site access points, based on the criteria in El Paso County's Engineering Criteria Manual (ECM). Also included are potential long-term lane requirements; and
- Master-TIS-level findings and recommendations for submittal to El Paso County.

LIST OF OTHER TRAFFIC REPORTS USED IN THE PREPARATION OF THIS REPORT

Saddlehorn Ranch (dated July 11, 2019) was a previously-completed traffic report in the vicinity of the proposed Meadowlake Industrial Park. This report has been provided for reference and to provide context.

LAND USE AND ACCESS

Figure 1 shows the site location relative to the adjacent and nearby roadways. Located at El Paso County parcel IDs 4300000548, 4300000551, 4300000552, and 4300000553, the site is located northwest of the intersection of Falcon Highway/Curtis Road. Meadow Lake Airport is located north and west of the site. Single-family homes currently exist south of Falcon Highway, while the parcel east of Curtis Road is currently vacant.

Figure 2 shows the access points to the existing, adjacent public roads (preliminary) and the proposed zoning map. As shown in Figure 2, the site is planned for a mix of I-2, I-3, and CS zoning. Table 1 below shows the assumed land uses in this study.

Table 1: Land Use Table – Meadowlake Industrial Park

Land Uses		Corresponding ITE Land Uses (for use in the Trip Generation Estimate)				
Rezone Plan Land Uses	Acreage	ITE Land Use	ITE Land Use Category	F.A.R.	Land Use Quantities (KSF)	
CS Zone	19.11	Shopping Plaza (No Supermarket)	821	0.18	75	KSF (Thousands square feet of building floor area)
	9.56	Business Park	770	0.25	104	KSF (Thousands square feet of building floor area)
Industrial Zones (I-2 & I-3)	173.38	Industrial Park	130	0.29	2,190	KSF (Thousands square feet of building floor area)
Total (not including detention, open space, street ROW, etc.)	192.49					

Source: LSC Transportation Consultants, Inc

May-22

Two proposed site-access points to Curtis Road would be located approximately 1/4-mile (right-in/right-out (RIRO) south access) and 2,640 feet north of Falcon Highway (full-movement access). There would be 1/4-mile between the two proposed site access points. The north access would be located about 2,740 feet south of the Oscuro Trail – the south Saddlehorn development access. A three-quarter-movement access (left-in/right-in/right-out-only access), is also planned to Falcon Highway about 1,430 feet west of Curtis Road (755 feet east of McCandlish Road).

ROAD AND TRAFFIC CONDITIONS AND *MTCP* CLASSIFICATION

Figure 1 shows the roads adjacent to and in the vicinity of the site. Adjacent roads serving the site are identified below followed by a brief description of each:

US Highway (US Hwy) 24 is located about one mile north of the site (via Curtis Road) and about 1.5 miles west of the site (via Judge Orr Road). US Hwy 24 is also accessible from the southwest corner of the site via Falcon Highway. The travel distance to/from the intersection of US Hwy 24/Falcon Highway via Falcon Highway is about four miles.

This State Highway extends east/west across Colorado connecting the Buena Vista, Colorado Springs, and Limon areas. US Hwy 24 is planned to be widened to four lanes through the Falcon area and is classified as an Expressway by the Colorado Department of Transportation (CDOT) and the 2016 *El Paso County Major Transportation Corridors Plan (MTCP)*.

Judge Orr Road is a two-lane roadway that extends east from Eastonville Road across most of El Paso County. It is shown on the *El Paso County 2040 Major Transportation Corridors Plan* and the *Preserved Corridor Network Plan* as a four-lane Minor Arterial west of Curtis Road. Posted speed limits range from 45 to 55 miles per hour (mph). West of Curtis Road, the speed limit is 45 mph, while it generally increases to 55 mph east of Curtis Road. The intersection of US Hwy 24/Judge Orr is currently signalized. Due to the oblique angle of this intersection, the eastbound and westbound approaches are split-phased. The *US 24 Access Control Plan/PEL Study* shows future plans for realignment of Judge Orr at US Hwy 24 to improve the intersection and provide an intersection angle closer to 90 degrees.

Curtis Road is a two-lane roadway that extends south from the intersection of US Hwy 24/Stapleton Road intersection to Drennan Road. It is shown as a two-lane, rural Principal Arterial on El Paso County's *2040 Major Transportation Corridors Plan* and a four-lane Principal Arterial

on the *Preserved Corridor Network Plan*. Adjacent to the site, the posted speed limit is 45 mph. Both intersections of Curtis Road/Judge Orr Road and Curtis Road/Falcon Highway are two-way, stop-sign controlled. The newer section north of Judge Orr was constructed to current *ECM* standards with paved shoulders, etc. Generally, Curtis Road is an “unimproved,” two-lane paved road between Judge Orr and Falcon Highway.

Falcon Highway extends from US Hwy 24 to Ellicott Highway and is classified as a two-lane Minor Arterial on the 2040 El Paso County *MTCP*. Adjacent to the site, the posted speed limit is 55 mph. Currently, the intersection of Falcon Highway/Curtis Road has an auxiliary right-turn lane on the eastbound approach and auxiliary left-turn lanes on the northbound and southbound approaches. The westbound approach is currently a single lane at the two-way stop-sign-controlled (TWSC) intersection of Falcon Highway/Curtis Road.

Meridian Road extends north from South Blaney Road to County Line Road. The Meridian Road project connecting “New Meridian” Road to US Hwy 24 has been completed. As classified on the County’s *MTCP*, Meridian Road is shown as a:

- Four-lane Principal Arterial south of Rex Road
- Four-lane Minor Arterial north of Rex Road
- Two-lane Minor Arterial north of Murphy Road and south of Falcon Highway

Existing Traffic Volumes

Vehicular-turning-movement counts were conducted at the study-area intersections. Figure 3 shows these turning-movement volumes, as well as the average weekday traffic volumes (estimated based on factored peak-hour count data) on the study-area roadways. Raw count data are attached.

- Curtis Road/Falcon Highway
 - Wednesday, April 20, 2022 from 6:30 – 8:30 a.m.
 - Wednesday, April 20, 2022 from 4:00 – 6:00 p.m.
- Curtis Road/Judge Orr Road
 - Thursday, April 21, 2022 from 6:30 – 8:30 a.m.
 - Thursday, April 21, 2022 from 4:00 – 6:00 p.m.
- US 24/Judge Orr Road
 - Tuesday, May 10, 2022 from 6:30 – 8:30 a.m.
 - Tuesday, May 10, 2022 from 4:00 – 6:00 p.m.
- US 24/Meridian Road
 - Thursday, August 5, 2021 from 6:30 – 8:30 a.m.
 - Wednesday, August 4, 2021 from 4:00 – 6:00 p.m.
- US 24/Stapleton Drive
 - Wednesday, August 6, 2021 from 6:30 – 8:30 a.m.
 - Wednesday, August 6, 2021 from 4:00 – 6:00 p.m.
- New Meridian Road/Falcon Highway
 - Thursday, April 28, 2022 from 6:30 – 8:30 a.m.
 - Thursday, April 28, 2022 from 4:00 – 6:00 p.m.

PEDESTRIAN AND BICYCLE FACILITIES

The following roadway improvement projects have been identified as being needed by the year 2040 per Map 15 and Table 5 of El Paso County's 2016 *MTCP*:

- M4 – Falcon Highway from Meridian Road to South Peyton Highway
 - Bicycle and secondary regional trail improvements (6.95 miles)
- M7 – Elbert Road from US 24 to Judge Orr Road
 - Bicycle improvements (2.32 miles)
- M8 – Judge Orr Road from Eastonville Road to South Peyton Highway
 - Bicycle improvements (2.98 miles)
- M9 – Stapleton Road from Meridian Road to US 24
 - Bicycle improvements (2.56 miles)

TRIP GENERATION

Estimates of the vehicle trips projected to be generated by Meadowlake Industrial Park have been made using the nationally published trip-generation rates from *Trip Generation, 11th Edition, 2021* by the Institute of Transportation Engineers (ITE). Corresponding trip-generation rates from the following ITE Land Use Categories have been used to develop the trip-generation estimates for site buildout:

- “130 – Industrial Park”
- “770 – Business Park”
- “821 – Strip Retail Plaza Without a Supermarket (40-150 KSF)”

Table 2 below presents a summary of the estimated site trip generation. A detailed trip-generation estimate for the industrial park, including ITE rates for the proposed land uses, is presented in (attached).

Table 2: Estimated External Site Vehicle-Trip Generation

Analysis Period	Weekday		
	In	Out	Total
Morning Peak Hour*	873	254	1,127
Evening Peak Hour*	490	994	1,484
Daily/24-hour	7,770	7,770	15,439

*Less Internal Capture Trips

The proposed Meadowlake Industrial Park is projected to generate about 15,493 new driveway vehicle trips on the average weekday during a 24-hour period, with approximately half entering and half exiting the site. During the morning peak hour, approximately 873 entering vehicles and 254 exiting vehicles would be generated (less internal capture trips). Approximately 490 entering and 994 exiting vehicles (less internal capture trips) would be generated by the site during the evening peak hour.

Pass-By Trips

The total number of trips to be generated by the site has also been aggregated by trip type to account for pass-by trips. A pass-by trip is one made by a motorist who would already be on an adjacent road regardless of the proposed development, but who stops in at the site while passing by. That pass-by motorist would then continue on his or her way to a final destination in the original direction. Table 6 (attached) shows the percent of the trips generated that were assumed to be pass-by trips. The passby trip percentage of 34 percent has been based on data from the *Trip Generation Handbook - An ITE Proposed Recommended Practice, 3rd Edition, 2014* by ITE.

Analysis accounts for pass-by trips from Curtis Road & Falcon Highway. The ITE-average percent pass-by trips for shopping-related land uses were used for this study, as summarized in Table 6. The resulting trip estimate is shown in Table 6.

The proposed Meadowlake Industrial Park is projected to generate about 11,406 new, external vehicle trips on the average weekday during a 24-hour period, with approximately half entering and half exiting the site. During the morning peak hour, approximately 780 entering vehicles and 199 exiting vehicles would be generated (less internal capture trips). Approximately 316 entering and 803 exiting vehicles (less internal capture trips) would be generated by the site during the evening peak hour.

TRIP DISTRIBUTION AND ASSIGNMENT

Trip Directional Distribution

Estimating the directional distribution of site-generated vehicle trips to the study-area roads and intersections is a necessary component in determining the site's traffic impacts.

LSC has estimated distributions for three different trip types – primary, passby and diverted (or diverted linked) trips. These trip types are as defined in Chapter 5 of the *Trip Generation Manual 9th Edition Volume 1: User's Guide and Handbook*, published by the Institute of Transportation Engineers.

Figure 4 shows the percentages of the short-term site-generated vehicle trips projected to be oriented to and from the site's major approaches, while Figure 5 shows long-term site-generated directional distribution percentages. Estimates have been based on the following factors: the proposed general land uses, the area roadway system serving the site, and the site's geographic location relative to the overall greater El Paso County/Colorado Springs area.

Site-Generated Traffic

Short-Term

Short-term site-generated traffic volumes have been estimated at the study area intersections. The volumes have been calculated by applying the short-term directional distribution percentages estimated by LSC (from Figure 4) to the trip-generation estimates (from Table 6). Figure 6 shows the projected short-term site-generated traffic volumes for the weekday morning and evening peak hours. The figure also shows the estimated average daily traffic volumes (ADTs).

Long-Term

Long-term site-generated traffic volumes have been estimated at the study area intersections. The volumes have been calculated by applying the long-term directional distribution percentages estimated by LSC (from Figure 5) to the trip-generation estimates (from Table 6). Figure 7 shows the projected site-generated traffic volumes for the weekday morning and evening peak hours. The figure also shows the estimated average daily traffic volumes (ADTs).

Existing-Plus-Site-Generated Traffic Volumes

Figure 8 shows the sum of the existing traffic volumes (from Figure 3) and short-term site-generated peak-hour traffic volumes (shown in Figure 6). These volumes represent the projected short-term total traffic following site buildout. Laneage and traffic control at the study-area intersections following site buildout are shown in Figure 8.

2042 Background Traffic Volumes

The 2042 background traffic volumes are generally based on the projections presented in the *MTCP*, but adjustments have been made to account for the removal of the PUD, urban-density land use and corresponding trip generation from the former Santa Fe Springs development area. For more information and details, please refer to PCD File Nos. P178 through P1714. The County rezoned the former Santa Fe Springs development parcels to A-5, A-35, F-5, RR.5, RR2.5, and RR-2, which replaced the Santa Fe Springs PUD 1 zoning.

US Hwy 24 volumes are estimates by LSC based, in part, on the Colorado Department of Transportation *US 24 Planning and Environmental Linkages Study Final Corridor Conditions Report* (dated December 2016). These volumes assume the 2042 roadway system including the extension of Stapleton Road west to Briargate Parkway. Traffic from the proposed Meadowlake Industrial Park is **not** included in the 2042 **background** traffic volumes.

2042 Total Traffic Volumes

Figure 10 shows the sum of 2042 background traffic volumes (from Figure 9) plus long-term site-generated traffic volumes (from Figure 7).

LEVEL OF SERVICE ANALYSIS

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection and is indicated on a scale from "A" to "F." LOS A is indicative of little congestion or delay. LOS F indicates a high level of congestion or delay. Table 3 shows the level of service delay ranges for signalized and unsignalized intersections.

Table 3: Intersection Levels of Service Delay Ranges

Level of Service	Signalized Intersections	Unsignalized Intersections
	Average Control Delay (seconds per vehicle)	Average Control Delay (seconds per vehicle) ⁽¹⁾
A	10.0 sec or less	10.0 sec or less
B	10.1-20.0 sec	10.1-15.0 sec
C	20.1-35.0 sec	15.1-25.0 sec
D	35.1-55.0 sec	25.1-35.0 sec
E	55.1-80.0 sec	35.1-50.0 sec
F	80.1 sec or more	50.1 sec or more

(1) For unsignalized intersections, if V/C ratio is greater than 1.0 the level of service is LOS F, regardless of the projected average control delay per vehicle.

LOS values have been included on each figure for each turning movement/approach during the weekday morning and evening peak hours for the proposed site access intersections and off-site intersections in the study area:

- Figure 3: Existing Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 8: Existing + Site Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 9: 2040 Background Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 10: 2040 Background + Site Traffic, Lane Geometry, Traffic Control, and LOS

LOS calculations for long-term scenarios were based upon the recommended lane geometries and traffic controls outlined in the figures above.

Falcon Highway/South Site Access (Three-Quarter Movement)

All individual turning movements and approaches are projected to operate at LOS C or better through the 2040 horizon year. This analysis assumes that the southbound left-turn movement would be prohibited (three-quarter-movement intersection configuration). Please refer to Figure

8 and Figure 10 for recommended lane configurations and LOS summaries at this intersection during the short- and long-term scenarios, respectively.

Curtis Road/North Site Access (Full-Movement)

Short-Term

The unsignalized analysis indicates that the eastbound-left turning movement is projected to operate at LOS F during the PM peak hour of the short-term total scenario. It is not uncommon for minor-street movements like this to operate at LOS E or F during peak periods. Gaps created by traffic control improvements at the nearby intersection of Falcon Highway/Curtis Road would allow for vehicles to exit the site from this access.

All other individual turning movements and approaches are projected to operate at LOS D or better during the short-term as a two-way stop-sign-controlled intersection with the following auxiliary turn lanes: southbound right-turn deceleration lane, southbound right-turn acceleration lane, and northbound left-turn deceleration lane. Please refer to Figure 8 for recommended lane configurations and LOS summaries at this intersection during the short-term scenario.

As development progresses and as through traffic increases on Curtis Road, it is likely that a traffic signal will become warranted. The timing of a traffic control change from a Stop-sign to signal or roundabout can be addressed with the Preliminary Plan or Final Plat(s).

Long-Term

Please refer to Figure 10 for recommended lane configurations and LOS summaries at this intersection during the long-term scenario:

- The eastbound left-turning movement is projected to operate at LOS F during both long-term peak hours if the intersection were to operate as two-way stop-sign-controlled.
- All individual turning movements would operate at LOS D or better if this intersection were to be signalized.
- If the intersection were to be converted to a two-lane roundabout, all individual approaches would operate at LOS C or better during the long term.

Curtis Road/South Site Access (RIRO)

All individual turning movements and approaches are projected to operate at LOS C or better through the long term as a two-way stop-sign-controlled intersection with the following auxiliary turn lanes: southbound right-turn deceleration lane, southbound right-turn acceleration lane, and northbound left-turn deceleration lane. Please refer to Figure 8 and Figure 10 for recommended lane configurations and LOS summaries at this intersection during the short- and long-term scenarios, respectively.

US Highway 24/Stapleton Road

Short-Term

Currently, the intersection of US Hwy 24/Stapleton is two-way stop-sign-controlled (TWSC). The following turning movements currently operate at LOS E or worse, with or without the addition of site-generated traffic: northwest-bound left, northwest-bound through, southeast-bound left, and southeast-bound through.

Once signalized, all individual turning movements and the intersection overall currently operate at and are projected to operate at LOS C or better during both short-term peak hours, with or without the addition of site-generated traffic. CDOT has indicated that this intersection is on the list of intersections programmed for signalization.

Long-Term

Based on the long-term scenario analyzed in this report, dual left-turn lanes are projected to be constructed to all approaches at the intersection of US Hwy 24/Stapleton Road. Additionally, all approaches on US Hwy 24 and Stapleton Road would be improved to two through lanes in each direction. Assuming the planned future traffic-signal control, all individual turning movements and the intersection overall are projected to operate at LOS D or better during both long-term peak hours, with or without the addition of site-generated traffic. Please refer to Figure 9 and Figure 10 for anticipated/assumed future lane geometry and LOS at this intersection.

Judge Orr Road/Curtis Road

Short-Term

Currently, all individual approaches/turning movements at the intersection of Judge Orr/Curtis operate at LOS B or better during both peak hours. The northbound-left and southbound-left turning movements are projected to operate at LOS F during the short-term with the addition of site-generated traffic if the intersection were to remain TWSC. If the intersection were to have all-way stop-sign control, the northbound-through/right and southbound-through/right turn lanes would operate at LOS E during at least one peak period. If the intersection of Judge Orr/Curtis were to be converted to a roundabout, all individual turning movements would operate at LOS C or better during the short-term buildout scenario.

Long-Term

If the intersection of Judge Orr/Curtis were to be converted from TWSC to a roundabout, all individual turning movements would operate at LOS B or better during both peak hours of the long-term buildout scenario. This intersection improvement was previously recommended in the

Saddlehorn Ranch traffic study. Additionally, all approaches on Judge Orr Road and Curtis Road would be improved to two through lanes in each direction (per the 2040 *MTCP*).

Falcon Highway/Curtis Road

Short-Term

Currently, all individual approaches/turning movements at the intersection of Falcon Highway/Curtis Road operate at LOS D or better during both peak hours. The northbound left-turn and southbound left-turn movements are projected to operate at LOS E or worse during the short-term with the addition of site-generated traffic. If the intersection of Falcon Highway/Curtis Road were to be converted from TWSC to a roundabout, all individual turning movements would operate at LOS B or better during the short-term buildout scenario.

Long-Term

If the intersection of Falcon Highway/Curtis Road were to be converted from TWSC to a roundabout, all individual turning movements would operate at LOS C or better during both peak hours of the long-term buildout scenario. This intersection improvement was previously recommended in the Saddlehorn Ranch traffic study. Additionally, all approaches at the Falcon Highway/Curtis Road intersection would be improved to two through lanes in each direction (per the 2040 *MTCP*).

AUXILIARY TURN-LANE ANALYSIS, INTERSECTION CONFIGURATION, AND TRAFFIC CONTROL

Auxiliary Turn-Lane Requirements

Auxiliary turn lanes at the access points and study area intersections would be required to meet design criteria specified in El Paso County's *Engineering Criteria Manual* (*ECM* Tables 2-24 and 2-27) or the Colorado State Highway Access Code (CDOT) for US Hwy 24 intersections.

Turn-Lane Criteria – El Paso County

Table 4 summarizes peak-hour auxiliary left- and right-turn lane thresholds according to *ECM* criteria. Roadway classifications for key County thoroughfares in the vicinity of the site include:

- Expressway – US Highway 24
- Principal Arterial – Curtis Road, Meridian Road
- Minor Arterial – Judge Orr Road, Falcon Highway

Table 4: ECM Auxiliary Turn-Lane Thresholds by Functional Classification

Functional Classification	Deceleration Lanes		Acceleration Lanes	
	Left	Right	Left	Right
Expressway	Required	10+ vph	*	10+ vph
Principal Arterial	10+ vph	25+ vph	*	50+ vph
Minor Arterial and Lower	25+ vph	50+ vph	*	Generally not required

* May be required if the design would benefit safety and roadway operations
Note: vph = vehicles per hour

Based on projected volumes and *ECM* criteria summarized in Table 4, auxiliary turn lanes would be required for the following turning movements at the following study-area intersections.

Note: all proposed auxiliary turn lanes at these intersections have been based on the *ECM* design speed for the roadway's classification. However, at the time of Preliminary Plan submittal, these auxiliary turn-lane lengths may be adjusted for storage lengths and/or based on the more site-specific design speed of the adjacent roadway (if different from the *ECM* design speed by general roadway classification).

Falcon Highway/Proposed Three-Quarter Site Access

For the proposed three-quarter-movement intersection configuration on Falcon Highway, LSC recommends the following auxiliary turn lanes, based on projected site-generated traffic volumes:

- Eastbound left-turn deceleration lane
 - 290-foot deceleration lane
 - 150-foot storage length
 - 240-foot approach taper
 - 55:1 redirect taper length
- Westbound right-turn deceleration lane
 - 290-foot deceleration lane
 - 240-foot approach taper
 - 55:1 redirect taper length

Curtis Road/ North Site Access (Full-Movement)

Short Term/Long Term

The north site access on Curtis Road, if not constructed as a roundabout, would likely require the following auxiliary turn lanes:

- Southbound right-turn deceleration lane
 - 235-foot deceleration lane
 - 200-foot approach taper
 - 45:1 redirect taper length
- Southbound right-turn acceleration lane (or continuous southbound right turn lane south to the RI/RO access).
 - 550-foot acceleration lane
 - 13.5:1 transition taper ratio
- Northbound left-turn deceleration lane
 - 235-foot deceleration lane
 - 150-foot storage length
 - 200-foot approach taper
 - 45:1 redirect taper length

Note: if a roundabout is selected for traffic control, the above would not apply. Any auxiliary turn lanes would be identified as part of the roundabout design.

Curtis Road/South Site Access (Right-in/Right-out)

Short Term/Long Term

The south site access on Curtis as an unsignalized, right-in/right-out (turn-restricted) intersection would likely require the following auxiliary turn lanes:

- Southbound right-turn deceleration lane
 - 235-foot deceleration lane
 - 200-foot approach taper
 - 45:1 redirect taper length
- Southbound right-turn acceleration lane (or continuous southbound right turn lane south to Falcon Highway)
 - 550-foot acceleration lane
 - 13.5:1 transition taper ratio
- Northbound left-turn deceleration lane
 - 235-foot deceleration lane
 - 150-foot storage length
 - 200-foot approach taper
 - 45:1 redirect taper length

Judge Orr Road/Curtis Road

The intersection will likely require improvements/upgrades, including traffic control, in order for all individual turning movements/approaches to operate at an acceptable level of service upon site buildout. The development may be required to participate in future improvements or construct improvements. The intersection could potentially be signed AWSC in the short term once AWSC warrants are met.

Although the “buildout” scenario has been assumed for the “existing + site” (short-term) volumes, this project will likely take a while to build out. As such, the northbound-left-turning movement is projected to operate at LOS F during the short term for this project. Although the roundabout improvements in the Saddlehorn Ranch traffic study were recommended as a long-term improvement, the need for intersection improvements in the “immediate term” could be addressed with Preliminary Plans/site development plans/plats as the project develops over time.

Note: The following auxiliary turn-lane upgrades would not be required if a roundabout were to be constructed at the intersection of Falcon Highway/Curtis Road. However, these auxiliary turn lanes may be needed if two-way stop control or all-way stop-sign control is used as an intermediate traffic condition:

- Eastbound right-turn deceleration lane
 - 290-foot acceleration lane
 - 240-foot approach taper
 - 55:1 redirect taper length

Falcon Highway/Curtis Road

The intersection will likely require improvements/upgrades, including traffic control, in order for all individual turning movements/approaches to operate at an acceptable level of service upon site buildout. The development may be required to participate in future improvements or construct improvements. The intersection of Falcon Highway/Curtis Road could potentially be signed AWSC during the short term once AWSC warrants are met, as all approaches would operate at LOS D or better with AWSC.

Note: The following auxiliary turn-lane upgrades would not be required if a roundabout were to be constructed at the intersection of Falcon Highway/Curtis Road. However, these auxiliary turn lanes may be needed if all-way stop-sign control is used as an intermediate traffic condition:

- Southbound right-turn deceleration lane
 - 235-foot deceleration lane
 - 200-foot approach taper
 - 45:1 redirect taper length
- Eastbound left-turn deceleration lane
 - 290-foot acceleration lane
 - 240-foot approach taper
 - 55:1 redirect taper length
- Westbound right-turn deceleration lane
 - 290-foot deceleration lane
 - 240-foot approach taper
 - 55:1 redirect taper length

Falcon Highway/McCandlish Road

Per staff comments, the potential need for a westbound left-turn lane on Falcon Highway at the McCandlish Road intersection will be evaluated and analysis will be provided in the TIS submitted with the **preliminary plan** application. Note: it is unlikely that the *ECM* turning-volume threshold for a westbound left-turn lane will be exceeded. However, the evaluation will consider other factors including the detailed eastbound left-turn lane geometry needed for the site access on Falcon Highway, including redirect tapers, as well as sight distance, grade, the crest vertical-curve geometry on Falcon Highway, etc.

Please refer to the detailed improvements table in Table 5 (attached) for a complete list.

ROADWAY CLASSIFICATIONS

Classifications of internal streets within the site will be determined with the Preliminary Plan. However, it is most likely that the streets connecting to Curtis Road and Falcon Highway will be classified as Urban Non-Residential Collectors.

ROADWAY SEGMENT IMPROVEMENTS

Curtis Road

Curtis Road should be improved to a two-lane, Principal Arterial. Dedication of right-of-way for one-half of a two-lane Principal Arterial with ROW reservation for additional width up to 90 feet from centerline for the four-lane Principal Arterial corridor preservation. The improvement would be from Falcon Highway north to connect to the segment of Curtis planned for upgrade as part of the Saddlehorn development to the north

Falcon Highway

Falcon Highway should be improved to a two-lane, Rural Minor Arterial, as shown in the 2040 *MTCP* (Project U5). Dedication of right-of-way for one-half of a two-lane, rural Minor Arterial with ROW reservation for additional width up to 90 feet from centerline for the four-lane Minor Arterial corridor preservation.

DEVIATIONS

Deviations are not typically included with a rezone submittal. However, the staff comments have suggested the south Curtis Road access deviation be submitted now.

- A deviation will be required for the proposed south access on Curtis Road due to the spacing along Curtis. The ECM requires a minimum of 1/2-mile spacing between public street intersections on Principal Arterials. The south Curtis Road access is now proposed as a right-in/right-out, and a deviation request is included with this submittal.
- A deviation for the Falcon Highway access will be required at the Preliminary Plan stage due to the spacing to McCandlish Road to the west.

COUNTY ROAD IMPROVEMENT FEE PROGRAM

Transportation Impact Fees

Per *ECM* Appendix B: *State what the current applicable Transportation Impact Fees are and what option the developer will be selecting for payment.*

The applicant will be required to participate in this program. The PID option will be identified with a future Preliminary Plan/Plat submittal.

MTCP Improvements

Per the County TIS Checklist: *State whether the MTCP or other approved corridor study calls for the construction of improvements in the immediate area.*

The following roadway improvement projects have been identified as being needed by the year 2040 per Map 13 and Table 4 of El Paso County's 2016 *MTCP*. Note: this list below is not indicating that this project must complete all these improvements, rather simply echoing a general list from the *MTCP* of nearby improvements called out on the *MTCP*, based on the collective impacts of new development in general. Specific obligations for this project will be addressed with the Preliminary Plan.

- U1 – Curtis Road from Judge Orr Road to State Highway 94 (\$35,549,000)
 - Existing conditions – 2-lane Rural Unimproved County Road
 - Future conditions – 2-lane Principal Arterial
- U5 – Falcon Highway from US Hwy 24 to 1 mile east of Curtis Road (\$16,509,000)
 - Existing conditions – 2-lane Rural Unimproved County Road
 - Future conditions – 2-lane Minor Arterial
- C12 – Stapleton Road from Towner Road to Judge Orr Road (\$41,076,000)
 - Existing conditions – 2-lane Principal Arterial
 - Future conditions – 4-lane Principal Arterial
- C14 – Judge Orr Road from Eastonville Road to Peyton Highway (\$38,248,000)
 - Existing conditions – 2-lane Minor Arterial
 - Future conditions – 4-lane Minor Arterial

Per the County TIS Checklist: *State whether or not any improvements affected by the project are reimbursable under the current Major Transportation Corridors Plan (MTCP) and Road Fee program.*

The determination of specific “eligible improvements” affected by the project – i.e., which improvements the project will need to construct and determine if those improvements will qualify as eligible for credit (and reimbursement) – will be determined with the Preliminary Plan. This would also include determination of eligible intersection improvements.

MULTI-MODAL TRANSPORTATION AND TDM OPPORTUNITIES

The following roadway improvement projects have been identified as being needed by the year 2040 per Map 15 and Table 5 of El Paso County’s 2016 MTCP:

- M4 – Falcon Highway from Meridian Road to South Peyton Highway
 - Bicycle and secondary regional trail improvements (6.95 miles)
- M7 – Elbert Road from US Hwy 24 to Judge Orr Road
 - Bicycle improvements (2.32 miles)
- M8 – Judge Orr Road from Eastonville Road to South Peyton Highway
 - Bicycle improvements (2.98 miles)
- M9 – Stapleton Road from Meridian Road to US 24
 - Bicycle improvements (2.56 miles)

Also, the Falcon Park-and-Ride facility recently opened at the intersection of Meridian Road/Swingline Road.

IMPROVEMENTS SUMMARY TABLE

Please refer to Table 5, which presents a summary of improvements.

FINDINGS AND CONCLUSIONS

- The site is projected to generate about 15,439 new, driveway vehicle trips on the average weekday.
- During the weekday morning peak hour of adjacent street traffic, 873 vehicles would enter the site while 254 vehicles would exit (less internal capture trips).
- During the weekday evening peak hour of adjacent street traffic, 5490 vehicles would enter the site while 994 vehicles would exit (less internal capture trips).
- In order for both intersections to operate at acceptable levels of service, LSC recommends that the intersections of Curtis Road/Falcon Highway and Curtis Road/Judge Orr Road be converted to roundabouts in the short-term.
- As a TWSC intersection, the eastbound left-turning movement at both proposed site accesses on Curtis Road (Sunriver Drive and Minden Drive) would operate at LOS C or better during the short term but LOS F during the long term. All approaches at both site accesses on Curtis Road are projected to operate at LOS C or better, during the long-term scenario, if both were converted to roundabouts.
- Please refer to the Improvements Table for a detailed list of roadway system improvements.
- Please refer to the “Auxiliary Turn-Lane Analysis” section above for preliminary recommendations. These are subject to change at the Preliminary Plan stage.
- Per staff comments, the potential need for a westbound left turn lane on Falcon Highway at the McCandlish Road intersection will be evaluated and analysis will be provided in the TIS submitted with the preliminary plan application.
- All major internal streets within the site will likely be designed to meet Urban Non-Residential Collector criteria prescribed in the ECM. Classifications will be determined at the Preliminary Plan stage.
- CDOT State Highway Access Permit applications will be submitted at the Preliminary Plan stage of development when the Land Use(s) and associated trip generation are defined.

* * * * *

Please contact me if you have any questions regarding this report.

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC.

By: Jeffrey C. Hodsdon, P.E.
Principal

JCH/JAB:jas

Enclosures: Tables 5-6
Figures 1-10
Traffic Count Reports
Synchro Los Reports

Tables



Table 5: Roadway Improvements for Meadowlake Industrial Park

Roadway Segment Improvements			
Item #	Improvement	Timing	Responsibility
1.1	Curtis Road (Short-Term) -- Falcon Hwy to south end of planned Saddlehorn improvements Upgrade to 2-lane Principal Arterial	With this development; potential for phasing with subdivision/plat filings	Details TBD Applicant or potentially with the property on the east side of Curtis Road if that land owner happens to begin developing that property)
1.2	Curtis Road (Long-Term) -- Falcon Hwy to SH 94 Upgrade to 2-Lane Rural Principal Arterial	Shown in 2040 MTCP (Project U1)	Details TBD Applicant will pay fee program traffic impact fees
1.3	Falcon Highway Upgrade to 2-Lane Rural Minor Arterial	Shown in 2040 MTCP (Project US)	Details TBD Applicant will pay fee program traffic impact fees
1.4	Stapleton Road Widen to 4-Lane Rural Principal Arterial	Shown in 2040 MTCP (Project C12)	Details TBD Applicant will pay fee program traffic impact fees
1.5	Judge Orr Road Widen to 4-Lane Rural Minor Arterial	Shown in 2040 MTCP (Project C14)	Details TBD Applicant will pay fee program traffic impact fees
Adjacent County Arterial Roadway ROW Requirements			
Item #	Improvement	Timing	Responsibility
2.1	Curtis Road 2-Lane Rural Principal Arterial 130' to 150' estimated ROW dedication (Note: 4-lane Rural Principal is 180')	Shown in 2040 MTCP	Applicant (west side - half ROW)
2.2	Curtis Road 4-Lane Rural Principal Arterial 180' right-of-way preservation	Shown in 2060 Corridor Preservation Plan	Applicant (west side - half ROW)
Internal Subdivision Roadways			
Item #	Improvement	Timing	Responsibility
3.1	Construct major internal streets to County Urban Non-Residential Collector Standards (to be determined)	With subdivision/plat filings	Applicant
Off-Site Intersections			
US Highway 24/Stapleton Intersection			
Item #	Improvement	Timing	Responsibility
4.1	Submit Access Permit Application to CDOT	Submit access permit application with the Preliminary Plan stage of the development process when the Land Use(s) and associated trip generation are defined.	Applicant
4.2	Escrow towards cost of signalization	TBD w/Preliminary Plan/Plat	CDOT plans to signalize this intersection based on their priority system. This project is only at the rezone stage. Specific responsibility with respect to this project for possible installation or participation toward the cost of the signal will be addressed at the Preliminary Plan stage of the development process when the Land Use(s) and associated trip generation are defined. The responsibility will be determined with the access permit process and the application will be submitted with the preliminary plan.
US Highway 24/Falcon Highway and US Highway 24/Judge Orr Intersections			
Item #	Improvement	Timing	Responsibility
5.1	Submit Access Permit Application(s) to CDOT as required.	Submit access permit application(s) with the Preliminary Plan or platting/site development plan stage of the development process when the Land Use(s) and associated trip generation are defined.	Applicant
5.2	Potential escrows toward the construction of signals and/or improvements at these intersections.	To be determined as part of the access permit process.	Applicant
Falcon Highway/Meridian Road Intersection			
6.1	Short Term Westbound right-turn deceleration lane	Currently warranted by ECM	Escrow for improvement or construction at the time of development (fee program credit per fee program provisions)
Judge Orr/Curtis Road Intersection			
Item #	Improvement	Timing	Responsibility
7.1	Short Term Eastbound right-turn deceleration lane	Currently warranted by ECM	Escrow for improvement or construction at the time of development (fee program credit per fee program provisions)
7.2	Short Term Potentially sign for all way stop-sign control	Once warrants for AWSC are met	Applicant
7.3	Long Term (or Prior to 2040) Participate on a pro-rata basis with a fair share contribution or upgrade the intersection, potentially including new traffic control, to mitigate substandard level of service, as necessary.	Once LOS of AWSC drops below acceptable levels; and/or once signal warrants are met. Depends on the pace and intensity of development of this site and the rate of other area development and associated background traffic growth.	The applicant will pay fee program traffic impact fees and any required intersection improvements (or participation) may be fee-program eligible for credit based on the program guidelines.
7.4	Long Term (if signalized in the future) Lengthen northbound left-turn deceleration lane	As needed based on future speed limit and turning volume/stacking length criteria	Escrow for improvement or construction if warranted at the time of development (fee program credit per fee program provisions)
Adjacent & Access Intersections			
Curtis Road/Falcon Highway			
Item #	Improvement	Timing	Responsibility
8.1	Short Term/Long Term Change to AWSC traffic control as necessary. Participate on a pro-rata basis with a fair share contribution toward upgrade the intersection, potentially including new traffic control, to mitigate substandard level of service, as necessary. Significant improvements may be needed in the short term if rapid site buildout and area growth occurs. Otherwise, intermediate term.	Once LOS of AWSC drops below acceptable levels; and/or once signal warrants are met. Depends on the pace and intensity of development of this site and the rate of other area development and associated background traffic growth.	The applicant will pay fee program traffic impact fees and any required intersection improvements (or participation) may be fee-program eligible for credit based on the program guidelines.
8.2	Short Term (if planned to be signalized in the future) Construct SB right-turn deceleration lane on Curtis Road approaching Falcon Highway	With subdivision/plat filings, per ECM turning volume thresholds	Escrow for pro-rata share of improvement or construction if warranted at the time of development (fee program credit per fee program provisions)
8.3	Short Term (if planned to be signalized in the future) Construct EB left-turn deceleration lane on Curtis Road approaching Falcon Highway	With subdivision/plat filings, per ECM turning volume thresholds	Escrow for pro-rata share of improvement or construction if warranted at the time of development (fee program credit per fee program provisions)
8.4	Short Term (if planned to be signalized in the future) Construct WB right-turn deceleration lane on Curtis Road approaching Falcon Highway	With subdivision/plat filings, per ECM turning volume thresholds	Escrow for pro-rata share of improvement or construction if warranted at the time of development (fee program credit per fee program provisions)
8.5	Long Term (if planned to be signalized in the future) Lengthen northbound left-turn deceleration lane	As needed based on future speed limit and turning volume/stacking length criteria	Escrow for improvement or construction if warranted at the time of development (fee program credit per fee program provisions)
Falcon Highway/Three-Quarter-Movement Site Access			
Item #	Improvement	Timing	Responsibility
9.1	Short Term Westbound right-turn deceleration lane	With subdivision/plat filings, per ECM turning volume thresholds	Applicant
9.2	Short Term Eastbound left-turn deceleration lane and standard 3/4-movement intersection design	With subdivision/plat filings, per ECM turning volume thresholds	Applicant
9.3	Short Term Southbound right-turn acceleration lane - typically not required (if necessary to maintain acceptable southbound right-turn LOS).	To be determined w/ subdivision/plat filings.	Applicant (if deemed necessary)
9.4	Potential need for westbound left turn lane at Falcon Highway/Mccan	To be determined w/ subdivision/plat filings.	Applicant (if deemed necessary)
Falcon Highway/McCandish Road			
Possible need for westbound left turn lane at Falcon Highway/McCandish Road - Evaluate with preliminary plan TIS.			
Curtis Road/Full-Movement North Site Access			
Item #	Improvement	Timing	Responsibility
10a.1	Short Term & Long Term w/ Roundabout Option - Construct one-lane modern roundabout, expandable to a two-lane roundabout.	With subdivision/plat filings, per ECM turning volume thresholds	Applicant
OR			
10b.1	Short Term Southbound right-turn deceleration lane on Curtis Rd approaching the site access	With subdivision/plat filings, per ECM turning volume thresholds	Applicant
10b.2	Short Term Northbound left-turn deceleration lane on Curtis Rd approaching the site access	With subdivision/plat filings, per ECM turning volume thresholds	Applicant
10b.3	Short Term Southbound right-turn acceleration lane on Curtis Rd for right-turning traffic exiting the site access	With subdivision/plat filings, per ECM turning volume thresholds	Applicant
10b.4	Long Term Install traffic signal	Once warranted - with site development, as necessary to maintain acceptable intersection operations	Applicant
Curtis Road & Right-in/Right-out South Site Access			
Item #	Improvement	Timing	Responsibility
11.1	Short Term Southbound right-turn deceleration lane on Curtis Rd approaching the site access	With subdivision/plat filings, per ECM turning volume thresholds	Applicant
11.2	Short Term Southbound right-turn acceleration lane on Curtis Rd for right-turning traffic exiting the site access	With subdivision/plat filings, per ECM turning volume thresholds	Applicant

Source: LSC Transportation Consultants, Inc. (6/28/2022)

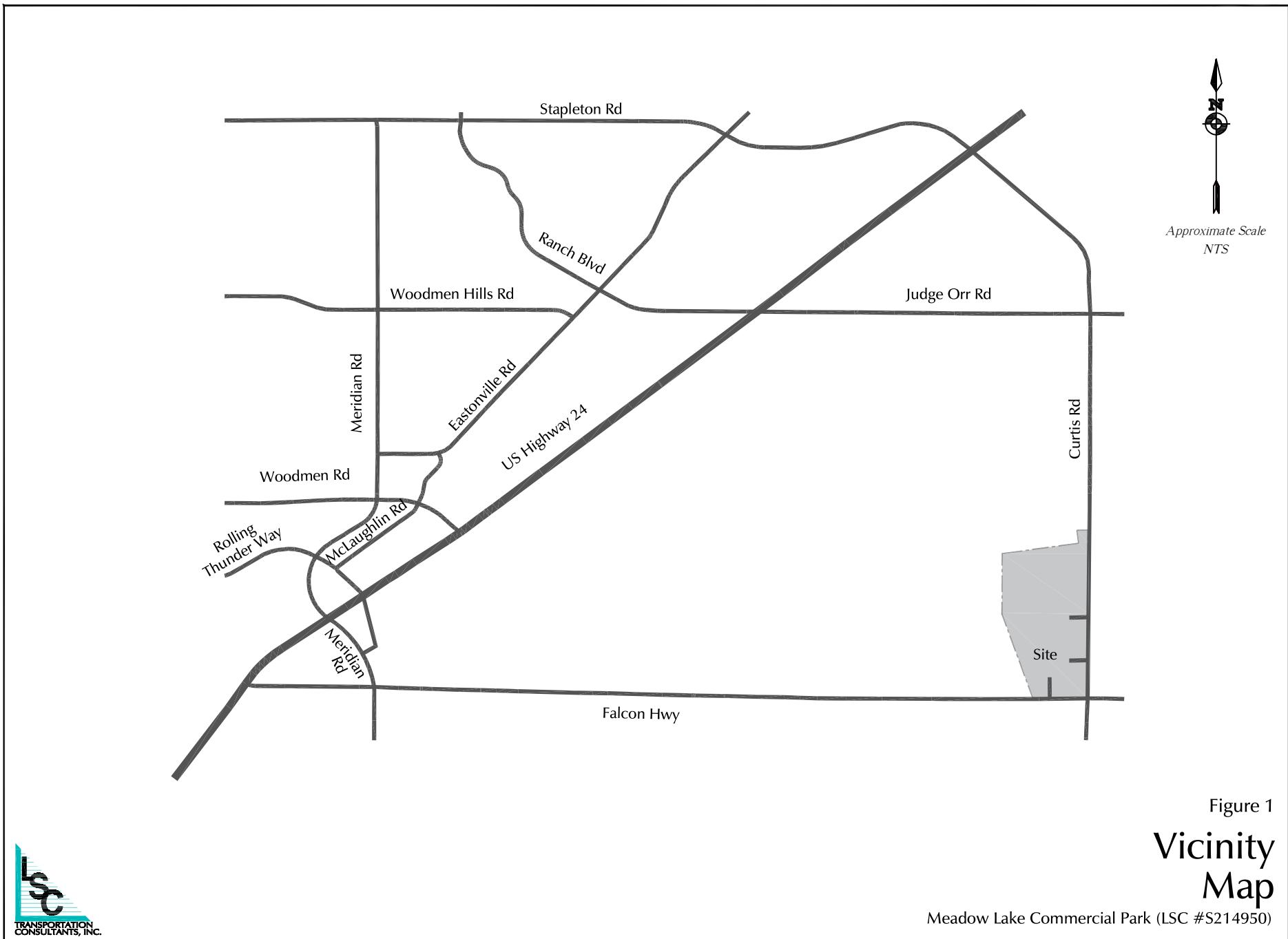
Note: Timing and responsibility will be determined with Preliminary Plan/Plat and are subject to change as these future applications are submitted

Table 6: Detailed Trip Generation Estimate

TAZ	ITE	Parcel Sizes on Site Plan			Usable Area		Trip Generation Rates ²				Driveway Trips Generated				Internal Capture		%	%	%	Total External Trips Generated									
		Value	Units ¹	% Floor Area	Value	Units ¹	Average Weekday	A.M.		P.M.		Average Weekday	A.M.		P.M.		Average Weekday	Peak Hours	Primary Trips	Diverted Trips	Pass-By Trips	Average Weekday	A.M. In	A.M. Out	P.M. In	P.M. Out			
								In	Out	In	Out		In	Out	In	Out						Average Weekday	In	Out	In	Out			
Code	Description																												
Currently-Proposed Site Plan																													
1, 3, 4, 5	130	Industrial Park	174.280	Acres	29%	2201.575	KSF	3.37	0.28	0.06	0.07	0.27	7419	606	142	165	584	0%	0%	100%	0%	0%	7419	606	142	165	584		
2	770	Business Park	9.555	Acres	25%	104.054	KSF	12.44	1.15	0.20	0.32	0.90	1294	119	21	33	94	0%	0%	95%	5%	0%	1230	113	20	31	89		
2	821	Strip Retail Plaza w/o Supermarket (40-150 KSF)	9.555	Acres	18%	74.919	KSF	94.49	2.19	1.34	4.33	4.70	6725	148	90	292	317	5%	10%	41%	25%	34%	2757	61	37	120	130		
													Total	15439	873	254	490	994						Total	11406	780	199	316	803
Comparison to Previous Site Plan																													
-	-	Previously-Approved Land Uses	-	-	-	-	-	-	-	-	-	-	13343	390	124	426	607	-	-	-	-	-	13343	390	124	426	607		
-	-	Currently-Proposed Land Uses	-	-	-	-	-	-	-	-	-	-	15439	873	254	490	994	-	-	-	-	-	11406	780	199	316	803		
													Change in Trip Generation	2096	483	130	64	387						Change in Trip Generation	-1937	390	75	-110	196

Figures





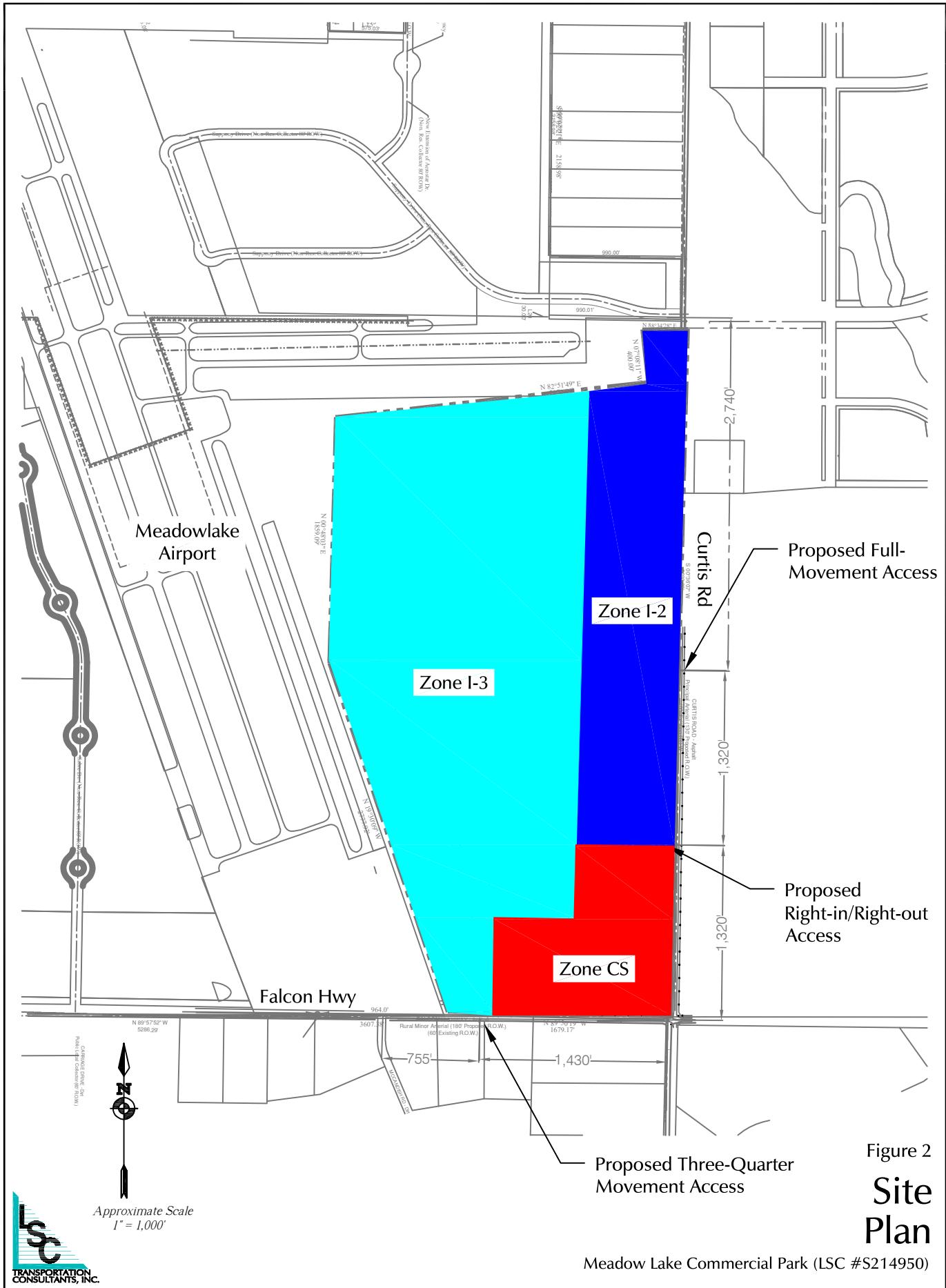


Figure 2
Site
Plan

Meadow Lake Commercial Park (LSC #S214950)

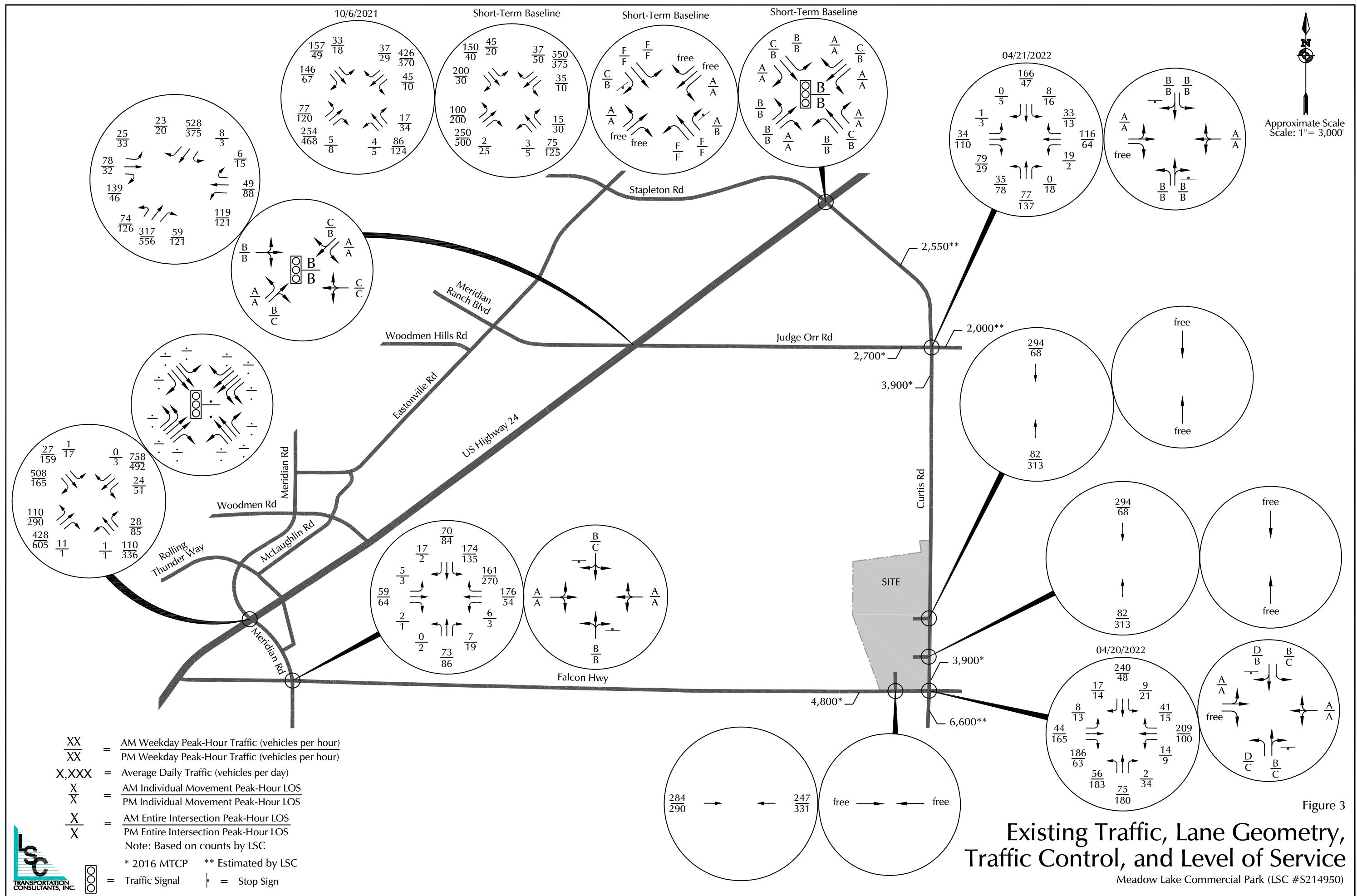


Figure 3



Approximate Scale
Scale: 1" = 3,000'

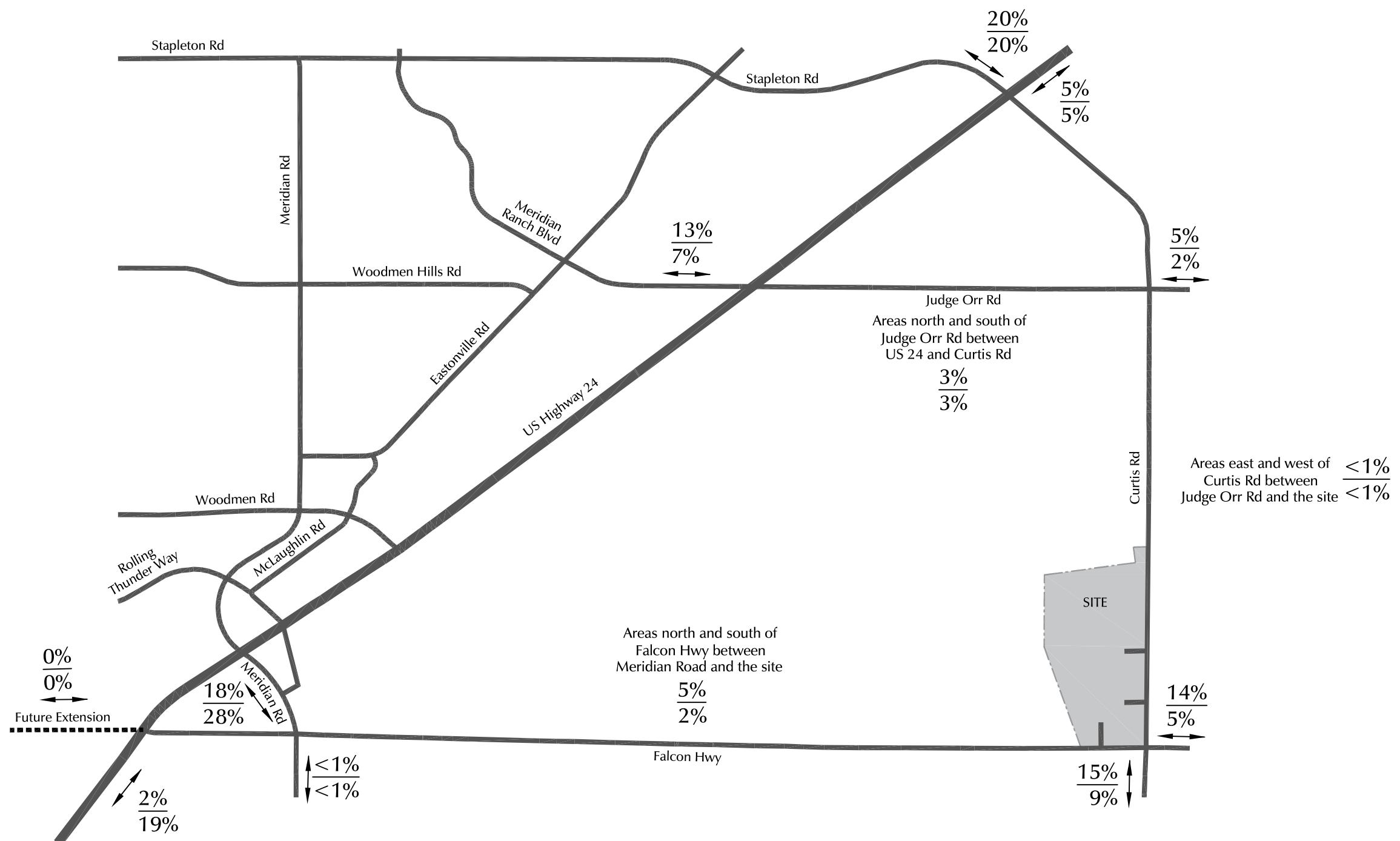
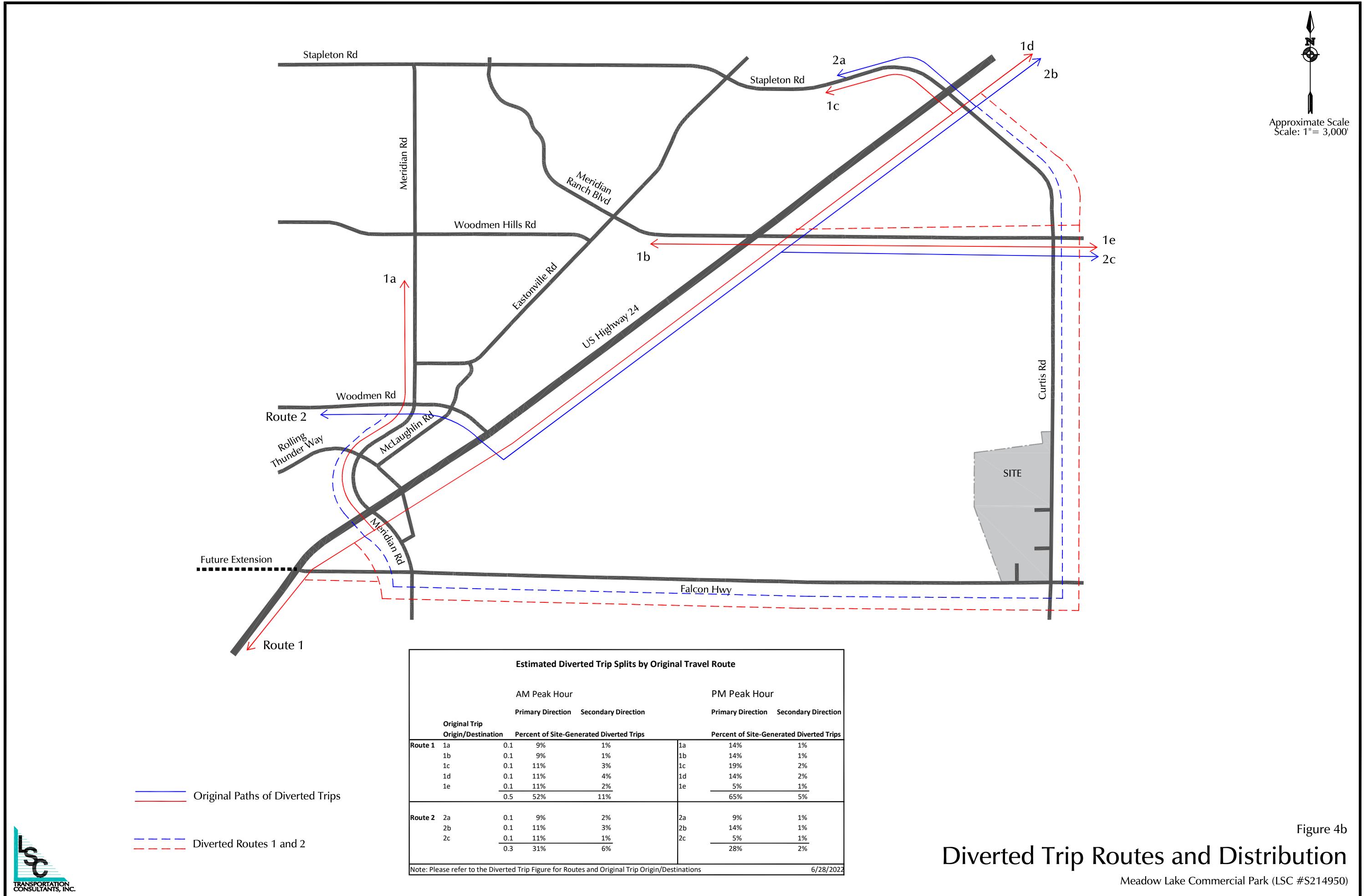


Figure 4a

Short-Term Directional Distribution - Primary Trips

Meadow Lake Commercial Park (LSC #S214950)





Approximate Scale
Scale: 1" = 3,000'

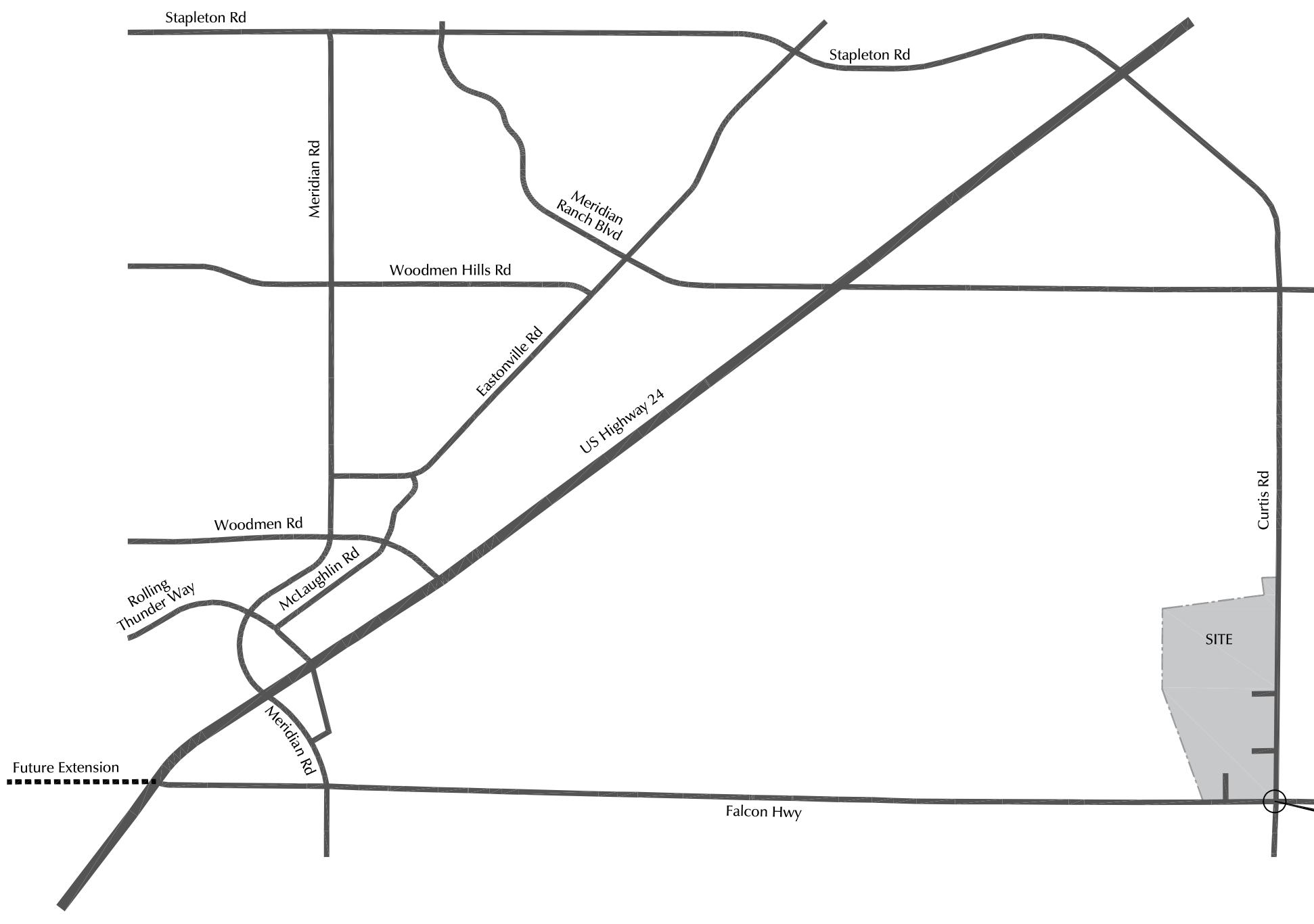


Figure 4c

Pass-by Trip Distribution

Meadow Lake Commercial Park (LSC #S214950)



$$\frac{XX\%}{XX\%} = \frac{\text{AM Percentage of Pass-by trips from the adjacent roads}}{\text{PM Percentage of Pass-by trips from the adjacent roads}}$$



Approximate Scale
Scale: 1" = 3,000'

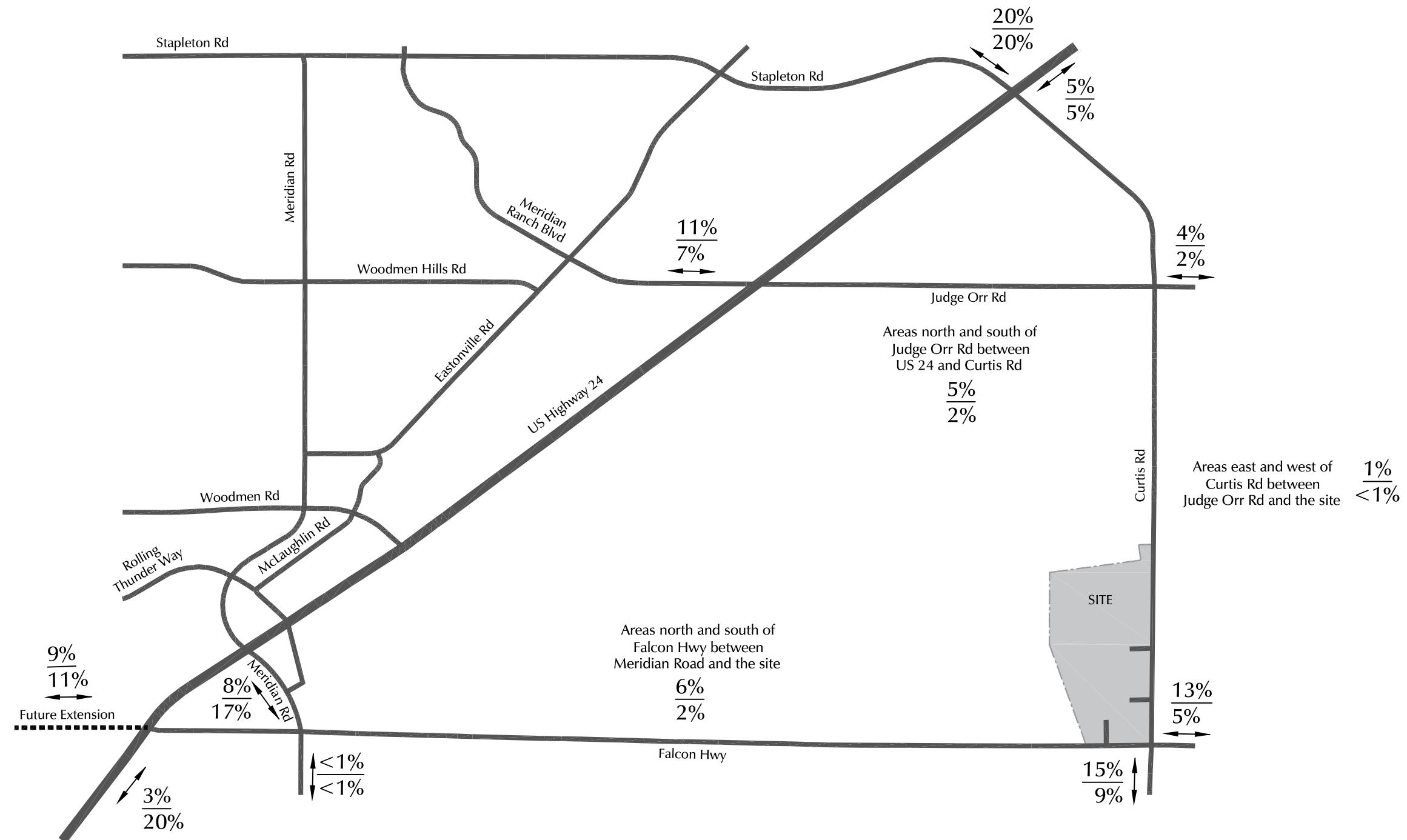


Figure 5

Long-Term Directional Distribution - Primary Trips

Meadow Lake Commercial Park (LSC #S214950)



Approximate Scale
Scale: 1" = 3,000'

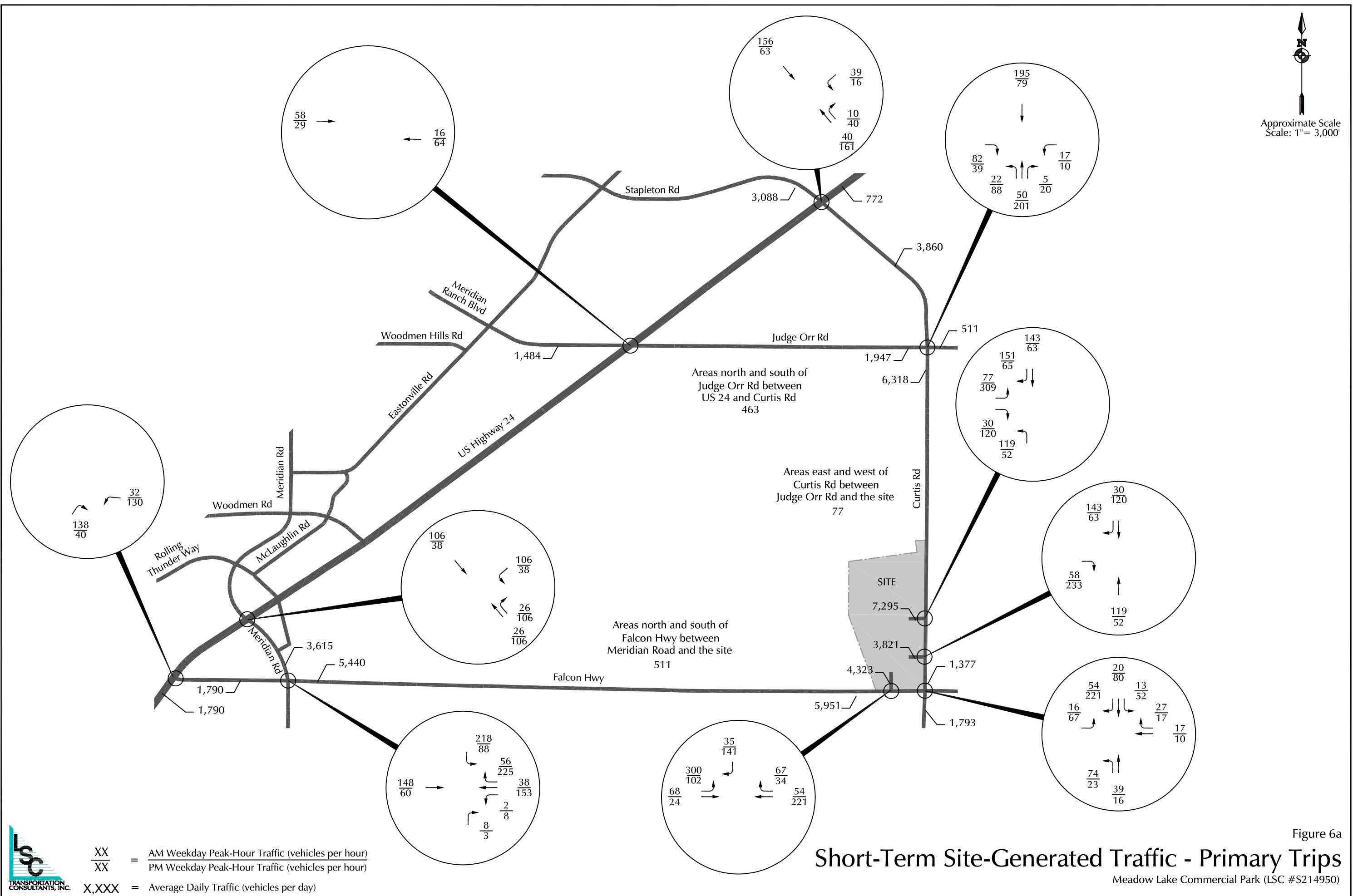


Figure 6a

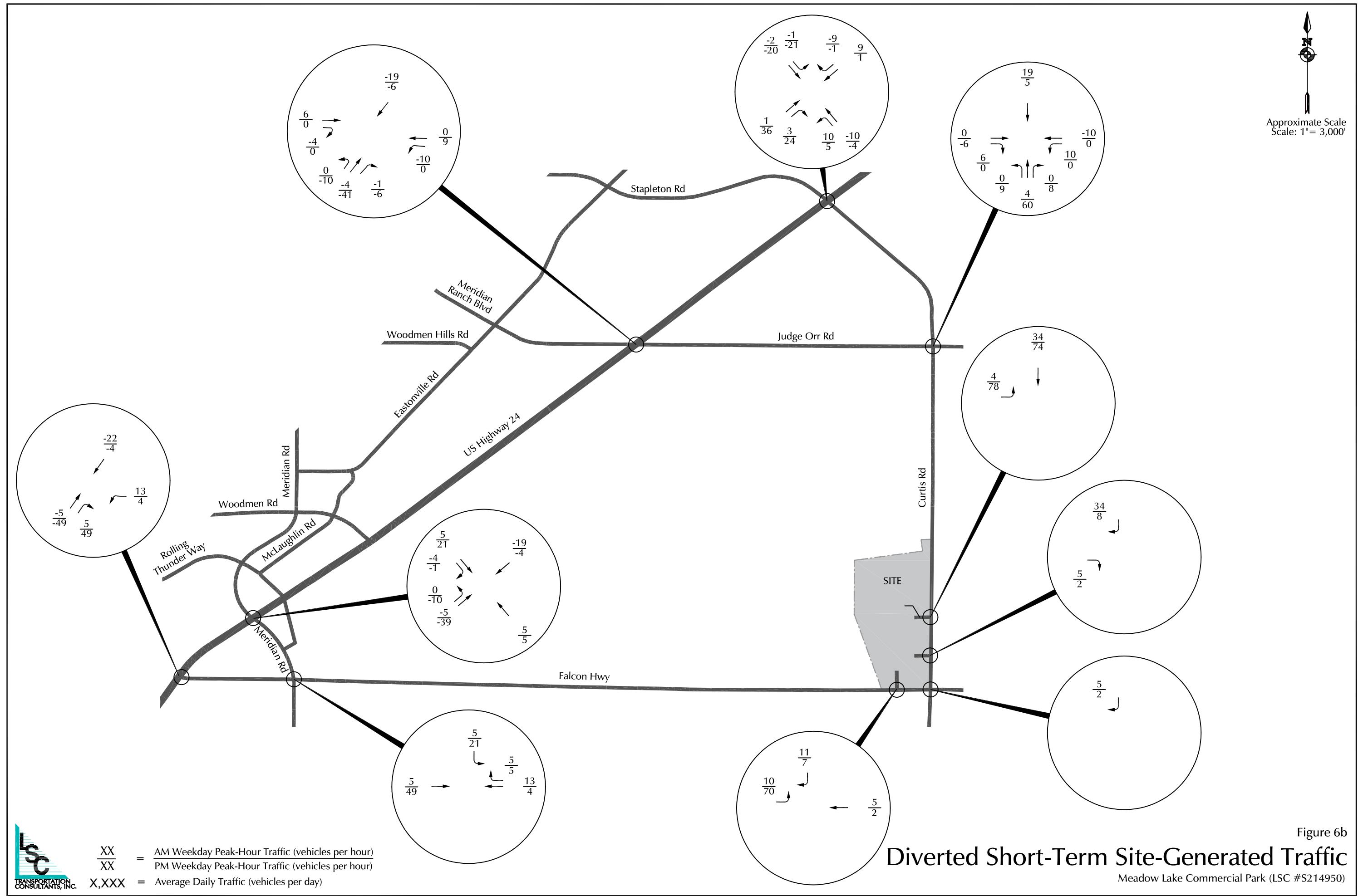
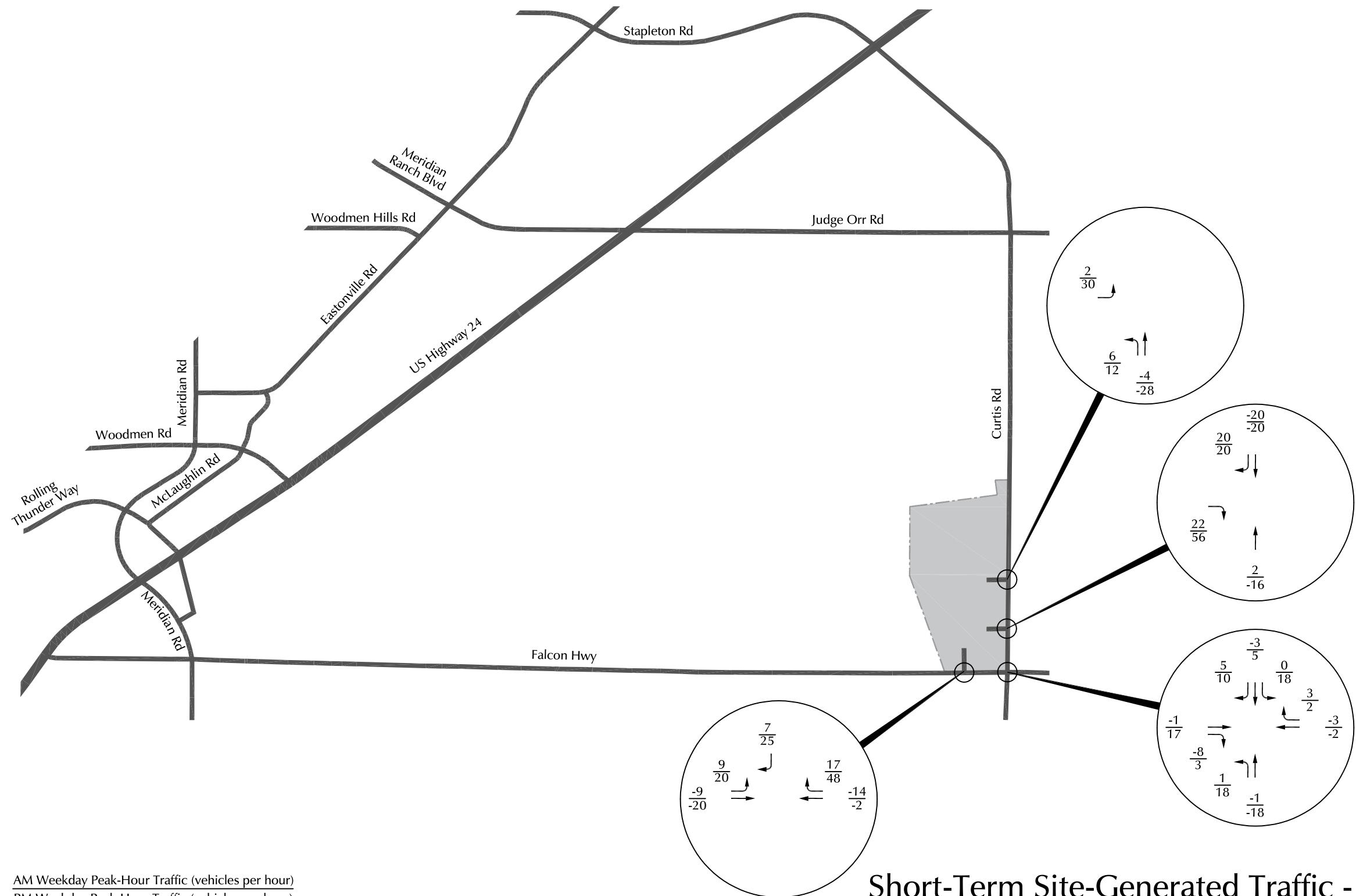


Figure 6b

N
Approximate Scale
Scale: 1" = 3,000'



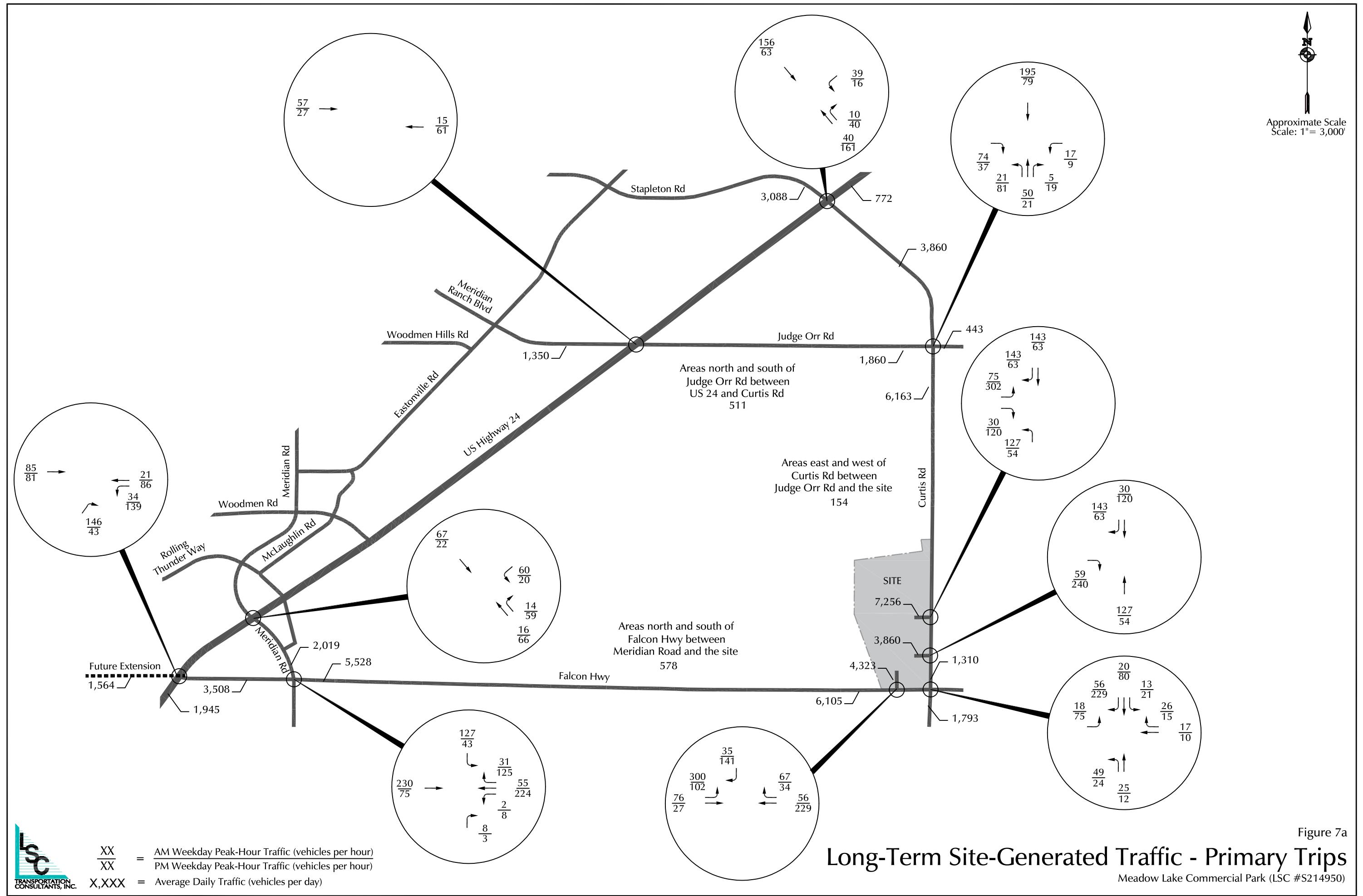
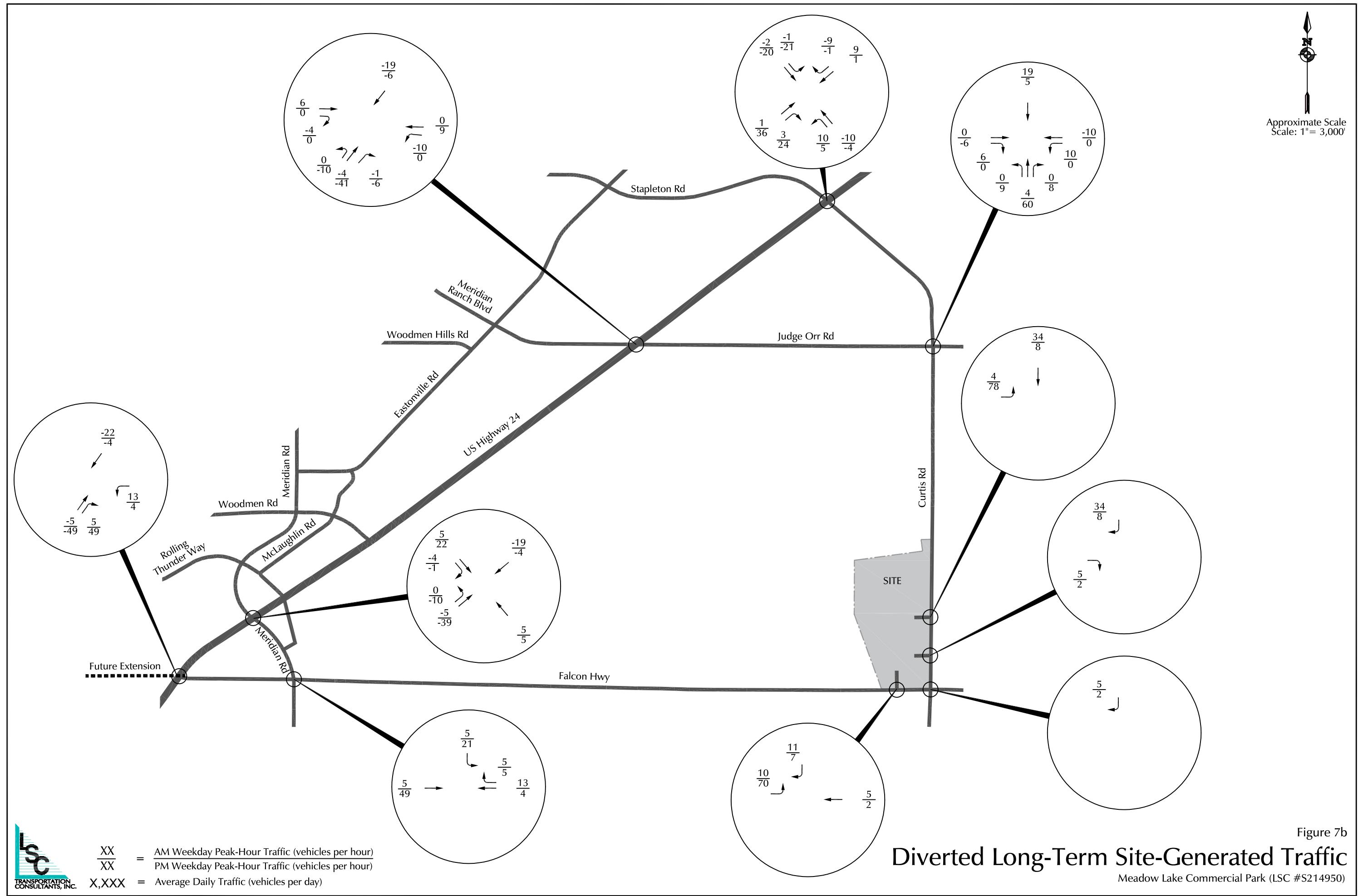
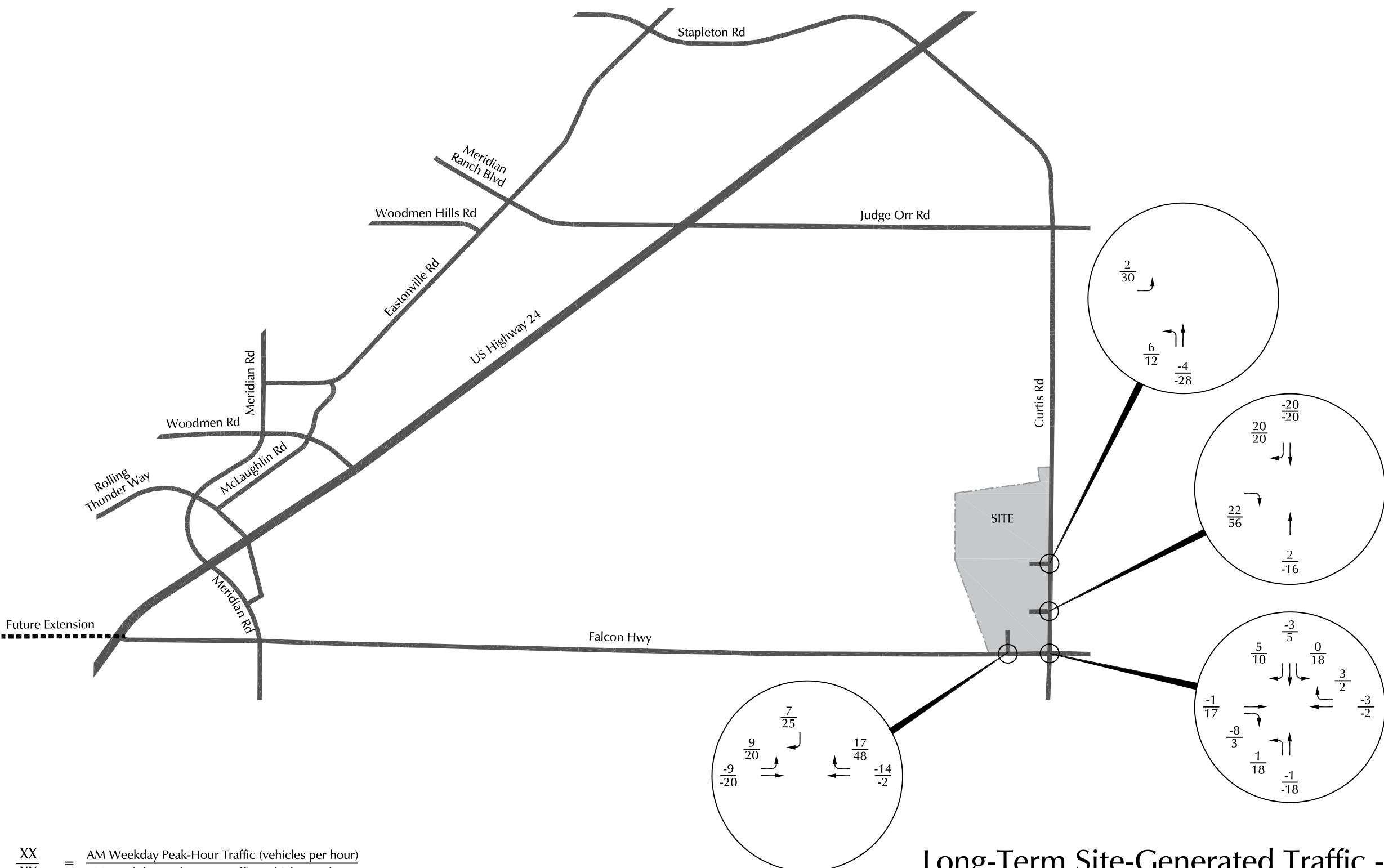
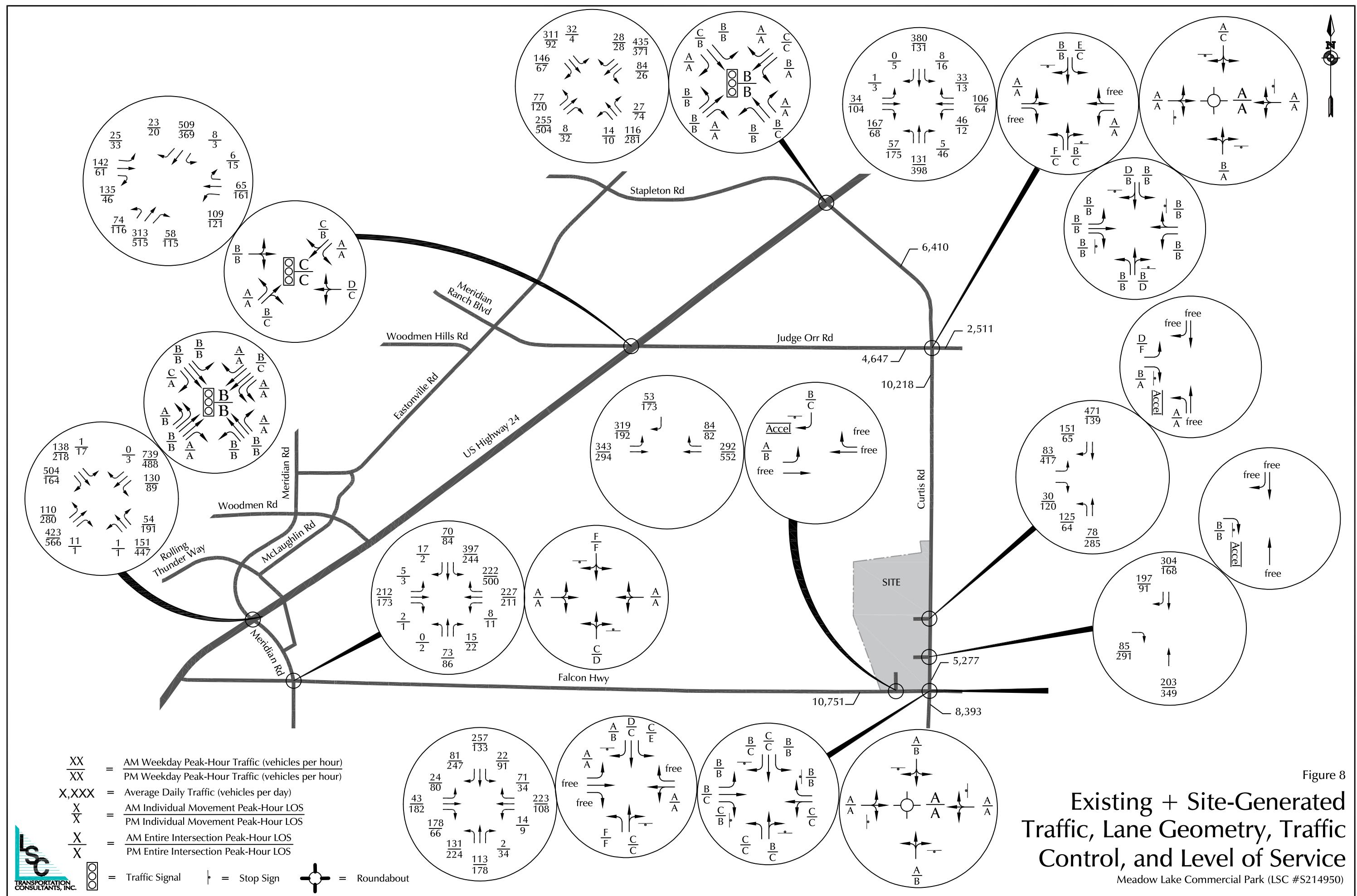


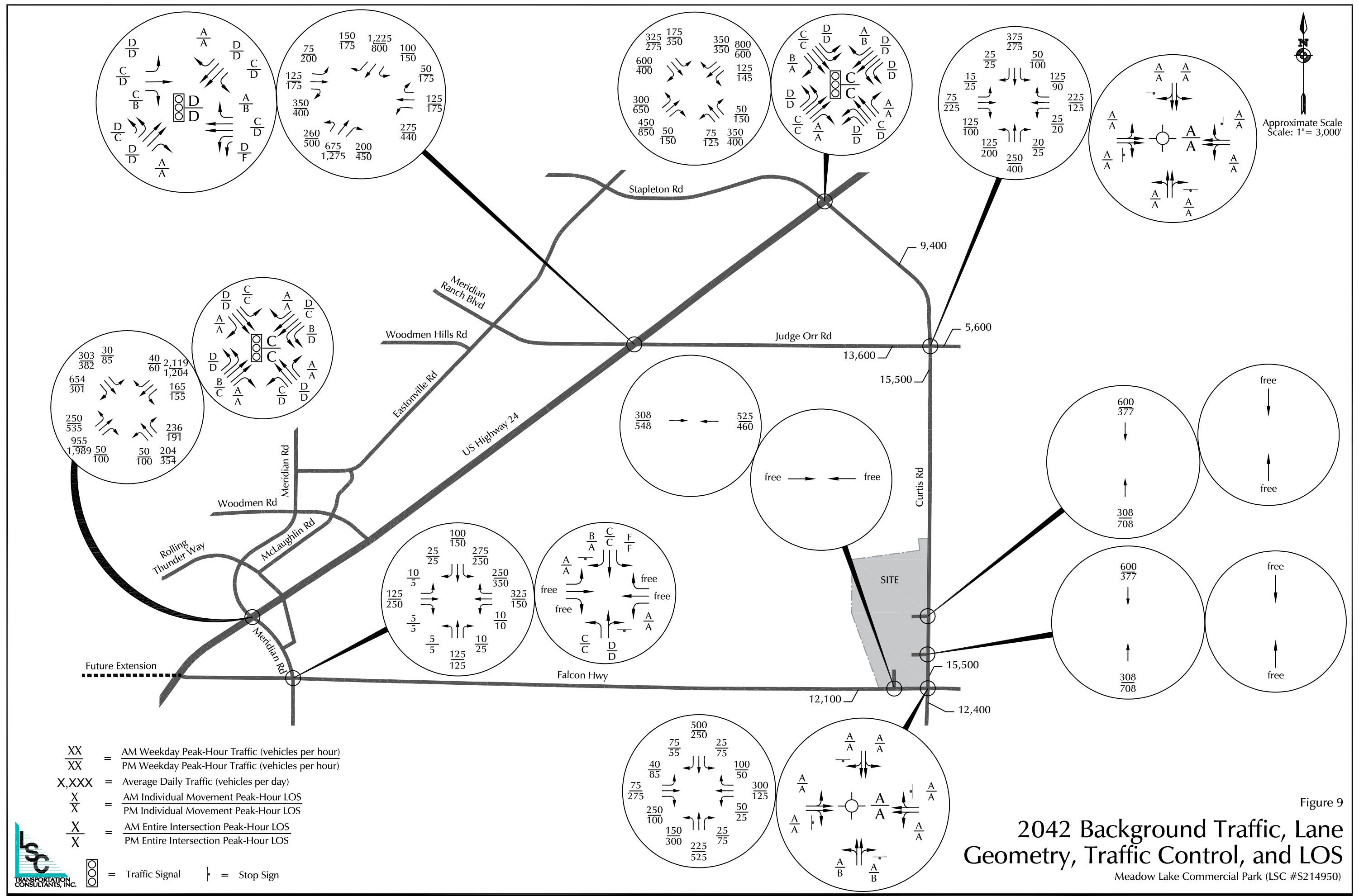
Figure 7a

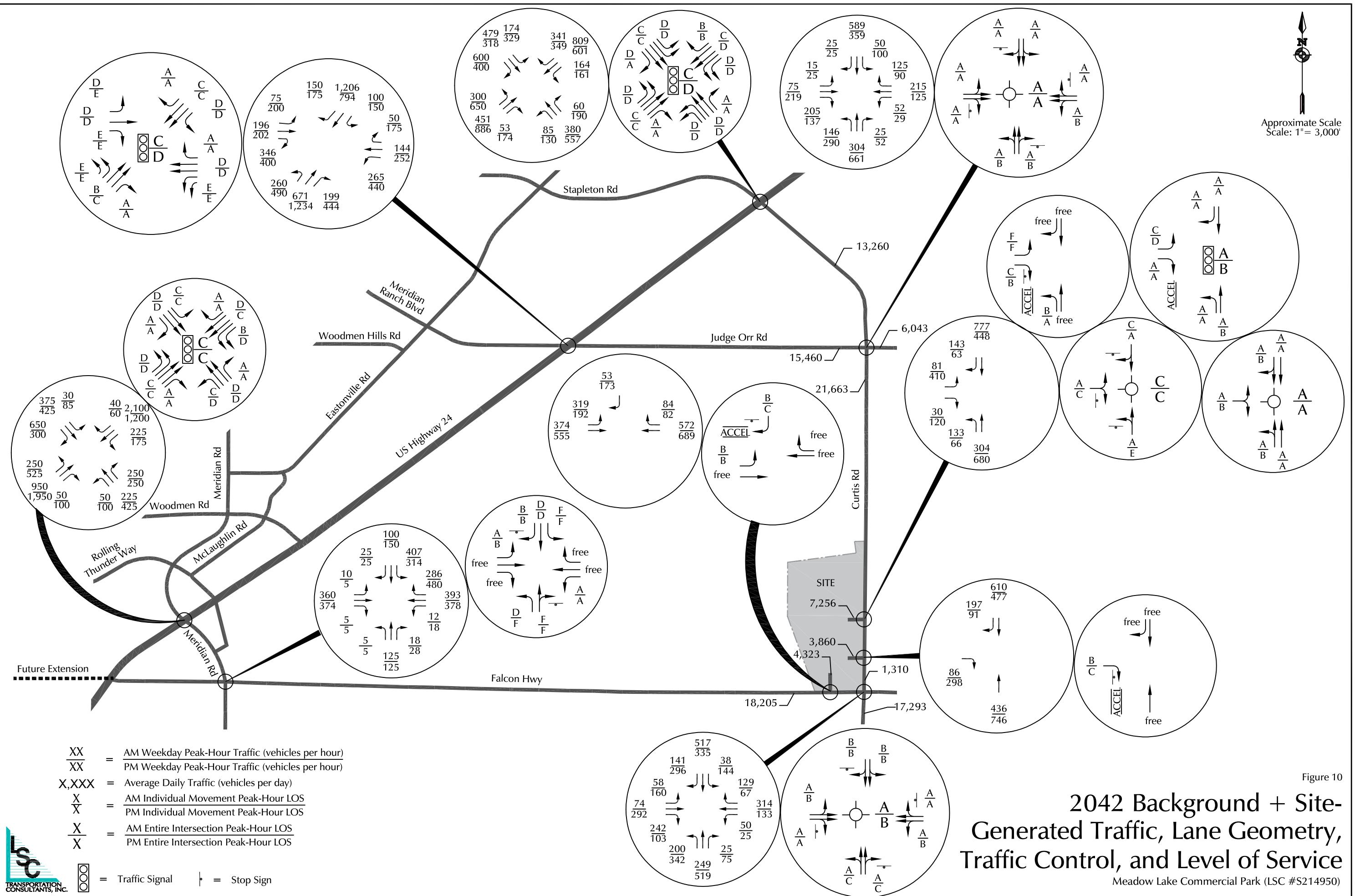


N
Approximate Scale
Scale: 1" = 3,000'









Traffic Counts



LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

File Name : Curtis Rd - Falcon Hwy AM

Site Code : S214950

Start Date : 4/20/2022

Page No : 1

Groups Printed- Unshifted

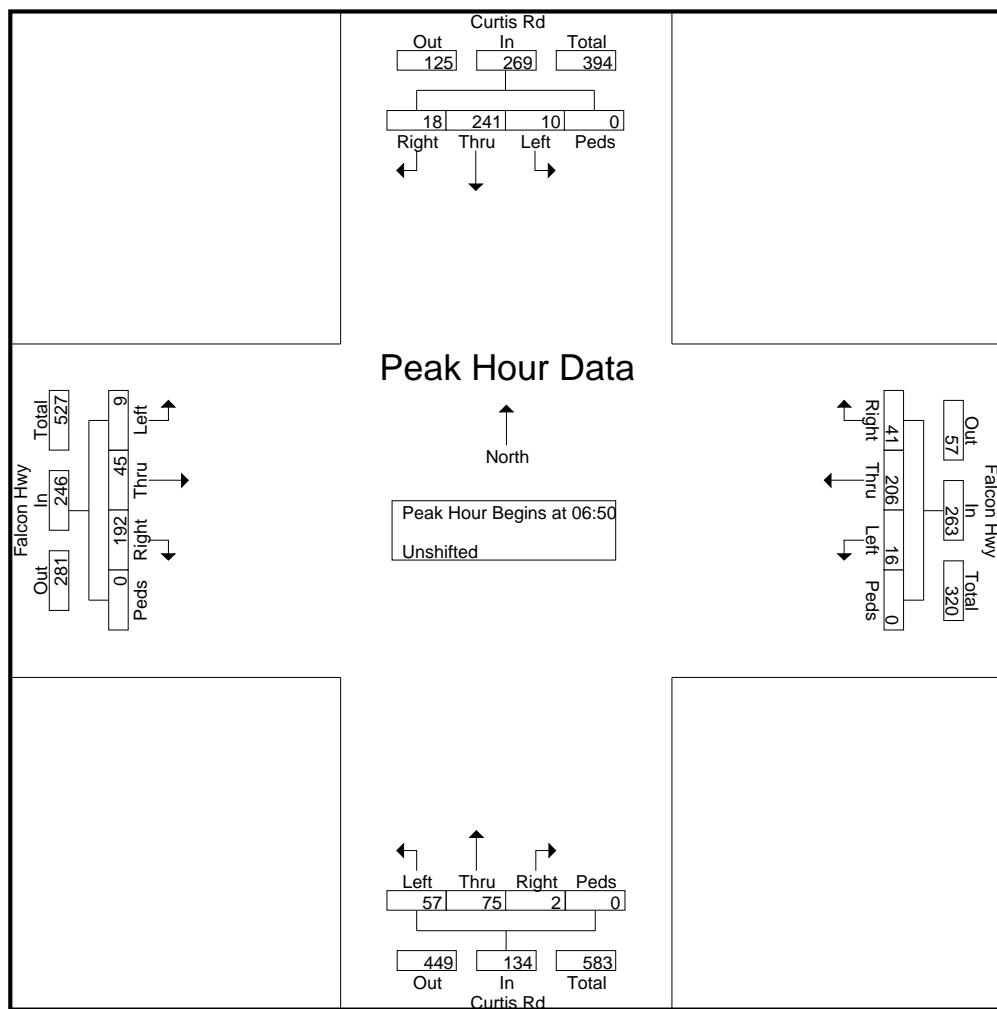
Start Time	Curtis Rd Southbound					Falcon Hwy Westbound					Curtis Rd Northbound					Falcon Hwy Eastbound					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:30	0	12	0	0	12	2	15	2	0	19	0	4	4	0	8	12	1	0	0	13	52
06:35	0	14	1	0	15	1	15	2	0	18	0	3	4	0	7	13	0	0	0	13	53
06:40	0	13	0	0	13	2	14	3	0	19	0	4	5	0	9	15	1	0	0	16	57
06:45	0	20	0	0	20	1	13	1	0	15	0	4	4	0	8	6	3	0	0	9	52
06:50	0	18	0	0	18	0	15	1	0	16	0	5	4	0	9	19	1	0	0	20	63
06:55	0	15	0	0	15	5	19	2	0	26	0	7	4	0	11	16	5	0	0	21	73
Total	0	92	1	0	93	11	91	11	0	113	0	27	25	0	52	81	11	0	0	92	350
07:00	0	19	2	0	21	4	19	1	0	24	0	3	4	0	7	11	3	2	0	16	68
07:05	2	23	0	0	25	5	26	2	0	33	0	5	1	0	6	10	3	1	0	14	78
07:10	2	23	0	0	25	5	16	1	0	22	0	9	2	0	11	16	4	0	0	20	78
07:15	3	23	1	0	27	4	18	1	0	23	0	10	6	0	16	15	1	1	0	17	83
07:20	3	20	2	0	25	4	19	1	0	24	1	8	5	0	14	23	2	0	0	25	88
07:25	2	11	1	0	14	4	20	0	0	24	0	6	7	0	13	15	6	0	0	21	72
07:30	3	18	0	0	21	2	20	1	0	23	0	6	8	0	14	14	4	2	0	20	78
07:35	2	22	1	0	25	3	11	3	0	17	1	6	4	0	11	25	9	2	0	36	89
07:40	0	28	2	0	30	4	13	0	0	17	0	6	7	0	13	16	3	0	0	19	79
07:45	1	21	1	0	23	1	10	3	0	14	0	4	5	0	9	12	4	1	0	17	63
07:50	1	15	0	0	16	2	9	0	0	11	0	1	2	0	3	10	3	0	0	13	43
07:55	0	11	1	0	12	4	11	1	0	16	1	2	7	0	10	17	6	1	0	24	62
Total	19	234	11	0	264	42	192	14	0	248	3	66	58	0	127	184	48	10	0	242	881
08:00	0	19	2	0	21	0	18	0	0	18	0	2	12	0	14	13	6	0	0	19	72
08:05	2	7	2	0	11	0	15	1	0	16	1	2	2	0	5	12	5	0	0	17	49
08:10	1	14	0	0	15	1	11	1	0	13	1	2	7	0	10	10	5	3	0	18	56
08:15	0	7	0	0	7	1	8	1	0	10	0	3	4	0	7	9	6	0	0	15	39
08:20	1	8	0	0	9	2	17	1	0	20	0	3	7	0	10	11	9	0	0	20	59
08:25	0	4	0	0	4	3	9	2	0	14	0	2	6	0	8	7	7	1	0	15	41
Grand Total	23	385	16	0	424	60	361	31	0	452	5	107	121	0	233	327	97	14	0	438	1547
Apprch %	5.4	90.8	3.8	0		13.3	79.9	6.9	0		2.1	45.9	51.9	0		74.7	22.1	3.2	0		
Total %	1.5	24.9	1	0	27.4	3.9	23.3	2	0	29.2	0.3	6.9	7.8	0	15.1	21.1	6.3	0.9	0	28.3	

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	Curtis Rd Southbound					Falcon Hwy Westbound					Curtis Rd Northbound					Falcon Hwy 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 06:30 to 08:25 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:50																					
06:50	0	18	0	0	18	0	15	1	0	16	0	5	4	0	9	19	1	0	0	20	63
06:55	0	15	0	0	15	5	19	2	0	26	0	7	4	0	11	16	5	0	0	21	73
07:00	0	19	2	0	21	4	19	1	0	24	0	3	4	0	7	11	3	2	0	16	68
07:05	2	23	0	0	25	5	26	2	0	33	0	5	1	0	6	10	3	1	0	14	78
07:10	2	23	0	0	25	5	16	1	0	22	0	9	2	0	11	16	4	0	0	20	78
07:15	3	23	1	0	27	4	18	1	0	23	0	10	6	0	16	15	1	1	0	17	83
07:20	3	20	2	0	25	4	19	1	0	24	1	8	5	0	14	23	2	0	0	25	88
07:25	2	11	1	0	14	4	20	0	0	24	0	6	7	0	13	15	6	0	0	21	72
07:30	3	18	0	0	21	2	20	1	0	23	0	6	8	0	14	14	4	2	0	20	78
07:35	2	22	1	0	25	3	11	3	0	17	1	6	4	0	11	25	9	2	0	36	89
07:40	0	28	2	0	30	4	13	0	0	17	0	6	7	0	13	16	3	0	0	19	79
07:45	1	21	1	0	23	1	10	3	0	14	0	4	5	0	9	12	4	1	0	17	63
Total Volume	18	241	10	0	269	41	206	16	0	263	2	75	57	0	134	192	45	9	0	246	912
% App. Total	6.7	89.6	3.7	0		15.6	78.3	6.1	0		1.5	56	42.5	0		78	18.3	3.7	0		
PHF	.500	.717	.417	.000	.747	.683	.660	.444	.000	.664	.167	.625	.594	.000	.698	.640	.417	.375	.000	.569	.854

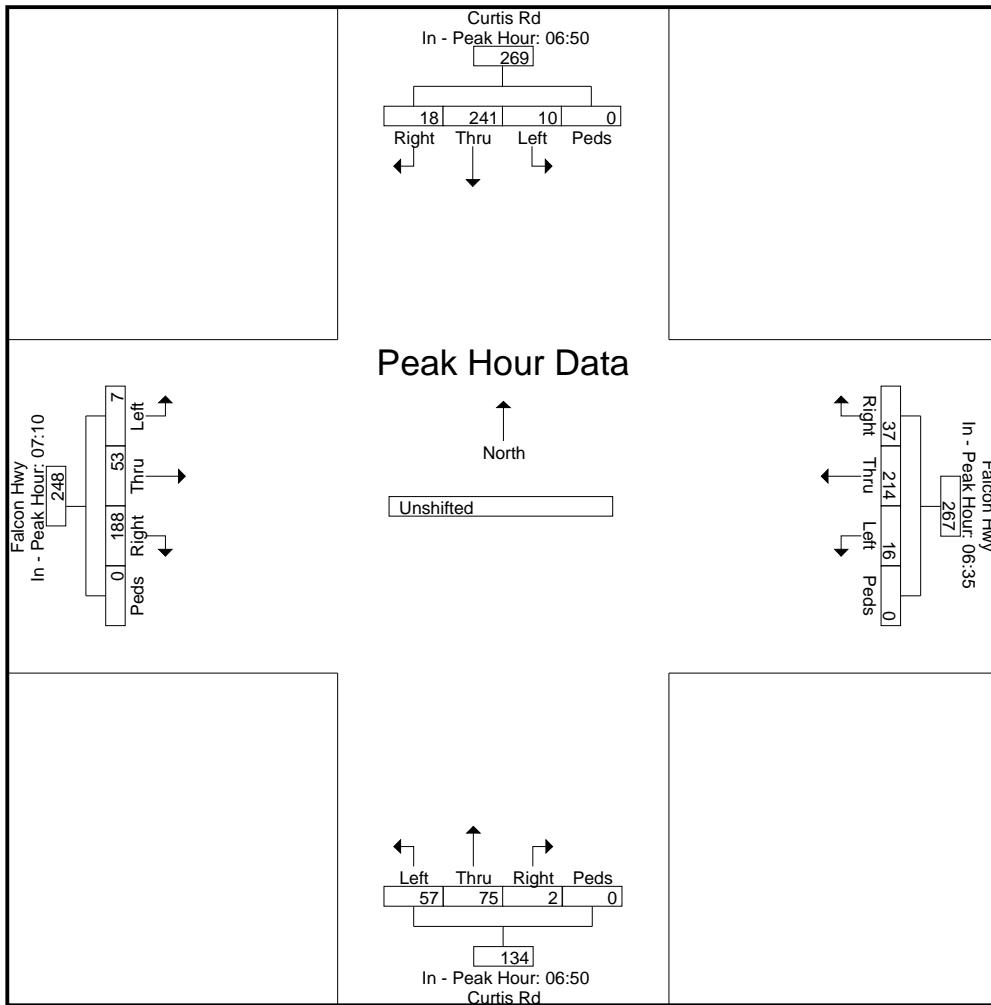


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File Name : Curtis Rd - Falcon Hwy AM
 Site Code : S214950
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Start Time	Curtis Rd Southbound					Falcon Hwy Westbound					Curtis Rd Northbound					Falcon Hwy Eastbound				
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total
Peak Hour Analysis From 06:30 to 08:25 - Peak 1 of 1																				
Peak Hour for Each Approach Begins at:																				
06:50	0	18	0	0	18	1	15	2	0	18	0	5	4	0	9	16	4	0	0	20
+0 mins.	0	15	0	0	15	2	14	3	0	19	0	7	4	0	11	15	1	1	0	17
+5 mins.	0	19	2	0	21	1	13	1	0	15	0	3	4	0	7	23	2	0	0	25
+10 mins.	2	23	0	0	25	0	15	1	0	16	0	5	1	0	6	15	6	0	0	21
+15 mins.	2	23	0	0	25	5	19	2	0	26	0	9	2	0	11	14	4	2	0	20
+20 mins.	3	23	1	0	27	4	19	1	0	24	0	10	6	0	16	25	9	2	0	36
+25 mins.	3	20	2	0	25	5	26	2	0	33	1	8	5	0	14	16	3	0	0	19
+30 mins.	2	11	1	0	14	5	16	1	0	22	0	6	7	0	13	12	4	1	0	17
+35 mins.	3	18	0	0	21	4	18	1	0	23	0	6	8	0	14	10	3	0	0	13
+40 mins.	2	22	1	0	25	4	19	1	0	24	1	6	4	0	11	17	6	1	0	24
+45 mins.	0	28	2	0	30	4	20	0	0	24	0	6	7	0	13	13	6	0	0	19
+50 mins.	1	21	1	0	23	2	20	1	0	23	0	4	5	0	9	12	5	0	0	17
Total Volume	18	241	10	0	269	37	214	16	0	267	2	75	57	0	134	188	53	7	0	248
% App. Total	6.7	89.6	3.7	0		13.9	80.1	6	0		1.5	56	42.5	0		75.8	21.4	2.8	0	
PHF	.500	.717	.417	.000	.747	.617	.686	.444	.000	.674	.167	.625	.594	.000	.698	.627	.491	.292	.000	.574



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File Name : Curtis Rd - Falcon Hwy AM
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Groups Printed- Unshifted

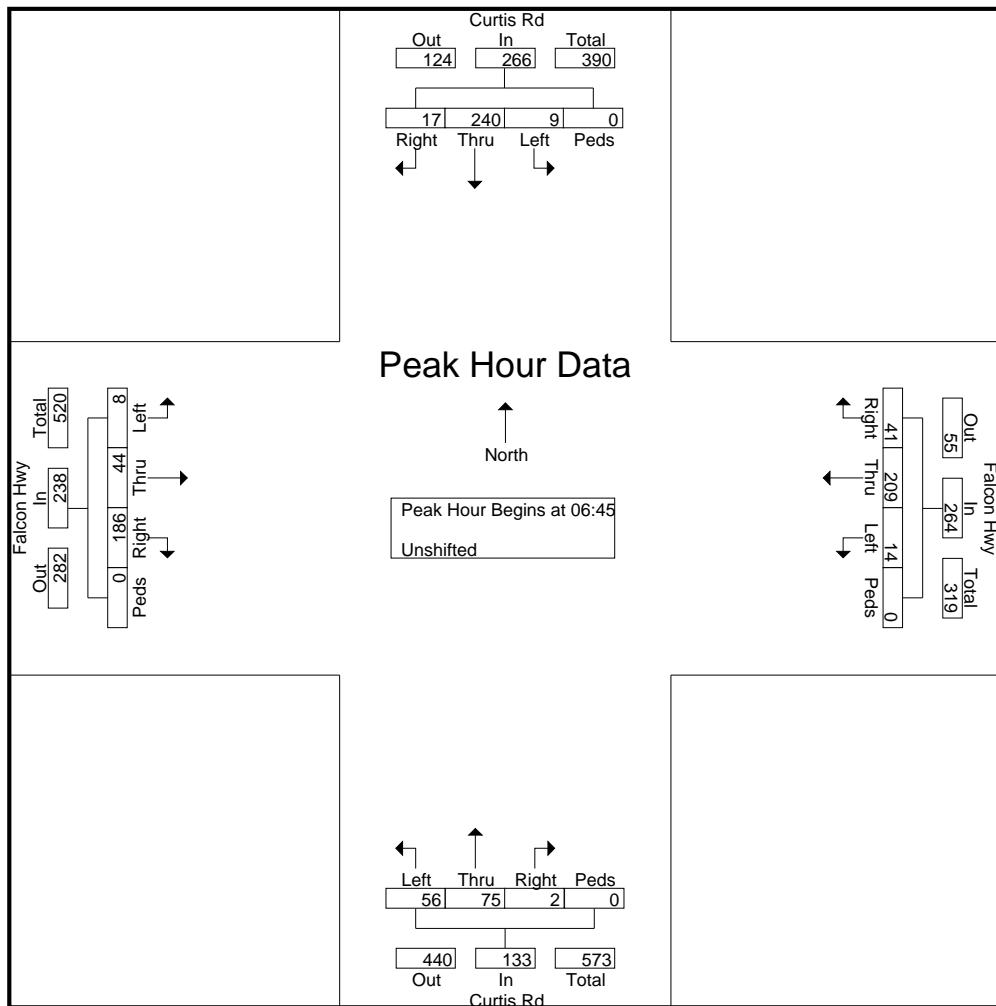
	Curtis Rd Southbound					Falcon Hwy Westbound					Curtis Rd Northbound					Falcon Hwy Eastbound					
	Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total
06:30	0	39	1	0	40	5	44	7	0	56	0	11	13	0	24	40	2	0	0	42	162
06:45	0	53	0	0	53	6	47	4	0	57	0	16	12	0	28	41	9	0	0	50	188
Total	0	92	1	0	93	11	91	11	0	113	0	27	25	0	52	81	11	0	0	92	350
07:00	4	65	2	0	71	14	61	4	0	79	0	17	7	0	24	37	10	3	0	50	224
07:15	8	54	4	0	66	12	57	2	0	71	1	24	18	0	43	53	9	1	0	63	243
07:30	5	68	3	0	76	9	44	4	0	57	1	18	19	0	38	55	16	4	0	75	246
07:45	2	47	2	0	51	7	30	4	0	41	1	7	14	0	22	39	13	2	0	54	168
Total	19	234	11	0	264	42	192	14	0	248	3	66	58	0	127	184	48	10	0	242	881
08:00	3	40	4	0	47	1	44	2	0	47	2	6	21	0	29	35	16	3	0	54	177
08:15	1	19	0	0	20	6	34	4	0	44	0	8	17	0	25	27	22	1	0	50	139
Grand Total	23	385	16	0	424	60	361	31	0	452	5	107	121	0	233	327	97	14	0	438	1547
Apprch %	5.4	90.8	3.8	0		13.3	79.9	6.9	0		2.1	45.9	51.9	0		74.7	22.1	3.2	0		
Total %	1.5	24.9	1	0	27.4	3.9	23.3	2	0	29.2	0.3	6.9	7.8	0	15.1	21.1	6.3	0.9	0	28.3	

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Start Time	Curtis Rd Southbound					Falcon Hwy Westbound					Curtis Rd Northbound					Falcon Hwy Eastbound					
	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 6:30:00 AM to 8:15:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 6:45:00 AM																					
6:45:00 AM	0	53	0	0	53	6	47	4	0	57	0	16	12	0	28	41	9	0	0	50	188
7:00:00 AM	4	65	2	0	71	14	61	4	0	79	0	17	7	0	24	37	10	3	0	50	224
7:15:00 AM	8	54	4	0	66	12	57	2	0	71	1	24	18	0	43	53	9	1	0	63	243
7:30:00 AM	5	68	3	0	76	9	44	4	0	57	1	18	19	0	38	55	16	4	0	75	246
Total Volume	17	240	9	0	266	41	209	14	0	264	2	75	56	0	133	186	44	8	0	238	901
% App. Total	6.4	90.2	3.4	0		15.5	79.2	5.3	0		1.5	56.4	42.1	0		78.2	18.5	3.4	0		
PHF	.531	.882	.563	.000	.875	.732	.857	.875	.000	.835	.500	.781	.737	.000	.773	.845	.688	.500	.000	.793	.916



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File Name : Curtis Rd - Falcon Hwy AM

Site Code : S214950

Start Date : 4/20/2022

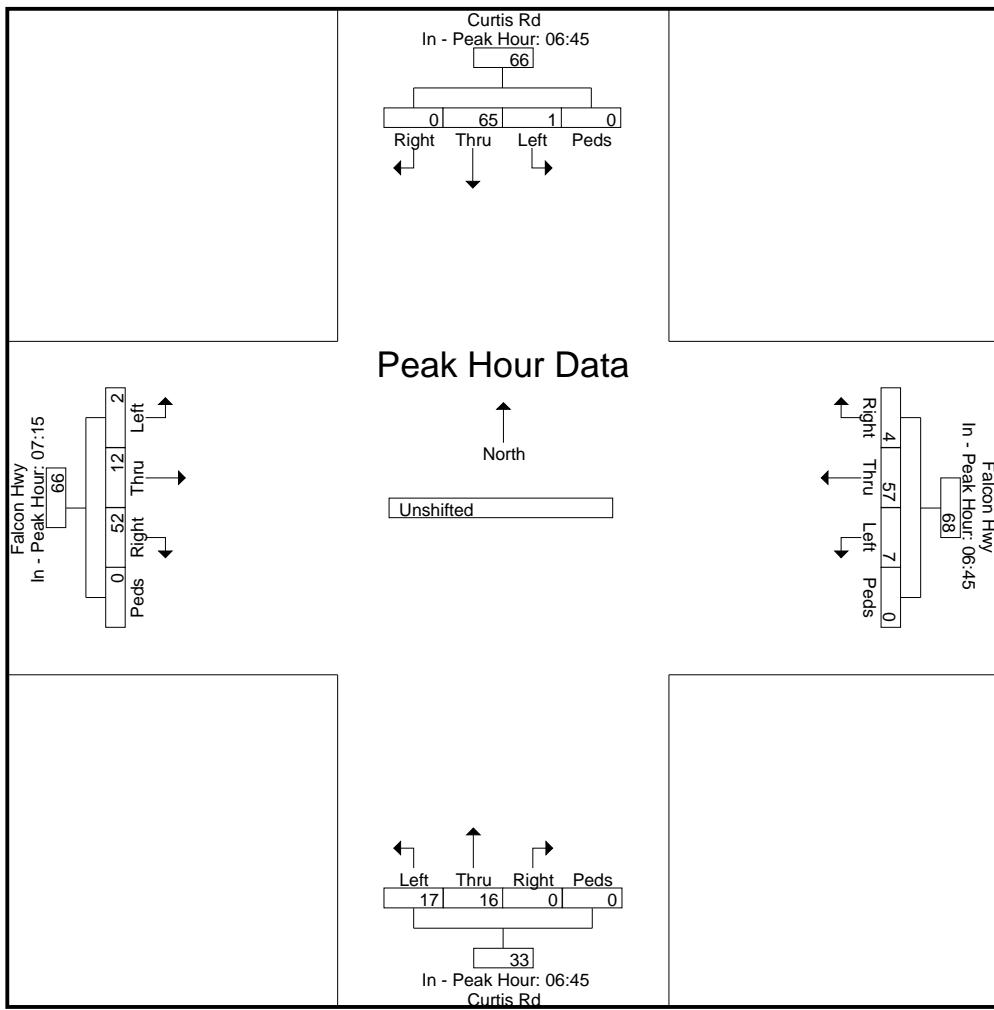
Page No : 3

Start Time	Curtis Rd Southbound				Falcon Hwy Westbound				Curtis Rd Northbound				Falcon Hwy Eastbound				App. Total	Int. Total
	Right	Thru	Left	Peds														

Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	6:45:00 AM					6:45:00 AM					6:45:00 AM					7:15:00 AM					
	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
+0 mins.	0	53	0	0	53	6	47	4	0	57	0	16	12	0	28	53	9	1	0	63	
+5 mins.	4	65	2	0	71	14	61	4	0	79	0	17	7	0	24	55	16	4	0	75	
+10 mins.	8	54	4	0	66	12	57	2	0	71	1	24	18	0	43	39	13	2	0	54	
+15 mins.	5	68	3	0	76	9	44	4	0	57	1	18	19	0	38	35	16	3	0	54	
Total Volume	17	240	9	0	266	41	209	14	0	264	2	75	56	0	133	182	54	10	0	246	
% App. Total	6.4	90.2	3.4	0		15.5	79.2	5.3	0		1.5	56.4	42.1	0		74	22	4.1	0		
PHF	.531	.882	.563	.000	.875	.732	.857	.875	.000	.835	.500	.781	.737	.000	.773	.827	.844	.625	.000	.820	



LSC Transportation Consultants, Inc.

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File Name : Curtis Rd - Falcon Hwy PM

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Groups Printed- Unshifted

Start Time	Curtis Rd Southbound					Falcon Hwy Westbound					Curtis Rd Northbound					Falcon Hwy Eastbound					
	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
16:00	1	2	1	0	4	2	6	1	0	9	1	9	12	0	22	5	13	1	0	19	54
16:05	2	9	4	0	15	1	9	0	0	10	2	11	12	0	25	6	12	1	0	19	69
16:10	1	4	3	0	8	2	8	1	0	11	2	14	9	0	25	1	12	2	0	15	59
16:15	0	7	1	0	8	0	9	0	0	9	1	13	16	0	30	3	13	0	0	16	63
16:20	1	3	0	0	4	1	5	0	0	6	4	16	14	0	34	6	11	2	0	19	63
16:25	1	6	0	0	7	2	10	1	0	13	3	18	16	0	37	5	17	1	0	23	80
16:30	2	2	1	0	5	0	7	1	0	8	6	21	20	0	47	3	12	0	0	15	75
16:35	1	6	2	0	9	2	9	3	0	14	3	17	14	0	34	13	14	1	0	28	85
16:40	1	2	1	0	4	0	15	0	0	15	3	16	19	0	38	5	13	0	0	18	75
16:45	2	3	3	0	8	1	8	0	0	9	3	10	16	0	29	9	14	2	0	25	71
16:50	2	2	3	0	7	1	7	1	0	9	3	19	18	0	40	3	21	2	0	26	82
16:55	0	2	2	0	4	3	7	1	0	11	3	16	17	0	36	4	13	1	0	18	69
Total	14	48	21	0	83	15	100	9	0	124	34	180	183	0	397	63	165	13	0	241	845
17:00	0	5	0	0	5	0	4	0	0	4	2	7	18	0	27	8	16	2	0	26	62
17:05	2	2	1	0	5	1	5	1	0	7	2	20	10	0	32	6	14	1	0	21	65
17:10	0	4	2	0	6	0	9	0	0	9	3	11	4	0	18	4	14	0	0	18	51
17:15	1	1	2	0	4	0	9	1	0	10	3	18	12	0	33	10	18	1	0	29	76
17:20	1	6	1	0	8	0	5	0	0	5	1	16	12	0	29	3	18	2	0	23	65
17:25	0	4	3	0	7	0	2	0	0	2	3	11	17	0	31	6	18	1	0	25	65
17:30	2	3	0	0	5	0	3	1	0	4	0	11	6	0	17	4	14	2	0	20	46
17:35	0	2	2	0	4	1	9	0	0	10	4	9	8	0	21	6	14	1	0	21	56
17:40	0	5	0	0	5	1	8	1	0	10	0	10	8	0	18	4	13	1	0	18	51
17:45	1	3	2	0	6	0	4	0	0	4	0	8	10	0	18	9	21	0	0	30	58
17:50	1	3	0	0	4	0	8	1	0	9	2	5	4	0	11	6	13	0	0	19	43
17:55	0	4	3	0	7	0	10	0	0	10	2	5	13	0	20	5	19	0	0	24	61
Total	8	42	16	0	66	3	76	5	0	84	22	131	122	0	275	71	192	11	0	274	699
Grand Total	22	90	37	0	149	18	176	14	0	208	56	311	305	0	672	134	357	24	0	515	1544
Apprch %	14.8	60.4	24.8	0		8.7	84.6	6.7	0		8.3	46.3	45.4	0		26	69.3	4.7	0		
Total %	1.4	5.8	2.4	0	9.7	1.2	11.4	0.9	0	13.5	3.6	20.1	19.8	0	43.5	8.7	23.1	1.6	0	33.4	

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File Name : Curtis Rd - Falcon Hwy PM

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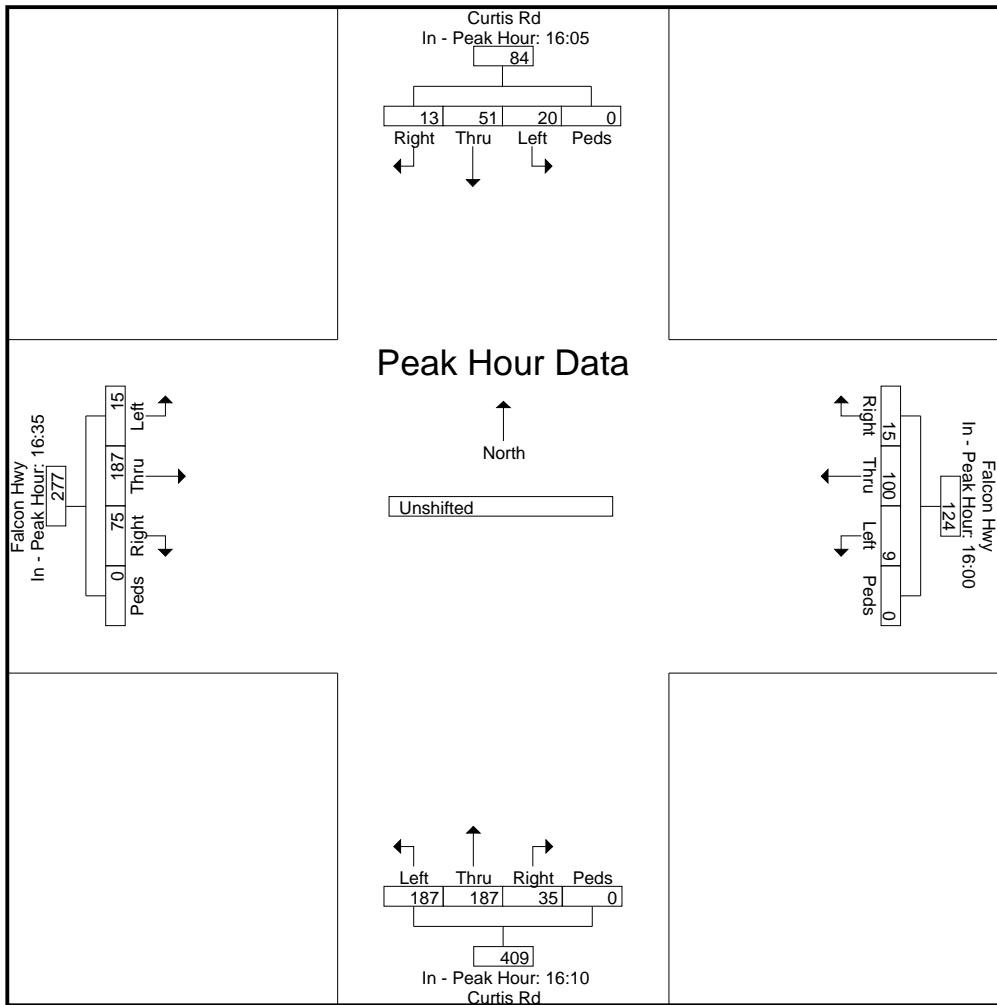
	Curtis Rd Southbound					Falcon Hwy Westbound					Curtis Rd Northbound					Falcon Hwy Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:55 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:25																					
16:25	1	6	0	0	7	2	10	1	0	13	3	18	16	0	37	5	17	1	0	23	80
16:30	2	2	1	0	5	0	7	1	0	8	6	21	20	0	47	3	12	0	0	15	75
16:35	1	6	2	0	9	2	9	3	0	14	3	17	14	0	34	13	14	1	0	28	85
16:40	1	2	1	0	4	0	15	0	0	15	3	16	19	0	38	5	13	0	0	18	75
16:45	2	3	3	0	8	1	8	0	0	9	3	10	16	0	29	9	14	2	0	25	71
16:50	2	2	3	0	7	1	7	1	0	9	3	19	18	0	40	3	21	2	0	26	82
16:55	0	2	2	0	4	3	7	1	0	11	3	16	17	0	36	4	13	1	0	18	69
17:00	0	5	0	0	5	0	4	0	0	4	2	7	18	0	27	8	16	2	0	26	62
17:05	2	2	1	0	5	1	5	1	0	7	2	20	10	0	32	6	14	1	0	21	65
17:10	0	4	2	0	6	0	9	0	0	9	3	11	4	0	18	4	14	0	0	18	51
17:15	1	1	2	0	4	0	9	1	0	10	3	18	12	0	33	10	18	1	0	29	76
17:20	1	6	1	0	8	0	5	0	0	5	1	16	12	0	29	3	18	2	0	23	65
Total Volume	13	41	18	0	72	10	95	9	0	114	35	189	176	0	400	73	184	13	0	270	856
% App. Total	18.1	56.9	25	0		8.8	83.3	7.9	0		8.8	47.2	44	0		27	68.1	4.8	0		
PHF	.542	.569	.500	.000	.667	.278	.528	.250	.000	.633	.486	.750	.733	.000	.709	.468	.730	.542	.000	.776	.839

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File Name : Curtis Rd - Falcon Hwy PM
 Site Code : S214950
 Start Date : 4/20/2022
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Start Time	Curtis Rd Southbound					Falcon Hwy Westbound					Curtis Rd Northbound					Falcon Hwy Eastbound				
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total
Peak Hour Analysis From 16:00 to 17:55 - Peak 1 of 1																				
Peak Hour for Each Approach Begins at:																				
16:05	2	9	4	0	15	2	6	1	0	9	2	14	9	0	25	13	14	1	0	28
+0 mins.	2	9	4	0	15	1	4	3	0	8	1	9	0	0	10	1	13	16	0	30
+5 mins.	1	4	3	0	8	2	8	1	0	11	4	16	14	0	34	9	14	2	0	25
+10 mins.	0	7	1	0	8	0	9	0	0	9	3	18	16	0	37	3	21	2	0	26
+15 mins.	1	3	0	0	4	0	9	0	0	9	3	17	14	0	34	8	16	2	0	26
+20 mins.	1	6	0	0	7	1	5	0	0	6	6	21	20	0	47	4	13	1	0	18
+25 mins.	2	2	1	0	5	2	10	1	0	13	3	17	14	0	34	6	14	1	0	21
+30 mins.	1	6	2	0	9	0	7	1	0	8	3	16	19	0	38	6	14	0	0	18
+35 mins.	1	2	1	0	4	2	9	3	0	14	3	10	16	0	29	4	14	0	0	18
+40 mins.	2	3	3	0	8	0	15	0	0	15	3	19	18	0	40	10	18	1	0	29
+45 mins.	2	2	3	0	7	1	8	0	0	9	3	16	17	0	36	3	18	2	0	23
+50 mins.	0	2	2	0	4	1	7	1	0	9	2	7	18	0	27	6	18	1	0	25
+55 mins.	0	5	0	0	5	3	7	1	0	11	2	20	10	0	32	4	14	2	0	20
Total Volume	13	51	20	0	84	15	100	9	0	124	35	187	187	0	409	75	187	15	0	277
% App. Total	15.5	60.7	23.8	0		12.1	80.6	7.3	0		8.6	45.7	45.7	0		27.1	67.5	5.4	0	
PHF	.542	.472	.417	.000	.467	.417	.556	.250	.000	.689	.486	.742	.779	.000	.725	.481	.742	.625	.000	.796



LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

File Name : Curtis Rd - Falcon Hwy PM

Site Code : S214950

Start Date : 4/20/2022

Page No : 1

Groups Printed- Unshifted

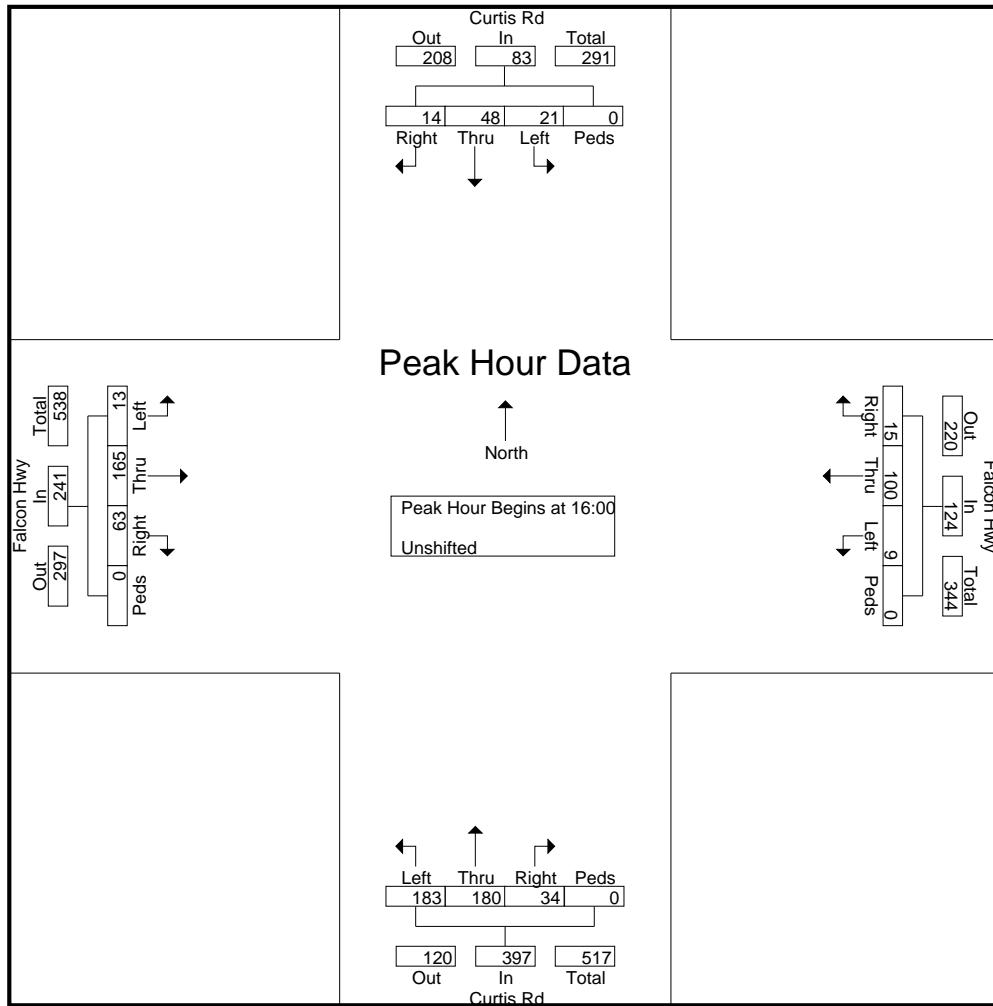
	Curtis Rd Southbound					Falcon Hwy Westbound					Curtis Rd Northbound					Falcon Hwy Eastbound						
	Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
16:00	4	15	8	0	27	5	23	2	0	30	5	34	33	0	72	12	37	4	0	53	182	
16:15	2	16	1	0	19	3	24	1	0	28	8	47	46	0	101	14	41	3	0	58	206	
16:30	4	10	4	0	18	2	31	4	0	37	12	54	53	0	119	21	39	1	0	61	235	
16:45	4	7	8	0	19	5	22	2	0	29	9	45	51	0	105	16	48	5	0	69	222	
Total		14	48	21	0	83	15	100	9	0	124	34	180	183	0	397	63	165	13	0	241	845
17:00	2	11	3	0	16	1	18	1	0	20	7	38	32	0	77	18	44	3	0	65	178	
17:15	2	11	6	0	19	0	16	1	0	17	7	45	41	0	93	19	54	4	0	77	206	
17:30	2	10	2	0	14	2	20	2	0	24	4	30	22	0	56	14	41	4	0	59	153	
17:45	2	10	5	0	17	0	22	1	0	23	4	18	27	0	49	20	53	0	0	73	162	
Total		8	42	16	0	66	3	76	5	0	84	22	131	122	0	275	71	192	11	0	274	699
Grand Total		22	90	37	0	149	18	176	14	0	208	56	311	305	0	672	134	357	24	0	515	1544
Apprch %		14.8	60.4	24.8	0		8.7	84.6	6.7	0		8.3	46.3	45.4	0		26	69.3	4.7	0		
Total %		1.4	5.8	2.4	0	9.7	1.2	11.4	0.9	0	13.5	3.6	20.1	19.8	0	43.5	8.7	23.1	1.6	0	33.4	

LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : Curtis Rd - Falcon Hwy PM
 Site Code : S214950
 Start Date : 4/20/2022
 Page No : 2

Start Time	Curtis Rd Southbound					Falcon Hwy Westbound					Curtis Rd Northbound					Falcon Hwy Eastbound					
	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 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 4:00:00 PM																					
4:00:00 PM	4	15	8	0	27	5	23	2	0	30	5	34	33	0	72	12	37	4	0	53	182
4:15:00 PM	2	16	1	0	19	3	24	1	0	28	8	47	46	0	101	14	41	3	0	58	206
4:30:00 PM	4	10	4	0	18	2	31	4	0	37	12	54	53	0	119	21	39	1	0	61	235
4:45:00 PM	4	7	8	0	19	5	22	2	0	29	9	45	51	0	105	16	48	5	0	69	222
Total Volume	14	48	21	0	83	15	100	9	0	124	34	180	183	0	397	63	165	13	0	241	845
% App. Total	16.9	57.8	25.3	0		12.1	80.6	7.3	0		8.6	45.3	46.1	0		26.1	68.5	5.4	0		
PHF	.875	.750	.656	.000	.769	.750	.806	.563	.000	.838	.708	.833	.863	.000	.834	.750	.859	.650	.000	.873	.899



LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

File Name : Curtis Rd - Falcon Hwy PM

Site Code : S214950

Start Date : 4/20/2022

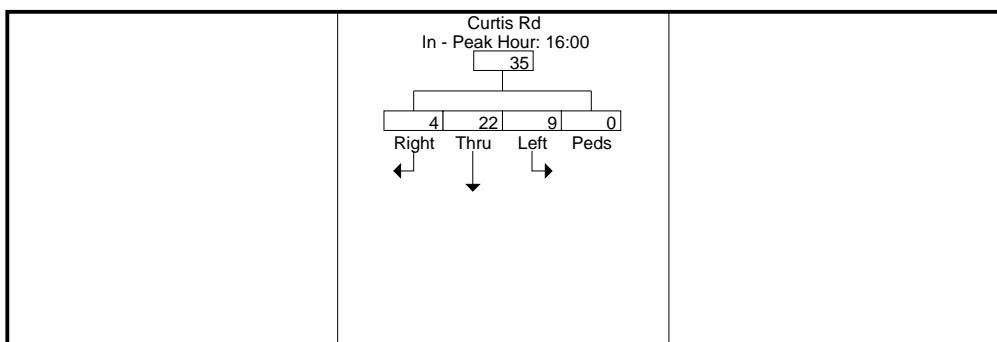
Page No : 3

	Curtis Rd Southbound				Falcon Hwy Westbound				Curtis Rd Northbound				Falcon Hwy 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

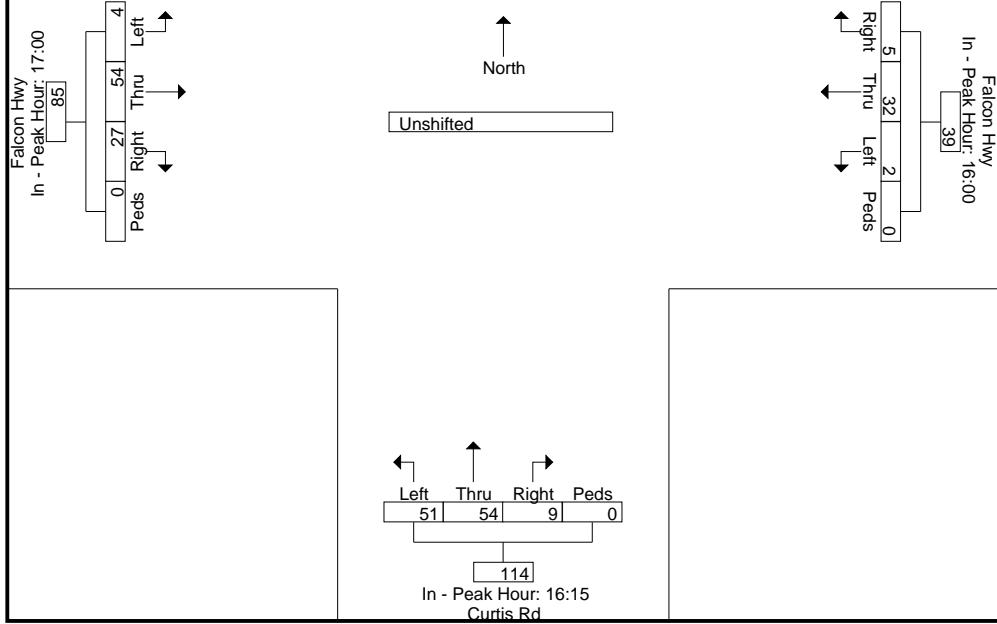
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	4:00:00 PM	4:00:00 PM	4:15:00 PM	5:00:00 PM
+0 mins.	4 15 8 0 27	5 23 2 0 30	8 47 46 0 101	18 44 3 0 65
+5 mins.	2 16 1 0 19	3 24 1 0 28	12 54 53 0 119	19 54 4 0 77
+10 mins.	4 10 4 0 18	2 31 4 0 37	9 45 51 0 105	14 41 4 0 59
+15 mins.	4 7 8 0 19	5 22 2 0 29	7 38 32 0 77	20 53 0 0 73
Total Volume	14 48 21 0 83	15 100 9 0 124	36 184 182 0 402	71 192 11 0 274
% App. Total	16.9 57.8 25.3 0	12.1 80.6 7.3 0	9 45.8 45.3 0	25.9 70.1 4 0
PHF	.875 .750 .656 .000 .769	.750 .806 .563 .000 .838	.750 .852 .858 .000 .845	.888 .889 .688 .000 .890



Peak Hour Data



LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

File Name : Curtis Rd - Judge Orr Rd AM

Site Code : S214950

Start Date : 4/21/2022

Page No : 1

Groups Printed- Unshifted

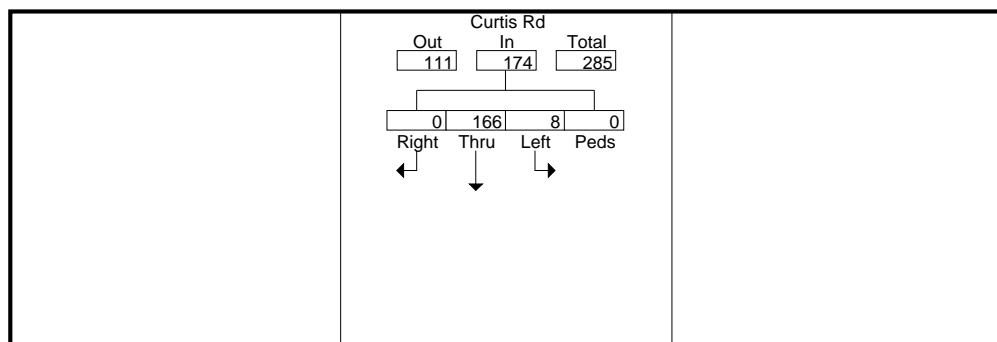
	Curtis Rd Southbound					Judge Orr Rd Westbound					Curtis Rd Northbound					Judge Orr Rd Eastbound						
	Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:30	0	15	0	0	0	15	1	8	0	0	9	0	3	1	0	4	4	2	0	0	6	34
06:35	0	13	1	0	0	14	1	10	1	0	12	0	2	2	0	4	6	1	0	0	7	37
06:40	0	14	0	0	0	14	0	11	1	0	12	0	4	1	0	5	4	2	0	0	6	37
06:45	0	12	1	0	0	13	2	12	1	0	15	0	5	3	0	8	5	1	0	0	6	42
06:50	0	14	0	0	0	14	4	6	0	0	10	0	5	1	0	6	4	5	0	0	9	39
06:55	0	14	2	0	0	16	0	9	4	0	13	0	2	2	0	4	4	3	0	0	7	40
Total		0	82	4	0	86	8	56	7	0	71	0	21	10	0	31	27	14	0	0	41	229
07:00	0	13	0	0	0	13	1	9	2	0	12	0	11	2	0	13	4	4	0	0	8	46
07:05	0	13	0	0	0	13	5	16	2	0	23	0	6	3	0	9	6	3	0	0	9	54
07:10	0	18	0	0	0	18	2	9	1	0	12	0	9	4	0	13	9	3	0	0	12	55
07:15	0	16	0	0	0	16	6	11	4	0	21	0	9	2	0	11	7	3	0	0	10	58
07:20	0	15	0	0	0	15	1	9	1	0	11	0	9	4	0	13	7	3	0	0	10	49
07:25	0	9	1	0	0	10	5	11	1	0	17	0	7	4	0	11	8	2	0	0	10	48
07:30	0	20	0	0	0	20	1	8	1	0	10	0	4	2	0	6	7	4	1	0	12	48
07:35	0	9	1	0	0	10	3	7	2	0	12	0	5	3	0	8	9	1	0	0	10	40
07:40	0	13	3	0	0	16	3	9	0	0	12	0	5	5	0	10	9	2	0	0	11	49
07:45	0	18	0	0	0	18	1	7	1	0	9	0	3	2	0	5	5	1	1	0	7	39
07:50	0	13	1	0	0	14	0	12	0	0	12	0	3	1	0	4	4	2	0	0	6	36
07:55	1	11	1	0	0	13	2	13	1	0	16	1	5	5	0	11	3	2	0	0	5	45
Total		1	168	7	0	176	30	121	16	0	167	1	76	37	0	114	78	30	2	0	110	567
08:00	1	8	1	0	0	10	1	4	1	0	6	0	3	3	0	6	2	2	0	0	4	26
08:05	0	8	3	0	0	11	2	6	1	0	9	0	2	0	0	2	1	2	0	0	3	25
08:10	0	1	3	0	0	4	1	8	0	0	9	0	3	0	0	3	2	3	1	0	6	22
08:15	0	7	1	0	0	8	0	6	1	0	7	0	3	1	0	4	1	4	0	0	5	24
08:20	0	6	2	0	0	8	3	9	0	0	12	0	7	1	0	8	4	3	0	0	7	35
08:25	1	4	0	0	0	5	0	6	0	0	6	2	4	0	0	6	2	6	0	0	8	25
Grand Total	3	284	21	0	0	308	45	216	26	0	287	3	119	52	0	174	117	64	3	0	184	953
Apprch %	1	92.2	6.8	0		15.7	75.3	9.1	0		1.7	68.4	29.9	0		63.6	34.8	1.6	0			
Total %	0.3	29.8	2.2	0	32.3	4.7	22.7	2.7	0	30.1	0.3	12.5	5.5	0	18.3	12.3	6.7	0.3	0	19.3		

LSC Transportation Consultants, Inc.

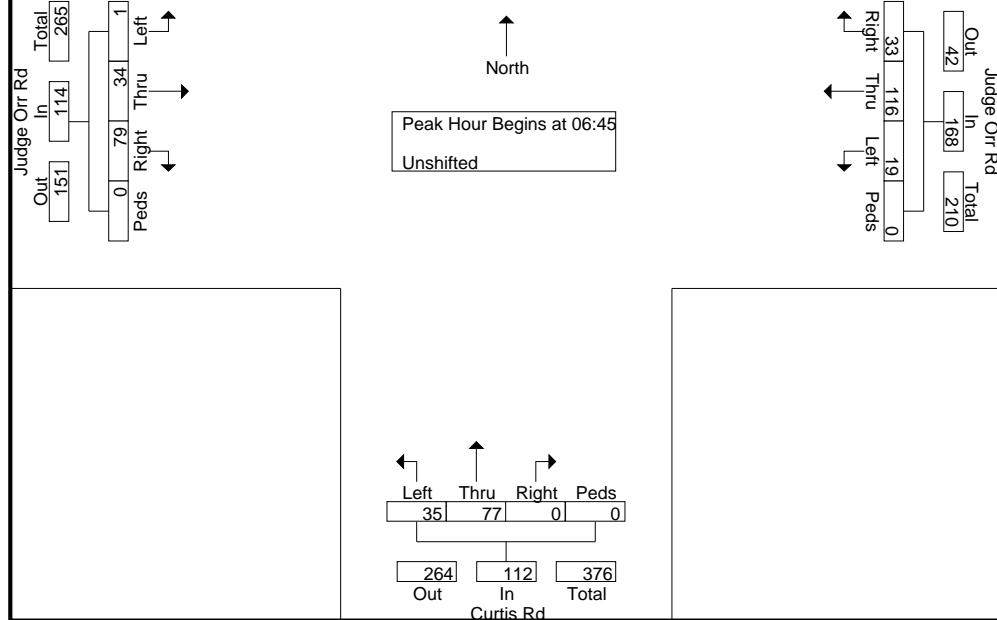
2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : Curtis Rd - Judge Orr Rd AM
 Site Code : S214950
 Start Date : 4/21/2022
 Page No : 2

Start Time	Curtis Rd Southbound					Judge Orr Rd Westbound					Curtis Rd Northbound					Judge Orr Rd Eastbound					
	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 06:30 to 08:25 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:45																					
06:45	0	12	1	0	13	2	12	1	0	15	0	5	3	0	8	5	1	0	0	6	42
06:50	0	14	0	0	14	4	6	0	0	10	0	5	1	0	6	4	5	0	0	9	39
06:55	0	14	2	0	16	0	9	4	0	13	0	2	2	0	4	4	3	0	0	7	40
07:00	0	13	0	0	13	1	9	2	0	12	0	11	2	0	13	4	4	0	0	8	46
07:05	0	13	0	0	13	5	16	2	0	23	0	6	3	0	9	6	3	0	0	9	54
07:10	0	18	0	0	18	2	9	1	0	12	0	9	4	0	13	9	3	0	0	12	55
07:15	0	16	0	0	16	6	11	4	0	21	0	9	2	0	11	7	3	0	0	10	58
07:20	0	15	0	0	15	1	9	1	0	11	0	9	4	0	13	7	3	0	0	10	49
07:25	0	9	1	0	10	5	11	1	0	17	0	7	4	0	11	8	2	0	0	10	48
07:30	0	20	0	0	20	1	8	1	0	10	0	4	2	0	6	7	4	1	0	12	48
07:35	0	9	1	0	10	3	7	2	0	12	0	5	3	0	8	9	1	0	0	10	40
07:40	0	13	3	0	16	3	9	0	0	12	0	5	5	0	10	9	2	0	0	11	49
Total Volume	0	166	8	0	174	33	116	19	0	168	0	77	35	0	112	79	34	1	0	114	568
% App. Total	0	95.4	4.6	0		19.6	69	11.3	0		0	68.8	31.2	0		69.3	29.8	0.9	0		
PHF	.000	.692	.222	.000	.725	.458	.604	.396	.000	.609	.000	.583	.583	.000	.718	.731	.567	.083	.000	.792	.816



Peak Hour Data

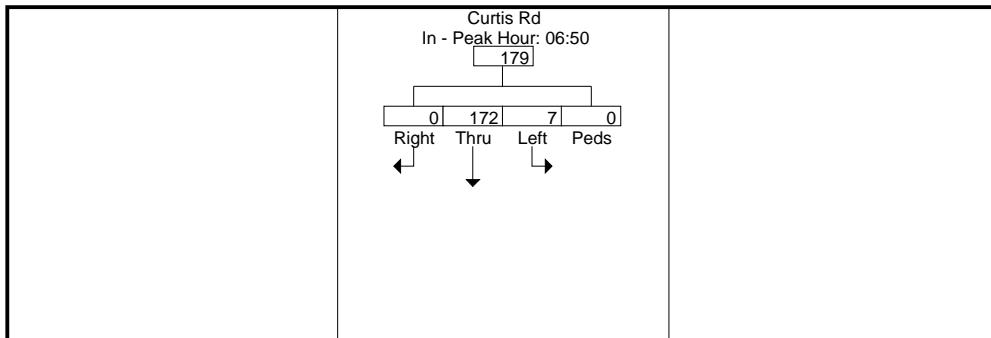


LSC Transportation Consultants, Inc.

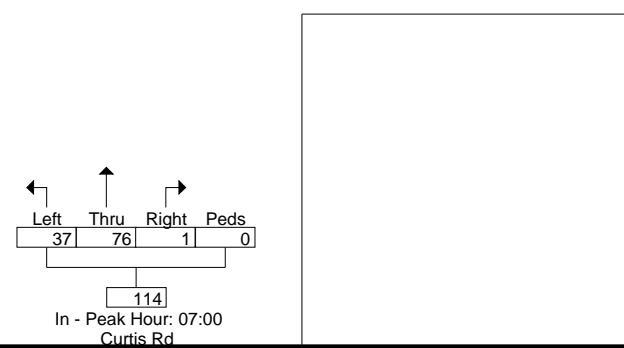
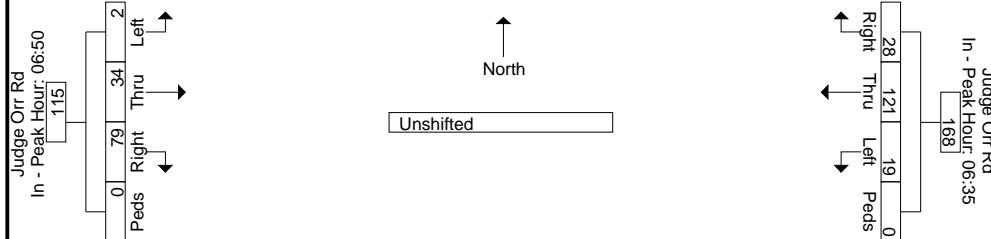
2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : Curtis Rd - Judge Orr Rd AM
 Site Code : S214950
 Start Date : 4/21/2022
 Page No : 3

Start Time	Curtis Rd Southbound				Judge Orr Rd Westbound				Curtis Rd Northbound				Judge Orr Rd Eastbound				Int. Total					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total		
Peak Hour Analysis From 06:30 to 08:25 - Peak 1 of 1																						
Peak Hour for Each Approach Begins at:																						
06:50	0	14	0	0	14	06:35	1	10	1	0	12	0	11	2	0	13	06:50	4	5	0	0	9
+0 mins.	0	14	2	0	16	+5 mins.	0	11	1	0	12	0	6	3	0	9	+4 mins.	4	3	0	0	7
+10 mins.	0	13	0	0	13	+15 mins.	2	12	1	0	15	0	9	4	0	13	+3 mins.	4	4	0	0	8
+20 mins.	0	13	0	0	13	+25 mins.	4	6	0	0	10	0	9	2	0	11	+2 mins.	6	3	0	0	9
+30 mins.	0	18	0	0	18	+35 mins.	0	9	4	0	13	0	9	4	0	13	+1 min.	9	3	0	0	12
+40 mins.	0	16	0	0	16	+45 mins.	1	9	2	0	12	0	7	4	0	11	0	7	3	0	0	10
+50 mins.	0	15	0	0	15	+55 mins.	5	16	2	0	23	0	4	2	0	6	+54 mins.	7	3	0	0	10
Total Volume	0	172	7	0	179	06:35	28	121	19	0	168	1	76	37	0	114	06:50	79	34	2	0	115
% App. Total	0	96.1	3.9	0		+0 mins.	16.7	72	11.3	0		0.9	66.7	32.5	0		+5 mins.	68.7	29.6	1.7	0	
PHF	.000	.717	.194	.000	.746	06:35	.389	.630	.396	.000	.609	.083	.576	.617	.000	.731	06:50	.731	.567	.167	.000	.799



Peak Hour Data



LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
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 719-633-2868

File Name : Curtis Rd - Judge Orr Rd AM
 Site Code : S214950
 Start Date : 4/21/2022
 Page No : 1

Groups Printed- Unshifted

	Curtis Rd Southbound					Judge Orr Rd Westbound					Curtis Rd Northbound					Judge Orr Rd 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
06:30	0	42	1	0	43	43	2	29	2	0	33	0	9	4	0	13	14	5	0	0	19	108
06:45	0	40	3	0	43	43	6	27	5	0	38	0	12	6	0	18	13	9	0	0	22	121
Total		0	82	4	0	86	8	56	7	0	71	0	21	10	0	31	27	14	0	0	41	229
07:00	0	44	0	0	44	44	8	34	5	0	47	0	26	9	0	35	19	10	0	0	29	155
07:15	0	40	1	0	41	41	12	31	6	0	49	0	25	10	0	35	22	8	0	0	30	155
07:30	0	42	4	0	46	46	7	24	3	0	34	0	14	10	0	24	25	7	1	0	33	137
07:45	1	42	2	0	45	45	3	32	2	0	37	1	11	8	0	20	12	5	1	0	18	120
Total		1	168	7	0	176	30	121	16	0	167	1	76	37	0	114	78	30	2	0	110	567
08:00	1	17	7	0	25	25	4	18	2	0	24	0	8	3	0	11	5	7	1	0	13	73
08:15	1	17	3	0	21	21	3	21	1	0	25	2	14	2	0	18	7	13	0	0	20	84
Grand Total		3	284	21	0	308	45	216	26	0	287	3	119	52	0	174	117	64	3	0	184	953
Apprch %		1	92.2	6.8	0		15.7	75.3	9.1	0		1.7	68.4	29.9	0		63.6	34.8	1.6	0		
Total %		0.3	29.8	2.2	0	32.3	4.7	22.7	2.7	0	30.1	0.3	12.5	5.5	0	18.3	12.3	6.7	0.3	0	19.3	

LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : Curtis Rd - Judge Orr Rd AM
 Site Code : S214950
 Start Date : 4/21/2022
 Page No : 2

	Curtis Rd Southbound					Judge Orr Rd Westbound					Curtis Rd Northbound					Judge Orr Rd 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 6:30:00 AM to 8:15:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 6:45:00 AM																					
6:45:00 AM	0	40	3	0	43	6	27	5	0	38	0	12	6	0	18	13	9	0	0	22	121
7:00:00 AM	0	44	0	0	44	8	34	5	0	47	0	26	9	0	35	19	10	0	0	29	155
7:15:00 AM	0	40	1	0	41	12	31	6	0	49	0	25	10	0	35	22	8	0	0	30	155
7:30:00 AM	0	42	4	0	46	7	24	3	0	34	0	14	10	0	24	25	7	1	0	33	137
Total Volume	0	166	8	0	174	33	116	19	0	168	0	77	35	0	112	79	34	1	0	114	568
% App. Total	0	95.4	4.6	0		19.6	69	11.3	0		0	68.8	31.2	0		69.3	29.8	0.9	0		
PHF	.000	.943	.500	.000	.946	.688	.853	.792	.000	.857	.000	.740	.875	.000	.800	.790	.850	.250	.000	.864	.916

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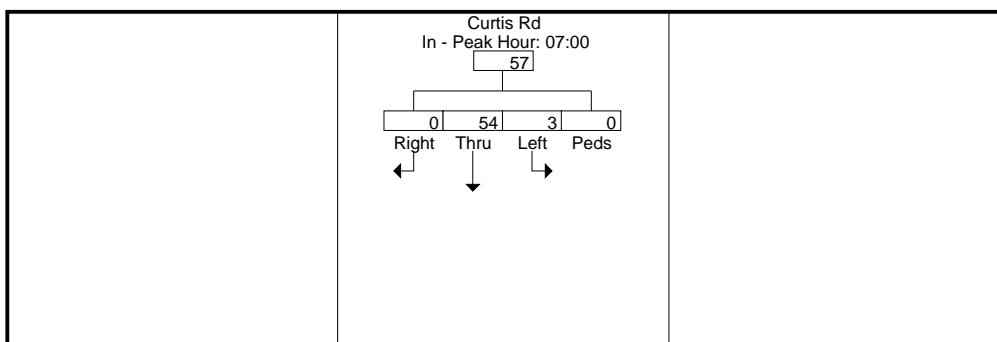
File Name : Curtis Rd - Judge Orr Rd AM
 Site Code : S214950
 Start Date : 4/21/2022
 Page No : 3

	Curtis Rd Southbound				Judge Orr Rd Westbound				Curtis Rd Northbound				Judge Orr Rd 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

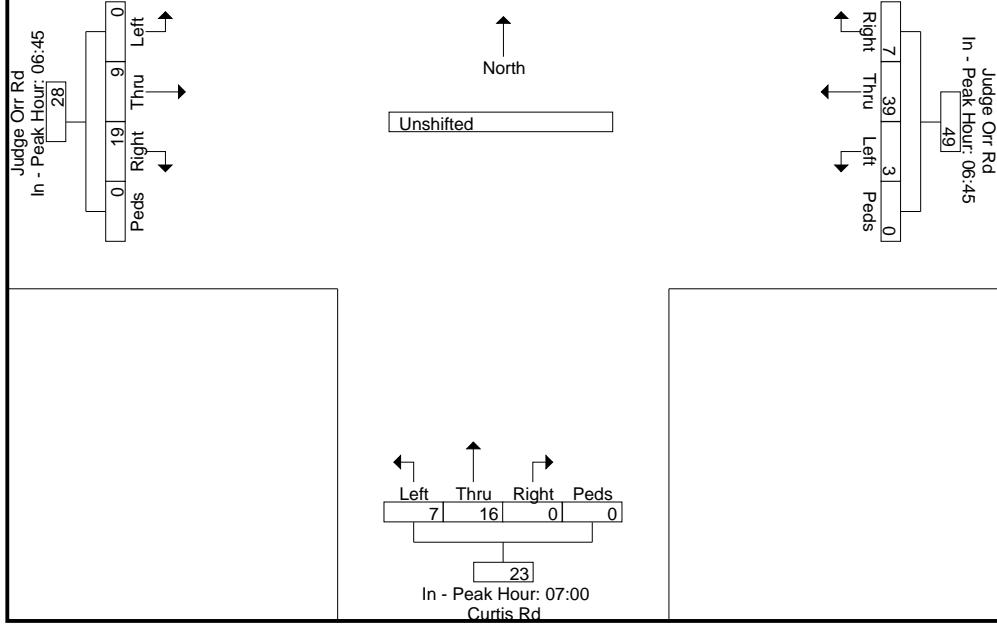
Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	7:00:00 AM	6:45:00 AM				7:00:00 AM				6:45:00 AM										
+0 mins.	0	44	0	0	44	6	27	5	0	38	0	26	9	0	35	13	9	0	0	22
+5 mins.	0	40	1	0	41	8	34	5	0	47	0	25	10	0	35	19	10	0	0	29
+10 mins.	0	42	4	0	46	12	31	6	0	49	0	14	10	0	24	22	8	0	0	30
+15 mins.	1	42	2	0	45	7	24	3	0	34	1	11	8	0	20	25	7	1	0	33
Total Volume	1	168	7	0	176	33	116	19	0	168	1	76	37	0	114	79	34	1	0	114
% App. Total	0.6	95.5	4	0		19.6	69	11.3	0		0.9	66.7	32.5	0		69.3	29.8	0.9	0	
PHF	.250	.955	.438	.000	.957	.688	.853	.792	.000	.857	.250	.731	.925	.000	.814	.790	.850	.250	.000	.864



Peak Hour Data



LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304

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719-633-2868

File Name : Curtis Rd - Judge Orr Rd PM

Site Code : S214950

Start Date : 4/21/2022

Page No : 1

Groups Printed- Unshifted

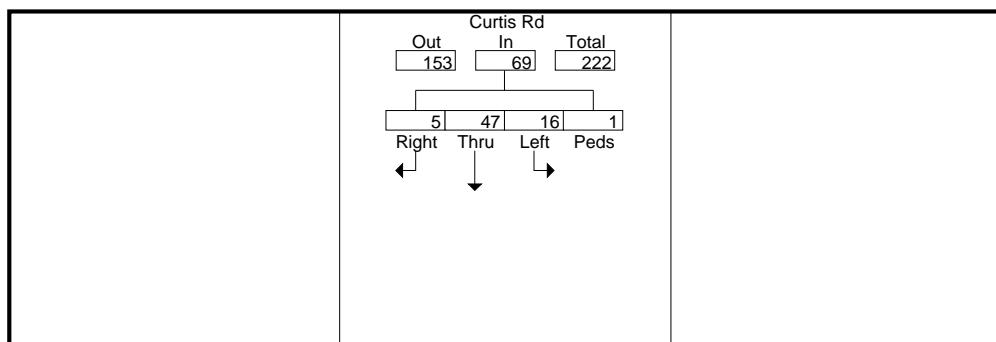
Start Time	Curtis Rd Southbound					Judge Orr Rd Westbound					Curtis Rd Northbound					Judge Orr Rd Eastbound					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
16:00	1	4	1	0	6	0	7	0	0	7	0	11	4	0	15	3	10	0	0	13	41
16:05	1	5	2	1	9	1	8	0	0	9	0	12	8	0	20	2	9	0	0	11	49
16:10	0	3	1	0	4	0	10	1	0	11	2	10	3	0	15	4	12	0	0	16	46
16:15	0	4	1	0	5	1	3	1	0	5	1	11	3	0	15	3	8	0	0	11	36
16:20	1	5	0	0	6	1	5	0	0	6	3	11	9	0	23	3	10	0	0	13	48
16:25	0	1	1	0	2	2	5	0	0	7	0	16	6	0	22	3	3	0	0	6	37
16:30	0	4	2	0	6	2	6	0	0	8	1	9	5	0	15	1	16	1	0	18	47
16:35	0	1	1	0	2	1	3	0	0	4	1	13	3	0	17	4	9	1	0	14	37
16:40	0	6	2	0	8	2	2	0	0	4	3	8	5	0	16	2	5	0	0	7	35
16:45	0	7	1	0	8	1	3	0	0	4	3	9	5	0	17	1	7	0	0	8	37
16:50	1	4	3	0	8	2	7	0	0	9	1	15	10	0	26	2	14	1	0	17	60
16:55	1	3	1	0	5	0	5	0	0	5	3	12	5	0	20	1	7	0	0	8	38
Total	5	47	16	1	69	13	64	2	0	79	18	137	66	0	221	29	110	3	0	142	511
17:00	0	3	2	0	5	0	4	0	0	4	2	9	3	0	14	4	11	0	0	15	38
17:05	0	2	1	0	3	4	4	0	0	8	3	21	3	0	27	0	5	0	0	5	43
17:10	0	4	1	0	5	0	2	0	0	2	1	11	5	0	17	1	16	1	0	18	42
17:15	1	7	0	0	8	0	4	0	0	4	1	8	3	0	12	2	8	0	0	10	34
17:20	0	6	2	0	8	2	5	0	0	7	1	9	3	0	13	3	8	1	0	12	40
17:25	0	2	0	0	2	1	6	0	0	7	0	6	5	0	11	3	6	0	0	9	29
17:30	0	1	2	0	3	2	3	0	0	5	0	7	1	0	8	3	15	0	0	18	34
17:35	0	5	4	0	9	1	3	0	0	4	0	7	2	0	9	3	7	0	0	10	32
17:40	1	4	3	0	8	2	5	0	0	7	2	3	3	0	8	0	14	0	0	14	37
17:45	1	4	5	0	10	0	9	0	0	9	0	7	2	0	9	3	12	0	0	15	43
17:50	0	6	2	0	8	0	7	1	0	8	0	3	2	0	5	0	4	1	0	5	26
17:55	0	3	2	0	5	0	3	0	0	3	1	8	0	0	9	0	7	0	0	7	24
Total	3	47	24	0	74	12	55	1	0	68	11	99	32	0	142	22	113	3	0	138	422
Grand Total	8	94	40	1	143	25	119	3	0	147	29	236	98	0	363	51	223	6	0	280	933
Apprch %	5.6	65.7	28	0.7		17	81	2	0		8	65	27	0		18.2	79.6	2.1	0		
Total %	0.9	10.1	4.3	0.1	15.3	2.7	12.8	0.3	0	15.8	3.1	25.3	10.5	0	38.9	5.5	23.9	0.6	0	30	

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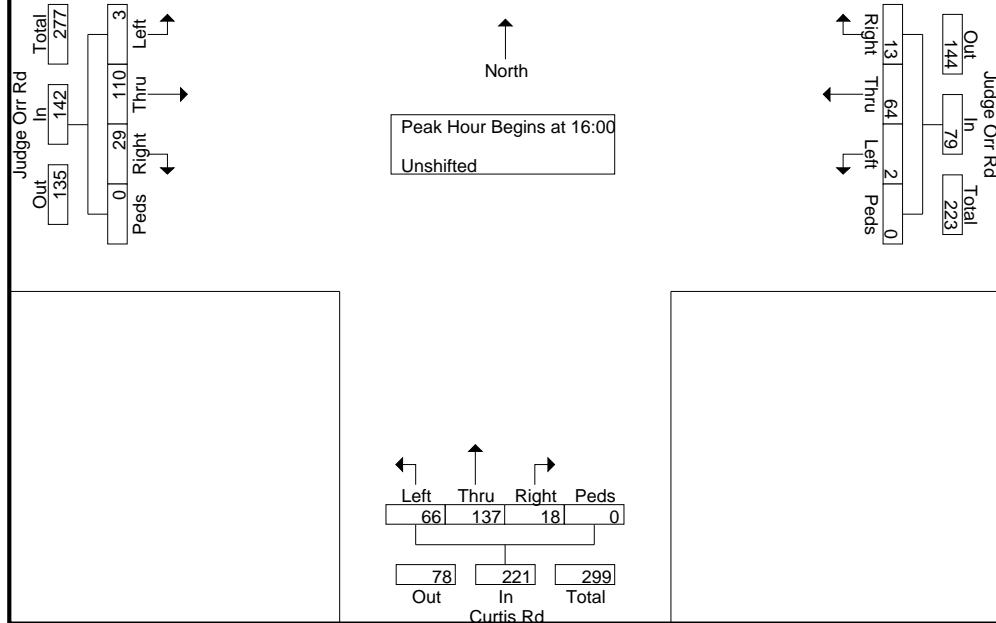
2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : Curtis Rd - Judge Orr Rd PM
 Site Code : S214950
 Start Date : 4/21/2022
 Page No : 2

Start Time	Curtis Rd Southbound					Judge Orr Rd Westbound					Curtis Rd Northbound					Judge Orr Rd Eastbound					
	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 16:00 to 17:55 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	1	4	1	0	6	0	7	0	0	7	0	11	4	0	15	3	10	0	0	13	41
16:05	1	5	2	1	9	1	8	0	0	9	0	12	8	0	20	2	9	0	0	11	49
16:10	0	3	1	0	4	0	10	1	0	11	2	10	3	0	15	4	12	0	0	16	46
16:15	0	4	1	0	5	1	3	1	0	5	1	11	3	0	15	3	8	0	0	11	36
16:20	1	5	0	0	6	1	5	0	0	6	3	11	9	0	23	3	10	0	0	13	48
16:25	0	1	1	0	2	2	5	0	0	7	0	16	6	0	22	3	3	0	0	6	37
16:30	0	4	2	0	6	2	6	0	0	8	1	9	5	0	15	1	16	1	0	18	47
16:35	0	1	1	0	2	1	3	0	0	4	1	13	3	0	17	4	9	1	0	14	37
16:40	0	6	2	0	8	2	2	0	0	4	3	8	5	0	16	2	5	0	0	7	35
16:45	0	7	1	0	8	1	3	0	0	4	3	9	5	0	17	1	7	0	0	8	37
16:50	1	4	3	0	8	2	7	0	0	9	1	15	10	0	26	2	14	1	0	17	60
16:55	1	3	1	0	5	0	5	0	0	5	3	12	5	0	20	1	7	0	0	8	38
Total Volume	5	47	16	1	69	13	64	2	0	79	18	137	66	0	221	29	110	3	0	142	511
% App. Total	7.2	68.1	23.2	1.4		16.5	81	2.5	0		8.1	62	29.9	0		20.4	77.5	2.1	0		
PHF	.417	.560	.444	.083	.639	.542	.533	.167	.000	.598	.500	.714	.550	.000	.708	.604	.573	.250	.000	.657	.710



Peak Hour Data

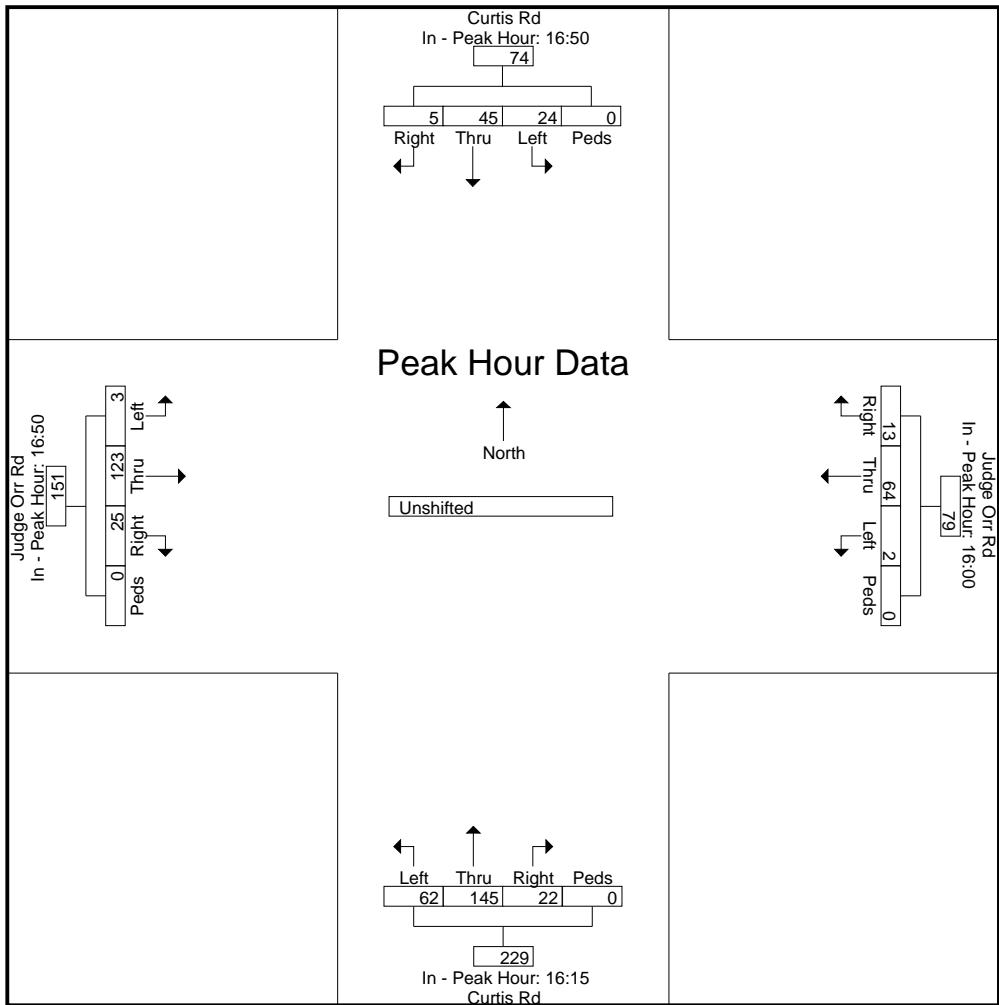


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2504 E. Pikes Peak Ave, Suite 304
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 719-633-2868

File Name : Curtis Rd - Judge Orr Rd PM
 Site Code : S214950
 Start Date : 4/21/2022
 Page No : 3

	Curtis Rd Southbound					Judge Orr Rd Westbound					Curtis Rd Northbound					Judge Orr Rd 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 16:00 to 17:55 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
16:50	1	4	3	0	8	0	7	0	0	7	1	11	3	0	15	2	14	1	0	17	
+0 mins.	1	3	1	0	5	1	8	0	0	9	3	11	9	0	23	1	7	0	0	8	
+5 mins.	0	3	2	0	5	0	10	1	0	11	0	16	6	0	22	4	11	0	0	15	
+10 mins.	0	2	1	0	3	1	3	1	0	5	1	9	5	0	15	0	5	0	0	5	
+15 mins.	0	4	1	0	5	1	5	0	0	6	1	13	3	0	17	1	16	1	0	18	
+20 mins.	1	7	0	0	8	2	5	0	0	7	3	8	5	0	16	2	8	0	0	10	
+25 mins.	0	2	0	0	2	1	3	0	0	4	1	15	10	0	26	3	6	0	0	9	
+30 mins.	0	1	2	0	3	2	2	0	0	4	3	12	5	0	20	3	15	0	0	18	
+35 mins.	0	5	4	0	9	1	3	0	0	4	2	9	3	0	14	3	7	0	0	10	
+40 mins.	1	4	3	0	8	2	7	0	0	9	3	21	3	0	27	0	14	0	0	14	
+45 mins.	1	4	5	0	10	0	5	0	0	5	1	11	5	0	17	3	12	0	0	15	
Total Volume	5	45	24	0	74	13	64	2	0	79	22	145	62	0	229	25	123	3	0	151	
% App. Total	6.8	60.8	32.4	0		16.5	81	2.5	0		9.6	63.3	27.1	0		16.6	81.5	2	0		
PHF	.417	.536	.400	.000	.617	.542	.533	.167	.000	.598	.611	.575	.517	.000	.707	.521	.641	.250	.000	.699	



LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

File Name : Curtis Rd - Judge Orr Rd PM

Site Code : S214950

Start Date : 4/21/2022

Page No : 1

Groups Printed- Unshifted

	Curtis Rd Southbound					Judge Orr Rd Westbound					Curtis Rd Northbound					Judge Orr Rd 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
16:00	2	12	4	1	19	19	1	25	1	0	27	2	33	15	0	50	9	31	0	0	40	136
16:15	1	10	2	0	13	13	4	13	1	0	18	4	38	18	0	60	9	21	0	0	30	121
16:30	0	11	5	0	16	16	5	11	0	0	16	5	30	13	0	48	7	30	2	0	39	119
16:45	2	14	5	0	21	21	3	15	0	0	18	7	36	20	0	63	4	28	1	0	33	135
Total		5	47	16	1	69	13	64	2	0	79	18	137	66	0	221	29	110	3	0	142	511
17:00	0	9	4	0	13	13	4	10	0	0	14	6	41	11	0	58	5	32	1	0	38	123
17:15	1	15	2	0	18	18	3	15	0	0	18	2	23	11	0	36	8	22	1	0	31	103
17:30	1	10	9	0	20	20	5	11	0	0	16	2	17	6	0	25	6	36	0	0	42	103
17:45	1	13	9	0	23	23	0	19	1	0	20	1	18	4	0	23	3	23	1	0	27	93
Total		3	47	24	0	74	12	55	1	0	68	11	99	32	0	142	22	113	3	0	138	422
Grand Total		8	94	40	1	143	25	119	3	0	147	29	236	98	0	363	51	223	6	0	280	933
Apprch %		5.6	65.7	28	0.7		17	81	2	0		8	65	27	0		18.2	79.6	2.1	0		
Total %		0.9	10.1	4.3	0.1	15.3	2.7	12.8	0.3	0	15.8	3.1	25.3	10.5	0	38.9	5.5	23.9	0.6	0	30	

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2504 E. Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

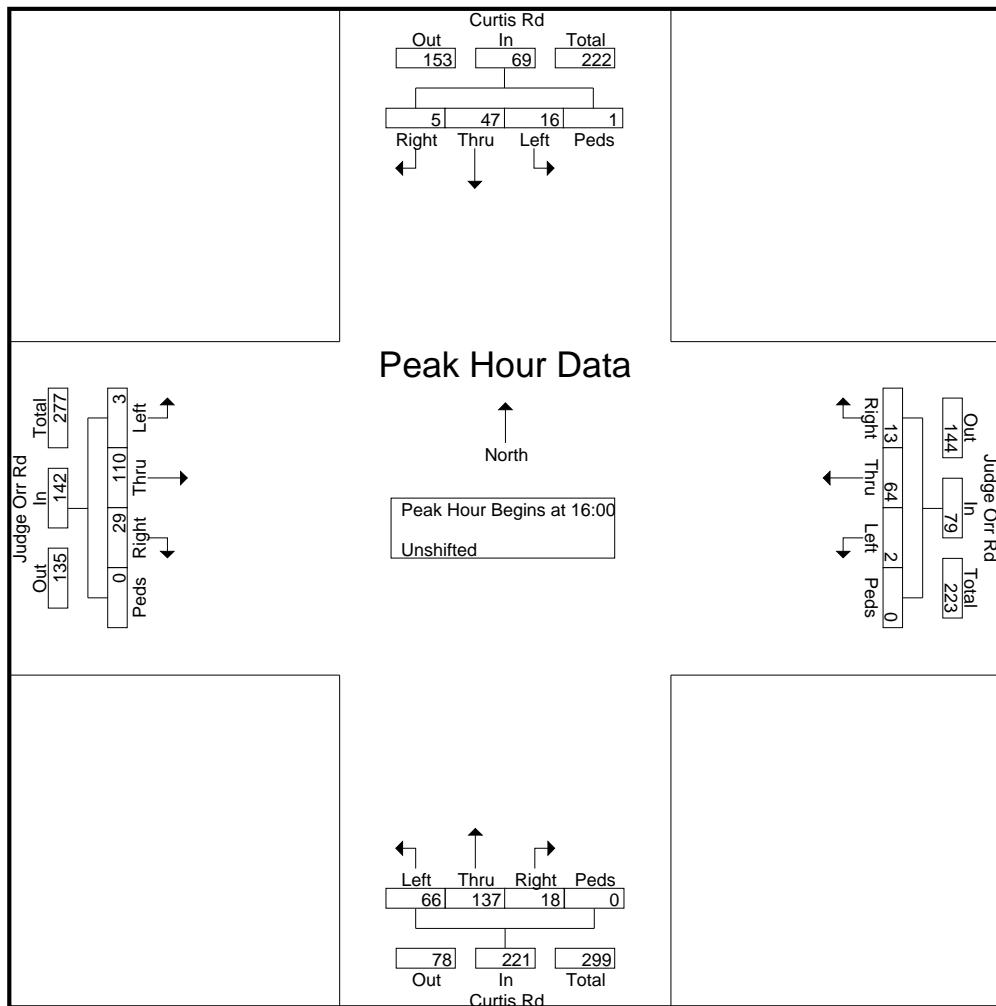
File Name : Curtis Rd - Judge Orr Rd PM

Site Code : S214950

Start Date : 4/21/2022

Page No : 2

	Curtis Rd Southbound					Judge Orr Rd Westbound					Curtis Rd Northbound					Judge Orr Rd 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 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 4:00:00 PM																					
4:00:00 PM	2	12	4	1	19	1	25	1	0	27	2	33	15	0	50	9	31	0	0	40	136
4:15:00 PM	1	10	2	0	13	4	13	1	0	18	4	38	18	0	60	9	21	0	0	30	121
4:30:00 PM	0	11	5	0	16	5	11	0	0	16	5	30	13	0	48	7	30	2	0	39	119
4:45:00 PM	2	14	5	0	21	3	15	0	0	18	7	36	20	0	63	4	28	1	0	33	135
Total Volume	5	47	16	1	69	13	64	2	0	79	18	137	66	0	221	29	110	3	0	142	511
% App. Total	7.2	68.1	23.2	1.4		16.5	81	2.5	0		8.1	62	29.9	0		20.4	77.5	2.1	0		
PHF	.625	.839	.800	.250	.821	.650	.640	.500	.000	.731	.643	.901	.825	.000	.877	.806	.887	.375	.000	.888	.939

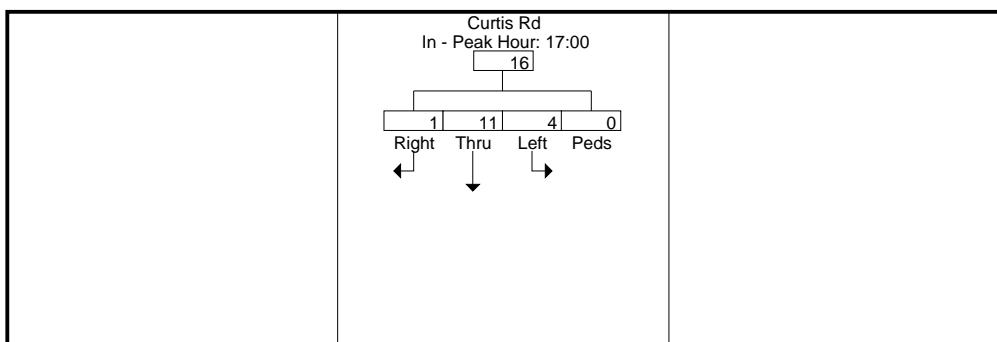


LSC Transportation Consultants, Inc.

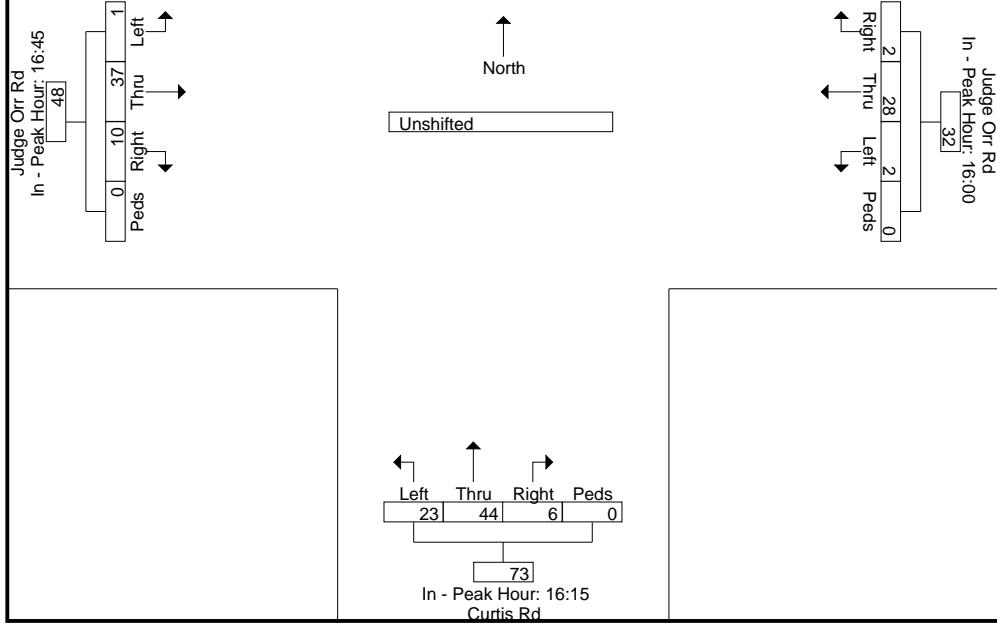
2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : Curtis Rd - Judge Orr Rd PM
 Site Code : S214950
 Start Date : 4/21/2022
 Page No : 3

	Curtis Rd Southbound					Judge Orr Rd Westbound					Curtis Rd Northbound					Judge Orr Rd 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 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
+0 mins.	0	9	4	0	13	1	25	1	0	27	4	38	18	0	60	4	28	1	0	33	
+5 mins.	1	15	2	0	18	4	13	1	0	18	5	30	13	0	48	5	32	1	0	38	
+10 mins.	1	10	9	0	20	5	11	0	0	16	7	36	20	0	63	8	22	1	0	31	
+15 mins.	1	13	9	0	23	3	15	0	0	18	6	41	11	0	58	6	36	0	0	42	
Total Volume	3	47	24	0	74	13	64	2	0	79	22	145	62	0	229	23	118	3	0	144	
% App. Total	4.1	63.5	32.4	0		16.5	81	2.5	0		9.6	63.3	27.1	0		16	81.9	2.1	0		
PHF	.750	.783	.667	.000	.804	.650	.640	.500	.000	.731	.786	.884	.775	.000	.909	.719	.819	.750	.000	.857	



Peak Hour Data



LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : hwy 24 - judge orr rd am
 Site Code : S214950
 Start Date : 5/10/2022
 Page No : 1

Groups Printed- Unshifted

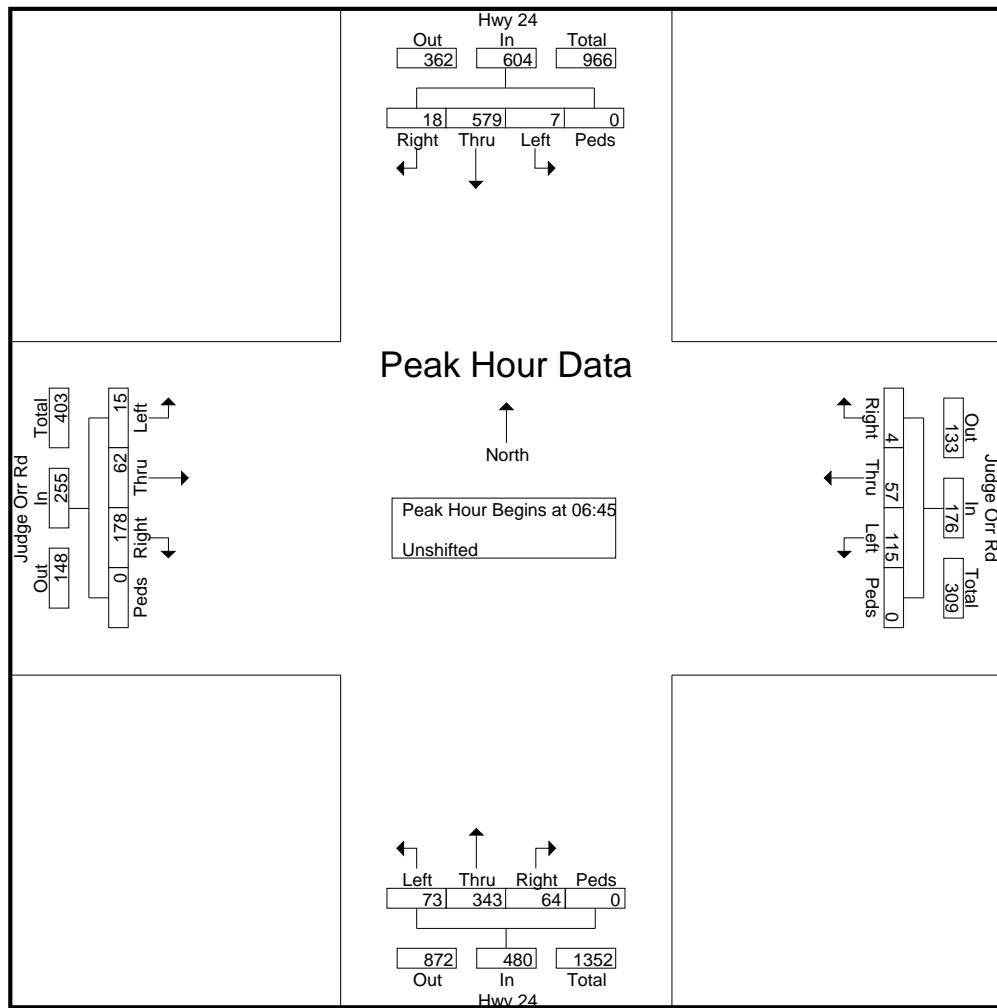
	Hwy 24 Southbound					Judge Orr Rd Westbound					Hwy 24 Northbound					Judge Orr Rd Eastbound						
	Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:30	1	130	0	0	0	131	1	7	36	0	44	4	66	8	0	78	43	14	2	0	59	312
06:45	4	173	3	0	0	180	0	10	20	0	30	18	92	8	0	118	34	10	4	0	48	376
Total	5	303	3	0	0	311	1	17	56	0	74	22	158	16	0	196	77	24	6	0	107	688
07:00	2	132	0	0	0	134	3	7	39	0	49	18	98	23	0	139	50	16	9	0	75	397
07:15	3	137	2	0	0	142	1	23	26	0	50	19	82	18	0	119	43	16	2	0	61	372
07:30	9	137	2	0	0	148	0	17	30	0	47	9	71	24	0	104	51	20	0	0	71	370
07:45	1	102	1	0	0	104	1	15	15	0	31	21	67	17	0	105	21	15	3	0	39	279
Total	15	508	5	0	0	528	5	62	110	0	177	67	318	82	0	467	165	67	14	0	246	1418
08:00	2	108	1	0	0	111	1	8	22	0	31	23	68	12	1	104	28	20	5	0	53	299
08:15	5	96	1	0	0	102	2	3	29	0	34	15	70	14	0	99	15	13	4	0	32	267
Grand Total	27	1015	10	0	0	1052	9	90	217	0	316	127	614	124	1	866	285	124	29	0	438	2672
Apprch %	2.6	96.5	1	0			2.8	28.5	68.7	0		14.7	70.9	14.3	0.1		65.1	28.3	6.6	0		
Total %	1	38	0.4	0	0	39.4	0.3	3.4	8.1	0	11.8	4.8	23	4.6	0	32.4	10.7	4.6	1.1	0	16.4	

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2504 E. Pikes Peak Ave, Suite 304
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 719-633-2868

File Name : hwy 24 - judge orr rd am
 Site Code : S214950
 Start Date : 5/10/2022
 Page No : 2

Start Time	Hwy 24 Southbound					Judge Orr Rd Westbound					Hwy 24 Northbound					Judge Orr Rd Eastbound					
	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 6:30:00 AM to 8:15:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 6:45:00 AM																					
6:45:00 AM	4	173	3	0	180	0	10	20	0	30	18	92	8	0	118	34	10	4	0	48	376
7:00:00 AM	2	132	0	0	134	3	7	39	0	49	18	98	23	0	139	50	16	9	0	75	397
7:15:00 AM	3	137	2	0	142	1	23	26	0	50	19	82	18	0	119	43	16	2	0	61	372
7:30:00 AM	9	137	2	0	148	0	17	30	0	47	9	71	24	0	104	51	20	0	0	71	370
Total Volume	18	579	7	0	604	4	57	115	0	176	64	343	73	0	480	178	62	15	0	255	1515
% App. Total	3	95.9	1.2	0		2.3	32.4	65.3	0		13.3	71.5	15.2	0		69.8	24.3	5.9	0		
PHF	.500	.837	.583	.000	.839	.333	.620	.737	.000	.880	.842	.875	.760	.000	.863	.873	.775	.417	.000	.850	.954



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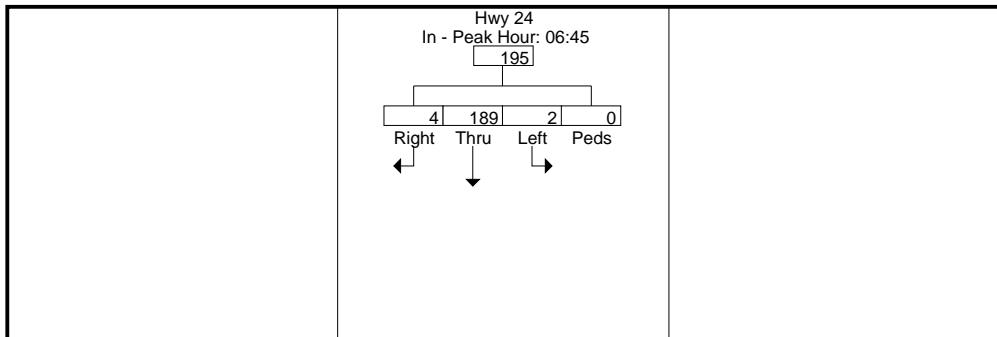
File Name : hwy 24 - judge orr rd am
 Site Code : S214950
 Start Date : 5/10/2022
 Page No : 3

Start Time	Hwy 24 Southbound				Judge Orr Rd Westbound				Hwy 24 Northbound				Judge Orr Rd Eastbound				Int. Total		
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds

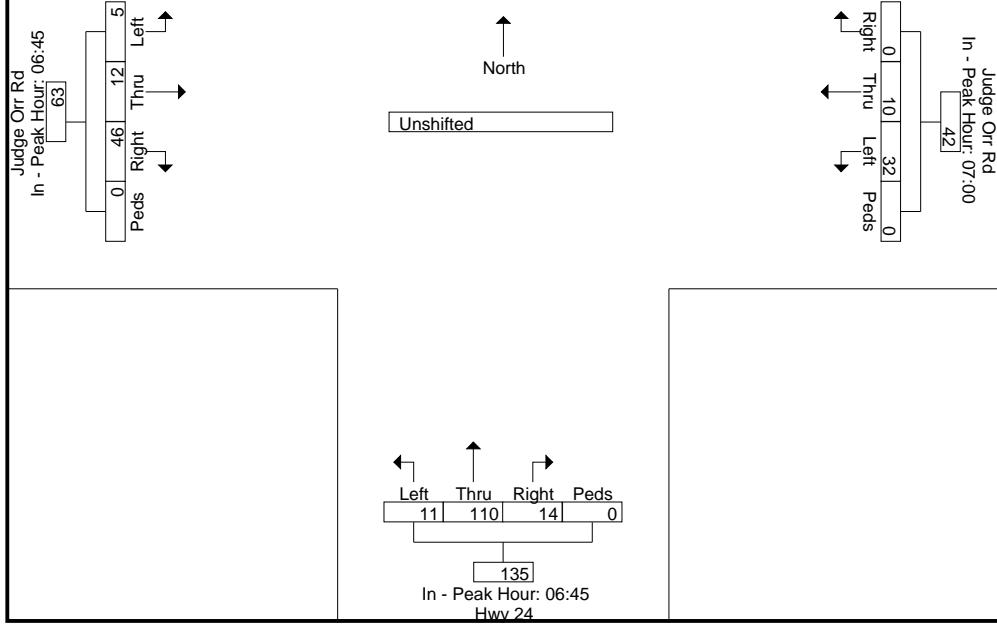
Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	6:45:00 AM					7:00:00 AM					6:45:00 AM					6:45:00 AM				
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total
+0 mins.	4	173	3	0	180	3	7	39	0	49	18	92	8	0	118	34	10	4	0	48
+5 mins.	2	132	0	0	134	1	23	26	0	50	18	98	23	0	139	50	16	9	0	75
+10 mins.	3	137	2	0	142	0	17	30	0	47	19	82	18	0	119	43	16	2	0	61
+15 mins.	9	137	2	0	148	1	15	15	0	31	9	71	24	0	104	51	20	0	0	71
Total Volume	18	579	7	0	604	5	62	110	0	177	64	343	73	0	480	178	62	15	0	255
% App. Total	3	95.9	1.2	0		2.8	35	62.1	0		13.3	71.5	15.2	0		69.8	24.3	5.9	0	
PHF	.500	.837	.583	.000	.839	.417	.674	.705	.000	.885	.842	.875	.760	.000	.863	.873	.775	.417	.000	.850



Peak Hour Data



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File Name : Hwy 24 - Judge Orr Rd PM

Site Code : S214950

Start Date : 5/10/2022

Page No : 1

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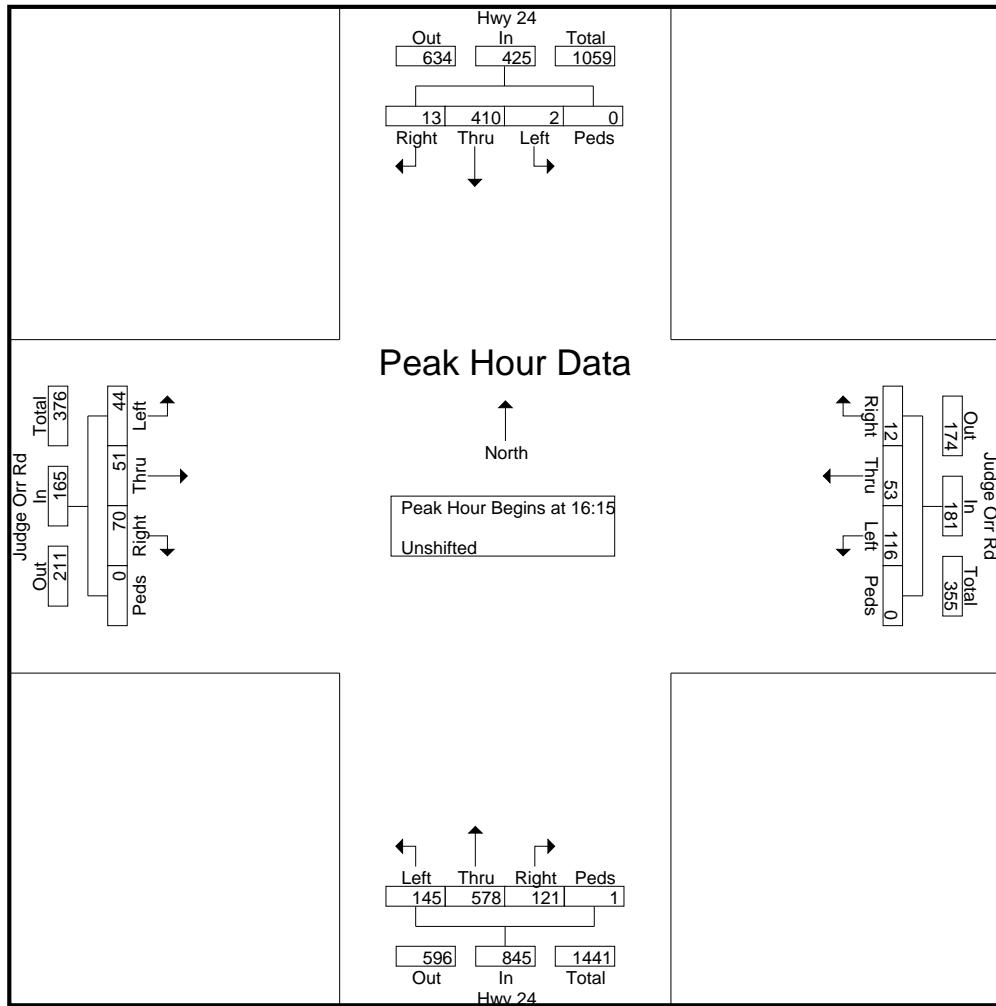
	Hwy 24 Southbound					Judge Orr Rd Westbound					Hwy 24 Northbound					Judge Orr Rd Eastbound					
	Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total
16:00	5	77	2	0	84	1	7	22	0	30	33	143	24	0	200	10	7	5	0	22	336
16:15	3	105	1	0	109	5	17	25	0	47	27	152	30	0	209	21	11	11	0	43	408
16:30	7	105	1	0	113	1	14	29	0	44	34	144	34	1	213	18	11	11	0	40	410
16:45	1	101	0	0	102	2	9	24	0	35	31	135	41	0	207	15	13	12	0	40	384
Total	16	388	4	0	408	9	47	100	0	156	125	574	129	1	829	64	42	39	0	145	1538
17:00	2	99	0	0	101	4	13	38	0	55	29	147	40	0	216	16	16	10	0	42	414
17:15	7	127	0	0	134	2	16	26	0	44	34	133	24	1	192	13	11	7	0	31	401
17:30	6	91	1	0	98	2	6	16	0	24	39	149	32	0	220	10	15	10	0	35	377
17:45	6	98	0	0	104	0	5	22	0	27	29	158	30	0	217	11	17	8	0	36	384
Total	21	415	1	0	437	8	40	102	0	150	131	587	126	1	845	50	59	35	0	144	1576
Grand Total	37	803	5	0	845	17	87	202	0	306	256	1161	255	2	1674	114	101	74	0	289	3114
Apprch %	4.4	95	0.6	0		5.6	28.4	66	0		15.3	69.4	15.2	0.1		39.4	34.9	25.6	0		
Total %	1.2	25.8	0.2	0	27.1	0.5	2.8	6.5	0	9.8	8.2	37.3	8.2	0.1	53.8	3.7	3.2	2.4	0	9.3	

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File Name : Hwy 24 - Judge Orr Rd PM
 Site Code : S214950
 Start Date : 5/10/2022
 Page No : 2

Start Time	Hwy 24 Southbound					Judge Orr Rd Westbound					Hwy 24 Northbound					Judge Orr Rd Eastbound					
	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 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour For Entire Intersection Begins at 4:15:00 PM																					
4:15:00 PM	3	105	1	0	109	5	17	25	0	47	27	152	30	0	209	21	11	11	0	43	408
4:30:00 PM	7	105	1	0	113	1	14	29	0	44	34	144	34	1	213	18	11	11	0	40	410
4:45:00 PM	1	101	0	0	102	2	9	24	0	35	31	135	41	0	207	15	13	12	0	40	384
5:00:00 PM	2	99	0	0	101	4	13	38	0	55	29	147	40	0	216	16	16	10	0	42	414
Total Volume	13	410	2	0	425	12	53	116	0	181	121	578	145	1	845	70	51	44	0	165	1616
% App. Total	3.1	96.5	0.5	0		6.6	29.3	64.1	0		14.3	68.4	17.2	0.1		42.4	30.9	26.7	0		
PHF	.464	.976	.500	.000	.940	.600	.779	.763	.000	.823	.890	.951	.884	.250	.978	.833	.797	.917	.000	.959	.976



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File Name : Hwy 24 - Judge Orr Rd PM

Site Code : S214950

Start Date : 5/10/2022

Page No : 3

Start Time	Hwy 24 Southbound				Judge Orr Rd Westbound				Hwy 24 Northbound				Judge Orr Rd Eastbound							
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total

Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	4:30:00 PM					4:15:00 PM					4:15:00 PM					4:15:00 PM				
+0 mins.	7	105	1	0	113	5	17	25	0	47	27	152	30	0	209	21	11	11	0	43
+5 mins.	1	101	0	0	102	1	14	29	0	44	34	144	34	1	213	18	11	11	0	40
+10 mins.	2	99	0	0	101	2	9	24	0	35	31	135	41	0	207	15	13	12	0	40
+15 mins.	7	127	0	0	134	4	13	38	0	55	29	147	40	0	216	16	16	10	0	42
Total Volume	17	432	1	0	450	12	53	116	0	181	121	578	145	1	845	70	51	44	0	165
% App. Total	3.8	96	0.2	0		6.6	29.3	64.1	0		14.3	68.4	17.2	0.1		42.4	30.9	26.7	0	
PHF	.607	.850	.250	.000	.840	.600	.779	.763	.000	.823	.890	.951	.884	.250	.978	.833	.797	.917	.000	.959

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File Name : Hwy 24 - New Meridian Rd AM
 Site Code : S214620
 Start Date : 8/5/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Hwy 24 Southbound					New Meridian Rd Westbound					Hwy 24 Northbound					New Meridian Rd Eastbound					
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	Int. Total
06:30 AM	9	173	0	0	182	1	36	7	0	44	30	109	2	0	141	1	22	93	0	116	483
06:45 AM	10	213	0	0	223	0	28	10	0	38	21	109	4	0	134	0	1	120	0	121	516
Total	19	386	0	0	405	1	64	17	0	82	51	218	6	0	275	1	23	213	0	237	999
07:00 AM	3	171	0	0	174	0	44	10	0	54	15	92	4	0	111	0	4	126	1	131	470
07:15 AM	2	201	0	0	203	0	2	1	0	3	44	118	1	0	163	0	0	169	0	169	538
Grand Total	24	758	0	0	782	1	110	28	0	139	110	428	11	0	549	1	27	508	1	537	2007
Apprch %	3.1	96.9	0	0		0.7	79.1	20.1	0		20	78	2	0		0.2	5	94.6	0.2		
Total %	1.2	37.8	0	0	39	0	5.5	1.4	0	6.9	5.5	21.3	0.5	0	27.4	0	1.3	25.3	0	26.8	

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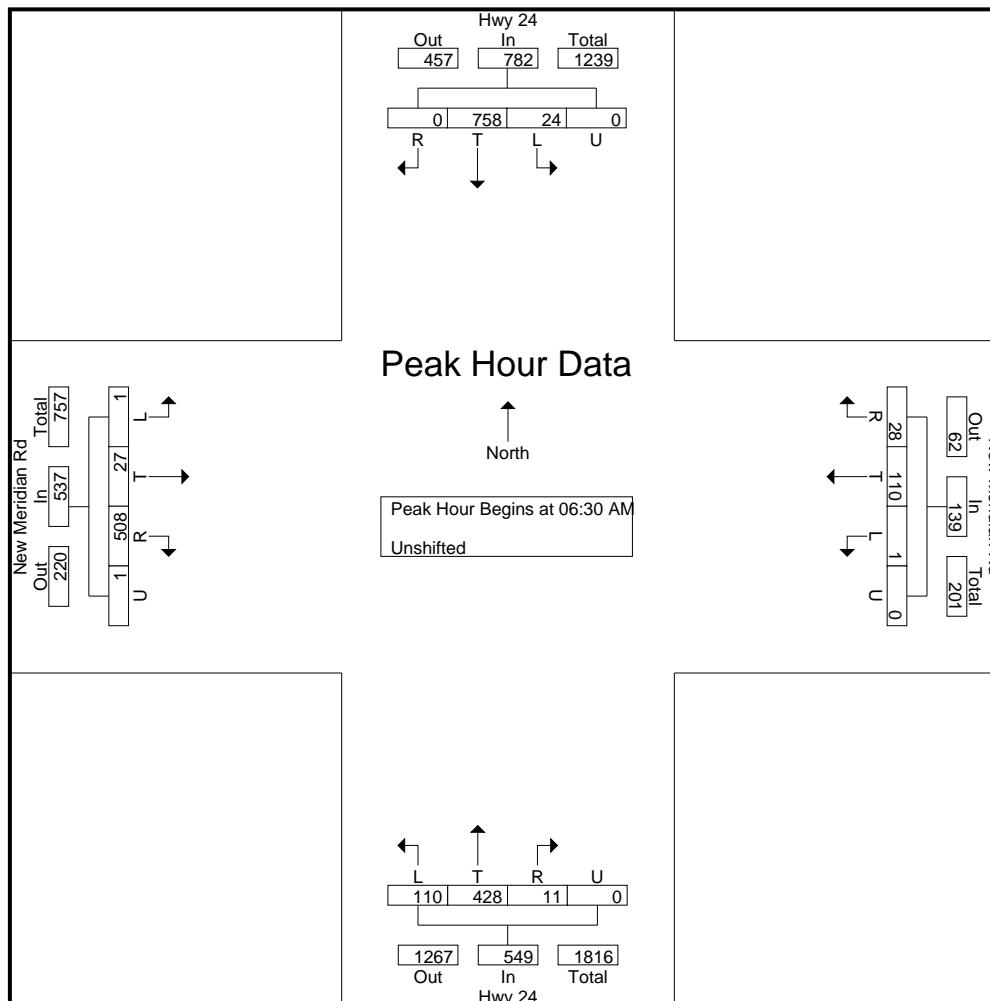
File Name : Hwy 24 - New Meridian Rd AM
 Site Code : S214620
 Start Date : 8/5/2021
 Page No : 2

Start Time	Hwy 24 Southbound					New Meridian Rd Westbound					Hwy 24 Northbound					New Meridian Rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
Peak Hour Analysis From 6:30:00 AM to 7:15:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 6:30:00 AM																					
6:30:00 AM	9	173	0	0	182	1	36	7	0	44	30	109	2	0	141	1	22	93	0	116	483
6:45:00 AM	10	213	0	0	223	0	28	10	0	38	21	109	4	0	134	0	1	120	0	121	516
7:00:00 AM	3	171	0	0	174	0	44	10	0	54	15	92	4	0	111	0	4	126	1	131	470
7:15:00 AM	2	201	0	0	203	0	2	1	0	3	44	118	1	0	163	0	0	169	0	169	538
Total Volume	24	758	0	0	782	1	110	28	0	139	110	428	11	0	549	1	27	508	1	537	2007
% App. Total	3.1	96.9	0	0		0.7	79.1	20.1	0		20	78	2	0		0.2	5	94.6	0.2		
PHF	.600	.890	.000	.000	.877	.250	.625	.700	.000	.644	.625	.907	.688	.000	.842	.250	.307	.751	.250	.794	.933

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File Name : Hwy 24 - New Meridian Rd AM
Site Code : S214620
Start Date : 8/5/2021
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File Name : Hwy 24 - New Meridian Rd AM
 Site Code : S214620
 Start Date : 8/5/2021
 Page No : 4

Start Time	Hwy 24 Southbound					New Meridian Rd Westbound					Hwy 24 Northbound					New Meridian Rd Eastbound				
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total

Peak Hour Analysis From 6:30:00 AM to 7:15:00 AM - Peak 1 of 1

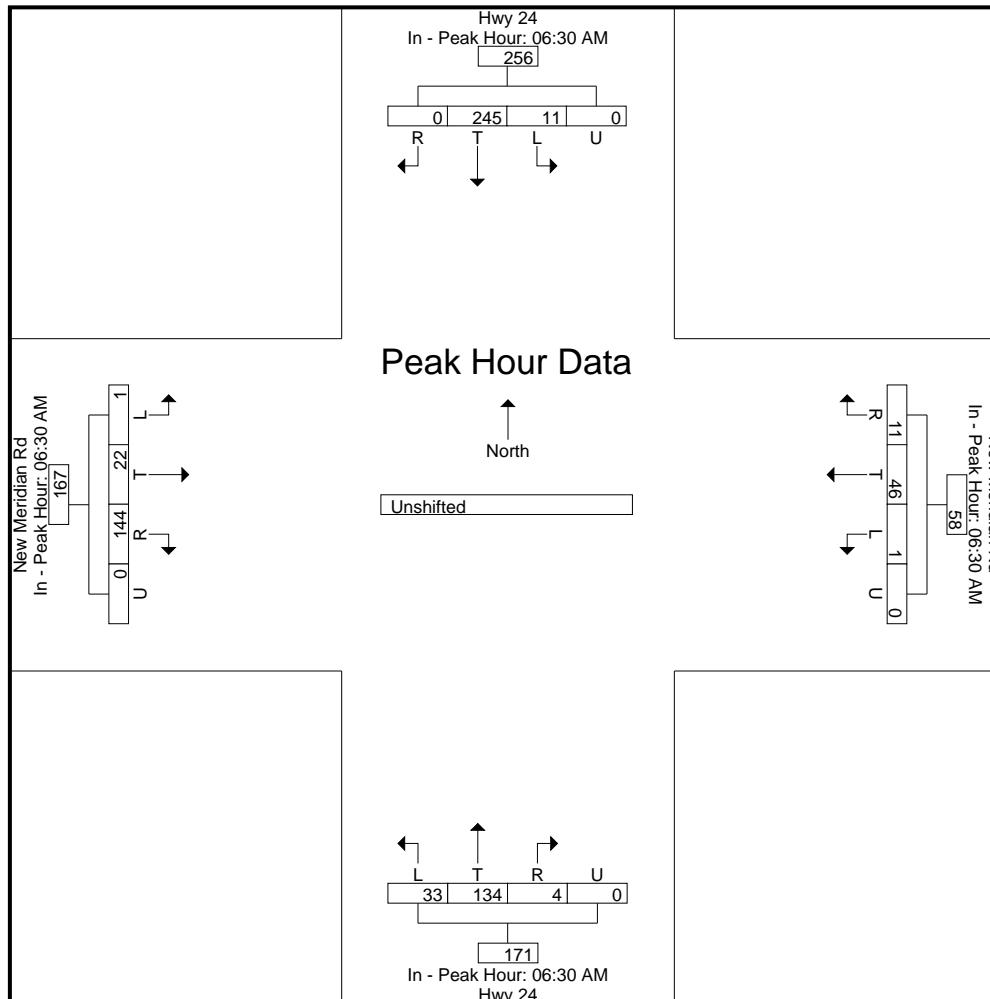
Peak Hour for Each Approach Begins at:

	6:30:00 AM					6:30:00 AM					6:30:00 AM					6:30:00 AM				
+0 mins.	9	173	0	0	182	1	36	7	0	44	30	109	2	0	141	1	22	93	0	116
+5 mins.	10	213	0	0	223	0	28	10	0	38	21	109	4	0	134	0	1	120	0	121
+10 mins.	3	171	0	0	174	0	44	10	0	54	15	92	4	0	111	0	4	126	1	131
+15 mins.	2	201	0	0	203	0	2	1	0	3	44	118	1	0	163	0	0	169	0	169
Total Volume	24	758	0	0	782	1	110	28	0	139	110	428	11	0	549	1	27	508	1	537
% App. Total	3.1	96.9	0	0		0.7	79.1	20.1	0		20	78	2	0		0.2	5	94.6	0.2	
PHF	.600	.890	.000	.000	.877	.250	.625	.700	.000	.644	.625	.907	.688	.000	.842	.250	.307	.751	.250	.794

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File Name : Hwy 24 - New Meridian Rd AM
Site Code : S214620
Start Date : 8/5/2021
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File Name : Hwy 24 - New Meridian Rd PM
 Site Code : S214620
 Start Date : 8/4/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Hwy 24 Southbound					New Meridian Rd Westbound					Hwy 24 Northbound					New Meridian Rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
04:00 PM	18	138	0	0	156	1	61	22	0	84	62	156	0	0	218	4	30	43	0	77	535
04:15 PM	9	139	2	0	150	0	72	29	0	101	60	149	1	0	210	4	37	37	0	78	539
04:30 PM	17	105	1	0	123	0	91	17	0	108	88	161	0	0	249	4	40	42	0	86	566
04:45 PM	11	139	0	0	150	1	82	12	0	95	63	145	0	0	208	4	41	38	3	86	539
Total	55	521	3	0	579	2	306	80	0	388	273	611	1	0	885	16	148	160	3	327	2179
05:00 PM	14	109	0	0	123	0	91	27	0	118	79	150	0	0	229	5	41	48	0	94	564
05:15 PM	6	114	1	0	121	0	52	26	0	78	78	162	0	0	240	3	32	42	1	78	517
05:30 PM	11	89	4	0	104	1	81	14	0	96	76	156	0	0	232	1	55	44	0	100	532
05:45 PM	22	119	1	0	142	1	45	10	0	56	81	174	0	0	255	2	52	33	0	87	540
Total	53	431	6	0	490	2	269	77	0	348	314	642	0	0	956	11	180	167	1	359	2153
Grand Total	108	952	9	0	1069	4	575	157	0	736	587	1253	1	0	1841	27	328	327	4	686	4332
Apprch %	10.1	89.1	0.8	0		0.5	78.1	21.3	0		31.9	68.1	0.1	0		3.9	47.8	47.7	0.6		
Total %	2.5	22	0.2	0	24.7	0.1	13.3	3.6	0	17	13.6	28.9	0	0	42.5	0.6	7.6	7.5	0.1	15.8	

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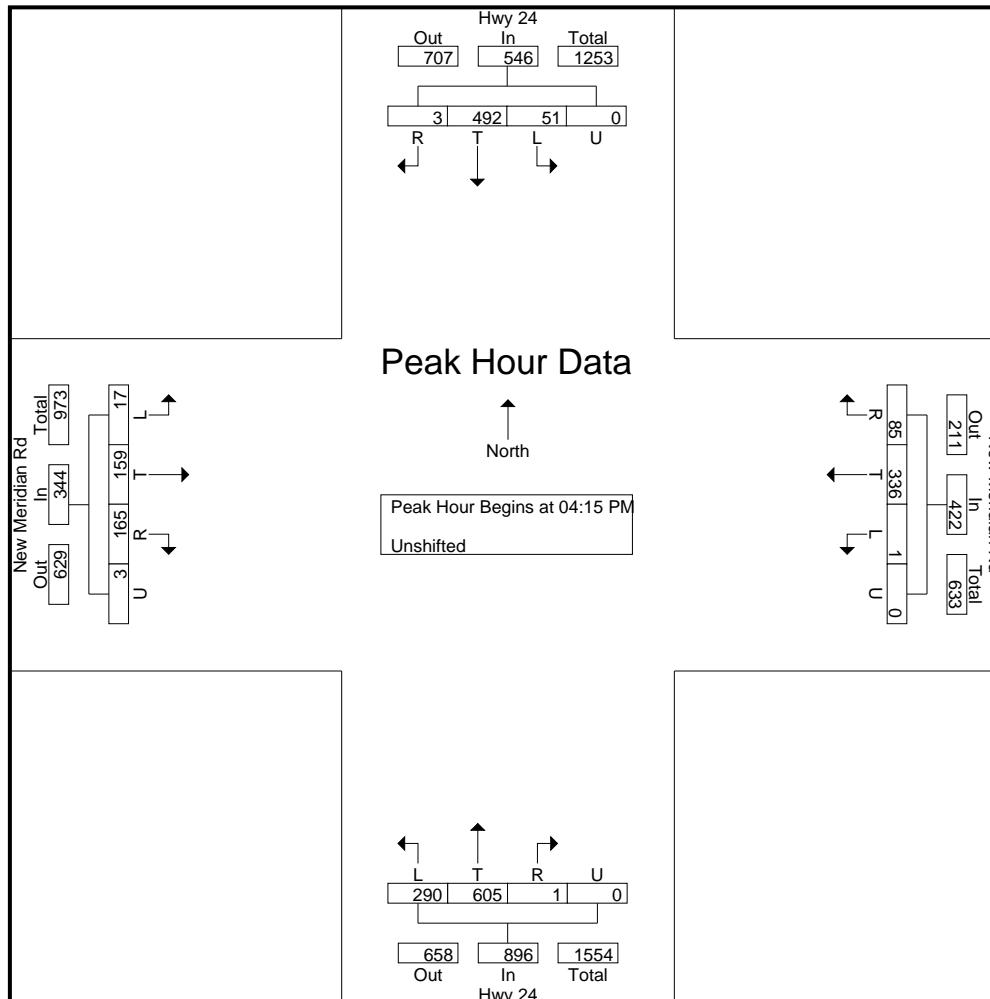
File Name : Hwy 24 - New Meridian Rd PM
 Site Code : S214620
 Start Date : 8/4/2021
 Page No : 2

Start Time	Hwy 24 Southbound					New Meridian Rd Westbound					Hwy 24 Northbound					New Meridian Rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 4:15:00 PM																					
4:15:00 PM	9	139	2	0	150	0	72	29	0	101	60	149	1	0	210	4	37	37	0	78	539
4:30:00 PM	17	105	1	0	123	0	91	17	0	108	88	161	0	0	249	4	40	42	0	86	566
4:45:00 PM	11	139	0	0	150	1	82	12	0	95	63	145	0	0	208	4	41	38	3	86	539
5:00:00 PM	14	109	0	0	123	0	91	27	0	118	79	150	0	0	229	5	41	48	0	94	564
Total Volume	51	492	3	0	546	1	336	85	0	422	290	605	1	0	896	17	159	165	3	344	2208
% App. Total	9.3	90.1	0.5	0		0.2	79.6	20.1	0		32.4	67.5	0.1	0		4.9	46.2	48	0.9		
PHF	.750	.885	.375	.000	.910	.250	.923	.733	.000	.894	.824	.939	.250	.000	.900	.850	.970	.859	.250	.915	.975

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File Name : Hwy 24 - New Meridian Rd PM
Site Code : S214620
Start Date : 8/4/2021
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File Name : Hwy 24 - New Meridian Rd PM
 Site Code : S214620
 Start Date : 8/4/2021
 Page No : 4

	Hwy 24 Southbound					New Meridian Rd Westbound					Hwy 24 Northbound					New Meridian Rd Eastbound					
	Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total

Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1

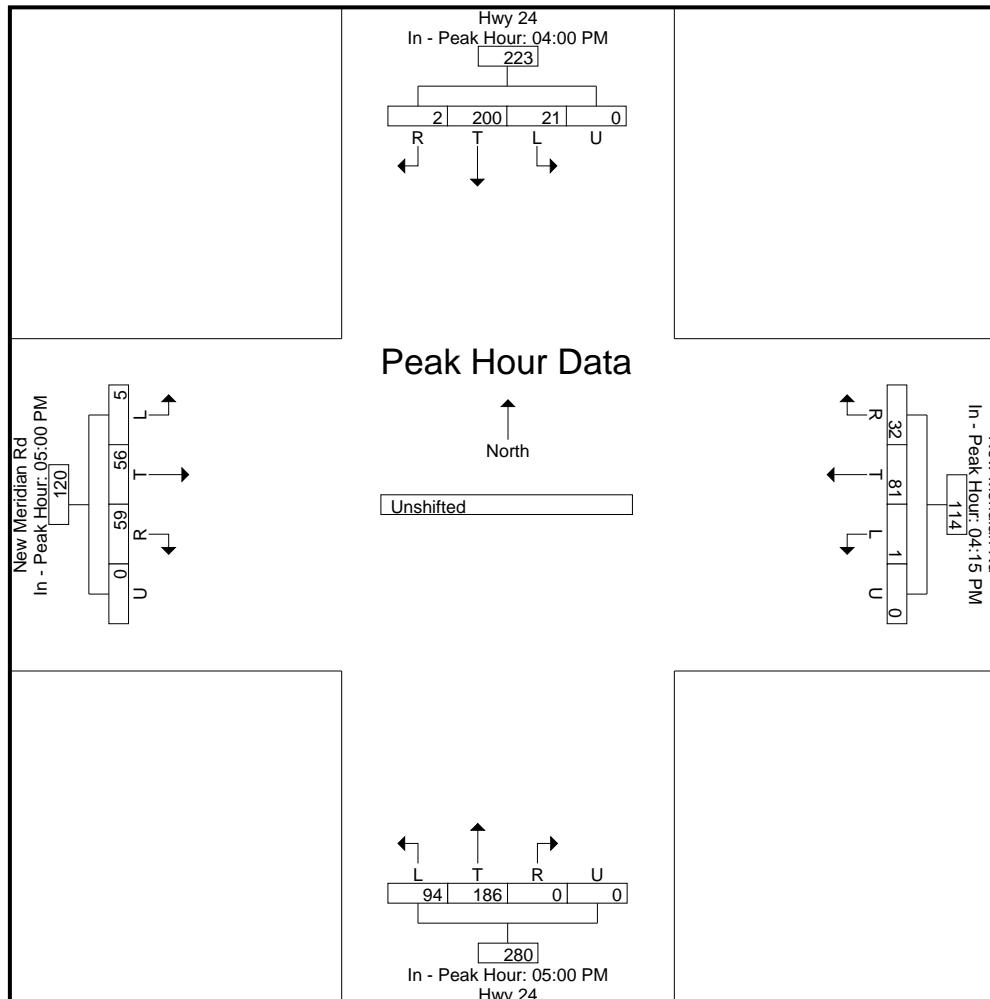
Peak Hour for Each Approach Begins at:

	4:00:00 PM	4:15:00 PM					5:00:00 PM					5:00:00 PM								
+0 mins.	18	138	0	0	156	0	72	29	0	101	79	150	0	0	229	5	41	48	0	94
+5 mins.	9	139	2	0	150	0	91	17	0	108	78	162	0	0	240	3	32	42	1	78
+10 mins.	17	105	1	0	123	1	82	12	0	95	76	156	0	0	232	1	55	44	0	100
+15 mins.	11	139	0	0	150	0	91	27	0	118	81	174	0	0	255	2	52	33	0	87
Total Volume	55	521	3	0	579	1	336	85	0	422	314	642	0	0	956	11	180	167	1	359
% App. Total	9.5	90	0.5	0		0.2	79.6	20.1	0		32.8	67.2	0	0		3.1	50.1	46.5	0.3	
PHF	.764	.937	.375	.000	.928	.250	.923	.733	.000	.894	.969	.922	.000	.000	.937	.550	.818	.870	.250	.898

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File Name : Hwy 24 - New Meridian Rd PM
Site Code : S214620
Start Date : 8/4/2021
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File Name : Hwy 24 - Stapleton Rd AM
 Site Code : S214740
 Start Date : 10/6/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Hwy 24 Southbound					Stapleton Rd Westbound					Hwy 24 Northbound					Stapleton Rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
06:30 AM	6	101	2	0	109	0	7	3	0	10	11	79	0	0	90	6	44	20	0	70	279
06:45 AM	8	112	3	0	123	2	12	2	0	16	24	77	1	0	102	6	32	36	1	75	316
Total	14	213	5	0	232	2	19	5	0	26	35	156	1	0	192	12	76	56	1	145	595
07:00 AM	9	98	8	0	115	1	27	4	0	32	17	71	1	0	89	16	41	32	1	90	326
07:15 AM	16	105	19	0	140	1	29	6	0	36	22	64	3	0	89	7	46	46	0	99	364
07:30 AM	12	111	7	0	130	0	18	5	0	23	14	42	0	0	56	4	38	32	0	74	283
07:45 AM	6	71	7	0	84	1	11	3	0	15	12	62	1	0	75	8	23	19	0	50	224
Total	43	385	41	0	469	3	85	18	0	106	65	239	5	0	309	35	148	129	1	313	1197
08:00 AM	4	95	8	0	107	0	9	3	0	12	18	59	3	0	80	1	22	15	0	38	237
08:15 AM	3	105	4	0	112	0	8	3	0	11	13	48	1	0	62	1	15	20	0	36	221
08:30 AM	4	44	4	0	52	4	4	2	0	10	4	43	0	0	47	8	9	7	0	24	133
Grand Total	68	842	62	0	972	9	125	31	0	165	135	545	10	0	690	57	270	227	2	556	2383
Apprch %	7	86.6	6.4	0		5.5	75.8	18.8	0		19.6	79	1.4	0		10.3	48.6	40.8	0.4		
Total %	2.9	35.3	2.6	0	40.8	0.4	5.2	1.3	0	6.9	5.7	22.9	0.4	0	29	2.4	11.3	9.5	0.1	23.3	

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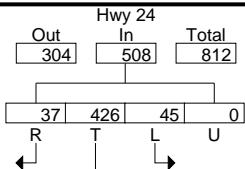
File Name : Hwy 24 - Stapleton Rd AM
 Site Code : S214740
 Start Date : 10/6/2021
 Page No : 2

Start Time	Hwy 24 Southbound					Stapleton Rd Westbound					Hwy 24 Northbound					Stapleton Rd Eastbound					Int. Total	
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total		
Peak Hour Analysis From 6:30:00 AM to 8:30:00 AM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 6:45:00 AM																						
6:45:00 AM	8	112	3	0	123	2	12	2	0	16	24	77	1	0	102	6	32	36	1	75	316	
7:00:00 AM	9	98	8	0	115	1	27	4	0	32	17	71	1	0	89	16	41	32	1	90	326	
7:15:00 AM	16	105	19	0	140	1	29	6	0	36	22	64	3	0	89	7	46	46	0	99	364	
7:30:00 AM	12	111	7	0	130	0	18	5	0	23	14	42	0	0	56	4	38	32	0	74	283	
Total Volume	45	426	37	0	508	4	86	17	0	107	77	254	5	0	336	33	157	146	2	338	1289	
% App. Total	8.9	83.9	7.3	0		3.7	80.4	15.9	0		22.9	75.6	1.5	0		9.8	46.4	43.2	0.6			
PHF	.703	.951	.487	.000	.907	.500	.741	.708	.000	.743	.802	.825	.417	.000	.824	.516	.853	.793	.500	.854	.885	

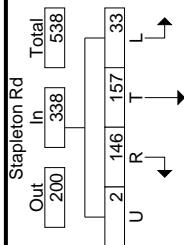
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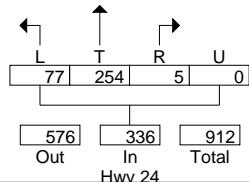
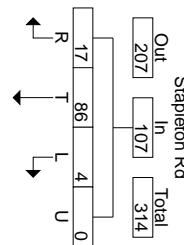
File Name : Hwy 24 - Stapleton Rd AM
Site Code : S214740
Start Date : 10/6/2021
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Peak Hour Data



Peak Hour Begins at 06:45 AM
Unshifted



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File Name : Hwy 24 - Stapleton Rd AM
 Site Code : S214740
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 Page No : 4

Start Time	Hwy 24 Southbound					Stapleton Rd Westbound					Hwy 24 Northbound					Stapleton Rd Eastbound				
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total

Peak Hour Analysis From 6:30:00 AM to 8:30:00 AM - Peak 1 of 1

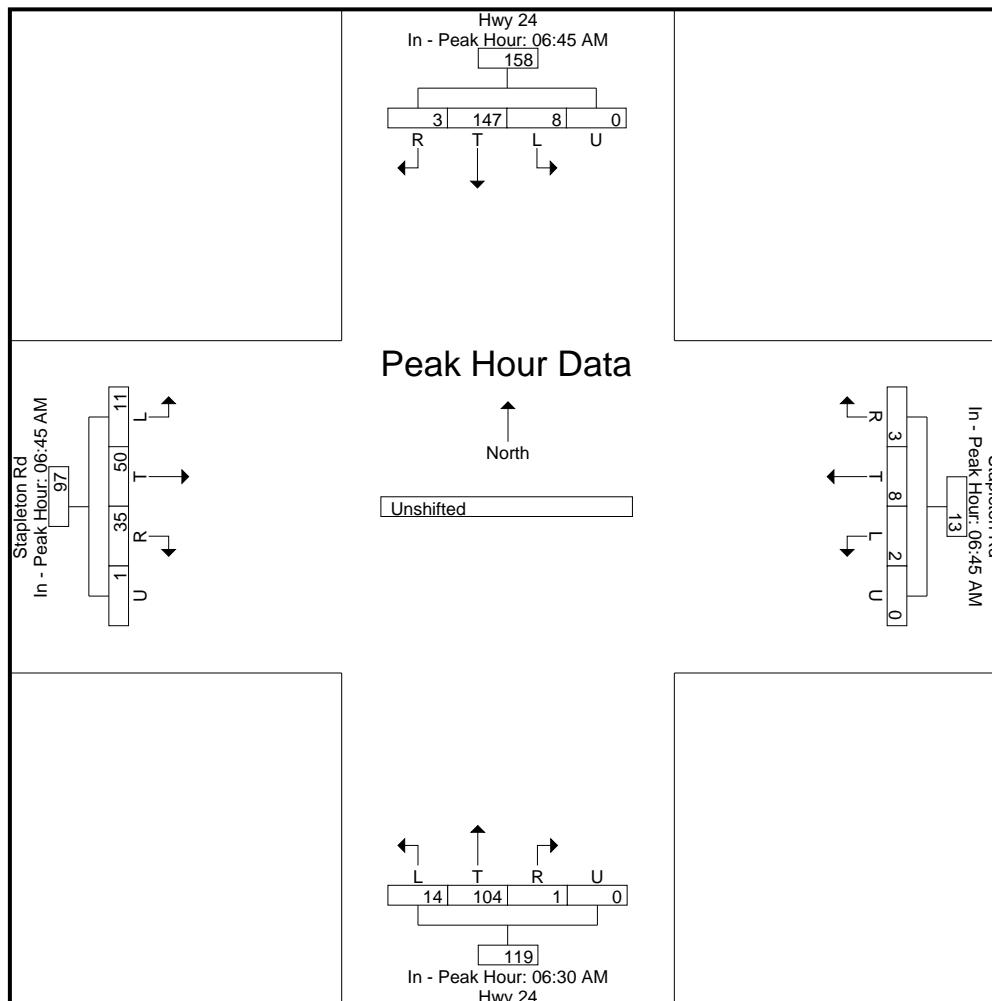
Peak Hour for Each Approach Begins at:

	6:45:00 AM	6:45:00 AM					6:30:00 AM					6:45:00 AM								
+0 mins.	8	112	3	0	123	2	12	2	0	16	11	79	0	0	90	6	32	36	1	75
+5 mins.	9	98	8	0	115	1	27	4	0	32	24	77	1	0	102	16	41	32	1	90
+10 mins.	16	105	19	0	140	1	29	6	0	36	17	71	1	0	89	7	46	46	0	99
+15 mins.	12	111	7	0	130	0	18	5	0	23	22	64	3	0	89	4	38	32	0	74
Total Volume	45	426	37	0	508	4	86	17	0	107	74	291	5	0	370	33	157	146	2	338
% App. Total	8.9	83.9	7.3	0		3.7	80.4	15.9	0		20	78.6	1.4	0		9.8	46.4	43.2	0.6	
PHF	.703	.951	.487	.000	.907	.500	.741	.708	.000	.743	.771	.921	.417	.000	.907	.516	.853	.793	.500	.854

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File Name : Not Named 3
 Site Code : S214740
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Southbound					Westbound					Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
01:45 PM	2	80	6	0	88	5	7	6	0	18	15	89	3	0	107	4	7	12	0	23	236
Total	2	80	6	0	88	5	7	6	0	18	15	89	3	0	107	4	7	12	0	23	236
02:00 PM	0	87	9	0	96	1	11	1	0	13	16	80	5	0	101	5	6	16	2	29	239
02:15 PM	3	78	10	0	91	1	11	5	0	17	19	95	1	0	115	2	4	7	0	13	236
02:30 PM	3	79	6	0	88	4	13	3	0	20	22	76	4	0	102	7	3	16	0	26	236
02:45 PM	1	84	4	0	89	3	16	0	0	19	16	91	3	0	110	8	14	25	2	49	267
Total	7	328	29	0	364	9	51	9	0	69	73	342	13	0	428	22	27	64	4	117	978
03:00 PM	2	79	3	0	84	5	19	2	0	26	19	78	6	0	103	7	11	11	0	29	242
03:15 PM	2	73	3	0	78	2	40	7	0	49	31	111	5	0	147	8	19	21	0	48	322
03:30 PM	3	121	10	0	134	3	21	2	0	26	20	119	11	0	150	5	16	23	0	44	354
03:45 PM	4	91	9	0	104	1	35	8	0	44	38	122	3	0	163	7	14	19	0	40	351
Total	11	364	25	0	400	11	115	19	0	145	108	430	25	0	563	27	60	74	0	161	1269
Grand Total	20	772	60	0	852	25	173	34	0	232	196	861	41	0	1098	53	94	150	4	301	2483
Apprch %	2.3	90.6	7	0		10.8	74.6	14.7	0		17.9	78.4	3.7	0		17.6	31.2	49.8	1.3		
Total %	0.8	31.1	2.4	0	34.3	1	7	1.4	0	9.3	7.9	34.7	1.7	0	44.2	2.1	3.8	6	0.2	12.1	

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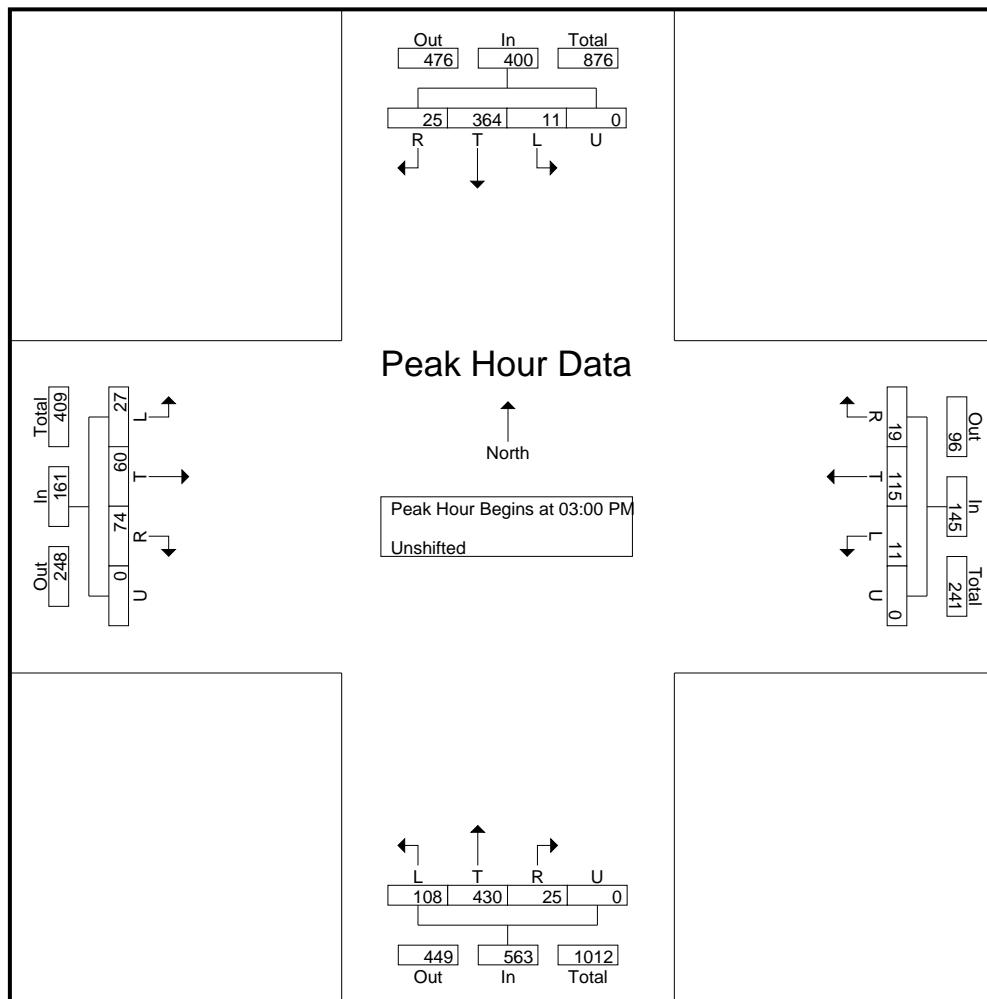
File Name : Not Named 3
 Site Code : S214740
 Start Date : 10/5/2021
 Page No : 2

Start Time	Southbound					Westbound					Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
Peak Hour Analysis From 1:45:00 PM to 3:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 3:00:00 PM																					
3:00:00 PM	2	79	3	0	84	5	19	2	0	26	19	78	6	0	103	7	11	11	0	29	242
3:15:00 PM	2	73	3	0	78	2	40	7	0	49	31	111	5	0	147	8	19	21	0	48	322
3:30:00 PM	3	121	10	0	134	3	21	2	0	26	20	119	11	0	150	5	16	23	0	44	354
3:45:00 PM	4	91	9	0	104	1	35	8	0	44	38	122	3	0	163	7	14	19	0	40	351
Total Volume	11	364	25	0	400	11	115	19	0	145	108	430	25	0	563	27	60	74	0	161	1269
% App. Total	2.8	91	6.2	0		7.6	79.3	13.1	0		19.2	76.4	4.4	0		16.8	37.3	46	0		
PHF	.688	.752	.625	.000	.746	.550	.719	.594	.000	.740	.711	.881	.568	.000	.863	.844	.789	.804	.000	.839	.896

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File Name : Not Named 3
 Site Code : S214740
 Start Date : 10/5/2021
 Page No : 4

Start Time	Southbound					Westbound					Northbound					Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	

Peak Hour Analysis From 1:45:00 PM to 3:45:00 PM - Peak 1 of 1

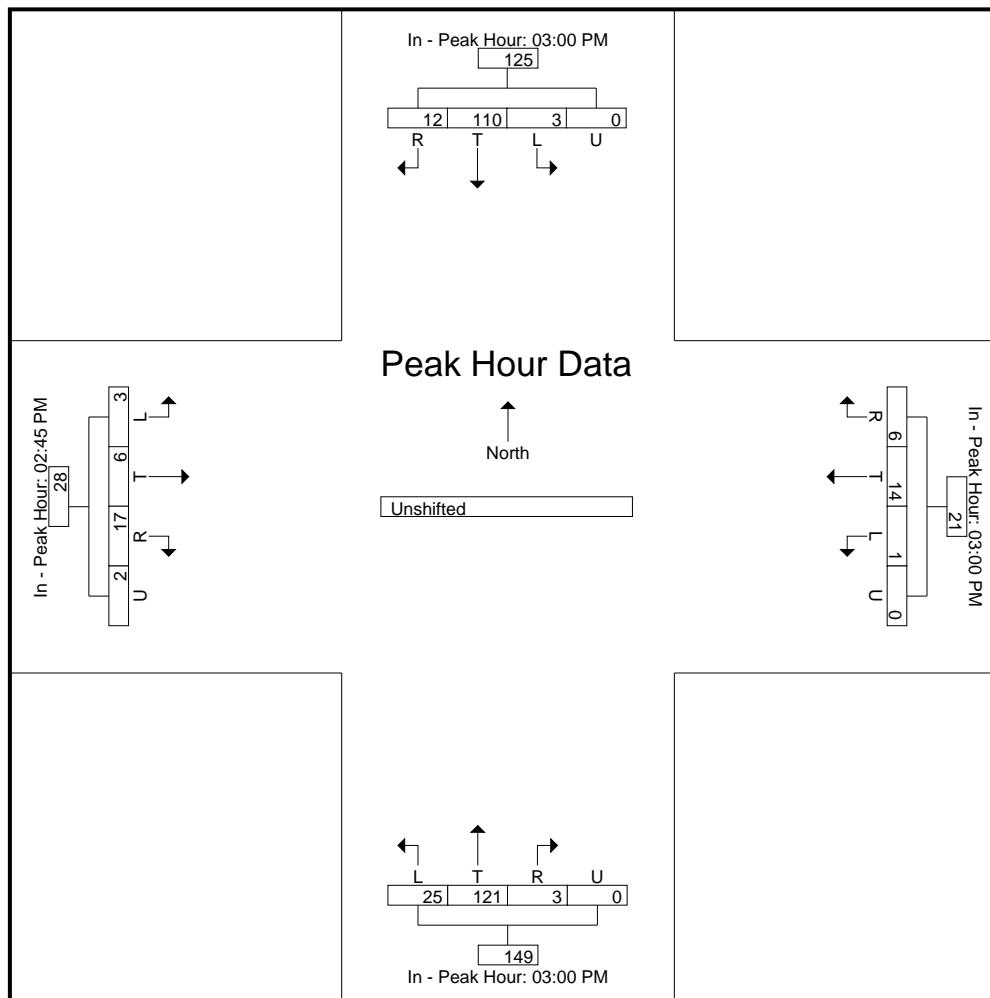
Peak Hour for Each Approach Begins at:

	3:00:00 PM	3:00:00 PM					3:00:00 PM					2:45:00 PM								
+0 mins.	2	79	3	0	84	5	19	2	0	26	19	78	6	0	103	8	14	25	2	49
+5 mins.	2	73	3	0	78	2	40	7	0	49	31	111	5	0	147	7	11	11	0	29
+10 mins.	3	121	10	0	134	3	21	2	0	26	20	119	11	0	150	8	19	21	0	48
+15 mins.	4	91	9	0	104	1	35	8	0	44	38	122	3	0	163	5	16	23	0	44
Total Volume	11	364	25	0	400	11	115	19	0	145	108	430	25	0	563	28	60	80	2	170
% App. Total	2.8	91	6.2	0		7.6	79.3	13.1	0		19.2	76.4	4.4	0		16.5	35.3	47.1	1.2	
PHF	.688	.752	.625	.000	.746	.550	.719	.594	.000	.740	.711	.881	.568	.000	.863	.875	.789	.800	.250	.867

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File Name : Not Named 3
Site Code : S214740
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File Name : Hwy 24 - Stapleton Rd Noon
 Site Code : S214740
 Start Date : 10/5/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Hwy 24 Southbound					Stapleton Rd Westbound					Hwy 24 Northbound					Stapleton Rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
11:00 AM	0	97	5	0	102	0	4	1	0	5	16	84	6	0	106	5	1	12	0	18	231
11:15 AM	2	83	3	0	88	0	5	1	0	6	18	73	5	0	96	3	2	12	0	17	207
11:30 AM	2	76	3	0	81	3	5	2	0	10	11	66	2	0	79	6	6	2	0	14	184
11:45 AM	3	70	5	0	78	2	9	3	0	14	14	91	4	0	109	5	4	7	0	16	217
Total	7	326	16	0	349	5	23	7	0	35	59	314	17	0	390	19	13	33	0	65	839
12:00 PM	1	79	3	0	83	1	6	2	0	9	14	68	6	0	88	8	6	7	0	21	201
12:15 PM	5	64	8	0	77	2	8	3	0	13	16	64	6	0	86	7	4	9	0	20	196
12:30 PM	4	76	4	0	84	2	3	1	0	6	11	76	7	0	94	3	6	11	0	20	204
12:45 PM	2	72	4	0	78	3	12	2	0	17	15	83	4	0	102	3	5	13	0	21	218
Total	12	291	19	0	322	8	29	8	0	45	56	291	23	0	370	21	21	40	0	82	819
Grand Total	19	617	35	0	671	13	52	15	0	80	115	605	40	0	760	40	34	73	0	147	1658
Apprch %	2.8	92	5.2	0		16.2	65	18.8	0		15.1	79.6	5.3	0		27.2	23.1	49.7	0		
Total %	1.1	37.2	2.1	0	40.5	0.8	3.1	0.9	0	4.8	6.9	36.5	2.4	0	45.8	2.4	2.1	4.4	0	8.9	

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File Name : Hwy 24 - Stapleton Rd Noon
 Site Code : S214740
 Start Date : 10/5/2021
 Page No : 2

Start Time	Hwy 24 Southbound					Stapleton Rd Westbound					Hwy 24 Northbound					Stapleton Rd Eastbound					Int. Total	
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total		
Peak Hour Analysis From 11:00:00 AM to 12:45:00 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 11:00:00 AM																						
11:00:00 AM	0	97	5	0	102	0	4	1	0	5	16	84	6	0	106	5	1	12	0	18	231	
11:15:00 AM	2	83	3	0	88	0	5	1	0	6	18	73	5	0	96	3	2	12	0	17	207	
11:30:00 AM	2	76	3	0	81	3	5	2	0	10	11	66	2	0	79	6	6	2	0	14	184	
11:45:00 AM	3	70	5	0	78	2	9	3	0	14	14	91	4	0	109	5	4	7	0	16	217	
Total Volume	7	326	16	0	349	5	23	7	0	35	59	314	17	0	390	19	13	33	0	65	839	
% App. Total	2	93.4	4.6	0		14.3	65.7	20	0		15.1	80.5	4.4	0		29.2	20	50.8	0			
PHF	.583	.840	.800	.000	.855	.417	.639	.583	.000	.625	.819	.863	.708	.000	.894	.792	.542	.688	.000	.903	.908	

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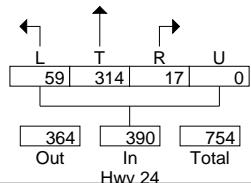
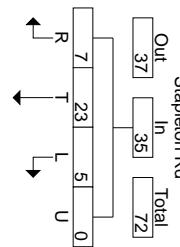
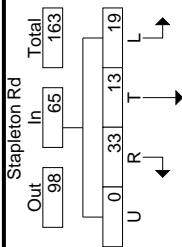
File Name : Hwy 24 - Stapleton Rd Noon
Site Code : S214740
Start Date : 10/5/2021
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Out	In	Total
340	349	689
16	326	7
R	T	L
U		

Peak Hour Data

North

Peak Hour Begins at 11:00 AM
Unshifted



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File Name : Hwy 24 - Stapleton Rd Noon
 Site Code : S214740
 Start Date : 10/5/2021
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Start Time	Hwy 24 Southbound					Stapleton Rd Westbound					Hwy 24 Northbound					Stapleton Rd Eastbound				
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total

Peak Hour Analysis From 11:00:00 AM to 12:45:00 PM - Peak 1 of 1

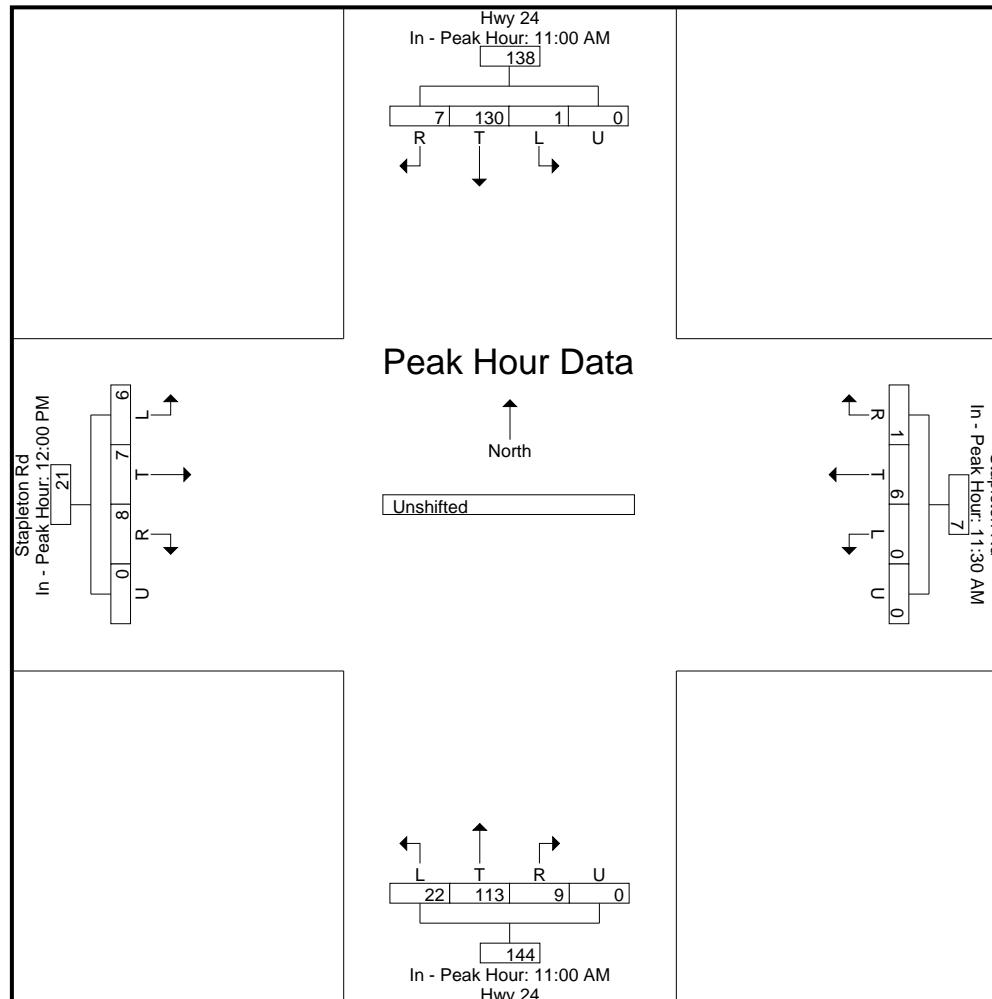
Peak Hour for Each Approach Begins at:

	11:00:00 AM	11:30:00 AM					11:00:00 AM					12:00:00 PM								
+0 mins.	0	97	5	0	102	3	5	2	0	10	16	84	6	0	106	8	6	7	0	21
+5 mins.	2	83	3	0	88	2	9	3	0	14	18	73	5	0	96	7	4	9	0	20
+10 mins.	2	76	3	0	81	1	6	2	0	9	11	66	2	0	79	3	6	11	0	20
+15 mins.	3	70	5	0	78	2	8	3	0	13	14	91	4	0	109	3	5	13	0	21
Total Volume	7	326	16	0	349	8	28	10	0	46	59	314	17	0	390	21	21	40	0	82
% App. Total	2	93.4	4.6	0		17.4	60.9	21.7	0		15.1	80.5	4.4	0		25.6	25.6	48.8	0	
PHF	.583	.840	.800	.000	.855	.667	.778	.833	.000	.821	.819	.863	.708	.000	.894	.656	.875	.769	.000	.976

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File Name : Hwy 24 - Stapleton Rd Noon
Site Code : S214740
Start Date : 10/5/2021
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File Name : Hwy 24 - Stapleton Rd PM
 Site Code : S214740
 Start Date : 10/6/2021
 Page No : 1

Groups Printed- Unshifted

Start Time	Hwy 24 Southbound					Stapleton Rd Westbound					Hwy 24 Northbound					Stapleton Rd Eastbound					Int. Total
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	
04:00 PM	2	100	10	0	112	2	27	6	0	35	32	115	2	0	149	3	11	20	0	34	330
04:15 PM	4	98	11	0	113	1	35	12	0	48	26	109	4	0	139	3	15	15	0	33	333
04:30 PM	2	101	3	0	106	2	27	9	0	38	28	124	1	0	153	5	15	16	0	36	333
04:45 PM	2	71	5	0	78	0	35	7	0	42	34	120	1	0	155	7	8	16	0	31	306
Total	10	370	29	0	409	5	124	34	0	163	120	468	8	0	596	18	49	67	0	134	1302
05:00 PM	0	73	12	0	85	0	25	7	0	32	26	112	10	0	148	5	9	24	0	38	303
05:15 PM	1	80	9	0	90	2	18	6	0	26	37	122	3	0	162	4	14	20	0	38	316
05:30 PM	6	82	6	0	94	1	26	6	0	33	29	121	4	0	154	5	9	20	0	34	315
05:45 PM	1	73	3	1	78	3	22	7	1	33	25	107	3	0	135	10	19	4	1	34	280
Total	8	308	30	1	347	6	91	26	1	124	117	462	20	0	599	24	51	68	1	144	1214
06:00 PM	3	87	2	0	92	2	18	5	0	25	18	108	9	0	135	5	8	24	0	37	289
Grand Total	21	765	61	1	848	13	233	65	1	312	255	1038	37	0	1330	47	108	159	1	315	2805
Apprch %	2.5	90.2	7.2	0.1		4.2	74.7	20.8	0.3		19.2	78	2.8	0		14.9	34.3	50.5	0.3		
Total %	0.7	27.3	2.2	0	30.2	0.5	8.3	2.3	0	11.1	9.1	37	1.3	0	47.4	1.7	3.9	5.7	0	11.2	

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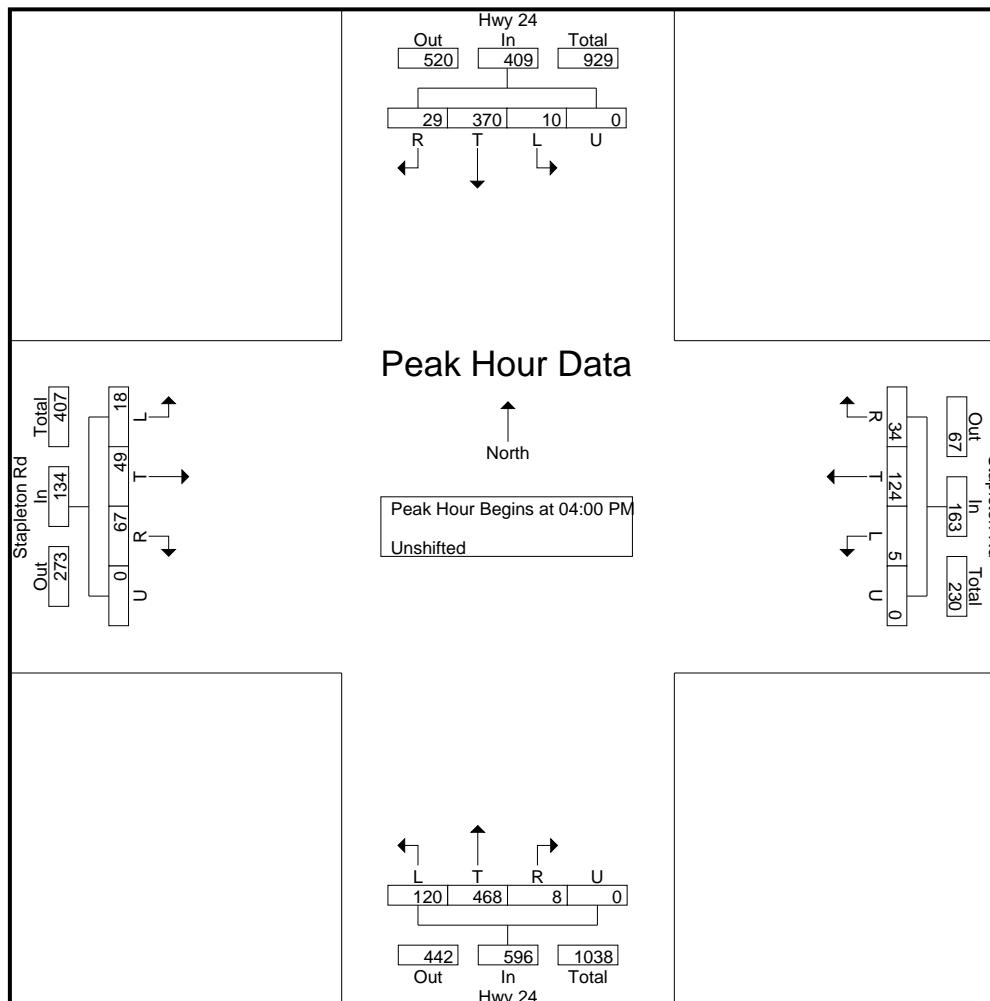
File Name : Hwy 24 - Stapleton Rd PM
 Site Code : S214740
 Start Date : 10/6/2021
 Page No : 2

Start Time	Hwy 24 Southbound					Stapleton Rd Westbound					Hwy 24 Northbound					Stapleton Rd Eastbound					Int. Total	
	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total		
Peak Hour Analysis From 4:00:00 PM to 6:00:00 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 4:00:00 PM																						
4:00:00 PM	2	100	10	0	112	2	27	6	0	35	32	115	2	0	149	3	11	20	0	34	330	
4:15:00 PM	4	98	11	0	113	1	35	12	0	48	26	109	4	0	139	3	15	15	0	33	333	
4:30:00 PM	2	101	3	0	106	2	27	9	0	38	28	124	1	0	153	5	15	16	0	36	333	
4:45:00 PM	2	71	5	0	78	0	35	7	0	42	34	120	1	0	155	7	8	16	0	31	306	
Total Volume	10	370	29	0	409	5	124	34	0	163	120	468	8	0	596	18	49	67	0	134	1302	
% App. Total	2.4	90.5	7.1	0		3.1	76.1	20.9	0		20.1	78.5	1.3	0		13.4	36.6	50	0			
PHF	.625	.916	.659	.000	.905	.625	.886	.708	.000	.849	.882	.944	.500	.000	.961	.643	.817	.838	.000	.931	.977	

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File Name : Hwy 24 - Stapleton Rd PM
Site Code : S214740
Start Date : 10/6/2021
Page No : 3



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File Name : Hwy 24 - Stapleton Rd PM
 Site Code : S214740
 Start Date : 10/6/2021
 Page No : 4

	Hwy 24 Southbound					Stapleton Rd Westbound					Hwy 24 Northbound					Stapleton Rd Eastbound					
	Start Time	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total	L	T	R	U	App. Total

Peak Hour Analysis From 4:00:00 PM to 6:00:00 PM - Peak 1 of 1

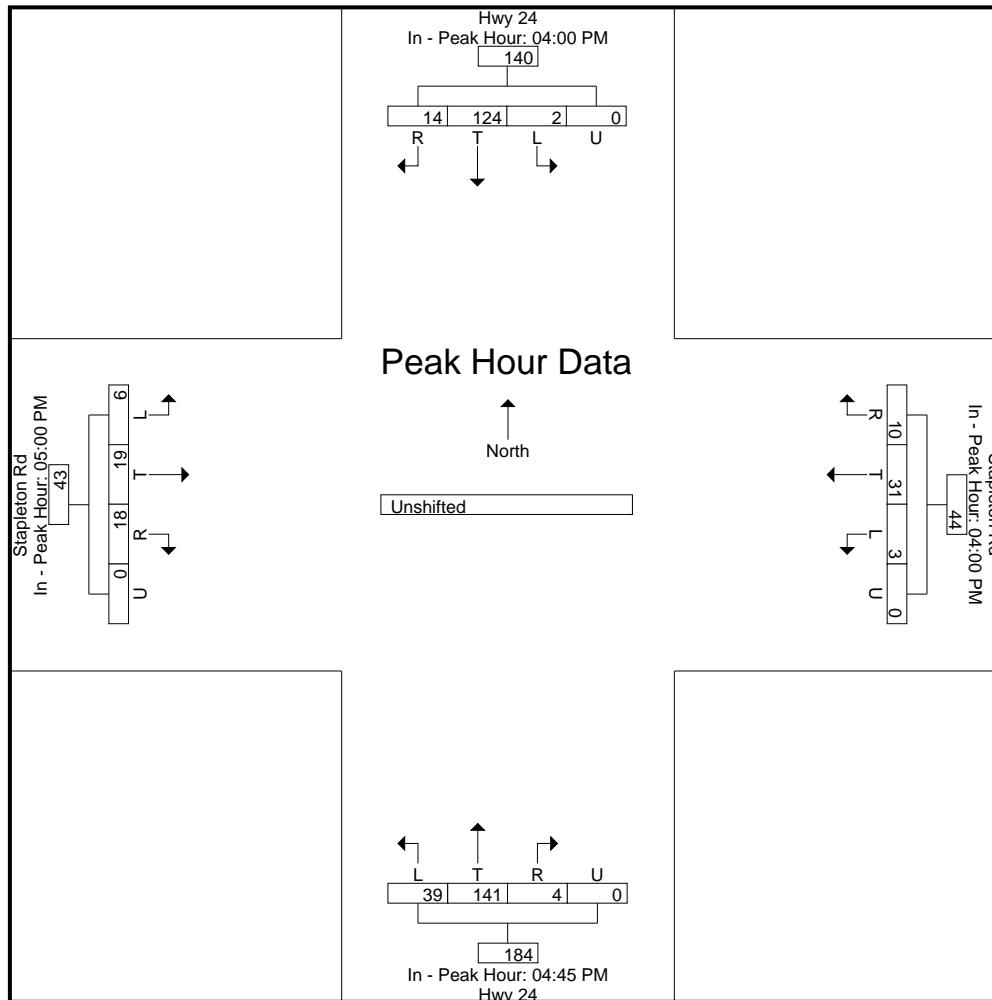
Peak Hour for Each Approach Begins at:

	4:00:00 PM	4:00:00 PM	4:45:00 PM	5:00:00 PM
+0 mins.	2 100 10 0 112	2 27 6 0 35	34 120 1 0 155	5 9 24 0 38
+5 mins.	4 98 11 0 113	1 35 12 0 48	26 112 10 0 148	4 14 20 0 38
+10 mins.	2 101 3 0 106	2 27 9 0 38	37 122 3 0 162	5 9 20 0 34
+15 mins.	2 71 5 0 78	0 35 7 0 42	29 121 4 0 154	10 19 4 1 34
Total Volume	10 370 29 0 409	5 124 34 0 163	126 475 18 0 619	24 51 68 1 144
% App. Total	2.4 90.5 7.1 0	3.1 76.1 20.9 0	20.4 76.7 2.9 0	16.7 35.4 47.2 0.7
PHF	.625 .916 .659 .000 .905	.625 .886 .708 .000 .849	.851 .973 .450 .000 .955	.600 .671 .708 .250 .947

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File Name : Hwy 24 - Stapleton Rd PM
Site Code : S214740
Start Date : 10/6/2021
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LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

File Name : New Meridian Rd - Falcon Hwy AM

Site Code : S214950

Start Date : 4/28/2022

Page No : 1

Groups Printed- Unshifted

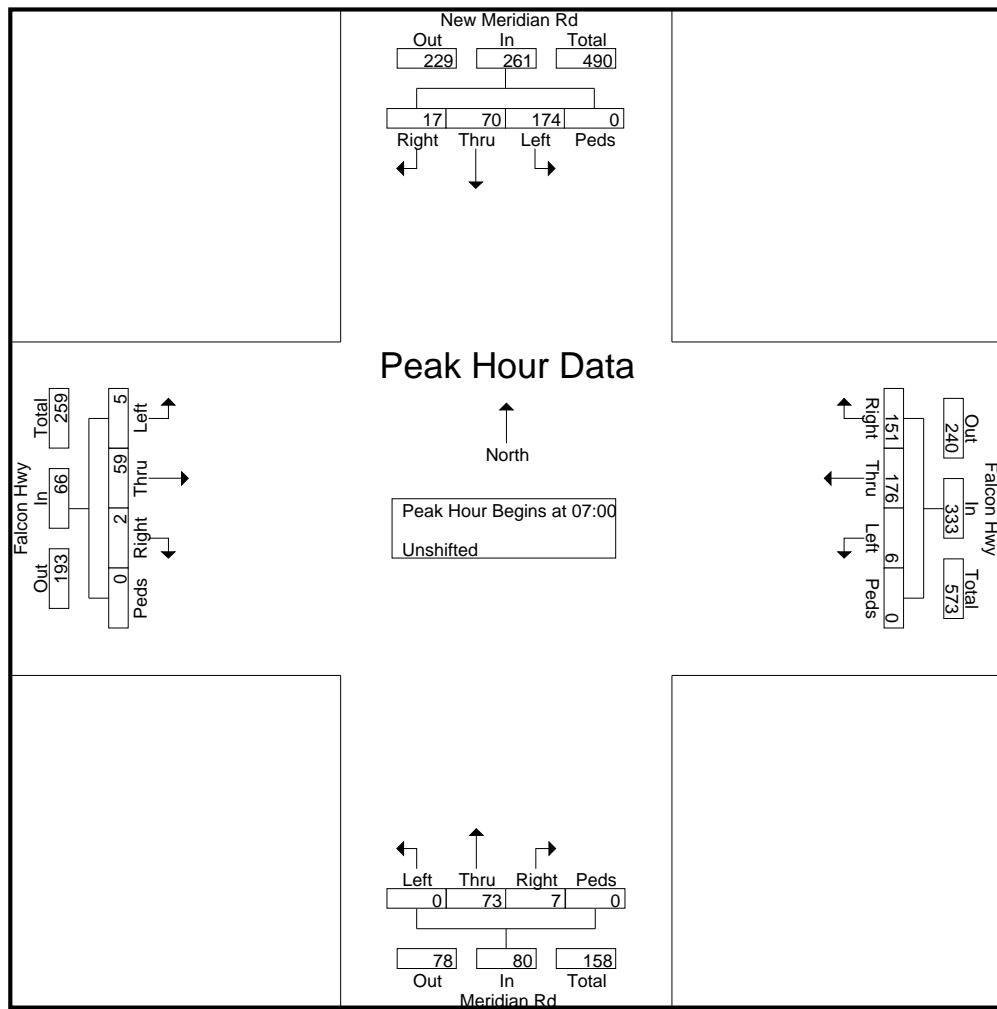
Start Time	New Meridian Rd Southbound					Falcon Hwy Westbound					Meridian Rd Northbound					Falcon Hwy Eastbound					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:30	0	3	10	0	13	8	10	0	0	18	0	8	0	0	8	0	2	0	0	2	41
06:35	0	2	15	0	17	12	11	0	0	23	0	5	0	0	5	0	3	0	0	3	48
06:40	1	2	13	0	16	13	9	0	0	22	0	5	0	0	5	0	0	0	0	0	43
06:45	0	2	15	0	17	9	11	0	0	20	0	3	0	0	3	0	2	0	0	2	42
06:50	0	2	14	0	16	14	8	0	0	22	1	1	0	0	2	0	2	0	0	2	42
06:55	0	1	10	0	11	10	12	0	0	22	0	10	0	0	10	0	3	0	0	3	46
Total	1	12	77	0	90	66	61	0	0	127	1	32	0	0	33	0	12	0	0	12	262
07:00	0	3	13	0	16	11	10	0	0	21	0	6	0	0	6	0	5	0	0	5	48
07:05	1	6	21	0	28	13	12	0	0	25	1	6	0	0	7	0	5	1	0	6	66
07:10	2	7	14	0	23	12	21	0	0	33	0	7	0	0	7	0	1	0	0	1	64
07:15	0	5	10	0	15	21	18	2	0	41	0	7	0	0	7	0	7	1	0	8	71
07:20	4	4	15	0	23	10	16	0	0	26	0	7	0	0	7	0	3	1	0	4	60
07:25	1	4	16	0	21	18	19	0	0	37	1	5	0	0	6	0	3	0	0	3	67
07:30	4	12	15	0	31	14	14	0	0	28	0	12	0	0	12	2	10	0	0	12	83
07:35	4	9	19	0	32	11	24	2	0	37	3	5	0	0	8	0	5	1	0	6	83
07:40	1	3	16	0	20	15	16	1	0	32	0	2	0	0	2	0	7	1	0	8	62
07:45	0	2	10	0	12	11	13	0	0	24	0	5	0	0	5	0	4	0	0	4	45
07:50	0	4	12	0	16	9	8	0	0	17	1	2	0	0	3	0	5	0	0	5	41
07:55	0	11	13	0	24	6	5	1	0	12	1	9	0	0	10	0	4	0	0	4	50
Total	17	70	174	0	261	151	176	6	0	333	7	73	0	0	80	2	59	5	0	66	740
08:00	0	1	9	0	10	11	4	1	0	16	1	1	0	0	2	0	6	0	0	6	34
08:05	1	4	11	0	16	11	3	0	0	14	1	10	0	0	11	0	2	0	0	2	43
08:10	0	5	4	0	9	8	5	0	0	13	2	2	0	0	4	0	2	2	0	4	30
08:15	0	3	11	0	14	20	16	0	0	36	2	10	0	0	12	0	4	0	0	4	66
08:20	0	5	9	0	14	16	13	0	0	29	0	6	0	0	6	0	5	1	0	6	55
08:25	0	1	5	0	6	25	13	5	0	43	0	3	0	0	3	0	2	0	0	2	54
Grand Total	19	101	300	0	420	308	291	12	0	611	14	137	0	0	151	2	92	8	0	102	1284
Apprch %	4.5	24	71.4	0		50.4	47.6	2	0		9.3	90.7	0	0		2	90.2	7.8	0		
Total %	1.5	7.9	23.4	0	32.7	24	22.7	0.9	0	47.6	1.1	10.7	0	0	11.8	0.2	7.2	0.6	0	7.9	

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2504 E. Pikes Peak Ave, Suite 304
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File Name : New Meridian Rd - Falcon Hwy AM
 Site Code : S214950
 Start Date : 4/28/2022
 Page No : 2

	New Meridian Rd Southbound					Falcon Hwy Westbound					Meridian Rd Northbound					Falcon Hwy 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 06:30 to 08:25 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00																					
07:00	0	3	13	0	16	11	10	0	0	21	0	6	0	0	6	0	5	0	0	5	48
07:05	1	6	21	0	28	13	12	0	0	25	1	6	0	0	7	0	5	1	0	6	66
07:10	2	7	14	0	23	12	21	0	0	33	0	7	0	0	7	0	1	0	0	1	64
07:15	0	5	10	0	15	21	18	2	0	41	0	7	0	0	7	0	7	1	0	8	71
07:20	4	4	15	0	23	10	16	0	0	26	0	7	0	0	7	0	3	1	0	4	60
07:25	1	4	16	0	21	18	19	0	0	37	1	5	0	0	6	0	3	0	0	3	67
07:30	4	12	15	0	31	14	14	0	0	28	0	12	0	0	12	2	10	0	0	12	83
07:35	4	9	19	0	32	11	24	2	0	37	3	5	0	0	8	0	5	1	0	6	83
07:40	1	3	16	0	20	15	16	1	0	32	0	2	0	0	2	0	7	1	0	8	62
07:45	0	2	10	0	12	11	13	0	0	24	0	5	0	0	5	0	4	0	0	4	45
07:50	0	4	12	0	16	9	8	0	0	17	1	2	0	0	3	0	5	0	0	5	41
07:55	0	11	13	0	24	6	5	1	0	12	1	9	0	0	10	0	4	0	0	4	50
Total Volume	17	70	174	0	261	151	176	6	0	333	7	73	0	0	80	2	59	5	0	66	740
% App. Total	6.5	26.8	66.7	0		45.3	52.9	1.8	0		8.8	91.2	0	0		3	89.4	7.6	0		
PHF	.354	.486	.690	.000	.680	.599	.611	.250	.000	.677	.194	.507	.000	.000	.556	.083	.492	.417	.000	.458	.743



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File Name : New Meridian Rd - Falcon Hwy AM

Site Code : S214950

Start Date : 4/28/2022

Page No : 3

	New Meridian Rd Southbound					Falcon Hwy Westbound					Meridian Rd Northbound					Falcon Hwy 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 06:30 to 08:25 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00	06:50	07:20	07:05
+0 mins.	0 3 13 0 16	14 8 0 0 22	0 7 0 0 7	0 5 1 0 6
+5 mins.	1 6 21 0 28	10 12 0 0 22	1 5 0 0 6	0 1 0 0 1
+10 mins.	2 7 14 0 23	11 10 0 0 21	0 12 0 0 12	0 7 1 0 8
+15 mins.	0 5 10 0 15	13 12 0 0 25	3 5 0 0 8	0 3 1 0 4
+20 mins.	4 4 15 0 23	12 21 0 0 33	0 2 0 0 2	0 3 0 0 3
+25 mins.	1 4 16 0 21	21 18 2 0 41	0 5 0 0 5	2 10 0 0 12
+30 mins.	4 12 15 0 31	10 16 0 0 26	1 2 0 0 3	0 5 1 0 6
+35 mins.	4 9 19 0 32	18 19 0 0 37	1 9 0 0 10	0 7 1 0 8
+40 mins.	1 3 16 0 20	14 14 0 0 28	1 1 0 0 2	0 4 0 0 4
+45 mins.	0 2 10 0 12	11 24 2 0 37	1 10 0 0 11	0 5 0 0 5
+50 mins.	0 4 12 0 16	15 16 1 0 32	2 2 0 0 4	0 4 0 0 4
+55 mins.	0 11 13 0 24	11 13 0 0 24	2 10 0 0 12	0 6 0 0 6
Total Volume	17 70 174 0 261	160 183 5 0 348	12 70 0 0 82	2 60 5 0 67
% App. Total	6.5 26.8 66.7 0	46 52.6 1.4 0	14.6 85.4 0 0	3 89.6 7.5 0
PHF	.354 .486 .690 .000 .680	.635 .635 .208 .000 .707	.333 .486 .000 .000 .569	.083 .500 .417 .000 .465

LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
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File Name : New Meridian Rd - Falcon Hwy AM
 Site Code : S214950
 Start Date : 4/28/2022
 Page No : 1

Groups Printed- Unshifted

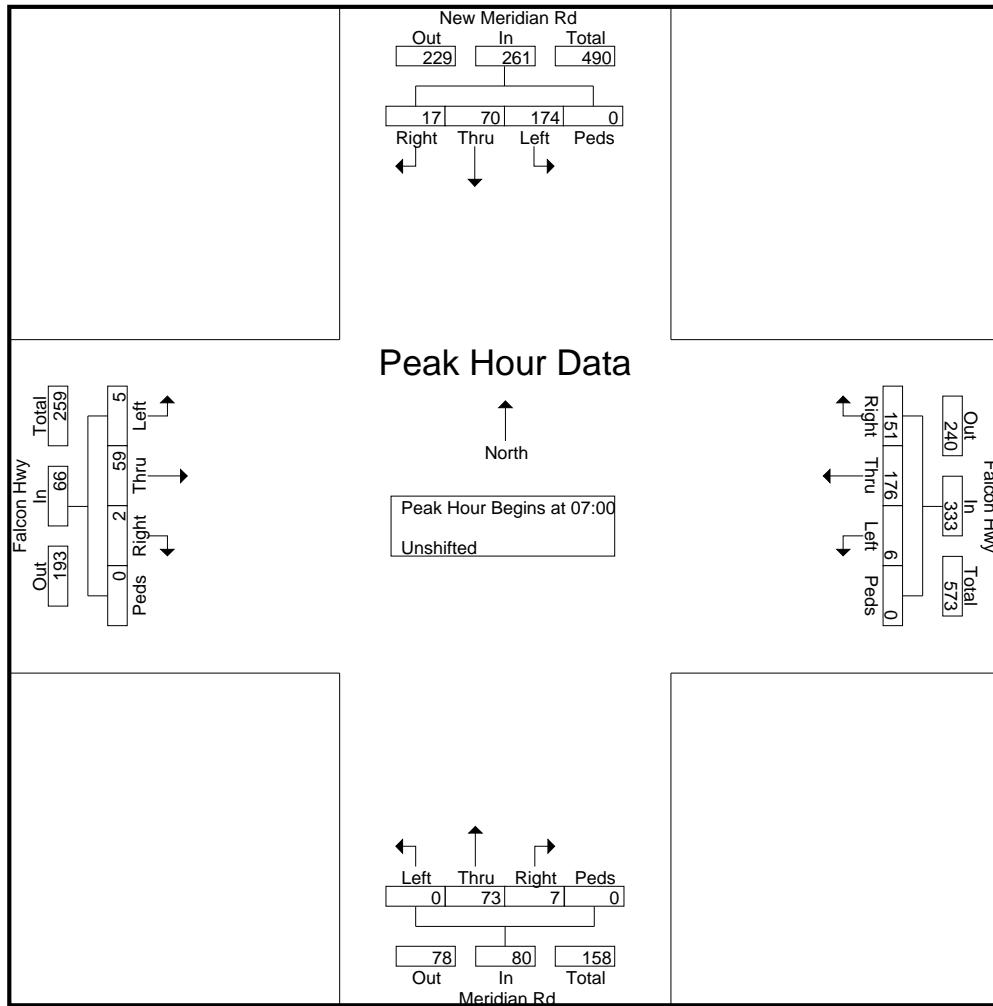
	New Meridian Rd Southbound					Falcon Hwy Westbound					Meridian Rd Northbound					Falcon Hwy Eastbound						
	Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
06:30	1	7	38	0	46	33	30	0	0	63	0	18	0	0	18	0	5	0	0	5	132	
06:45	0	5	39	0	44	33	31	0	0	64	1	14	0	0	15	0	7	0	0	7	130	
Total		1	12	77	0	90	66	61	0	0	127	1	32	0	0	33	0	12	0	0	12	262
07:00	3	16	48	0	67	36	43	0	0	79	1	19	0	0	20	0	11	1	0	12	178	
07:15	5	13	41	0	59	49	53	2	0	104	1	19	0	0	20	0	13	2	0	15	198	
07:30	9	24	50	0	83	40	54	3	0	97	3	19	0	0	22	2	22	2	0	26	228	
07:45	0	17	35	0	52	26	26	1	0	53	2	16	0	0	18	0	13	0	0	13	136	
Total		17	70	174	0	261	151	176	6	0	333	7	73	0	0	80	2	59	5	0	66	740
08:00	1	10	24	0	35	30	12	1	0	43	4	13	0	0	17	0	10	2	0	12	107	
08:15	0	9	25	0	34	61	42	5	0	108	2	19	0	0	21	0	11	1	0	12	175	
Grand Total		19	101	300	0	420	308	291	12	0	611	14	137	0	0	151	2	92	8	0	102	1284
Apprch %		4.5	24	71.4	0		50.4	47.6	2	0		9.3	90.7	0	0		2	90.2	7.8	0		
Total %		1.5	7.9	23.4	0	32.7	24	22.7	0.9	0	47.6	1.1	10.7	0	0	11.8	0.2	7.2	0.6	0	7.9	

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File Name : New Meridian Rd - Falcon Hwy AM
 Site Code : S214950
 Start Date : 4/28/2022
 Page No : 2

	New Meridian Rd Southbound					Falcon Hwy Westbound					Meridian Rd Northbound					Falcon Hwy 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 6:30:00 AM to 8:15:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 7:00:00 AM																					
7:00:00 AM	3	16	48	0	67	36	43	0	0	79	1	19	0	0	20	0	11	1	0	12	178
7:15:00 AM	5	13	41	0	59	49	53	2	0	104	1	19	0	0	20	0	13	2	0	15	198
7:30:00 AM	9	24	50	0	83	40	54	3	0	97	3	19	0	0	22	2	22	2	0	26	228
7:45:00 AM	0	17	35	0	52	26	26	1	0	53	2	16	0	0	18	0	13	0	0	13	136
Total Volume	17	70	174	0	261	151	176	6	0	333	7	73	0	0	80	2	59	5	0	66	740
% App. Total	6.5	26.8	66.7	0		45.3	52.9	1.8	0		8.8	91.2	0	0		3	89.4	7.6	0		
PHF	.472	.729	.870	.000	.786	.770	.815	.500	.000	.800	.583	.961	.000	.000	.909	.250	.670	.625	.000	.635	.811



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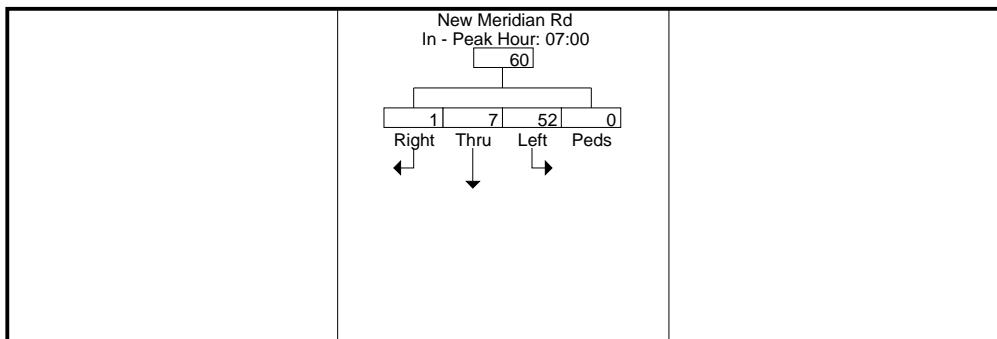
File Name : New Meridian Rd - Falcon Hwy AM
 Site Code : S214950
 Start Date : 4/28/2022
 Page No : 3

	New Meridian Rd Southbound					Falcon Hwy Westbound					Meridian Rd Northbound					Falcon Hwy 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

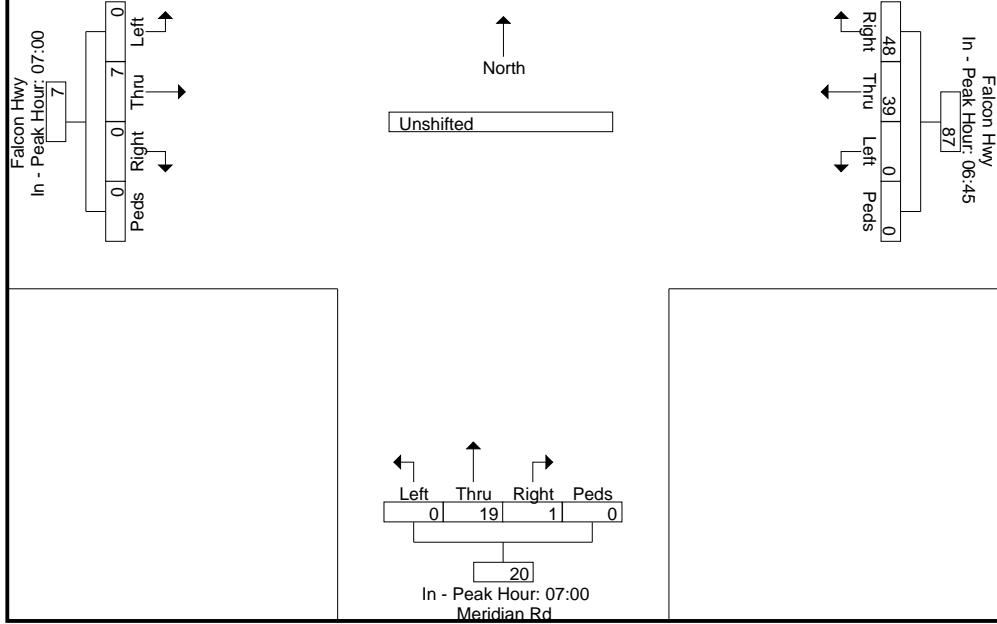
Peak Hour Analysis From 6:30:00 AM to 8:15:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	7:00:00 AM					6:45:00 AM					7:00:00 AM					7:00:00 AM				
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total
+0 mins.	3	16	48	0	67	33	31	0	0	64	1	19	0	0	20	0	11	1	0	12
+5 mins.	5	13	41	0	59	36	43	0	0	79	1	19	0	0	20	0	13	2	0	15
+10 mins.	9	24	50	0	83	49	53	2	0	104	3	19	0	0	22	2	22	2	0	26
+15 mins.	0	17	35	0	52	40	54	3	0	97	2	16	0	0	18	0	13	0	0	13
Total Volume	17	70	174	0	261	158	181	5	0	344	7	73	0	0	80	2	59	5	0	66
% App. Total	6.5	26.8	66.7	0		45.9	52.6	1.5	0		8.8	91.2	0	0		3	89.4	7.6	0	
PHF	.472	.729	.870	.000	.786	.806	.838	.417	.000	.827	.583	.961	.000	.000	.909	.250	.670	.625	.000	.635



Peak Hour Data



LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

File Name : New Meridian Rd - Falcon Hwy PM

Site Code : S214950

Start Date : 4/27/2022

Page No : 1

Groups Printed- Unshifted

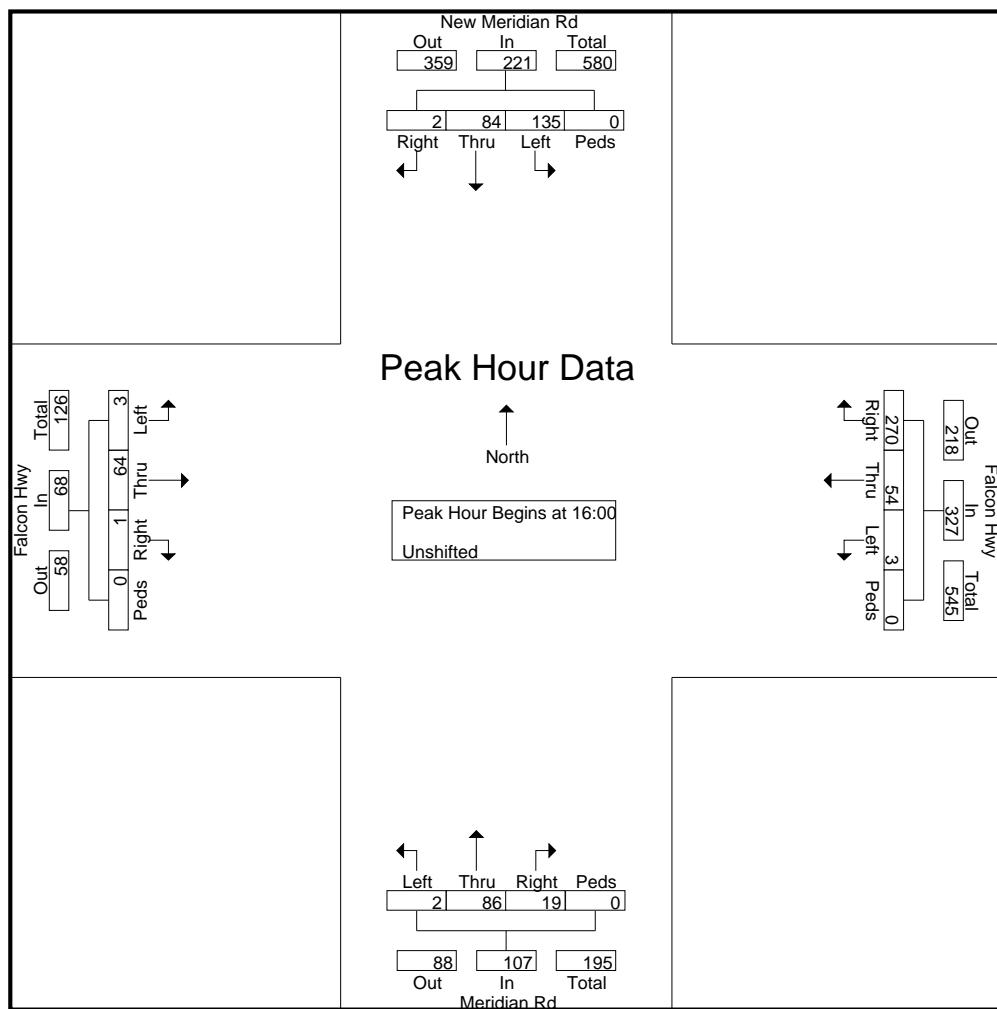
Start Time	New Meridian Rd Southbound					Falcon Hwy Westbound					Meridian Rd Northbound					Falcon Hwy Eastbound					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
16:00	1	7	10	0	18	28	6	0	0	34	3	6	0	0	9	1	4	1	0	6	67
16:05	0	8	10	0	18	25	4	0	0	29	0	5	1	0	6	0	9	0	0	9	62
16:10	0	12	11	0	23	22	5	0	0	27	1	7	0	0	8	0	4	0	0	4	62
16:15	0	6	13	0	19	16	5	0	0	21	2	6	0	0	8	0	5	0	0	5	53
16:20	0	6	11	0	17	28	5	1	0	34	1	8	1	0	10	0	4	2	0	6	67
16:25	0	3	12	0	15	26	5	0	0	31	3	10	0	0	13	0	3	0	0	3	62
16:30	0	2	8	0	10	29	6	1	0	36	3	10	0	0	13	0	1	0	0	1	60
16:35	1	6	16	0	23	19	5	1	0	25	0	6	0	0	6	0	3	0	0	3	57
16:40	0	5	13	0	18	20	5	0	0	25	1	5	0	0	6	0	5	0	0	5	54
16:45	0	12	12	0	24	22	4	0	0	26	3	10	0	0	13	0	10	0	0	10	73
16:50	0	11	9	0	20	17	2	0	0	19	2	9	0	0	11	0	6	0	0	6	56
16:55	0	6	10	0	16	18	2	0	0	20	0	4	0	0	4	0	10	0	0	10	50
Total	2	84	135	0	221	270	54	3	0	327	19	86	2	0	107	1	64	3	0	68	723
17:00	1	10	15	0	26	16	4	0	0	20	0	10	0	0	10	0	6	2	0	8	64
17:05	0	4	15	0	19	14	5	0	0	19	0	7	0	0	7	0	5	0	0	5	50
17:10	1	7	12	0	20	15	8	0	0	23	0	10	0	0	10	1	2	2	0	5	58
17:15	0	8	22	0	30	14	9	0	0	23	1	7	0	0	8	0	8	0	0	8	69
17:20	0	5	11	0	16	15	4	0	0	19	3	11	1	0	15	0	4	1	0	5	55
17:25	1	5	18	0	24	12	4	0	0	16	1	5	0	0	6	0	7	0	0	7	53
17:30	1	8	12	0	21	10	5	0	0	15	2	1	0	0	3	0	5	0	0	5	44
17:35	0	6	12	0	18	11	9	0	0	20	1	6	0	0	7	0	4	1	0	5	50
17:40	1	5	13	0	19	20	8	1	0	29	1	5	0	0	6	0	4	0	0	4	58
17:45	1	10	7	0	18	9	4	0	0	13	0	3	0	0	3	0	2	0	0	2	36
17:50	0	16	6	0	22	7	8	0	0	15	2	5	0	0	7	0	6	0	0	6	50
17:55	0	13	14	0	27	13	3	1	0	17	1	8	0	0	9	0	2	0	0	2	55
Total	6	97	157	0	260	156	71	2	0	229	12	78	1	0	91	1	55	6	0	62	642
Grand Total	8	181	292	0	481	426	125	5	0	556	31	164	3	0	198	2	119	9	0	130	1365
Apprch %	1.7	37.6	60.7	0		76.6	22.5	0.9	0		15.7	82.8	1.5	0		1.5	91.5	6.9	0		
Total %	0.6	13.3	21.4	0	35.2	31.2	9.2	0.4	0	40.7	2.3	12	0.2	0	14.5	0.1	8.7	0.7	0	9.5	

LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : New Meridian Rd - Falcon Hwy PM
 Site Code : S214950
 Start Date : 4/27/2022
 Page No : 2

	New Meridian Rd Southbound					Falcon Hwy Westbound					Meridian Rd Northbound					Falcon Hwy 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 16:00 to 17:55 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	1	7	10	0	18	28	6	0	0	34	3	6	0	0	9	1	4	1	0	6	67
16:05	0	8	10	0	18	25	4	0	0	29	0	5	1	0	6	0	9	0	0	9	62
16:10	0	12	11	0	23	22	5	0	0	27	1	7	0	0	8	0	4	0	0	4	62
16:15	0	6	13	0	19	16	5	0	0	21	2	6	0	0	8	0	5	0	0	5	53
16:20	0	6	11	0	17	28	5	1	0	34	1	8	1	0	10	0	4	2	0	6	67
16:25	0	3	12	0	15	26	5	0	0	31	3	10	0	0	13	0	3	0	0	3	62
16:30	0	2	8	0	10	29	6	1	0	36	3	10	0	0	13	0	1	0	0	1	60
16:35	1	6	16	0	23	19	5	1	0	25	0	6	0	0	6	0	3	0	0	3	57
16:40	0	5	13	0	18	20	5	0	0	25	1	5	0	0	6	0	5	0	0	5	54
16:45	0	12	12	0	24	22	4	0	0	26	3	10	0	0	13	0	10	0	0	10	73
16:50	0	11	9	0	20	17	2	0	0	19	2	9	0	0	11	0	6	0	0	6	56
16:55	0	6	10	0	16	18	2	0	0	20	0	4	0	0	4	0	10	0	0	10	50
Total Volume	2	84	135	0	221	270	54	3	0	327	19	86	2	0	107	1	64	3	0	68	723
% App. Total	0.9	38	61.1	0		82.6	16.5	0.9	0		17.8	80.4	1.9	0		1.5	94.1	4.4	0		
PHF	.167	.583	.703	.000	.767	.776	.750	.250	.000	.757	.528	.717	.167	.000	.686	.083	.533	.125	.000	.567	.825

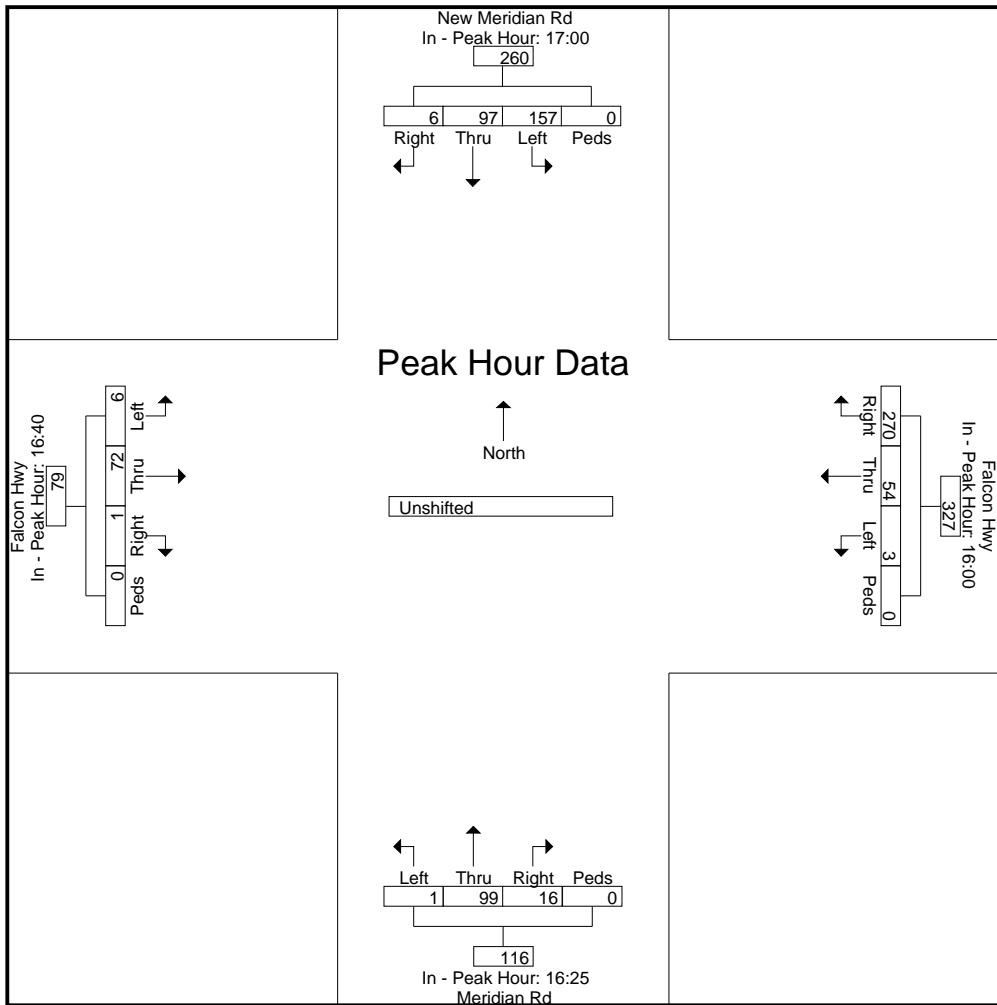


LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : New Meridian Rd - Falcon Hwy PM
 Site Code : S214950
 Start Date : 4/27/2022
 Page No : 3

	New Meridian Rd Southbound					Falcon Hwy Westbound					Meridian Rd Northbound					Falcon Hwy 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 16:00 to 17:55 - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
17:00	1	10	15	0	26	28	6	0	0	34	3	10	0	0	13	0	5	0	0	0	5
+0 mins.	0	4	15	0	19	25	4	0	0	29	3	10	0	0	13	0	10	0	0	0	10
+5 mins.	1	7	12	0	20	22	5	0	0	27	0	6	0	0	6	0	6	0	0	0	6
+10 mins.	0	8	22	0	30	16	5	0	0	21	1	5	0	0	6	0	10	0	0	0	10
+15 mins.	0	5	11	0	16	28	5	1	0	34	3	10	0	0	13	0	6	0	0	0	8
+20 mins.	1	5	18	0	24	26	5	0	0	31	2	9	0	0	11	0	5	0	0	0	5
+25 mins.	1	8	12	0	21	29	6	1	0	36	0	4	0	0	4	1	2	2	0	0	5
+30 mins.	0	6	12	0	18	19	5	1	0	25	0	10	0	0	10	0	8	0	0	0	8
+35 mins.	1	5	13	0	19	20	5	0	0	25	0	7	0	0	7	0	4	1	0	0	5
+40 mins.	1	10	7	0	18	22	4	0	0	26	0	10	0	0	10	0	7	0	0	0	7
+45 mins.	0	16	6	0	22	17	2	0	0	19	1	7	0	0	8	0	5	0	0	0	5
+50 mins.	0	13	14	0	27	18	2	0	0	20	3	11	1	0	15	0	4	1	0	0	5
Total Volume	6	97	157	0	260	270	54	3	0	327	16	99	1	0	116	1	72	6	0	0	79
% App. Total	2.3	37.3	60.4	0		82.6	16.5	0.9	0		13.8	85.3	0.9	0		1.3	91.1	7.6	0	0	
PHF	.500	.505	.595	.000	.722	.776	.750	.250	.000	.757	.444	.750	.083	.000	.644	.083	.600	.250	.000	.658	



LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : New Meridian Rd - Falcon Hwy PM
 Site Code : S214950
 Start Date : 4/27/2022
 Page No : 1

Groups Printed- Unshifted

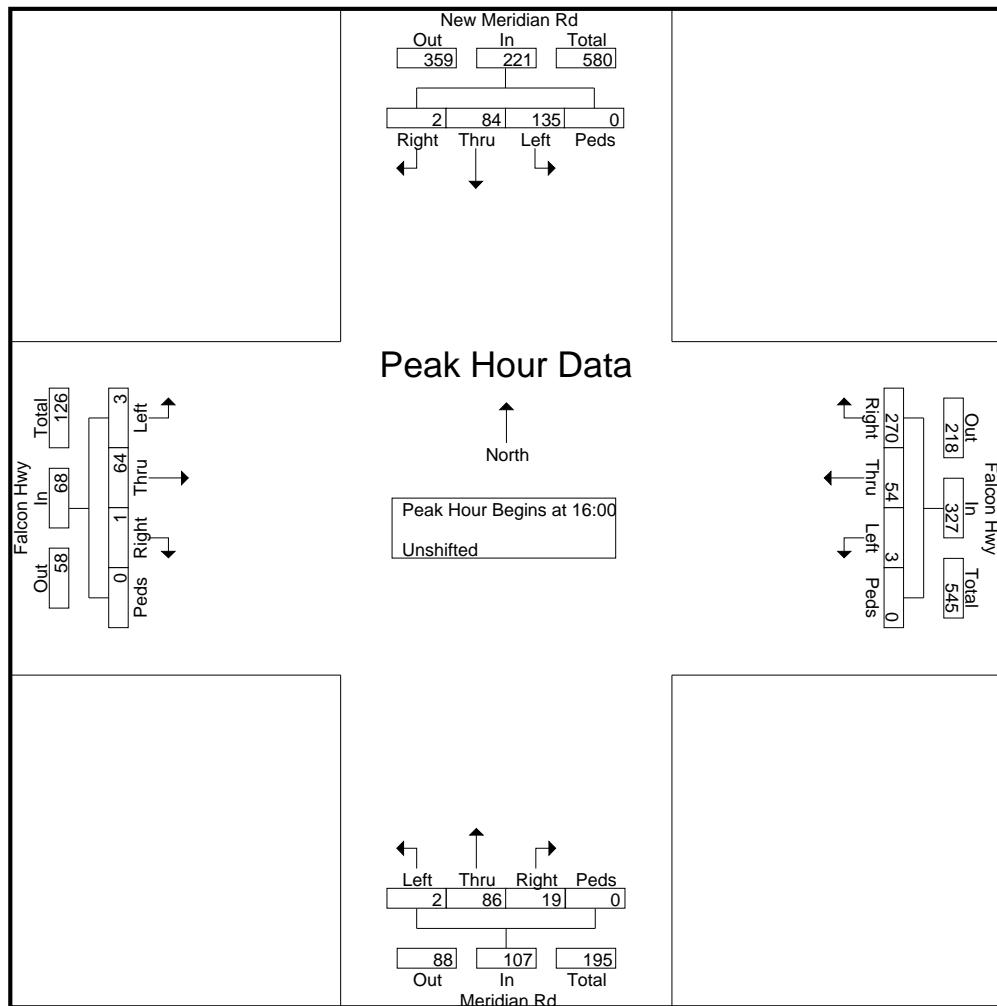
	New Meridian Rd Southbound					Falcon Hwy Westbound					Meridian Rd Northbound					Falcon Hwy Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
16:00	1	27	31	0	59	75	15	0	0	90	4	18	1	0	23	1	17	1	0	19	191
16:15	0	15	36	0	51	70	15	1	0	86	6	24	1	0	31	0	12	2	0	14	182
16:30	1	13	37	0	51	68	16	2	0	86	4	21	0	0	25	0	9	0	0	9	171
16:45	0	29	31	0	60	57	8	0	0	65	5	23	0	0	28	0	26	0	0	26	179
Total	2	84	135	0	221	270	54	3	0	327	19	86	2	0	107	1	64	3	0	68	723
17:00	2	21	42	0	65	45	17	0	0	62	0	27	0	0	27	1	13	4	0	18	172
17:15	1	18	51	0	70	41	17	0	0	58	5	23	1	0	29	0	19	1	0	20	177
17:30	2	19	37	0	58	41	22	1	0	64	4	12	0	0	16	0	13	1	0	14	152
17:45	1	39	27	0	67	29	15	1	0	45	3	16	0	0	19	0	10	0	0	10	141
Total	6	97	157	0	260	156	71	2	0	229	12	78	1	0	91	1	55	6	0	62	642
Grand Total	8	181	292	0	481	426	125	5	0	556	31	164	3	0	198	2	119	9	0	130	1365
Apprch %	1.7	37.6	60.7	0		76.6	22.5	0.9	0		15.7	82.8	1.5	0		1.5	91.5	6.9	0		
Total %	0.6	13.3	21.4	0	35.2	31.2	9.2	0.4	0	40.7	2.3	12	0.2	0	14.5	0.1	8.7	0.7	0	9.5	

LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : New Meridian Rd - Falcon Hwy PM
 Site Code : S214950
 Start Date : 4/27/2022
 Page No : 2

	New Meridian Rd Southbound					Falcon Hwy Westbound					Meridian Rd Northbound					Falcon Hwy 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 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 4:00:00 PM																					
4:00:00 PM	1	27	31	0	59	75	15	0	0	90	4	18	1	0	23	1	17	1	0	19	191
4:15:00 PM	0	15	36	0	51	70	15	1	0	86	6	24	1	0	31	0	12	2	0	14	182
4:30:00 PM	1	13	37	0	51	68	16	2	0	86	4	21	0	0	25	0	9	0	0	9	171
4:45:00 PM	0	29	31	0	60	57	8	0	0	65	5	23	0	0	28	0	26	0	0	26	179
Total Volume	2	84	135	0	221	270	54	3	0	327	19	86	2	0	107	1	64	3	0	68	723
% App. Total	0.9	38	61.1	0		82.6	16.5	0.9	0		17.8	80.4	1.9	0		1.5	94.1	4.4	0		
PHF	.500	.724	.912	.000	.921	.900	.844	.375	.000	.908	.792	.896	.500	.000	.863	.250	.615	.375	.000	.654	.946

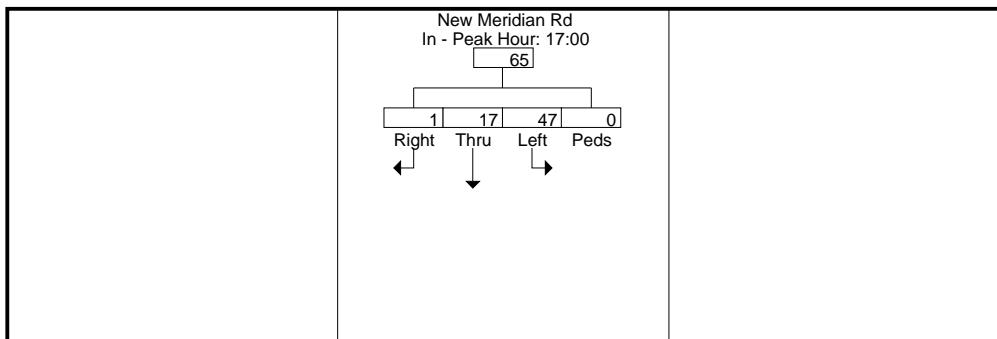


LSC Transportation Consultants, Inc.

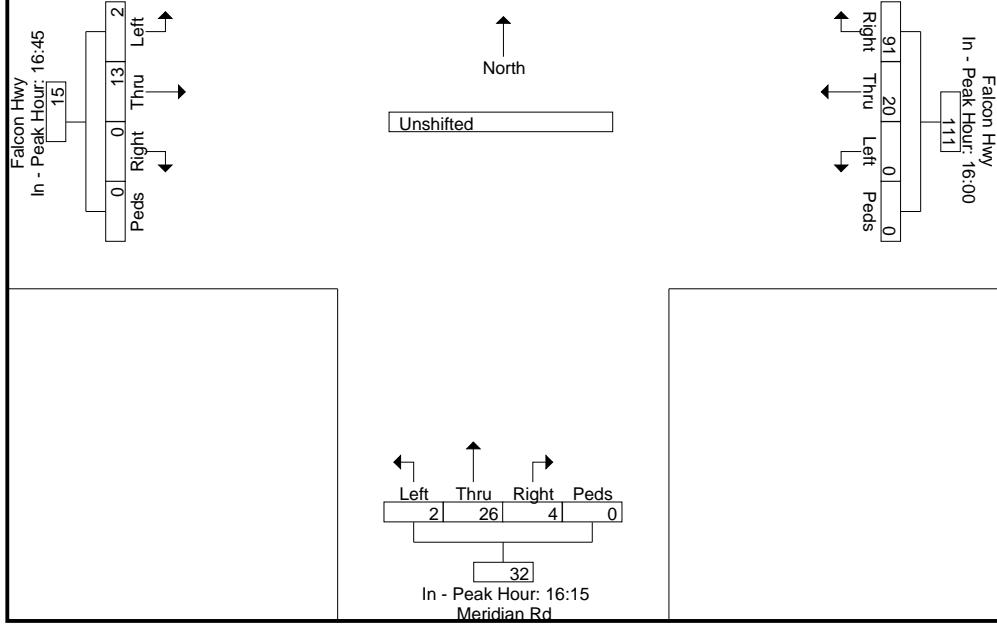
2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : New Meridian Rd - Falcon Hwy PM
 Site Code : S214950
 Start Date : 4/27/2022
 Page No : 3

Start Time	New Meridian Rd Southbound					Falcon Hwy Westbound					Meridian Rd Northbound					Falcon Hwy Eastbound				
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total
Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																				
Peak Hour for Each Approach Begins at:																				
+0 mins.	2	21	42	0	65	75	15	0	0	90	6	24	1	0	31	0	26	0	0	26
+5 mins.	1	18	51	0	70	70	15	1	0	86	4	21	0	0	25	1	13	4	0	18
+10 mins.	2	19	37	0	58	68	16	2	0	86	5	23	0	0	28	0	19	1	0	20
+15 mins.	1	39	27	0	67	57	8	0	0	65	0	27	0	0	27	0	13	1	0	14
Total Volume	6	97	157	0	260	270	54	3	0	327	15	95	1	0	111	1	71	6	0	78
% App. Total	2.3	37.3	60.4	0		82.6	16.5	0.9	0		13.5	85.6	0.9	0		1.3	91	7.7	0	
PHF	.750	.622	.770	.000	.929	.900	.844	.375	.000	.908	.625	.880	.250	.000	.895	.250	.683	.375	.000	.750



Peak Hour Data



LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

File Name : Swingline Rd - Old Meridian Rd PM 5 Min

Site Code : S214340

Start Date : 4/27/2022

Page No : 1

Groups Printed- Bank 1

	New Meridian Rd Southbound					Swingline Rd Westbound					New Meridian Rd Northbound					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
16:00	0	0	8	0	8	5	0	2	0	7	5	0	0	0	5	0	0	0	0	0	20	
16:15	0	0	14	0	14	2	0	3	0	5	4	0	0	0	4	0	0	0	0	0	23	
16:30	0	0	11	0	11	6	0	6	0	12	11	0	0	0	11	0	0	0	0	0	34	
16:45	0	0	9	1	10	4	0	10	0	14	4	0	0	0	4	0	0	0	0	0	28	
Total		0	0	42	1	43	17	0	21	0	38	24	0	0	0	24	0	0	0	0	0	105
17:00	0	0	10	0	10	3	0	5	0	8	3	0	0	0	3	0	0	0	0	0	21	
17:15	0	0	10	0	10	7	0	5	0	12	4	0	0	0	4	0	0	0	0	0	26	
17:30	0	0	9	0	9	6	0	4	0	10	4	0	0	0	4	0	0	0	0	0	23	
17:45	0	0	9	0	9	4	0	2	0	6	4	0	0	0	4	0	0	0	0	0	19	
Total		0	0	38	0	38	20	0	16	0	36	15	0	0	0	15	0	0	0	0	0	89
Grand Total		0	0	80	1	81	37	0	37	0	74	39	0	0	0	39	0	0	0	0	0	194
Apprch %		0	0	98.8	1.2		50	0	50	0		100	0	0	0		0	0	0	0	0	
Total %		0	0	41.2	0.5	41.8	19.1	0	19.1	0	38.1	20.1	0	0	0	20.1	0	0	0	0	0	

LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

File Name : Swingline Rd - Old Meridian Rd PM 5 Min

Site Code : S214340

Start Date : 4/27/2022

Page No : 2

	New Meridian Rd Southbound					Swingline Rd Westbound					New Meridian Rd Northbound					Eastbound					
	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 4:00:00 PM to 5:45:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 4:30:00 PM																					
4:30:00 PM	0	0	11	0	11	6	0	6	0	12	11	0	0	0	11	0	0	0	0	0	34
4:45:00 PM	0	0	9	1	10	4	0	10	0	14	4	0	0	0	4	0	0	0	0	0	28
5:00:00 PM	0	0	10	0	10	3	0	5	0	8	3	0	0	0	3	0	0	0	0	0	21
5:15:00 PM	0	0	10	0	10	7	0	5	0	12	4	0	0	0	4	0	0	0	0	0	26
Total Volume	0	0	40	1	41	20	0	26	0	46	22	0	0	0	22	0	0	0	0	0	109
% App. Total	0	0	97.6	2.4		43.5	0	56.5	0		100	0	0	0		0	0	0	0	0	
PHF	.000	.000	.909	.250	.932	.714	.000	.650	.000	.821	.500	.000	.000	.000	.500	.000	.000	.000	.000	.801	

LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

File Name : Swingline Rd - Old Meridian Rd PM 5 Min

Site Code : S214340

Start Date : 4/27/2022

Page No : 3

Start Time	New Meridian Rd Southbound				Swingline Rd Westbound				New Meridian Rd Northbound				Eastbound							
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total

Peak Hour Analysis From 4:00:00 PM to 5:45:00 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	4:15:00 PM	4:30:00 PM	4:00:00 PM	4:00:00 PM
+0 mins.	0 0 14 0 14	6 0 6 0 12	5 0 0 0 5	0 0 0 0 0
+5 mins.	0 0 11 0 11	4 0 10 0 14	4 0 0 0 4	0 0 0 0 0
+10 mins.	0 0 9 1 10	3 0 5 0 8	11 0 0 0 11	0 0 0 0 0
+15 mins.	0 0 10 0 10	7 0 5 0 12	4 0 0 0 4	0 0 0 0 0
Total Volume	0 0 44 1 45	20 0 26 0 46	24 0 0 0 24	0 0 0 0 0
% App. Total	0 0 97.8 2.2	43.5 0 56.5 0	100 0 0 0 0	0 0 0 0 0
PHF	.000 .000 .786 .250 .804	.714 .000 .650 .000 .821	.545 .000 .000 .000 .545	.000 .000 .000 .000 .000

LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

File Name : Swingline Rd - Old Meridian Rd PM 5 Min

Site Code : S214340

Start Date : 4/27/2022

Page No : 1

Groups Printed- Bank 1

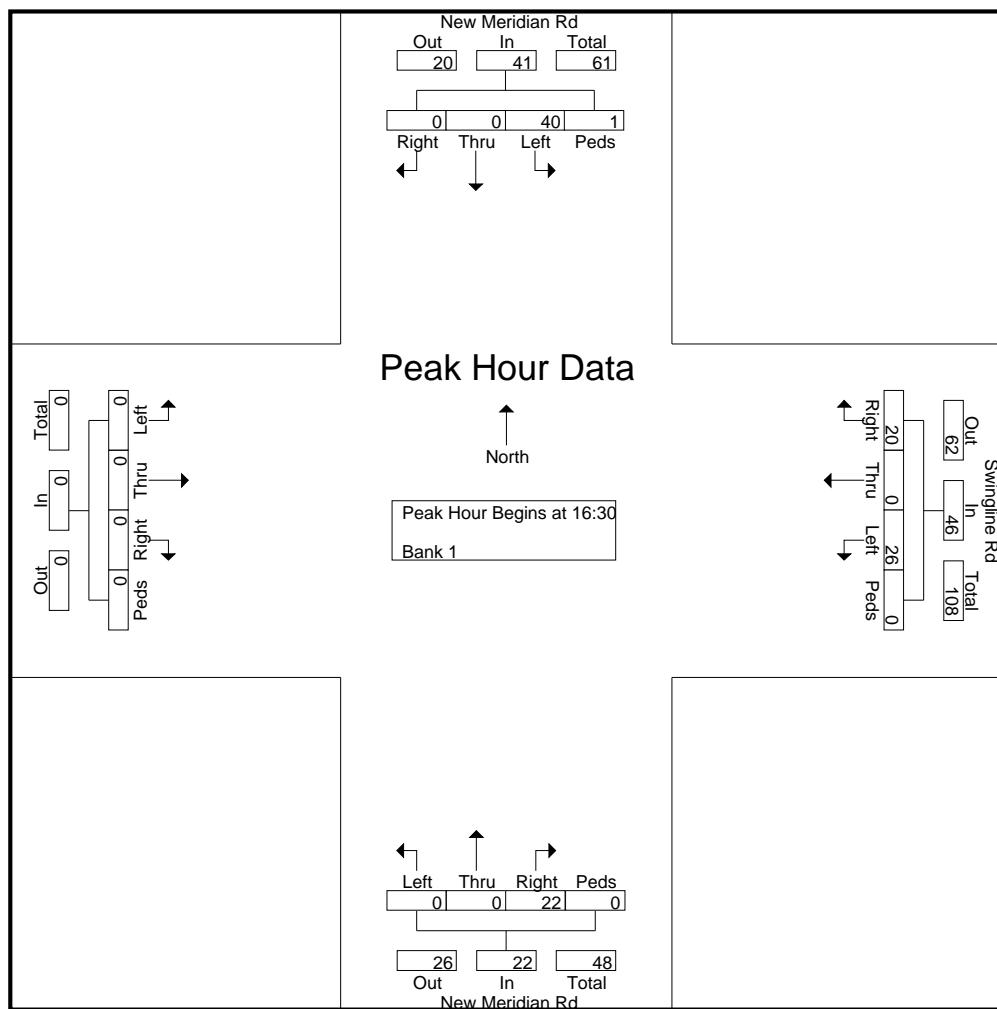
	New Meridian Rd Southbound					Swingline Rd Westbound					New Meridian Rd Northbound					Eastbound						
	Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
16:00		0	0	4	0	4	1	0	0	0	1	3	0	0	0	3	0	0	0	0	0	8
16:05		0	0	3	0	3	4	0	1	0	5	0	0	0	0	0	0	0	0	0	0	8
16:10		0	0	1	0	1	0	0	1	0	1	2	0	0	0	2	0	0	0	0	0	4
16:15		0	0	5	0	5	0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	7
16:20		0	0	4	0	4	1	0	1	0	2	2	0	0	0	2	0	0	0	0	0	8
16:25		0	0	5	0	5	1	0	1	0	2	1	0	0	0	1	0	0	0	0	0	8
16:30		0	0	4	0	4	3	0	1	0	4	3	0	0	0	3	0	0	0	0	0	11
16:35		0	0	1	0	1	3	0	3	0	6	3	0	0	0	3	0	0	0	0	0	10
16:40		0	0	6	0	6	0	0	2	0	2	5	0	0	0	5	0	0	0	0	0	13
16:45		0	0	2	0	2	1	0	4	0	5	3	0	0	0	3	0	0	0	0	0	10
16:50		0	0	1	0	1	2	0	4	0	6	1	0	0	0	1	0	0	0	0	0	8
16:55		0	0	6	1	7	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	10
Total		0	0	42	1	43	17	0	21	0	38	24	0	0	0	24	0	0	0	0	0	105
17:00		0	0	2	0	2	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	5
17:05		0	0	5	0	5	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	7
17:10		0	0	3	0	3	1	0	3	0	4	2	0	0	0	2	0	0	0	0	0	9
17:15		0	0	1	0	1	2	0	2	0	4	1	0	0	0	1	0	0	0	0	0	6
17:20		0	0	6	0	6	1	0	1	0	2	1	0	0	0	1	0	0	0	0	0	9
17:25		0	0	3	0	3	4	0	2	0	6	2	0	0	0	2	0	0	0	0	0	11
17:30		0	0	5	0	5	1	0	3	0	4	1	0	0	0	1	0	0	0	0	0	10
17:35		0	0	2	0	2	3	0	0	0	3	2	0	0	0	2	0	0	0	0	0	7
17:40		0	0	2	0	2	2	0	1	0	3	1	0	0	0	1	0	0	0	0	0	6
17:45		0	0	2	0	2	1	0	1	0	2	1	0	0	0	1	0	0	0	0	0	5
17:50		0	0	4	0	4	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	6
17:55		0	0	3	0	3	2	0	1	0	3	2	0	0	0	2	0	0	0	0	0	8
Total		0	0	38	0	38	20	0	16	0	36	15	0	0	0	15	0	0	0	0	0	89
Grand Total		0	0	80	1	81	37	0	37	0	74	39	0	0	0	39	0	0	0	0	0	194
Apprch %		0	0	98.8	1.2		50	0	50	0	100	0	0	0	0	0	0	0	0	0	0	
Total %		0	0	41.2	0.5	41.8	19.1	0	19.1	0	38.1	20.1	0	0	0	20.1	0	0	0	0	0	0

LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : Swingline Rd - Old Meridian Rd PM 5 Min
 Site Code : S214340
 Start Date : 4/27/2022
 Page No : 2

Start Time	New Meridian Rd Southbound					Swingline Rd Westbound					New Meridian Rd Northbound					Eastbound					
	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 16:00 to 17:55 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:30																					
16:30	0	0	4	0	4	3	0	1	0	4	3	0	0	0	3	0	0	0	0	0	11
16:35	0	0	1	0	1	3	0	3	0	6	3	0	0	0	3	0	0	0	0	0	10
16:40	0	0	6	0	6	0	0	2	0	2	5	0	0	0	5	0	0	0	0	0	13
16:45	0	0	2	0	2	1	0	4	0	5	3	0	0	0	3	0	0	0	0	0	10
16:50	0	0	1	0	1	2	0	4	0	6	1	0	0	0	1	0	0	0	0	0	8
16:55	0	0	6	1	7	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	10
17:00	0	0	2	0	2	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	5
17:05	0	0	5	0	5	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	7
17:10	0	0	3	0	3	1	0	3	0	4	2	0	0	0	2	0	0	0	0	0	9
17:15	0	0	1	0	1	2	0	2	0	4	1	0	0	0	1	0	0	0	0	0	6
17:20	0	0	6	0	6	1	0	1	0	2	1	0	0	0	1	0	0	0	0	0	9
17:25	0	0	3	0	3	4	0	2	0	6	2	0	0	0	2	0	0	0	0	0	11
Total Volume	0	0	40	1	41	20	0	26	0	46	22	0	0	0	22	0	0	0	0	0	109
% App. Total	0	0	97.6	2.4		43.5	0	56.5	0		100	0	0	0	0	0	0	0	0	0	
PHF	.000	.000	.556	.083	.488	.417	.000	.542	.000	.639	.367	.000	.000	.000	.367	.000	.000	.000	.000	.000	.699



LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

File Name : Swingline Rd - Old Meridian Rd PM 5 Min

Site Code : S214340

Start Date : 4/27/2022

Page No : 3

Start Time	New Meridian Rd Southbound				Swingline Rd Westbound				New Meridian Rd Northbound				Eastbound							
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total

Peak Hour Analysis From 16:00 to 17:55 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	16:15	16:30	16:00	16:00
+0 mins.	0 0 5 0 5	3 0 1 0 4	3 0 0 0 3	0 0 0 0 0
+5 mins.	0 0 4 0 4	3 0 3 0 6	0 0 0 0 0	0 0 0 0 0
+10 mins.	0 0 5 0 5	0 0 2 0 2	2 0 0 0 2	0 0 0 0 0
+15 mins.	0 0 4 0 4	1 0 4 0 5	1 0 0 0 1	0 0 0 0 0
+20 mins.	0 0 1 0 1	2 0 4 0 6	2 0 0 0 2	0 0 0 0 0
+25 mins.	0 0 6 0 6	1 0 2 0 3	1 0 0 0 1	0 0 0 0 0
+30 mins.	0 0 2 0 2	1 0 2 0 3	3 0 0 0 3	0 0 0 0 0
+35 mins.	0 0 1 0 1	1 0 0 0 1	3 0 0 0 3	0 0 0 0 0
+40 mins.	0 0 6 1 7	1 0 3 0 4	5 0 0 0 5	0 0 0 0 0
+45 mins.	0 0 2 0 2	2 0 2 0 4	3 0 0 0 3	0 0 0 0 0
+50 mins.	0 0 5 0 5	1 0 1 0 2	1 0 0 0 1	0 0 0 0 0
+55 mins.	0 0 3 0 3	4 0 2 0 6	0 0 0 0 0	0 0 0 0 0
Total Volume	0 0 44 1 45	20 0 26 0 46	24 0 0 0 24	0 0 0 0 0
% App. Total	0 0 97.8 2.2	43.5 0 56.5 0	100 0 0 0 0	0 0 0 0 0
PHF	.000 .000 .611 .083 .536	.417 .000 .542 .000 .639	.400 .000 .000 .000 .400	.000 .000 .000 .000 .000

Levels of Service



Lanes, Volumes, Timings
2: US 24 & Meridian Rd

Existing
AM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑	↑↑	↑
Traffic Volume (vph)	1	27	508	1	110	28	110	428	11	24	758	0
Future Volume (vph)	1	27	508	1	110	28	110	428	11	24	758	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195		195	195		195	555		490	555		490
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	180			180			300			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1863	1863
Flt Permitted	0.668			0.737			0.119			0.430		
Satd. Flow (perm)	1244	3539	1583	1373	3539	1583	222	1863	1583	801	1863	1863
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			324			109			109			
Link Speed (mph)		40			40			65			65	
Link Distance (ft)		873			1300			985			695	
Travel Time (s)		14.9			22.2			10.3			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.83	0.83	0.83	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1	29	552	1	133	34	118	460	12	26	815	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	29	552	1	133	34	118	460	12	26	815	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4		4	8		8

Lanes, Volumes, Timings
2: US 24 & Meridian Rd

Existing
AM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	6	6	6	2	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	36.0	36.0	12.0	36.0	36.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	60.0%	60.0%	20.0%	60.0%	60.0%
Maximum Green (s)	7.5	7.5	7.5	7.5	7.5	7.5	7.5	31.5	31.5	7.5	31.5	31.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	Max	Max	Max	Max	None	None	None	None	None	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effect Green (s)	18.5	18.5	18.5	18.5	18.5	18.5	36.4	33.6	33.6	33.3	28.8	
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.28	0.28	0.56	0.51	0.51	0.51	0.44	
v/c Ratio	0.00	0.03	0.81	0.00	0.13	0.06	0.40	0.48	0.01	0.05	1.00	
Control Delay	20.0	19.9	22.2	20.0	20.8	0.2	11.0	13.1	0.0	5.8	52.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	20.0	19.9	22.2	20.0	20.8	0.2	11.0	13.1	0.0	5.8	52.2	
LOS	B	B	C	B	C	A	B	B	A	A	D	
Approach Delay							16.7					50.7
Approach LOS							B					D
Queue Length 50th (ft)	0	4	93	0	23	0	19	89	0	4	333	
Queue Length 95th (ft)	4	14	#275	4	40	0	42	219	0	12	#573	
Internal Link Dist (ft)			793			1220			905			615
Turn Bay Length (ft)	195		195	195		195	555		490	555		
Base Capacity (vph)	352	1002	680	388	1002	526	306	1061	948	534	923	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.00	0.03	0.81	0.00	0.13	0.06	0.39	0.43	0.01	0.05	0.88	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 65.5

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 30.1

Intersection LOS: C

Intersection Capacity Utilization 86.8%

ICU Level of Service E

Analysis Period (min) 15

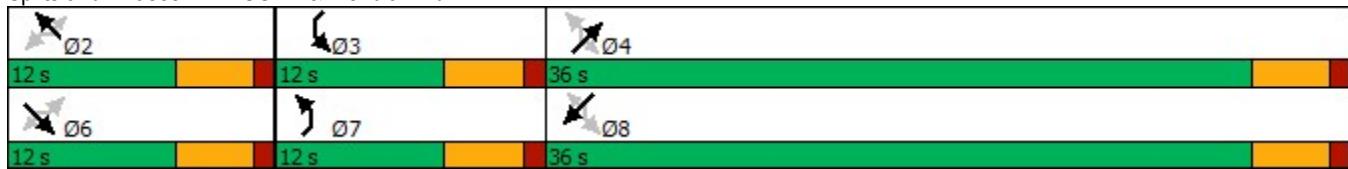
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
2: US 24 & Meridian Rd

Existing
AM

Splits and Phases: 2: US 24 & Meridian Rd



Lanes, Volumes, Timings
3: US 24 & Judge Orr

Existing AM

	→	→	↗	↖	←	↙	↗	↖	↙	↖	↗	←
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	25	78	139	119	49	6	74	317	59	8	528	23
Future Volume (vph)	25	78	139	119	49	6	74	317	59	8	528	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	850		0	700		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			280			300		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.923			0.995			0.977			0.994	
Flt Protected		0.995			0.967		0.950			0.950		
Satd. Flow (prot)	0	1711	0	0	1792	0	1770	1820	0	1770	1852	0
Flt Permitted		0.952			0.573		0.229			0.475		
Satd. Flow (perm)	0	1637	0	0	1062	0	427	1820	0	885	1852	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		124			3			16			4	
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		801			719			1315			2758	
Travel Time (s)		12.1			10.9			16.3			34.2	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92	0.93	0.93	0.93
Adj. Flow (vph)	29	90	160	137	56	7	80	345	64	9	568	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	279	0	0	200	0	80	409	0	9	593	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		

Lanes, Volumes, Timings
3: US 24 & Judge Orr

Existing AM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	8.5	21.5		8.5	21.5		8.5	21.5		8.5	21.5	
Total Split (%)	14.2%	35.8%		14.2%	35.8%		14.2%	35.8%		14.2%	35.8%	
Maximum Green (s)	4.0	17.0		4.0	17.0		4.0	17.0		4.0	17.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)		12.1			12.1		22.6	21.9		21.0	18.9	
Actuated g/C Ratio		0.27			0.27		0.50	0.49		0.47	0.42	
v/c Ratio		0.52			0.69		0.24	0.45		0.02	0.76	
Control Delay		12.0			28.7		8.1	11.2		6.5	23.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		12.0			28.7		8.1	11.2		6.5	23.9	
LOS		B			C		A	B		A	C	
Approach Delay		12.0			28.7			10.7			23.6	
Approach LOS		B			C			B			C	
Queue Length 50th (ft)		35			50		9	56		1	147	
Queue Length 95th (ft)		82			102		28	179		6	#351	
Internal Link Dist (ft)		721			639			1235			2678	
Turn Bay Length (ft)							850			700		
Base Capacity (vph)		715			417		339	899		496	782	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.39			0.48		0.24	0.45		0.02	0.76	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 44.8

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 18.2

Intersection LOS: B

Intersection Capacity Utilization 71.9%

ICU Level of Service C

Analysis Period (min) 15

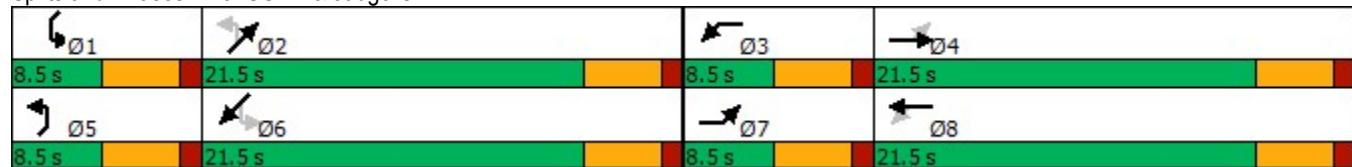
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
3: US 24 & Judge Orr

Existing
AM

Splits and Phases: 3: US 24 & Judge Orr



Lanes, Volumes, Timings
4: US 24 & Curtis/Stapleton

Existing
AM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	33	157	146	4	86	17	77	254	5	45	426	37
Future Volume (vph)	33	157	146	4	86	17	77	254	5	45	426	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		325	215		215	890		1000	790		790
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	240			200			190			190		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.652			0.649			0.292			0.580		
Satd. Flow (perm)	1215	1863	1583	1209	1863	1583	544	1863	1583	1080	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			191			191			191
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		1349			1298			2758			1426	
Travel Time (s)		20.4			19.7			34.2			17.7	
Peak Hour Factor	0.92	0.92	0.92	0.83	0.83	0.83	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	36	171	159	5	104	20	84	276	5	49	463	40
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	171	159	5	104	20	84	276	5	49	463	40
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm									
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2		2	4		4	8		8

Lanes, Volumes, Timings
4: US 24 & Curtis/Stapleton

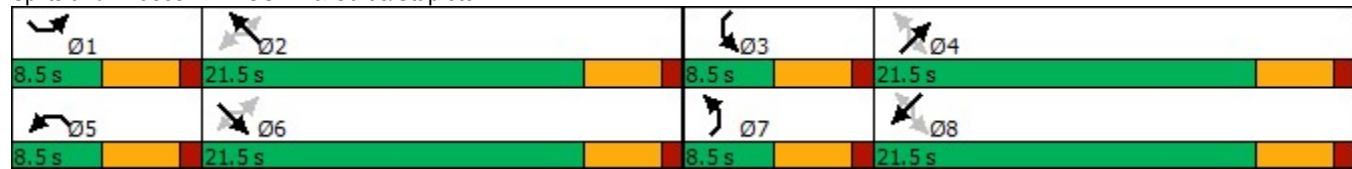
Existing
AM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR								
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8								
Switch Phase																				
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0								
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5								
Total Split (s)	8.5	21.5	21.5	8.5	21.5	21.5	8.5	21.5	21.5	8.5	21.5	21.5								
Total Split (%)	14.2%	35.8%	35.8%	14.2%	35.8%	35.8%	14.2%	35.8%	35.8%	14.2%	35.8%	35.8%								
Maximum Green (s)	4.0	17.0	17.0	4.0	17.0	17.0	4.0	17.0	17.0	4.0	17.0	17.0								
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5								
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0								
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5								
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag								
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes								
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0								
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	None								
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0								
Flash Dont Walk (s)	11.0	11.0			11.0	11.0		11.0	11.0		11.0	11.0								
Pedestrian Calls (#/hr)	0	0			0	0		0	0		0	0								
Act Effect Green (s)	11.6	11.0	11.0	10.8	9.6	9.6	18.8	17.6	17.6	17.9	15.9	15.9								
Actuated g/C Ratio	0.27	0.26	0.26	0.26	0.23	0.23	0.44	0.42	0.42	0.42	0.38	0.38								
v/c Ratio	0.09	0.35	0.29	0.01	0.25	0.04	0.23	0.36	0.01	0.09	0.66	0.06								
Control Delay	12.2	17.1	3.8	11.2	18.0	0.1	9.2	13.4	0.0	8.2	21.1	0.2								
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
Total Delay	12.2	17.1	3.8	11.2	18.0	0.1	9.2	13.4	0.0	8.2	21.1	0.2								
LOS	B	B	A	B	B	A	A	B	A	A	C	A								
Approach Delay		10.8				15.0				12.2		18.5								
Approach LOS		B				B				B										
Queue Length 50th (ft)	7	37	0	1	22	0	8	28	0	4	89	0								
Queue Length 95th (ft)	22	94	27	6	56	0	38	142	0	25	#298	0								
Internal Link Dist (ft)		1269			1218			2678			1346									
Turn Bay Length (ft)	190		325	215		215	890		1000	790		790								
Base Capacity (vph)	389	827	809	367	822	805	369	894	859	529	822	805								
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0								
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0								
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced v/c Ratio	0.09	0.21	0.20	0.01	0.13	0.02	0.23	0.31	0.01	0.09	0.56	0.05								
Intersection Summary																				
Area Type:	Other																			
Cycle Length: 60																				
Actuated Cycle Length: 42.3																				
Natural Cycle: 65																				
Control Type: Actuated-Uncoordinated																				
Maximum v/c Ratio: 0.66																				
Intersection Signal Delay: 14.6	Intersection LOS: B																			
Intersection Capacity Utilization 46.9%	ICU Level of Service A																			
Analysis Period (min) 15																				
# 95th percentile volume exceeds capacity, queue may be longer.																				
Queue shown is maximum after two cycles.																				

Lanes, Volumes, Timings
4: US 24 & Curtis/Stapleton

Existing
AM

Splits and Phases: 4: US 24 & Curtis/Stapleton



HCM 6th TWSC
5: Curtis Rd & Judge Orr Rd

Existing
AM

Intersection

Int Delay, s/veh 7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	34	79	19	116	33	35	77	0	8	166	0
Future Vol, veh/h	1	34	79	19	116	33	35	77	0	8	166	0
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									
Storage Length	-	-	0	0	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	87	87	87	83	83	83	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	41	95	22	133	38	42	93	0	9	191	0

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	171	0	0	136	0	0	335	258	41	333	334	152
Stage 1	-	-	-	-	-	-	43	43	-	196	196	-
Stage 2	-	-	-	-	-	-	292	215	-	137	138	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1406	-	-	1448	-	-	619	646	1030	620	586	894
Stage 1	-	-	-	-	-	-	971	859	-	806	739	-
Stage 2	-	-	-	-	-	-	716	725	-	866	782	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1406	-	-	1448	-	-	455	636	1030	544	577	894
Mov Cap-2 Maneuver	-	-	-	-	-	-	455	636	-	544	577	-
Stage 1	-	-	-	-	-	-	970	858	-	805	728	-
Stage 2	-	-	-	-	-	-	520	714	-	772	781	-

Approach	EB	WB			NB			SB				
HCM Control Delay, s	0.1	0.9			12.3			14.2				
HCM LOS					B			B				
<hr/>												
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	455	636	1406	-	-	1448	-	-	544	577		
HCM Lane V/C Ratio	0.093	0.146	0.001	-	-	0.015	-	-	0.017	0.331		
HCM Control Delay (s)	13.7	11.6	7.6	0	-	7.5	-	-	11.7	14.3		
HCM Lane LOS	B	B	A	A	-	A	-	-	B	B		
HCM 95th %tile Q(veh)	0.3	0.5	0	-	-	0	-	-	0.1	1.4		

HCM 6th TWSC
10: Meridian Rd & Falcon Hwy

Existing
AM

Intersection

Int Delay, s/veh 9.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	59	2	6	176	161	0	73	7	174	70	17
Future Vol, veh/h	5	59	2	6	176	161	0	73	7	174	70	17
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	92	92	92	83	83	83	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	71	2	7	191	175	0	88	8	189	76	18

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	366	0	0	73	0	0	424	464	72	425	378	279
Stage 1	-	-	-	-	-	-	84	84	-	293	293	-
Stage 2	-	-	-	-	-	-	340	380	-	132	85	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1193	-	-	1527	-	-	540	495	990	540	554	760
Stage 1	-	-	-	-	-	-	924	825	-	715	670	-
Stage 2	-	-	-	-	-	-	675	614	-	871	824	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1193	-	-	1527	-	-	467	490	990	458	548	760
Mov Cap-2 Maneuver	-	-	-	-	-	-	467	490	-	458	548	-
Stage 1	-	-	-	-	-	-	919	821	-	711	666	-
Stage 2	-	-	-	-	-	-	580	610	-	767	820	-

Approach	EB	WB			NB			SB				
HCM Control Delay, s	0.6	0.1			13.6			21.8				
HCM LOS					B			C				
<hr/>												
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	513	1193	-	-	1527	-	-	492				
HCM Lane V/C Ratio	0.188	0.005	-	-	0.004	-	-	0.577				
HCM Control Delay (s)	13.6	8	0	-	7.4	0	-	21.8				
HCM Lane LOS	B	A	A	-	A	A	-	C				
HCM 95th %tile Q(veh)	0.7	0	-	-	0	-	-	3.6				

Lanes, Volumes, Timings
2: US 24 & Meridian Rd

Existing
PM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	17	159	165	1	336	85	290	605	1	51	492	3
Future Volume (vph)	17	159	165	1	336	85	290	605	1	51	492	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195		195	195		195	555		490	555		490
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	180			180			300			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.502			0.643			0.215			0.226		
Satd. Flow (perm)	935	3539	1583	1198	3539	1583	400	1863	1583	421	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			179			109			109			109
Link Speed (mph)		40			40			65			65	
Link Distance (ft)		873			1300			985			695	
Travel Time (s)		14.9			22.2			10.3			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	18	173	179	1	365	92	312	651	1	55	535	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	173	179	1	365	92	312	651	1	55	535	3
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex				Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4		4	8		8

Lanes, Volumes, Timings
2: US 24 & Meridian Rd

Existing
PM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	6	6	6	2	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	36.0	36.0	12.0	36.0	36.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	60.0%	60.0%	20.0%	60.0%	60.0%
Maximum Green (s)	7.5	7.5	7.5	7.5	7.5	7.5	7.5	31.5	31.5	7.5	31.5	31.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	Max	Max	Max	Max	None	None	None	None	None	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effect Green (s)	18.2	18.2	18.2	18.2	18.2	18.2	33.7	29.6	29.6	30.1	23.7	23.7
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.29	0.53	0.47	0.47	0.48	0.38	0.38
v/c Ratio	0.07	0.17	0.31	0.00	0.36	0.17	0.83	0.75	0.00	0.16	0.77	0.00
Control Delay	20.5	19.4	5.5	19.0	20.7	4.7	30.2	21.9	0.0	6.9	24.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.5	19.4	5.5	19.0	20.7	4.7	30.2	21.9	0.0	6.9	24.9	0.0
LOS	C	B	A	B	C	A	C	C	A	A	C	A
Approach Delay		12.7			17.5				24.5			23.1
Approach LOS		B			B			C				C
Queue Length 50th (ft)	5	27	0	0	62	0	55	221	0	8	172	0
Queue Length 95th (ft)	21	54	43	4	106	26	#178	#383	0	20	273	0
Internal Link Dist (ft)		793			1220			905			615	
Turn Bay Length (ft)	195		195	195		195	555		490	555		490
Base Capacity (vph)	269	1021	584	345	1021	534	378	940	853	370	940	853
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.17	0.31	0.00	0.36	0.17	0.83	0.69	0.00	0.15	0.57	0.00

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 63.2

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 21.0 Intersection LOS: C

Intersection Capacity Utilization 67.3% ICU Level of Service C

Analysis Period (min) 15

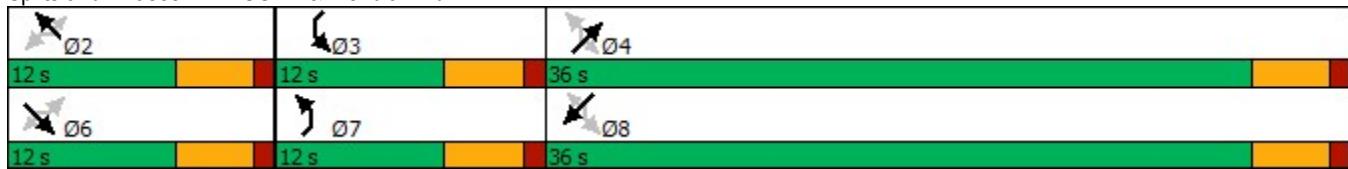
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
2: US 24 & Meridian Rd

Existing
PM

Splits and Phases: 2: US 24 & Meridian Rd



Lanes, Volumes, Timings
3: US 24 & Judge Orr

Existing
PM

	→	→	↗	↖	←	↙	↗	↖	→	↗	↖	←
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	33	32	46	121	88	15	126	556	121	3	375	20
Future Volume (vph)	33	32	46	121	88	15	126	556	121	3	375	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	850		0	700		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			280			300		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.945			0.991			0.973			0.992	
Flt Protected		0.985			0.974		0.950			0.950		
Satd. Flow (prot)	0	1734	0	0	1798	0	1770	1812	0	1770	1848	0
Flt Permitted		0.874			0.803		0.362			0.185		
Satd. Flow (perm)	0	1538	0	0	1482	0	674	1812	0	345	1848	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		55			7		18			5		
Link Speed (mph)		45			45		55			55		
Link Distance (ft)		801			719		1315			2758		
Travel Time (s)		12.1			10.9		16.3			34.2		
Peak Hour Factor	0.83	0.83	0.83	0.87	0.87	0.87	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	40	39	55	139	101	17	135	598	130	3	408	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	134	0	0	257	0	135	728	0	3	430	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94		94			94		
Detector 2 Size(ft)		6			6		6			6		
Detector 2 Type		Cl+Ex			Cl+Ex		Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0		0.0			0.0		
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		

Lanes, Volumes, Timings
3: US 24 & Judge Orr

Existing
PM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	8.5	21.5		8.5	21.5		8.5	21.5		8.5	21.5	
Total Split (%)	14.2%	35.8%		14.2%	35.8%		14.2%	35.8%		14.2%	35.8%	
Maximum Green (s)	4.0	17.0		4.0	17.0		4.0	17.0		4.0	17.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)		13.0			13.0		25.3	24.5		22.6	19.5	
Actuated g/C Ratio		0.27			0.27		0.52	0.51		0.47	0.40	
v/c Ratio		0.29			0.63		0.30	0.78		0.01	0.57	
Control Delay		10.7			22.7		8.6	21.7		6.7	17.0	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		10.7			22.7		8.6	21.7		6.7	17.0	
LOS		B			C		A	C		A	B	
Approach Delay		10.7			22.7			19.7			16.9	
Approach LOS		B			C			B			B	
Queue Length 50th (ft)		17			62		17	136		0	97	
Queue Length 95th (ft)		44			115		43	#457		3	#195	
Internal Link Dist (ft)		721			639			1235			2678	
Turn Bay Length (ft)							850			700		
Base Capacity (vph)		582			531		445	931		281	752	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.23			0.48		0.30	0.78		0.01	0.57	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 48.2

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 18.7

Intersection LOS: B

Intersection Capacity Utilization 70.9%

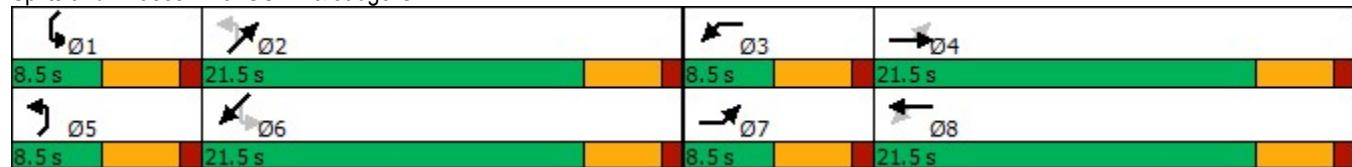
ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: US 24 & Judge Orr



Lanes, Volumes, Timings
4: US 24 & Curtis/Stapleton

Existing
PM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	18	49	67	5	124	34	120	468	8	10	370	29
Future Volume (vph)	18	49	67	5	124	34	120	468	8	10	370	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		325	215		215	890		1000	790		790
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	240			200			190			190		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.666			0.719			0.354			0.373		
Satd. Flow (perm)	1241	1863	1583	1339	1863	1583	659	1863	1583	695	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			191			191			191
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		1349			1298			2758			1426	
Travel Time (s)		20.4			19.7			34.2			17.7	
Peak Hour Factor	0.83	0.83	0.83	0.87	0.87	0.87	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	22	59	81	6	143	39	129	503	9	11	402	32
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	59	81	6	143	39	129	503	9	11	402	32
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm									
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2		2	4		4	8		8

Lanes, Volumes, Timings
4: US 24 & Curtis/Stapleton

Existing
PM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	8.5	21.5	21.5	8.5	21.5	21.5	8.5	21.5	21.5	8.5	21.5	21.5
Total Split (%)	14.2%	35.8%	35.8%	14.2%	35.8%	35.8%	14.2%	35.8%	35.8%	14.2%	35.8%	35.8%
Maximum Green (s)	4.0	17.0	17.0	4.0	17.0	17.0	4.0	17.0	17.0	4.0	17.0	17.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag									
Lead-Lag Optimize?	Yes											
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)	11.0	11.0			11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)	0	0			0	0		0	0		0	0
Act Effect Green (s)	9.3	8.8	8.8	9.3	8.8	8.8	21.0	20.4	20.4	18.2	15.2	15.2
Actuated g/C Ratio	0.23	0.21	0.21	0.23	0.21	0.21	0.51	0.50	0.50	0.44	0.37	0.37
v/c Ratio	0.07	0.15	0.17	0.02	0.36	0.08	0.29	0.54	0.01	0.03	0.59	0.05
Control Delay	12.7	16.2	0.7	12.2	18.6	0.3	8.3	14.5	0.0	6.7	17.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.7	16.2	0.7	12.2	18.6	0.3	8.3	14.5	0.0	6.7	17.4	0.1
LOS	B	B	A	B	B	A	A	B	A	A	B	A
Approach Delay		8.0			14.6				13.1			15.9
Approach LOS		A			B				B			
Queue Length 50th (ft)	4	11	0	1	28	0	11	55	0	1	71	0
Queue Length 95th (ft)	14	37	0	7	78	0	50	#314	0	9	#229	0
Internal Link Dist (ft)		1269			1218			2678			1346	
Turn Bay Length (ft)	190		325	215		215	890		1000	790		790
Base Capacity (vph)	336	810	797	348	810	797	449	970	916	417	810	797
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.07	0.10	0.02	0.18	0.05	0.29	0.52	0.01	0.03	0.50	0.04

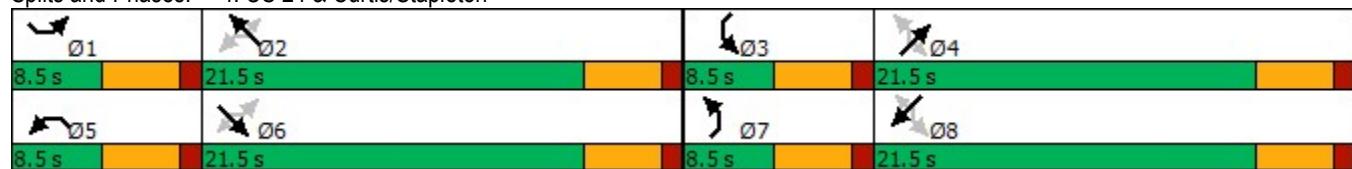
Intersection Summary

Area Type:	Other
Cycle Length:	60
Actuated Cycle Length:	41.1
Natural Cycle:	65
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.59
Intersection Signal Delay:	13.6
Intersection LOS:	B
Intersection Capacity Utilization	54.5%
ICU Level of Service	A
Analysis Period (min)	15
# 95th percentile volume exceeds capacity, queue may be longer.	
Queue shown is maximum after two cycles.	

Lanes, Volumes, Timings
4: US 24 & Curtis/Stapleton

Existing
PM

Splits and Phases: 4: US 24 & Curtis/Stapleton



HCM 6th TWSC
5: Curtis Rd & Judge Orr Rd

Existing
PM

Intersection

Int Delay, s/veh 6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	110	29	2	64	13	78	137	18	16	47	5
Future Vol, veh/h	3	110	29	2	64	13	78	137	18	16	47	5
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									
Storage Length	-	-	0	0	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	87	87	87	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	133	35	2	77	16	90	157	21	19	57	6

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	93	0	0	168	0	0	262	238	133	337	265	85
Stage 1	-	-	-	-	-	-	141	141	-	89	89	-
Stage 2	-	-	-	-	-	-	121	97	-	248	176	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1501	-	-	1410	-	-	691	663	916	617	640	974
Stage 1	-	-	-	-	-	-	862	780	-	918	821	-
Stage 2	-	-	-	-	-	-	883	815	-	756	753	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1501	-	-	1410	-	-	638	660	916	491	637	974
Mov Cap-2 Maneuver	-	-	-	-	-	-	638	660	-	491	637	-
Stage 1	-	-	-	-	-	-	859	778	-	915	820	-
Stage 2	-	-	-	-	-	-	816	814	-	588	751	-

Approach	EB	WB			NB			SB			
HCM Control Delay, s	0.2	0.2			11.9			11.4			
HCM LOS					B			B			
<hr/>											
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)	638	682	1501	-	-	1410	-	-	491	659	
HCM Lane V/C Ratio	0.141	0.261	0.002	-	-	0.002	-	-	0.039	0.095	
HCM Control Delay (s)	11.6	12.1	7.4	0	-	7.6	-	-	12.6	11	
HCM Lane LOS	B	B	A	A	-	A	-	-	B	B	
HCM 95th %tile Q(veh)	0.5	1	0	-	-	0	-	-	0.1	0.3	

HCM 6th TWSC
10: Meridian Rd & Falcon Hwy

Existing
PM

Intersection

Int Delay, s/veh 7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	64	1	3	54	290	2	86	19	135	84	2
Future Vol, veh/h	3	64	1	3	54	290	2	86	19	135	84	2
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	92	92	92	83	83	83	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	77	1	3	59	315	2	104	23	155	97	2

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	374	0	0	78	0	0	358	466	78	372	309	217
Stage 1	-	-	-	-	-	-	86	86	-	223	223	-
Stage 2	-	-	-	-	-	-	272	380	-	149	86	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1184	-	-	1520	-	-	597	494	983	585	605	823
Stage 1	-	-	-	-	-	-	922	824	-	780	719	-
Stage 2	-	-	-	-	-	-	734	614	-	854	824	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1184	-	-	1520	-	-	519	491	983	476	601	823
Mov Cap-2 Maneuver	-	-	-	-	-	-	519	491	-	476	601	-
Stage 1	-	-	-	-	-	-	918	821	-	777	717	-
Stage 2	-	-	-	-	-	-	631	612	-	726	821	-

Approach	EB	WB			NB			SB				
HCM Control Delay, s	0.4	0.1			13.8			18.4				
HCM LOS					B			C				
<hr/>												
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBLn1			
Capacity (veh/h)	539	1184	-	-	1520	-	-	-	519			
HCM Lane V/C Ratio	0.239	0.003	-	-	0.002	-	-	-	0.489			
HCM Control Delay (s)	13.8	8.1	0	-	7.4	0	-	-	18.4			
HCM Lane LOS	B	A	A	-	A	A	-	-	C			
HCM 95th %tile Q(veh)	0.9	0	-	-	0	-	-	-	2.7			

Lanes, Volumes, Timings
2: US 24

Existing + Site

AM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑	↑	↑	↑↑	↑
Traffic Volume (vph)	1	155	504	1	149	62	110	423	11	1	155	504
Future Volume (vph)	1	155	504	1	149	62	110	423	11	1	155	504
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195		195	195		195	555		490	555		490
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	180			180			300			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.644			0.646			0.510			0.433		
Satd. Flow (perm)	1200	3539	1583	1203	3539	1583	950	1863	1583	807	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			542			109			109			465
Link Speed (mph)		40			40			65			65	
Link Distance (ft)		873			1300			985			695	
Travel Time (s)		14.9			22.2			10.3			7.3	
Peak Hour Factor	0.93	0.93	0.93	0.87	0.87	0.87	0.92	0.92	0.92	0.93	0.93	0.93
Adj. Flow (vph)	1	167	542	1	171	71	120	460	12	1	167	542
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	167	542	1	171	71	120	460	12	1	167	542
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4		4	8		8

Lanes, Volumes, Timings
2: US 24

Existing + Site

AM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	6	6	6	2	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0	36.0	36.0	12.0	36.0	36.0
Total Split (%)	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	60.0%	60.0%	20.0%	60.0%	60.0%
Maximum Green (s)	7.5	7.5	7.5	7.5	7.5	7.5	7.5	31.5	31.5	7.5	31.5	31.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	Max	Max	Max	Max	None	None	None	None	None	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effect Green (s)	18.6	18.6	18.6	18.6	18.6	18.6	22.0	20.9	20.9	17.6	13.4	13.4
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.37	0.37	0.44	0.41	0.41	0.35	0.27	0.27
v/c Ratio	0.00	0.13	0.58	0.00	0.13	0.11	0.23	0.60	0.02	0.00	0.34	0.71
Control Delay	15.0	14.0	5.0	15.0	14.0	2.4	8.2	15.2	0.0	6.0	17.3	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.0	14.0	5.0	15.0	14.0	2.4	8.2	15.2	0.0	6.0	17.3	9.0
LOS	B	B	A	B	B	A	A	B	A	A	B	A
Approach Delay							10.6					10.9
Approach LOS							B					B
Queue Length 50th (ft)	0	16	0	0	16	0	19	89	0	0	42	19
Queue Length 95th (ft)	4	48	68	3	47	13	38	215	0	2	79	84
Internal Link Dist (ft)		793			1220			905			615	
Turn Bay Length (ft)	195		195	195		195	555		490	555		490
Base Capacity (vph)	443	1309	927	445	1309	654	541	1206	1063	454	1206	1188
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.13	0.58	0.00	0.13	0.11	0.22	0.38	0.01	0.00	0.14	0.46

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 50.4

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 10.4

Intersection LOS: B

Intersection Capacity Utilization 54.8%

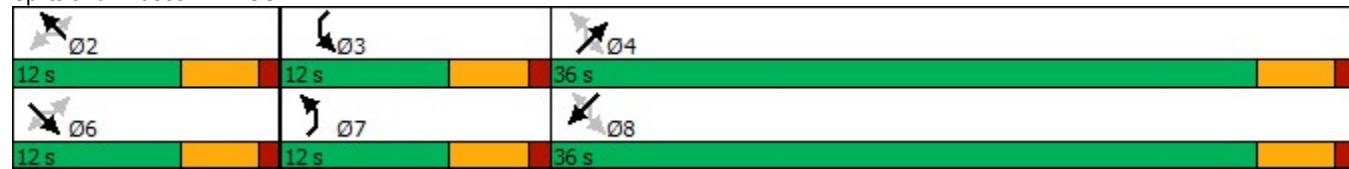
ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings
2: US 24

Existing + Site
AM

Splits and Phases: 2: US 24



Lanes, Volumes, Timings
3: US 24 & Judge Orr

Existing + Site
AM

	→	→	↗	↖	←	↙	↗	↖	→	↗	↖	←
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	25	151	135	109	69	6	74	313	58	8	509	23
Future Volume (vph)	25	151	135	109	69	6	74	313	58	8	509	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	850		0	700		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			280			300		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.941			0.996			0.977			0.993	
Flt Protected		0.996			0.971		0.950			0.950		
Satd. Flow (prot)	0	1746	0	0	1801	0	1770	1820	0	1770	1850	0
Flt Permitted		0.962			0.529		0.243			0.480		
Satd. Flow (perm)	0	1686	0	0	981	0	453	1820	0	894	1850	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		71			3			16			4	
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		801			719			1315			2758	
Travel Time (s)		12.1			10.9			16.3			34.2	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.92	0.92	0.92	0.93	0.93	0.93
Adj. Flow (vph)	27	164	147	125	79	7	80	340	63	9	547	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	338	0	0	211	0	80	403	0	9	572	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		

Lanes, Volumes, Timings
3: US 24 & Judge Orr

Existing + Site
AM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	8.5	21.5		8.5	21.5		8.5	21.5		8.5	21.5	
Total Split (%)	14.2%	35.8%		14.2%	35.8%		14.2%	35.8%		14.2%	35.8%	
Maximum Green (s)	4.0	17.0		4.0	17.0		4.0	17.0		4.0	17.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)		12.3			12.3		22.3	21.6		20.7	18.6	
Actuated g/C Ratio		0.28			0.28		0.50	0.48		0.46	0.42	
v/c Ratio		0.66			0.78		0.23	0.45		0.02	0.74	
Control Delay		18.3			37.0		8.1	11.2		6.5	23.0	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		18.3			37.0		8.1	11.2		6.5	23.0	
LOS		B			D		A	B		A	C	
Approach Delay		18.3			37.0			10.7			22.8	
Approach LOS		B			D			B			C	
Queue Length 50th (ft)		65			54		9	56		1	142	
Queue Length 95th (ft)		133			#133		28	175		6	#334	
Internal Link Dist (ft)		721			639			1235			2678	
Turn Bay Length (ft)							850			700		
Base Capacity (vph)		705			387		347	888		495	771	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.48			0.55		0.23	0.45		0.02	0.74	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 44.7

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 20.1

Intersection LOS: C

Intersection Capacity Utilization 75.0%

ICU Level of Service D

Analysis Period (min) 15

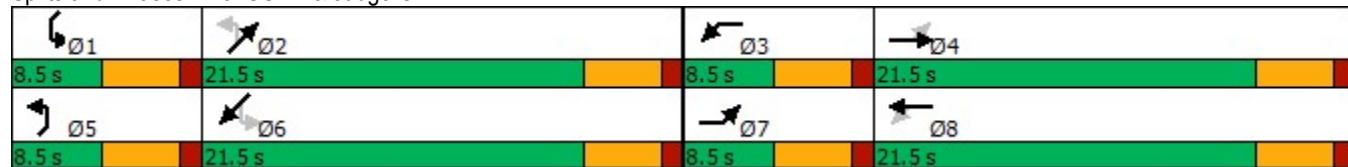
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
3: US 24 & Judge Orr

Existing + Site
AM

Splits and Phases: 3: US 24 & Judge Orr



Lanes, Volumes, Timings
4: US 24 & Curtis/Stapleton

Existing + Site
AM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	32	335	146	14	127	30	77	255	8	90	435	28
Future Volume (vph)	32	335	146	14	127	30	77	255	8	90	435	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		325	215		215	890		1000	790		790
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	240			200			190			190		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.632			0.374			0.277			0.485		
Satd. Flow (perm)	1177	1863	1583	697	1863	1583	516	1863	1583	903	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			191			191			191
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		1349			1298			2758			1426	
Travel Time (s)		20.4			19.7			34.2			17.7	
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.92	0.92	0.92	0.93	0.93	0.93
Adj. Flow (vph)	35	364	159	16	146	34	84	277	9	97	468	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	364	159	16	146	34	84	277	9	97	468	30
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm									
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2		2	4		4	8		8

Lanes, Volumes, Timings
4: US 24 & Curtis/Stapleton

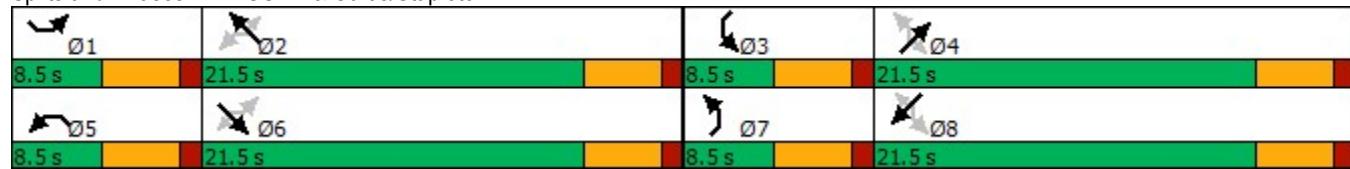
Existing + Site
AM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR								
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8								
Switch Phase																				
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0								
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5								
Total Split (s)	8.5	21.5	21.5	8.5	21.5	21.5	8.5	21.5	21.5	8.5	21.5	21.5								
Total Split (%)	14.2%	35.8%	35.8%	14.2%	35.8%	35.8%	14.2%	35.8%	35.8%	14.2%	35.8%	35.8%								
Maximum Green (s)	4.0	17.0	17.0	4.0	17.0	17.0	4.0	17.0	17.0	4.0	17.0	17.0								
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5								
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0								
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5								
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag								
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes								
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0								
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	None								
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0								
Flash Dont Walk (s)	11.0	11.0			11.0	11.0		11.0	11.0		11.0	11.0								
Pedestrian Calls (#/hr)	0	0			0	0		0	0		0	0								
Act Effect Green (s)	14.9	14.3	14.3	14.1	12.8	12.8	17.6	14.6	14.6	18.6	16.6	16.6								
Actuated g/C Ratio	0.32	0.31	0.31	0.31	0.28	0.28	0.38	0.32	0.32	0.40	0.36	0.36								
v/c Ratio	0.08	0.63	0.26	0.05	0.28	0.06	0.27	0.47	0.01	0.22	0.70	0.04								
Control Delay	11.5	21.5	3.3	11.3	17.7	0.2	11.0	18.1	0.0	10.1	24.1	0.1								
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
Total Delay	11.5	21.5	3.3	11.3	17.7	0.2	11.0	18.1	0.0	10.1	24.1	0.1								
LOS	B	C	A	B	B	A	B	B	A	B	C	A								
Approach Delay		15.7				14.1				16.0		20.6								
Approach LOS		B				B				B		C								
Queue Length 50th (ft)	7	90	0	3	31	0	11	59	0	13	114	0								
Queue Length 95th (ft)	21	#208	27	12	78	0	40	148	0	45	#316	0								
Internal Link Dist (ft)		1269			1218			2678			1346									
Turn Bay Length (ft)	190		325	215		215	890		1000	790		790								
Base Capacity (vph)	434	749	750	312	733	738	312	733	738	444	744	747								
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0								
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0								
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced v/c Ratio	0.08	0.49	0.21	0.05	0.20	0.05	0.27	0.38	0.01	0.22	0.63	0.04								
Intersection Summary																				
Area Type:	Other																			
Cycle Length: 60																				
Actuated Cycle Length: 46.2																				
Natural Cycle: 65																				
Control Type: Actuated-Uncoordinated																				
Maximum v/c Ratio: 0.70																				
Intersection Signal Delay: 17.3	Intersection LOS: B																			
Intersection Capacity Utilization 64.0%	ICU Level of Service B																			
Analysis Period (min) 15																				
# 95th percentile volume exceeds capacity, queue may be longer.																				
Queue shown is maximum after two cycles.																				

Lanes, Volumes, Timings
4: US 24 & Curtis/Stapleton

Existing + Site
AM

Splits and Phases: 4: US 24 & Curtis/Stapleton



HCM 6th TWSC
5: Curtis Rd & Judge Orr Rd

Existing + Site
AM

Intersection

Int Delay, s/veh 25.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	34	167	46	106	33	57	131	5	8	380	0
Future Vol, veh/h	1	34	167	46	106	33	57	131	5	8	380	0
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									
Storage Length	-	-	0	0	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	39	192	53	122	38	66	151	6	9	413	0

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	160	0	0	231	0	0	495	307	39	463	480	141
Stage 1	-	-	-	-	-	-	41	41	-	247	247	-
Stage 2	-	-	-	-	-	-	454	266	-	216	233	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1419	-	-	1337	-	-	485	607	1033	509	485	907
Stage 1	-	-	-	-	-	-	974	861	-	757	702	-
Stage 2	-	-	-	-	-	-	586	689	-	786	712	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1419	-	-	1337	-	-	113	582	1033	393	465	907
Mov Cap-2 Maneuver	-	-	-	-	-	-	113	582	-	393	465	-
Stage 1	-	-	-	-	-	-	973	860	-	756	674	-
Stage 2	-	-	-	-	-	-	218	661	-	644	711	-

Approach	EB	WB			NB			SB				
HCM Control Delay, s	0	1.9			31.1			47.9				
HCM LOS					D			E				
<hr/>												
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	113	591	1419	-	-	1337	-	-	393	465		
HCM Lane V/C Ratio	0.58	0.265	0.001	-	-	0.04	-	-	0.022	0.888		
HCM Control Delay (s)	73.7	13.3	7.5	0	-	7.8	-	-	14.4	48.6		
HCM Lane LOS	F	B	A	A	-	A	-	-	B	E		
HCM 95th %tile Q(veh)	2.8	1.1	0	-	-	0.1	-	-	0.1	9.6		

Intersection

Int Delay, s/veh 4.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↗ ↗ ↘					
Traffic Vol, veh/h	83	30	125	78	471	151
Future Vol, veh/h	83	30	125	78	471	151
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	0	385	-	-	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	95	34	144	90	506	162

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	884	506	668	0	-	0
Stage 1	506	-	-	-	-	-
Stage 2	378	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	316	566	922	-	-	-
Stage 1	606	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	267	566	922	-	-	-
Mov Cap-2 Maneuver	267	-	-	-	-	-
Stage 1	511	-	-	-	-	-
Stage 2	693	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.1	5.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	922	-	267	566	-	-
HCM Lane V/C Ratio	0.156	-	0.357	0.061	-	-
HCM Control Delay (s)	9.6	-	25.8	11.8	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.6	-	1.6	0.2	-	-

HCM 6th TWSC
7: Curtis Rd & Suncadia Dr

Existing + Site
AM

Intersection

Int Delay, s/veh 1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↑		↑	↑	↑
Traffic Vol, veh/h	0	85	0	203	304	197
Future Vol, veh/h	0	85	0	203	304	197
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	-	-	-	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	87	87	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	102	0	233	330	214

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	330	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.22	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.318	-
Pot Cap-1 Maneuver	0	712	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	712	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	712	-	-
HCM Lane V/C Ratio	-	0.144	-	-
HCM Control Delay (s)	-	10.9	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.5	-	-

HCM 6th TWSC
9: Falcon Hwy & Sharpstown Dr

Existing + Site
AM

Intersection

Int Delay, s/veh 3.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗
Traffic Vol, veh/h	319	343	292	84	0	53
Future Vol, veh/h	319	343	292	84	0	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	385	-	-	235	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	99	92	92	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	343	346	317	91	0	64

Major/Minor	Major1	Major2	Minor2	
Conflicting Flow All	408	0	-	0 - 317
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.12	-	-	- 6.22
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.218	-	-	- 3.318
Pot Cap-1 Maneuver	1151	-	-	0 724
Stage 1	-	-	-	0 -
Stage 2	-	-	-	0 -
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	1151	-	-	- 724
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	SB	
HCM Control Delay, s	4.7	0	10.5	
HCM LOS			B	

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1151	-	-	-	724
HCM Lane V/C Ratio	0.298	-	-	-	0.088
HCM Control Delay (s)	9.4	-	-	-	10.5
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	1.3	-	-	-	0.3

HCM 6th TWSC
10: Meridian Rd & Falcon Hwy

Existing + Site
AM

Intersection

Int Delay, s/veh 212.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	235	2	9	237	237	0	73	16	431	70	17
Future Vol, veh/h	5	235	2	9	237	237	0	73	16	431	70	17
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	92	92	92	83	83	83	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	270	2	10	258	258	0	88	19	468	76	18

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	516	0	0	272	0	0	737	819	271	744	691	387
Stage 1	-	-	-	-	-	-	283	283	-	407	407	-
Stage 2	-	-	-	-	-	-	454	536	-	337	284	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1050	-	-	1291	-	-	334	310	768	~ 331	368	661
Stage 1	-	-	-	-	-	-	724	677	-	621	597	-
Stage 2	-	-	-	-	-	-	586	523	-	677	676	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1050	-	-	1291	-	-	269	304	768	~ 247	361	661
Mov Cap-2 Maneuver	-	-	-	-	-	-	269	304	-	~ 247	361	-
Stage 1	-	-	-	-	-	-	719	672	-	617	590	-
Stage 2	-	-	-	-	-	-	491	517	-	570	671	-

Approach	EB	WB			NB			SB			
HCM Control Delay, s	0.2	0.1			20.3			\$ 552.9			
HCM LOS					C			F			
<hr/>											
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			

Capacity (veh/h) 341 1050 - - 1291 - - 264

HCM Lane V/C Ratio 0.314 0.005 - - 0.008 - - 2.133

HCM Control Delay (s) 20.3 8.4 0 - 7.8 0 -\$ 552.9

HCM Lane LOS C A A - A A - F

HCM 95th %tile Q(veh) 1.3 0 - - 0 - - 42.4

Notes

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

HCM 6th TWSC
55: Curtis Rd & Falcon Hwy

Existing + Site
AM

Intersection												
Int Delay, s/veh	20.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↖	↗	↖	↖	↖	↖	↑	↗
Traffic Vol, veh/h	24	43	178	14	223	71	131	113	2	22	257	81
Future Vol, veh/h	24	43	178	14	223	71	131	113	2	22	257	81
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	0	-	0	-	-	0	0	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	87	87	87	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	47	193	15	242	77	151	130	2	24	279	88
Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	319	0	0	240	0	0	593	448	47	534	564	242
Stage 1	-	-	-	-	-	-	99	99	-	272	272	-
Stage 2	-	-	-	-	-	-	494	349	-	262	292	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1241	-	-	1327	-	-	417	506	1022	457	435	797
Stage 1	-	-	-	-	-	-	907	813	-	734	685	-
Stage 2	-	-	-	-	-	-	557	633	-	743	671	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1241	-	-	1327	-	-	168	488	1022	353	420	797
Mov Cap-2 Maneuver	-	-	-	-	-	-	168	488	-	353	420	-
Stage 1	-	-	-	-	-	-	888	796	-	719	675	-
Stage 2	-	-	-	-	-	-	286	624	-	607	657	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	0.8		0.4		59.7		23.9					
HCM LOS					F		C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3	
Capacity (veh/h)	168	492	1241	-	-	1327	-	-	353	420	797	
HCM Lane V/C Ratio	0.896	0.269	0.021	-	-	0.011	-	-	0.068	0.665	0.11	
HCM Control Delay (s)	98.9	15	8	-	-	7.7	0	-	15.9	29	10.1	
HCM Lane LOS	F	C	A	-	-	A	A	-	C	D	B	
HCM 95th %tile Q(veh)	6.5	1.1	0.1	-	-	0	-	-	0.2	4.7	0.4	

HCM 6th Roundabout
45: Curtis Rd & Judge Orr Rd

Existing + Site
AM

Intersection				
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	232	213	223	422
Demand Flow Rate, veh/h	237	217	227	430
Vehicles Circulating, veh/h	484	222	50	245
Vehicles Exiting, veh/h	191	55	671	194
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.5	5.1	4.2	7.7
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	237	217	227	430
Cap Entry Lane, veh/h	842	1100	1311	1075
Entry HV Adj Factor	0.980	0.980	0.982	0.981
Flow Entry, veh/h	232	213	223	422
Cap Entry, veh/h	825	1078	1288	1054
V/C Ratio	0.281	0.197	0.173	0.400
Control Delay, s/veh	7.5	5.1	4.2	7.7
LOS	A	A	A	A
95th %tile Queue, veh	1	1	1	2

Intersection							
Approach	EB	WB	NB	SB			
Entry Lanes	2	1	2	2			
Conflicting Circle Lanes	1	1	1	1			
Adj Approach Flow, veh/h	266	334	283	391			
Demand Flow Rate, veh/h	272	341	289	399			
Vehicles Circulating, veh/h	324	314	99	416			
Vehicles Exiting, veh/h	491	74	497	239			
Ped Vol Crossing Leg, #/h	0	0	0	0			
Ped Cap Adj	1.000	1.000	1.000	1.000			
Approach Delay, s/veh	4.9	7.3	3.7	7.8			
Approach LOS	A	A	A	A			
Lane	Left	Right	Left	Left	Right	Left	Right
Designated Moves	LT	R	LTR	L	TR	L	TR
Assumed Moves	LT	R	LTR	L	TR	L	TR
RT Channelized							
Lane Util	0.276	0.724	1.000	0.533	0.467	0.060	0.940
Follow-Up Headway, s	2.535	2.535	2.609	2.535	2.535	2.535	2.535
Critical Headway, s	4.544	4.544	4.976	4.544	4.544	4.544	4.544
Entry Flow, veh/h	75	197	341	154	135	24	375
Cap Entry Lane, veh/h	1057	1057	1002	1298	1298	973	973
Entry HV Adj Factor	0.974	0.980	0.980	0.981	0.981	1.000	0.980
Flow Entry, veh/h	73	193	334	151	132	24	367
Cap Entry, veh/h	1030	1036	982	1272	1273	973	953
V/C Ratio	0.071	0.186	0.340	0.119	0.104	0.025	0.386
Control Delay, s/veh	4.1	5.2	7.3	3.8	3.7	3.9	8.1
LOS	A	A	A	A	A	A	A
95th %tile Queue, veh	0	1	2	0	0	0	2

HCM 6th AWSC
8: Curtis Rd & Falcon Hwy

Existing + Site
AM

Intersection

Intersection Delay, s/veh	17
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑		↑	↑	↑	↑		↑	↑	↑
Traffic Vol, veh/h	24	43	178	14	223	71	131	113	2	22	257	81
Future Vol, veh/h	24	43	178	14	223	71	131	113	2	22	257	81
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.87	0.87	0.87	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	26	47	193	15	242	77	151	130	2	24	279	88
Number of Lanes	1	1	1	0	1	1	1	1	0	1	1	1
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	2			3			3			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	3			2			3			2		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			3			2			3		
HCM Control Delay	14.3			18.5			15.1			18.8		
HCM LOS	B			C			C			C		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	0%	6%	0%	100%	0%	0%
Vol Thru, %	0%	98%	0%	100%	0%	94%	0%	0%	100%	0%
Vol Right, %	0%	2%	0%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop									
Traffic Vol by Lane	131	115	24	43	178	237	71	22	257	81
LT Vol	131	0	24	0	0	14	0	22	0	0
Through Vol	0	113	0	43	0	223	0	0	257	0
RT Vol	0	2	0	0	178	0	71	0	0	81
Lane Flow Rate	151	132	26	47	193	258	77	24	279	88
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.355	0.293	0.063	0.106	0.401	0.566	0.154	0.055	0.603	0.173
Departure Headway (Hd)	8.493	7.97	8.69	8.178	7.462	7.907	7.164	8.28	7.77	7.056
Convergence, Y/N	Yes									
Cap	422	448	410	436	480	453	498	431	464	505
Service Time	6.282	5.759	6.48	5.968	5.251	5.69	4.946	6.065	5.554	4.84
HCM Lane V/C Ratio	0.358	0.295	0.063	0.108	0.402	0.57	0.155	0.056	0.601	0.174
HCM Control Delay	15.9	14.1	12.1	11.9	15.2	20.6	11.3	11.6	21.8	11.3
HCM Lane LOS	C	B	B	B	C	C	B	B	C	B
HCM 95th-tile Q	1.6	1.2	0.2	0.4	1.9	3.4	0.5	0.2	3.9	0.6

Intersection

Intersection Delay, s/veh 20.2

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑		↑	↑		↑	↑	
Traffic Vol, veh/h	1	34	167	46	106	33	57	131	5	8	380	0
Future Vol, veh/h	1	34	167	46	106	33	57	131	5	8	380	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	39	192	53	122	38	66	151	6	9	413	0
Number of Lanes	1	1	1	1	1	0	1	1	0	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	2			3			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			3			2		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			2			3		
HCM Control Delay	13.3			13.6			13.3			31		
HCM LOS	B			B			B			D		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	100%	0%
Vol Thru, %	0%	96%	0%	100%	0%	0%	76%	0%	100%
Vol Right, %	0%	4%	0%	0%	100%	0%	24%	0%	0%
Sign Control	Stop								
Traffic Vol by Lane	57	136	1	34	167	46	139	8	380
LT Vol	57	0	1	0	0	46	0	8	0
Through Vol	0	131	0	34	0	0	106	0	380
RT Vol	0	5	0	0	167	0	33	0	0
Lane Flow Rate	66	156	1	39	192	53	160	9	413
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.146	0.325	0.003	0.083	0.372	0.121	0.334	0.018	0.794
Departure Headway (Hd)	8.012	7.476	8.201	7.688	6.971	8.221	7.536	7.426	6.92
Convergence, Y/N	Yes								
Cap	447	480	436	465	514	435	476	482	525
Service Time	5.774	5.238	5.963	5.45	4.733	5.984	5.299	5.177	4.67
HCM Lane V/C Ratio	0.148	0.325	0.002	0.084	0.374	0.122	0.336	0.019	0.787
HCM Control Delay	12.1	13.8	11	11.2	13.8	12.1	14.1	10.3	31.4
HCM Lane LOS	B	B	B	B	B	B	B	B	D
HCM 95th-tile Q	0.5	1.4	0	0.3	1.7	0.4	1.5	0.1	7.4

Lanes, Volumes, Timings
2: US 24

Existing + Site

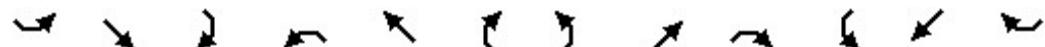
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	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	17	218	164	1	460	204	280	566	1	89	488	3
Future Volume (vph)	17	218	164	1	460	204	280	566	1	89	488	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195		195	195		195	555		490	555		490
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	180			180			300			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.420			0.604			0.284			0.421		
Satd. Flow (perm)	782	3539	1583	1125	3539	1583	529	3539	1583	784	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			178			219			109			109
Link Speed (mph)		40			40			65			65	
Link Distance (ft)		873			1300			985			695	
Travel Time (s)		14.9			22.2			10.3			7.3	
Peak Hour Factor	0.92	0.92	0.92	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	18	237	178	1	495	219	301	609	1	96	525	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	237	178	1	495	219	301	609	1	96	525	3
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex				Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases		6			2			7	4		3	8
Permitted Phases	6		6	2		2	4		4	8		8

Lanes, Volumes, Timings
2: US 24

Existing + Site

PM



Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	6	6	6	2	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	15.0	15.0	15.0	15.0	15.0	15.0	15.0	30.0	30.0	15.0	30.0	30.0
Total Split (%)	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	50.0%	50.0%	25.0%	50.0%	50.0%
Maximum Green (s)	10.5	10.5	10.5	10.5	10.5	10.5	10.5	25.5	25.5	10.5	25.5	25.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	Max	Max	Max	Max	Max	None	None	None	None	None	None
Walk Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Pedestrian Calls (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Act Effect Green (s)	18.1	18.1	18.1	18.1	18.1	18.1	26.9	18.8	18.8	20.7	13.7	13.7
Actuated g/C Ratio	0.33	0.33	0.33	0.33	0.33	0.33	0.49	0.34	0.34	0.37	0.25	0.25
v/c Ratio	0.07	0.20	0.28	0.00	0.43	0.33	0.63	0.50	0.00	0.23	0.60	0.01
Control Delay	15.8	15.1	4.5	15.0	16.8	4.5	14.3	17.2	0.0	8.6	21.4	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.8	15.1	4.5	15.0	16.8	4.5	14.3	17.2	0.0	8.6	21.4	0.0
LOS	B	B	A	B	B	A	B	B	A	A	C	A
Approach Delay							13.0			16.2		19.3
Approach LOS							B			B		
Queue Length 50th (ft)	4	28	0	0	65	0	53	87	0	15	81	0
Queue Length 95th (ft)	18	59	38	3	118	42	93	135	0	32	121	0
Internal Link Dist (ft)		793			1220			905			615	
Turn Bay Length (ft)	195		195	195		195	555		490	555		490
Base Capacity (vph)	256	1158	637	368	1158	665	495	1641	792	531	1641	792
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.20	0.28	0.00	0.43	0.33	0.61	0.37	0.00	0.18	0.32	0.00

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 55.3

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 15.2

Intersection LOS: B

Intersection Capacity Utilization 54.4%

ICU Level of Service A

Analysis Period (min) 15

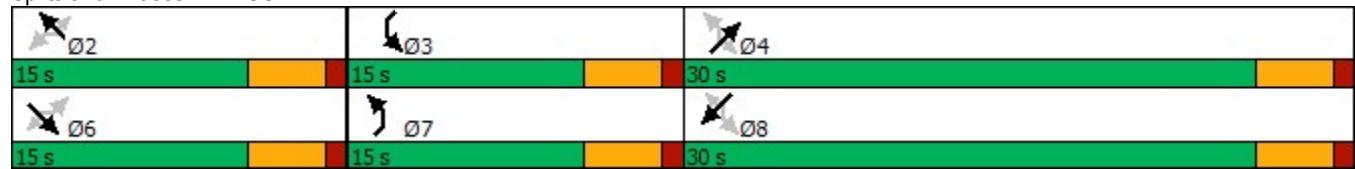
Lanes, Volumes, Timings

Existing + Site

2: US 24

PM

Splits and Phases: 2: US 24



Lanes, Volumes, Timings
3: US 24 & Judge Orr

Existing + Site
PM

	→	→	↗	↖	←	↙	↗	↖	↙	↖	↗	←
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	33	61	46	121	168	15	116	515	115	3	369	20
Future Volume (vph)	33	61	46	121	168	15	116	515	115	3	369	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	850		0	700		0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (ft)	25			25			280			300		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.956			0.993			0.973			0.992	
Flt Protected		0.988			0.980		0.950			0.950		
Satd. Flow (prot)	0	1759	0	0	1813	0	1770	1812	0	1770	1848	0
Flt Permitted		0.881			0.826		0.355			0.205		
Satd. Flow (perm)	0	1569	0	0	1528	0	661	1812	0	382	1848	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		45			5			19			5	
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		801			719			1315			2758	
Travel Time (s)		12.1			10.9			16.3			34.2	
Peak Hour Factor	0.87	0.87	0.87	0.92	0.92	0.92	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	38	70	53	132	183	16	125	554	124	3	401	22
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	161	0	0	331	0	125	678	0	3	423	0
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru										
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex										
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA										
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		

Lanes, Volumes, Timings
3: US 24 & Judge Orr

Existing + Site
PM



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	7	4		3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	9.5	22.5		9.5	22.5		9.5	22.5		9.5	22.5	
Total Split (s)	8.5	21.5		8.5	21.5		8.5	21.5		8.5	21.5	
Total Split (%)	14.2%	35.8%		14.2%	35.8%		14.2%	35.8%		14.2%	35.8%	
Maximum Green (s)	4.0	17.0		4.0	17.0		4.0	17.0		4.0	17.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)		4.5			4.5		4.5	4.5		4.5	4.5	
Lead/Lag	Lead	Lag										
Lead-Lag Optimize?	Yes	Yes										
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	Max		None	Max	
Walk Time (s)		7.0			7.0			7.0			7.0	
Flash Dont Walk (s)		11.0			11.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)		14.2			14.2		24.0	23.2		21.4	18.4	
Actuated g/C Ratio		0.29			0.29		0.50	0.48		0.44	0.38	
v/c Ratio		0.33			0.73		0.30	0.77		0.01	0.60	
Control Delay		12.3			26.5		8.9	21.5		6.7	17.9	
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay		12.3			26.5		8.9	21.5		6.7	17.9	
LOS		B			C		A	C		A	B	
Approach Delay		12.3			26.5			19.5			17.9	
Approach LOS		B			C			B			B	
Queue Length 50th (ft)		26			85		18	139		1	104	
Queue Length 95th (ft)		60			#183		40	#417		3	189	
Internal Link Dist (ft)		721			639			1235			2678	
Turn Bay Length (ft)							850			700		
Base Capacity (vph)		594			554		422	883		287	708	
Starvation Cap Reductn		0			0		0	0		0	0	
Spillback Cap Reductn		0			0		0	0		0	0	
Storage Cap Reductn		0			0		0	0		0	0	
Reduced v/c Ratio		0.27			0.60		0.30	0.77		0.01	0.60	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 48.2

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 19.8

Intersection LOS: B

Intersection Capacity Utilization 72.6%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
3: US 24 & Judge Orr

Existing + Site
PM

Splits and Phases: 3: US 24 & Judge Orr



Lanes, Volumes, Timings
4: US 24 & Curtis/Stapleton

Existing + Site
PM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	4	92	67	10	299	79	120	504	32	26	371	28
Future Volume (vph)	4	92	67	10	299	79	120	504	32	26	371	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		325	215		215	890		1000	790		790
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	240			200			190			190		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.365			0.689			0.333			0.299		
Satd. Flow (perm)	680	1863	1583	1283	1863	1583	620	1863	1583	557	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			191			191			191
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		1349			1298			2758			1426	
Travel Time (s)		20.4			19.7			34.2			17.7	
Peak Hour Factor	0.87	0.87	0.87	0.92	0.92	0.92	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	5	106	77	11	325	86	129	542	34	28	403	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	106	77	11	325	86	129	542	34	28	403	30
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm									
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2		2	4		4	8		8

Lanes, Volumes, Timings
4: US 24 & Curtis/Stapleton

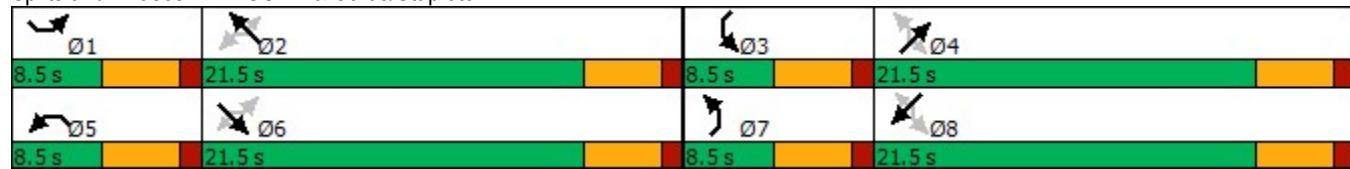
Existing + Site
PM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR								
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8								
Switch Phase																				
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0								
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5								
Total Split (s)	8.5	21.5	21.5	8.5	21.5	21.5	8.5	21.5	21.5	8.5	21.5	21.5								
Total Split (%)	14.2%	35.8%	35.8%	14.2%	35.8%	35.8%	14.2%	35.8%	35.8%	14.2%	35.8%	35.8%								
Maximum Green (s)	4.0	17.0	17.0	4.0	17.0	17.0	4.0	17.0	17.0	4.0	17.0	17.0								
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5								
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0								
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5								
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag								
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes								
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0								
Recall Mode	None	Min	Min	None	Min	Min	None	None	None	None	None	None								
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0								
Flash Dont Walk (s)	11.0	11.0			11.0	11.0		11.0	11.0		11.0	11.0								
Pedestrian Calls (#/hr)	0	0			0	0		0	0		0	0								
Act Effect Green (s)	13.4	12.8	12.8	13.4	12.8	12.8	22.3	21.7	21.7	19.6	16.5	16.5								
Actuated g/C Ratio	0.29	0.28	0.28	0.29	0.28	0.28	0.48	0.47	0.47	0.42	0.36	0.36								
v/c Ratio	0.02	0.21	0.13	0.03	0.63	0.15	0.32	0.62	0.04	0.08	0.61	0.04								
Control Delay	11.0	15.4	0.5	11.2	22.1	0.6	10.9	18.5	0.1	8.8	20.8	0.1								
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0								
Total Delay	11.0	15.4	0.5	11.2	22.1	0.6	10.9	18.5	0.1	8.8	20.8	0.1								
LOS	B	B	A	B	C	A	B	B	A	A	C	A								
Approach Delay		9.2				17.5						18.7								
Approach LOS		A				B						B								
Queue Length 50th (ft)	1	21	0	2	75	0	16	87	0	3	89	0								
Queue Length 95th (ft)	6	60	0	10	176	0	57	#382	0	18	#256	0								
Internal Link Dist (ft)		1269			1218			2678			1346									
Turn Bay Length (ft)	190		325	215		215	890		1000	790		790								
Base Capacity (vph)	293	707	719	413	707	719	400	870	841	343	707	719								
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0								
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0								
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0								
Reduced v/c Ratio	0.02	0.15	0.11	0.03	0.46	0.12	0.32	0.62	0.04	0.08	0.57	0.04								
Intersection Summary																				
Area Type:	Other																			
Cycle Length: 60																				
Actuated Cycle Length: 46.4																				
Natural Cycle: 70																				
Control Type: Actuated-Uncoordinated																				
Maximum v/c Ratio: 0.63																				
Intersection Signal Delay: 16.4	Intersection LOS: B																			
Intersection Capacity Utilization 57.7%	ICU Level of Service B																			
Analysis Period (min) 15																				
# 95th percentile volume exceeds capacity, queue may be longer.																				
Queue shown is maximum after two cycles.																				

Lanes, Volumes, Timings
4: US 24 & Curtis/Stapleton

Existing + Site
PM

Splits and Phases: 4: US 24 & Curtis/Stapleton



HCM 6th TWSC
5: Curtis Rd & Judge Orr Rd

Existing + Site
PM

Intersection

Int Delay, s/veh 14.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	104	68	12	64	13	175	398	46	16	131	5
Future Vol, veh/h	3	104	68	12	64	13	175	398	46	16	131	5
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									
Storage Length	-	-	0	0	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	83	83	83	93	93	93	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	120	78	14	77	16	188	428	49	18	151	6

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	93	0	0	198	0	0	318	247	120	517	317	85
Stage 1	-	-	-	-	-	-	126	126	-	113	113	-
Stage 2	-	-	-	-	-	-	192	121	-	404	204	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1501	-	-	1375	-	-	635	655	931	469	599	974
Stage 1	-	-	-	-	-	-	878	792	-	892	802	-
Stage 2	-	-	-	-	-	-	810	796	-	623	733	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1501	-	-	1375	-	-	503	647	931	206	592	974
Mov Cap-2 Maneuver	-	-	-	-	-	-	503	647	-	206	592	-
Stage 1	-	-	-	-	-	-	876	790	-	890	794	-
Stage 2	-	-	-	-	-	-	646	788	-	270	732	-

Approach	EB	WB			NB			SB			
HCM Control Delay, s	0.1	1			20.9			14.3			
HCM LOS					C			B			
<hr/>											
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)	503	668	1501	-	-	1375	-	-	206	601	
HCM Lane V/C Ratio	0.374	0.715	0.002	-	-	0.011	-	-	0.089	0.26	
HCM Control Delay (s)	16.4	22.7	7.4	0	-	7.6	-	-	24.2	13.1	
HCM Lane LOS	C	C	A	A	-	A	-	-	C	B	
HCM 95th %tile Q(veh)	1.7	6	0	-	-	0	-	-	0.3	1	

Intersection

Int Delay, s/veh 32.9

Movement EBL EBR NBL NBT SBT SBR

Lane Configurations ↗ ↗ ↗ ↗ ↗ ↗

Traffic Vol, veh/h 417 120 64 285 139 65

Future Vol, veh/h 417 120 64 285 139 65

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 0 385 - - 235

Veh in Median Storage, # 0 - - 0 0 -

Grade, % 0 - - 0 0 -

Peak Hour Factor 93 93 92 92 87 87

Heavy Vehicles, % 2 2 2 2 2 2

Mvmt Flow 448 129 70 310 160 75

Major/Minor Minor2 Major1 Major2

Conflicting Flow All 610 160 235 0 - 0

Stage 1 160 - - - - -

Stage 2 450 - - - - -

Critical Hdwy 6.42 6.22 4.12 - - -

Critical Hdwy Stg 1 5.42 - - - - -

Critical Hdwy Stg 2 5.42 - - - - -

Follow-up Hdwy 3.518 3.318 2.218 - - -

Pot Cap-1 Maneuver 458 885 1332 - - -

Stage 1 869 - - - - -

Stage 2 642 - - - - -

Platoon blocked, % - - - - -

Mov Cap-1 Maneuver ~ 434 885 1332 - - -

Mov Cap-2 Maneuver ~ 434 - - - - -

Stage 1 823 - - - - -

Stage 2 642 - - - - -

Approach EB NB SB

HCM Control Delay, s 66.9 1.4 0

HCM LOS F

Minor Lane/Major Mvmt NBL NBT EBLn1 EBLn2 SBT SBR

Capacity (veh/h) 1332 - 434 885 - -

HCM Lane V/C Ratio 0.052 - 1.033 0.146 - -

HCM Control Delay (s) 7.9 - 83.3 9.8 - -

HCM Lane LOS A - F A - -

HCM 95th %tile Q(veh) 0.2 - 13.9 0.5 - -

Notes

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

HCM 6th TWSC
7: Curtis Rd & Suncadia Dr

Existing + Site
PM

Intersection

Int Delay, s/veh 3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↑	↑	↑	↑	↑
Traffic Vol, veh/h	0	291	0	349	168	91
Future Vol, veh/h	0	291	0	349	168	91
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	385	-	-	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	316	0	379	183	99

Major/Minor	Minor2	Major1	Major2		
Conflicting Flow All	-	183	282	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.22	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.318	2.218	-	-
Pot Cap-1 Maneuver	0	859	1280	-	-
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	-	859	1280	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	NB	SB		
HCM Control Delay, s	11.6	0	0		
HCM LOS	B				

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1280	-	859	-	-
HCM Lane V/C Ratio	-	-	0.368	-	-
HCM Control Delay (s)	0	-	11.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	1.7	-	-

HCM 6th TWSC
9: Falcon Hwy & Sharpstown Dr

Existing + Site
PM

Intersection

Int Delay, s/veh 3.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗	↑ ↗
Traffic Vol, veh/h	192	294	552	82	0	173
Future Vol, veh/h	192	294	552	82	0	173
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	385	-	-	235	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	93	93	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	209	320	594	88	0	199

Major/Minor	Major1	Major2	Minor2	
Conflicting Flow All	682	0	-	0 - 594
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.12	-	-	- 6.22
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.218	-	-	- 3.318
Pot Cap-1 Maneuver	911	-	-	0 505
Stage 1	-	-	-	0 -
Stage 2	-	-	-	0 -
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	911	-	-	- 505
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	SB	
HCM Control Delay, s	4	0	16.7	
HCM LOS			C	

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	911	-	-	-	505
HCM Lane V/C Ratio	0.229	-	-	-	0.394
HCM Control Delay (s)	10.1	-	-	-	16.7
HCM Lane LOS	B	-	-	-	C
HCM 95th %tile Q(veh)	0.9	-	-	-	1.9

HCM 6th TWSC
10: Meridian Rd & Falcon Hwy

Existing + Site
PM

Intersection

Int Delay, s/veh 104.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	173	1	12	228	526	2	86	22	244	84	2
Future Vol, veh/h	3	173	1	12	228	526	2	86	22	244	84	2
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									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	93	93	93	83	83	83	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	208	1	13	245	566	2	104	27	265	91	2

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	811	0	0	209	0	0	818	1054	209	836	771	528
Stage 1	-	-	-	-	-	-	217	217	-	554	554	-
Stage 2	-	-	-	-	-	-	601	837	-	282	217	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	815	-	-	1362	-	-	295	226	831	287	331	550
Stage 1	-	-	-	-	-	-	785	723	-	517	514	-
Stage 2	-	-	-	-	-	-	487	382	-	725	723	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	815	-	-	1362	-	-	225	220	831	~172	322	550
Mov Cap-2 Maneuver	-	-	-	-	-	-	225	220	-	~172	322	-
Stage 1	-	-	-	-	-	-	780	719	-	514	504	-
Stage 2	-	-	-	-	-	-	389	374	-	597	719	-

Approach	EB	WB			NB			SB			
HCM Control Delay, s	0.2	0.1			32.8			\$ 433.8			
HCM LOS					D			F			
<hr/>											
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1			

Capacity (veh/h)	258	815	-	-	1362	-	-	196			
HCM Lane V/C Ratio	0.514	0.004	-	-	0.009	-	-	1.83			
HCM Control Delay (s)	32.8	9.4	0	-	7.7	0	-	\$ 433.8			
HCM Lane LOS	D	A	A	-	A	A	-	F			
HCM 95th %tile Q(veh)	2.7	0	-	-	0	-	-	25.6			

Notes

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

Intersection

Int Delay, s/veh 60.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↖	↖	↑	↖	↖	↖	↖	↖	↑	↖
Traffic Vol, veh/h	80	182	66	9	108	34	224	178	34	91	133	247
Future Vol, veh/h	80	182	66	9	108	34	224	178	34	91	133	247
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									
Storage Length	0	-	0	0	-	0	0	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	87	87	87	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	87	198	72	10	124	39	243	193	37	99	145	268

Major/Minor	Major1	Major2		Minor1		Minor2						
Conflicting Flow All	163	0	0	270	0	0	742	555	198	667	588	124
Stage 1	-	-	-	-	-	-	372	372	-	144	144	-
Stage 2	-	-	-	-	-	-	370	183	-	523	444	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1416	-	-	1293	-	-	332	440	843	372	421	927
Stage 1	-	-	-	-	-	-	648	619	-	859	778	-
Stage 2	-	-	-	-	-	-	650	748	-	537	575	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1416	-	-	1293	-	-	~ 160	410	843	213	392	927
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 160	410	-	213	392	-
Stage 1	-	-	-	-	-	-	608	581	-	807	772	-
Stage 2	-	-	-	-	-	-	372	742	-	321	540	-

Approach	EB	WB		NB		SB					
HCM Control Delay, s	1.9	0.5		172.6		17.9					
HCM LOS				F		C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	160	447	1416	-	-	1293	-	-	213	392	927
HCM Lane V/C Ratio	1.522	0.516	0.061	-	-	0.008	-	-	0.464	0.369	0.29
HCM Control Delay (s)	\$ 315.7	21.3	7.7	-	-	7.8	-	-	35.8	19.5	10.5
HCM Lane LOS	F	C	A	-	-	A	-	-	E	C	B
HCM 95th %tile Q(veh)	16.1	2.9	0.2	-	-	0	-	-	2.2	1.7	1.2

Notes

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

HCM 6th Roundabout
45: Curtis Rd & Judge Orr Rd

Existing + Site
PM

Intersection				
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	201	107	665	175
Demand Flow Rate, veh/h	205	109	679	178
Vehicles Circulating, veh/h	186	632	143	285
Vehicles Exiting, veh/h	277	190	248	456
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	4.8	6.7	9.9	5.2
Approach LOS	A	A	A	A
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	205	109	679	178
Cap Entry Lane, veh/h	1141	724	1193	1032
Entry HV Adj Factor	0.979	0.986	0.980	0.983
Flow Entry, veh/h	201	107	665	175
Cap Entry, veh/h	1117	714	1169	1014
V/C Ratio	0.180	0.150	0.569	0.173
Control Delay, s/veh	4.8	6.7	9.9	5.2
LOS	A	A	A	A
95th %tile Queue, veh	1	1	4	1

Intersection				
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	357	173	473	512
Demand Flow Rate, veh/h	364	176	483	522
Vehicles Circulating, veh/h	259	534	392	384
Vehicles Exiting, veh/h	647	341	231	326
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	7.0	7.0	10.8	11.6
Approach LOS	A	A	B	B
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	364	176	483	522
Cap Entry Lane, veh/h	1060	800	925	933
Entry HV Adj Factor	0.981	0.980	0.980	0.981
Flow Entry, veh/h	357	173	473	512
Cap Entry, veh/h	1039	785	906	915
V/C Ratio	0.344	0.220	0.522	0.560
Control Delay, s/veh	7.0	7.0	10.8	11.6
LOS	A	A	B	B
95th %tile Queue, veh	2	1	3	4

HCM 6th AWSC
8: Curtis Rd & Falcon Hwy

Existing + Site
PM

Intersection

Intersection Delay, s/veh 18.7

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑		↑	↑	↑	↑		↑	↑	↑
Traffic Vol, veh/h	80	182	66	9	108	34	224	178	34	91	133	247
Future Vol, veh/h	80	182	66	9	108	34	224	178	34	91	133	247
Peak Hour Factor	0.92	0.92	0.92	0.87	0.87	0.87	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	87	198	72	10	124	39	243	193	37	99	145	268
Number of Lanes	1	1	1	0	1	1	1	1	0	1	1	1
Approach	EB		WB			NB			SB			
Opposing Approach	WB		EB			SB			NB			
Opposing Lanes	2		3			3			2			
Conflicting Approach Left	SB		NB			EB			WB			
Conflicting Lanes Left	3		2			3			2			
Conflicting Approach Right	NB		SB			WB			EB			
Conflicting Lanes Right	2		3			2			3			
HCM Control Delay	17		16.1			21.9			17.7			
HCM LOS	C		C			C			C			

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	100%	0%	0%	8%	0%	100%	0%	0%
Vol Thru, %	0%	84%	0%	100%	0%	92%	0%	0%	100%	0%
Vol Right, %	0%	16%	0%	0%	100%	0%	100%	0%	0%	100%
Sign Control	Stop									
Traffic Vol by Lane	224	212	80	182	66	117	34	91	133	247
LT Vol	224	0	80	0	0	9	0	91	0	0
Through Vol	0	178	0	182	0	108	0	0	133	0
RT Vol	0	34	0	0	66	0	34	0	0	247
Lane Flow Rate	243	230	87	198	72	134	39	99	145	268
Geometry Grp	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.597	0.525	0.225	0.484	0.161	0.351	0.094	0.244	0.337	0.571
Departure Headway (Hd)	8.83	8.205	9.317	8.803	8.085	9.391	8.631	8.892	8.38	7.663
Convergence, Y/N	Yes									
Cap	409	440	386	409	443	383	415	405	429	470
Service Time	6.577	5.952	7.066	6.553	5.834	7.145	6.384	6.639	6.126	5.409
HCM Lane V/C Ratio	0.594	0.523	0.225	0.484	0.163	0.35	0.094	0.244	0.338	0.57
HCM Control Delay	23.9	19.7	14.8	19.6	12.4	17.2	12.3	14.5	15.3	20.2
HCM Lane LOS	C	C	B	C	B	C	B	B	C	C
HCM 95th-tile Q	3.8	3	0.9	2.6	0.6	1.5	0.3	0.9	1.5	3.5

Intersection

Intersection Delay, s/veh 20.8

Intersection LOS C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	3	104	68	12	64	13	175	398	46	16	131	5
Future Vol, veh/h	3	104	68	12	64	13	175	398	46	16	131	5
Peak Hour Factor	0.87	0.87	0.87	0.83	0.83	0.83	0.93	0.93	0.93	0.87	0.87	0.87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	120	78	14	77	16	188	428	49	18	151	6
Number of Lanes	1	1	1	1	1	0	1	1	0	1	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	2			3			2			2		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	2			2			3			2		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	2			2			2			3		
HCM Control Delay	12			12.3			26.8			13.2		
HCM LOS	B			B			D			B		

Lane	NBLn1	NBLn2	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	100%	0%	100%	0%
Vol Thru, %	0%	90%	0%	100%	0%	0%	83%	0%	96%
Vol Right, %	0%	10%	0%	0%	100%	0%	17%	0%	4%
Sign Control	Stop								
Traffic Vol by Lane	175	444	3	104	68	12	77	16	136
LT Vol	175	0	3	0	0	12	0	16	0
Through Vol	0	398	0	104	0	0	64	0	131
RT Vol	0	46	0	0	68	0	13	0	5
Lane Flow Rate	188	477	3	120	78	14	93	18	156
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.356	0.828	0.008	0.251	0.149	0.034	0.199	0.04	0.318
Departure Headway (Hd)	6.817	6.24	8.075	7.565	6.85	8.358	7.723	7.855	7.321
Convergence, Y/N	Yes								
Cap	531	582	444	475	524	429	465	456	491
Service Time	4.517	3.94	5.817	5.306	4.591	6.103	5.468	5.597	5.063
HCM Lane V/C Ratio	0.354	0.82	0.007	0.253	0.149	0.033	0.2	0.039	0.318
HCM Control Delay	13.2	32.1	10.9	12.8	10.8	11.4	12.4	10.9	13.5
HCM Lane LOS	B	D	B	B	B	B	B	B	B
HCM 95th-tile Q	1.6	8.5	0	1	0.5	0.1	0.7	0.1	1.4

Lanes, Volumes, Timings
2: US 24 & New Meridian Rd

2042 Background
AM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	30	306	650	50	205	232	250	950	50	163	2100	40
Future Volume (vph)	30	306	650	50	205	232	250	950	50	163	2100	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195		195	195		195	555		490	555		490
Storage Lanes	1		0	1		0	2		1	1		1
Taper Length (ft)	180			180			300			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.568			0.453			0.950			0.239		
Satd. Flow (perm)	1058	3539	1583	844	3539	1583	3433	5085	1583	445	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			422			252			95			95
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		1093			1072			1370			1144	
Travel Time (s)		18.6			18.3			17.0			14.2	
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	329	699	54	223	252	263	1000	53	172	2211	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	329	699	54	223	252	263	1000	53	172	2211	42
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Free	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		Free	2		2			4	8		8

Lanes, Volumes, Timings
2: US 24 & New Meridian Rd

2042 Background
AM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	1	6		5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	13.0	30.0		10.0	27.0	27.0	23.0	59.0	59.0	21.0	57.0	57.0
Total Split (%)	10.8%	25.0%		8.3%	22.5%	22.5%	19.2%	49.2%	49.2%	17.5%	47.5%	47.5%
Maximum Green (s)	8.5	25.5		5.5	22.5	22.5	18.5	54.5	54.5	16.5	52.5	52.5
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max		None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	31.3	25.6	113.6	29.5	26.3	26.3	14.0	56.5	56.5	62.8	52.7	52.7
Actuated g/C Ratio	0.28	0.23	1.00	0.26	0.23	0.23	0.12	0.50	0.50	0.55	0.46	0.46
v/c Ratio	0.10	0.41	0.44	0.20	0.27	0.45	0.62	0.40	0.06	0.47	0.94	0.05
Control Delay	30.2	40.4	0.9	31.9	38.8	7.9	54.5	19.0	0.7	14.2	38.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.2	40.4	0.9	31.9	38.8	7.9	54.5	19.0	0.7	14.2	38.8	0.1
LOS	C	D	A	C	D	A	D	B	A	B	D	A
Approach Delay		14.1			23.4			25.4			36.4	
Approach LOS		B			C			C			D	
Queue Length 50th (ft)	17	111	0	29	74	0	97	168	0	51	568	0
Queue Length 95th (ft)	43	164	0	63	118	72	140	214	5	82	#741	0
Internal Link Dist (ft)		1013			992			1290			1064	
Turn Bay Length (ft)	195		195	195		195	555		490	555		490
Base Capacity (vph)	353	797	1583	264	819	560	561	2529	835	462	2358	785
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.41	0.44	0.20	0.27	0.45	0.47	0.40	0.06	0.37	0.94	0.05

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 113.6

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 27.9

Intersection LOS: C

Intersection Capacity Utilization 75.3%

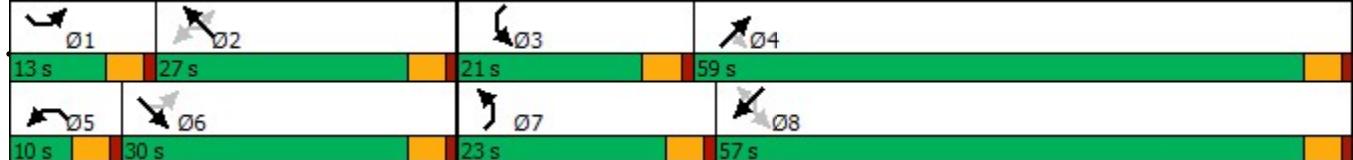
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: US 24 & New Meridian Rd



Lanes, Volumes, Timings
4: US 24 & Curtis Rd/Stapleton Dr

2042 Background

AM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	175	325	600	75	350	50	300	450	50	125	800	350
Future Volume (vph)	175	325	600	75	350	50	300	450	50	125	800	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		325	235		235	890		1000	790		790
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	240			200			190			190		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			471			193			149			363
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		687			651			1501			1327	
Travel Time (s)		10.4			9.9			18.6			16.5	
Peak Hour Factor	0.95	0.95	0.95	0.92	0.92	0.92	0.93	0.93	0.93	0.95	0.95	0.95
Adj. Flow (vph)	184	342	632	82	380	54	323	484	54	132	842	368
Shared Lane Traffic (%)												
Lane Group Flow (vph)	184	342	632	82	380	54	323	484	54	132	842	368
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm									
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8

Lanes, Volumes, Timings
4: US 24 & Curtis Rd/Stapleton Dr

2042 Background

AM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	22.0	30.0	30.0	15.0	23.0	23.0	32.0	47.0	47.0	18.0	33.0	33.0
Total Split (%)	20.0%	27.3%	27.3%	13.6%	20.9%	20.9%	29.1%	42.7%	42.7%	16.4%	30.0%	30.0%
Maximum Green (s)	17.5	25.5	25.5	10.5	18.5	18.5	27.5	42.5	42.5	13.5	28.5	28.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag									
Lead-Lag Optimize?	Yes											
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	10.3	26.9	26.9	7.6	21.8	21.8	13.9	32.1	32.1	8.9	27.1	27.1
Actuated g/C Ratio	0.11	0.29	0.29	0.08	0.24	0.24	0.15	0.35	0.35	0.10	0.30	0.30
v/c Ratio	0.48	0.33	0.79	0.29	0.45	0.10	0.62	0.39	0.08	0.39	0.80	0.51
Control Delay	43.4	28.3	17.3	43.9	32.8	0.4	42.3	23.7	0.2	43.6	37.2	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.4	28.3	17.3	43.9	32.8	0.4	42.3	23.7	0.2	43.6	37.2	6.0
LOS	D	C	B	D	C	A	D	C	A	D	D	A
Approach Delay		24.7			31.2				29.2			29.3
Approach LOS		C			C			C				C
Queue Length 50th (ft)	54	85	83	24	101	0	93	111	0	38	238	2
Queue Length 95th (ft)	90	136	#311	48	159	0	140	164	0	69	#344	70
Internal Link Dist (ft)		607			571			1421				1247
Turn Bay Length (ft)	190		325	235		235	890		1000	790		790
Base Capacity (vph)	664	1044	799	398	844	524	1044	1664	823	512	1115	747
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.33	0.79	0.21	0.45	0.10	0.31	0.29	0.07	0.26	0.76	0.49

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 91.3

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 28.2

Intersection LOS: C

Intersection Capacity Utilization 74.7%

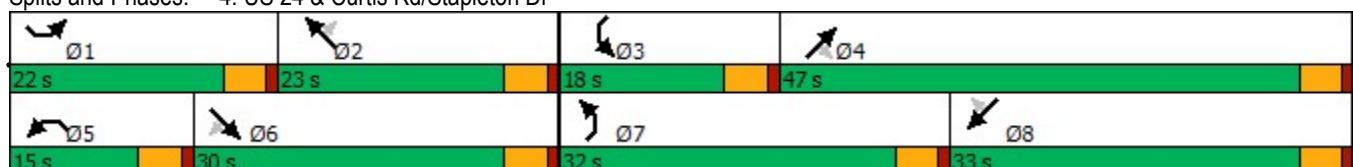
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: US 24 & Curtis Rd/Stapleton Dr



Lanes, Volumes, Timings
54: US 24 & Judge Orr Rd

2042 Background
AM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	75	125	350	275	125	50	260	675	200	100	1225	150
Future Volume (vph)	75	125	350	275	125	50	260	675	200	100	1225	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		325	215		215	890		1000	790		790
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	240			200			190			190		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			216			149			211			158
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		1050			925			1430			1303	
Travel Time (s)		15.9			14.0			17.7			16.2	
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	81	134	376	299	136	54	274	711	211	105	1289	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	81	134	376	299	136	54	274	711	211	105	1289	158
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm									
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8

Lanes, Volumes, Timings
54: US 24 & Judge Orr Rd

2042 Background
AM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	19.0	48.2	48.2	14.8	44.0	44.0	13.0	26.0	26.0	21.0	34.0	34.0
Total Split (%)	17.3%	43.8%	43.8%	13.5%	40.0%	40.0%	11.8%	23.6%	23.6%	19.1%	30.9%	30.9%
Maximum Green (s)	14.5	43.7	43.7	10.3	39.5	39.5	8.5	21.5	21.5	16.5	29.5	29.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag									
Lead-Lag Optimize?	Yes											
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	Min	Min	Min	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	7.4	15.0	15.0	10.4	18.1	18.1	8.6	21.6	21.6	16.6	29.7	29.7
Actuated g/C Ratio	0.09	0.18	0.18	0.13	0.22	0.22	0.11	0.26	0.26	0.20	0.36	0.36
v/c Ratio	0.26	0.21	0.81	0.69	0.17	0.12	0.76	0.76	0.37	0.15	1.00	0.23
Control Delay	38.6	27.9	26.9	45.0	25.8	0.5	52.6	35.4	6.3	29.6	54.5	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.6	27.9	26.9	45.0	25.8	0.5	52.6	35.4	6.3	29.6	54.5	4.9
LOS	D	C	C	D	C	A	D	D	A	C	D	A
Approach Delay		28.7			34.7				34.2			47.8
Approach LOS		C			C				C			D
Queue Length 50th (ft)	20	30	76	75	29	0	70	173	0	22	336	0
Queue Length 95th (ft)	44	53	175	#150	53	0	#153	#306	55	50	#598	42
Internal Link Dist (ft)		970			845			1350			1223	
Turn Bay Length (ft)	190		325	215		215	890		1000	790		790
Base Capacity (vph)	612	1903	951	435	1720	846	359	936	573	697	1285	675
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.07	0.40	0.69	0.08	0.06	0.76	0.76	0.37	0.15	1.00	0.23

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 81.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 38.9

Intersection LOS: D

Intersection Capacity Utilization 74.6%

ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 54: US 24 & Judge Orr Rd



Intersection									
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	247		408		430		489		
Demand Flow Rate, veh/h	252		417		438		499		
Vehicles Circulating, veh/h	499		433		160		417		
Vehicles Exiting, veh/h	417		165		591		433		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	5.5		6.1		4.6		6.5		
Approach LOS	A		A		A		A		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR	
Assumed Moves	LT	R	LT	TR	LT	TR	LT	TR	
RT Channelized									
Lane Util	0.417	0.583	0.470	0.530	0.470	0.530	0.471	0.529	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	105	147	196	221	206	232	235	264	
Cap Entry Lane, veh/h	853	929	906	983	1165	1240	920	996	
Entry HV Adj Factor	0.984	0.980	0.979	0.979	0.980	0.981	0.978	0.981	
Flow Entry, veh/h	103	144	192	216	202	228	230	259	
Cap Entry, veh/h	839	910	887	962	1142	1216	899	978	
V/C Ratio	0.123	0.158	0.216	0.225	0.177	0.187	0.255	0.265	
Control Delay, s/veh	5.5	5.5	6.3	5.9	4.7	4.6	6.6	6.3	
LOS	A	A	A	A	A	A	A	A	
95th %tile Queue, veh	0	1	1	1	1	1	1	1	

Intersection									
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	397		489		435		646		
Demand Flow Rate, veh/h	405		499		444		660		
Vehicles Circulating, veh/h	632		460		156		554		
Vehicles Exiting, veh/h	582		140		881		405		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	7.8		6.8		4.6		9.0		
Approach LOS	A		A		A		A		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR	
Assumed Moves	LT	R	LT	TR	LT	TR	LT	TR	
RT Channelized									
Lane Util	0.316	0.684	0.471	0.529	0.471	0.529	0.470	0.530	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	128	277	235	264	209	235	310	350	
Cap Entry Lane, veh/h	755	830	884	960	1169	1244	811	887	
Entry HV Adj Factor	0.979	0.982	0.979	0.983	0.978	0.981	0.980	0.979	
Flow Entry, veh/h	125	272	230	259	204	231	304	343	
Cap Entry, veh/h	739	815	866	944	1144	1220	794	868	
V/C Ratio	0.170	0.334	0.266	0.275	0.179	0.189	0.382	0.395	
Control Delay, s/veh	6.7	8.3	7.0	6.6	4.7	4.6	9.2	8.8	
LOS	A	A	A	A	A	A	A	A	
95th %tile Queue, veh	1	1	1	1	1	1	2	2	

Intersection				
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	397	489	435	646
Demand Flow Rate, veh/h	405	499	444	660
Vehicles Circulating, veh/h	632	460	156	554
Vehicles Exiting, veh/h	582	140	881	405
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	14.1	12.8	6.9	28.4
Approach LOS	B	B	A	D
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	405	499	444	660
Cap Entry Lane, veh/h	724	863	1177	784
Entry HV Adj Factor	0.981	0.981	0.980	0.979
Flow Entry, veh/h	397	489	435	646
Cap Entry, veh/h	711	847	1153	768
V/C Ratio	0.559	0.578	0.377	0.842
Control Delay, s/veh	14.1	12.8	6.9	28.4
LOS	B	B	A	D
95th %tile Queue, veh	3	4	2	10

Intersection

Int Delay, s/veh 47.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	125	5	10	325	250	5	125	10	275	100	25
Future Vol, veh/h	10	125	5	10	325	250	5	125	10	275	100	25
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									
Storage Length	-	-	-	-	-	235	-	-	-	385	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	93	93	93	83	83	83	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	151	6	11	349	269	6	151	12	299	109	27

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	618	0	0	157	0	0	752	818	154	631	552	349
Stage 1	-	-	-	-	-	-	178	178	-	371	371	-
Stage 2	-	-	-	-	-	-	574	640	-	260	181	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	962	-	-	1423	-	-	327	311	892	394	442	694
Stage 1	-	-	-	-	-	-	824	752	-	649	620	-
Stage 2	-	-	-	-	-	-	504	470	-	745	750	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	962	-	-	1423	-	-	248	303	892	~232	431	694
Mov Cap-2 Maneuver	-	-	-	-	-	-	248	303	-	~232	431	-
Stage 1	-	-	-	-	-	-	812	741	-	640	613	-
Stage 2	-	-	-	-	-	-	394	464	-	577	740	-

Approach	EB	WB			NB			SB			
HCM Control Delay, s	0.6	0.1			28.9			142.7			
HCM LOS					D			F			
<hr/>											
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		

Capacity (veh/h)	315	962	-	-	1423	-	-	232	466		
HCM Lane V/C Ratio	0.535	0.013	-	-	0.008	-	-	1.288	0.292		
HCM Control Delay (s)	28.9	8.8	0	-	7.5	0	-	200.3	15.9		
HCM Lane LOS	D	A	A	-	A	A	-	F	C		
HCM 95th %tile Q(veh)	3	0	-	-	0	-	-	15.6	1.2		

Notes

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

Lanes, Volumes, Timings
2: US 24 & New Meridian Rd

2042 Background
PM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	85	403	300	100	356	187	525	1950	100	154	1200	60
Future Volume (vph)	85	403	300	100	356	187	525	1950	100	154	1200	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195		195	195		195	555		490	555		490
Storage Lanes	1		0	1		0	2		1	1		1
Taper Length (ft)	180			180			300			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.370			0.359			0.950			0.095		
Satd. Flow (perm)	689	3539	1583	669	3539	1583	3433	5085	1583	177	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			323			201			105			136
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		1093			1072			1370			1144	
Travel Time (s)		18.6			18.3			17.0			14.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	91	433	323	108	383	201	553	2053	105	162	1263	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	433	323	108	383	201	553	2053	105	162	1263	63
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Free	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		Free	2		2			4	8		8

Lanes, Volumes, Timings
2: US 24 & New Meridian Rd

2042 Background
PM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	1	6		5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	13.0	30.0		10.0	27.0	27.0	30.0	59.0	59.0	21.0	50.0	50.0
Total Split (%)	10.8%	25.0%		8.3%	22.5%	22.5%	25.0%	49.2%	49.2%	17.5%	41.7%	41.7%
Maximum Green (s)	8.5	25.5		5.5	22.5	22.5	25.5	54.5	54.5	16.5	45.5	45.5
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max		None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	33.6	25.6	113.8	29.8	25.5	25.5	22.4	52.9	52.9	54.1	42.3	42.3
Actuated g/C Ratio	0.30	0.22	1.00	0.26	0.22	0.22	0.20	0.46	0.46	0.48	0.37	0.37
v/c Ratio	0.33	0.54	0.20	0.47	0.48	0.39	0.82	0.87	0.13	0.65	0.67	0.09
Control Delay	33.4	42.8	0.3	39.7	43.1	8.2	54.9	32.6	4.0	35.7	32.2	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.4	42.8	0.3	39.7	43.1	8.2	54.9	32.6	4.0	35.7	32.2	0.3
LOS	C	D	A	D	D	A	D	C	A	D	C	A
Approach Delay		25.6			32.4			36.1			31.2	
Approach LOS		C			C			D			C	
Queue Length 50th (ft)	49	151	0	59	136	0	203	481	0	61	283	0
Queue Length 95th (ft)	95	214	0	111	196	64	273	594	31	131	345	0
Internal Link Dist (ft)		1013			992			1290			1064	
Turn Bay Length (ft)	195		195	195		195	555		490	555		490
Base Capacity (vph)	287	795	1583	228	792	510	771	2442	815	323	2039	716
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.54	0.20	0.47	0.48	0.39	0.72	0.84	0.13	0.50	0.62	0.09

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 113.8

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 32.8

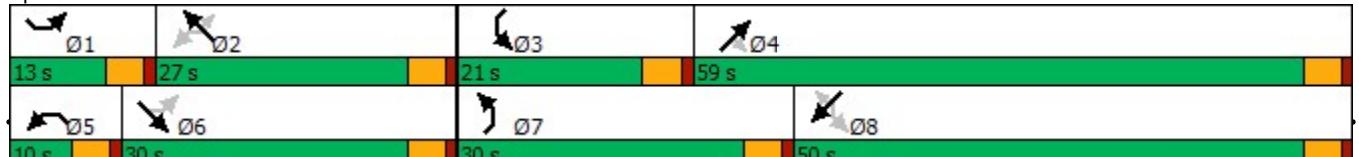
Intersection LOS: C

Intersection Capacity Utilization 77.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: US 24 & New Meridian Rd



Lanes, Volumes, Timings

JAB

Lanes, Volumes, Timings
4: US 24 & Curtis Rd/Stapleton Dr

2042 Background

PM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	350	275	400	125	400	150	650	850	150	145	600	350
Future Volume (vph)	350	275	400	125	400	150	650	850	150	145	600	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		325	235		235	890		1000	790		790
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	240			200			190			190		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			430			193			158			283
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		687			651			1501			1327	
Travel Time (s)		10.4			9.9			18.6			16.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	376	296	430	134	430	161	684	895	158	153	632	368
Shared Lane Traffic (%)												
Lane Group Flow (vph)	376	296	430	134	430	161	684	895	158	153	632	368
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm									
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8

Lanes, Volumes, Timings
4: US 24 & Curtis Rd/Stapleton Dr

2042 Background

PM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	22.0	30.0	30.0	15.0	23.0	23.0	32.0	47.0	47.0	18.0	33.0	33.0
Total Split (%)	20.0%	27.3%	27.3%	13.6%	20.9%	20.9%	29.1%	42.7%	42.7%	16.4%	30.0%	30.0%
Maximum Green (s)	17.5	25.5	25.5	10.5	18.5	18.5	27.5	42.5	42.5	13.5	28.5	28.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag									
Lead-Lag Optimize?	Yes											
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	15.4	25.8	25.8	9.0	19.5	19.5	24.0	38.4	38.4	10.0	24.3	24.3
Actuated g/C Ratio	0.15	0.25	0.25	0.09	0.19	0.19	0.24	0.38	0.38	0.10	0.24	0.24
v/c Ratio	0.72	0.33	0.59	0.44	0.63	0.35	0.84	0.67	0.23	0.45	0.75	0.62
Control Delay	50.6	33.8	7.3	50.2	44.4	5.5	47.8	29.1	4.3	49.0	42.1	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.6	33.8	7.3	50.2	44.4	5.5	47.8	29.1	4.3	49.0	42.1	13.9
LOS	D	C	A	D	D	A	D	C	A	D	D	B
Approach Delay		29.2			36.8			34.2			34.0	
Approach LOS		C			D			C			C	
Queue Length 50th (ft)	125	87	0	45	145	0	225	251	0	51	206	46
Queue Length 95th (ft)	181	133	85	78	209	36	303	337	41	84	277	144
Internal Link Dist (ft)		607			571			1421			1247	
Turn Bay Length (ft)	190		325	235		235	890		1000	790		790
Base Capacity (vph)	598	901	723	359	680	460	941	1515	768	462	1005	652
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.33	0.59	0.37	0.63	0.35	0.73	0.59	0.21	0.33	0.63	0.56

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 101.3

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 33.4

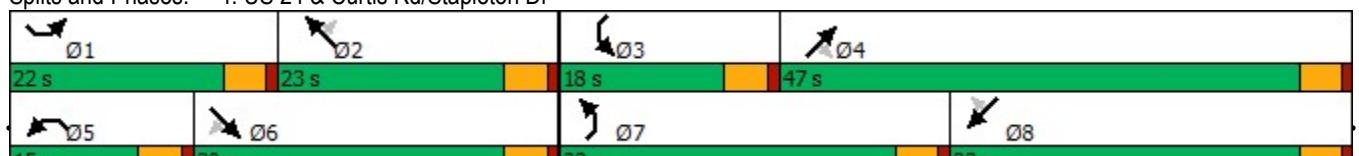
Intersection LOS: C

Intersection Capacity Utilization 71.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 4: US 24 & Curtis Rd/Stapleton Dr



Lanes, Volumes, Timings

JAB

Lanes, Volumes, Timings
54: US 24 & Judge Orr Rd

2042 Background
PM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	200	175	400	440	175	175	500	1275	450	150	800	175
Future Volume (vph)	200	175	400	440	175	175	500	1275	450	150	800	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		325	215		215	890		1000	790		790
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	240			200			190			190		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			388			193			474			193
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		1050			925			1430			1303	
Travel Time (s)		15.9			14.0			17.7			16.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	215	188	430	473	188	188	526	1342	474	158	842	184
Shared Lane Traffic (%)												
Lane Group Flow (vph)	215	188	430	473	188	188	526	1342	474	158	842	184
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm									
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8

Lanes, Volumes, Timings
54: US 24 & Judge Orr Rd

2042 Background
PM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	22.0	32.0	32.0	15.0	25.0	25.0	30.0	45.0	45.0	18.0	33.0	33.0
Total Split (%)	20.0%	29.1%	29.1%	13.6%	22.7%	22.7%	27.3%	40.9%	40.9%	16.4%	30.0%	30.0%
Maximum Green (s)	17.5	27.5	27.5	10.5	20.5	20.5	25.5	40.5	40.5	13.5	28.5	28.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag									
Lead-Lag Optimize?	Yes											
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	Min	Min	Min	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	11.3	13.0	13.0	10.5	12.3	12.3	25.6	40.6	40.6	13.5	28.6	28.6
Actuated g/C Ratio	0.12	0.14	0.14	0.11	0.13	0.13	0.27	0.42	0.42	0.14	0.30	0.30
v/c Ratio	0.53	0.39	0.78	1.25	0.42	0.51	0.57	0.89	0.50	0.33	0.80	0.30
Control Delay	45.3	39.5	16.9	171.5	41.5	10.5	34.2	35.6	4.1	40.4	38.6	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.3	39.5	16.9	171.5	41.5	10.5	34.2	35.6	4.1	40.4	38.6	5.3
LOS	D	D	B	F	D	B	C	D	A	D	D	A
Approach Delay		29.3			107.1			28.9			33.6	
Approach LOS		C			F			C			C	
Queue Length 50th (ft)	62	55	23	~180	55	0	138	373	0	43	238	0
Queue Length 95th (ft)	107	87	121	#325	92	56	223	#636	64	84	#400	48
Internal Link Dist (ft)		970			845			1350			1223	
Turn Bay Length (ft)	190		325	215		215	890		1000	790		790
Base Capacity (vph)	629	1019	732	377	760	491	917	1501	944	485	1056	607
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.18	0.59	1.25	0.25	0.38	0.57	0.89	0.50	0.33	0.80	0.30

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 95.8

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.25

Intersection Signal Delay: 42.8

Intersection LOS: D

Intersection Capacity Utilization 71.9%

ICU Level of Service C

Analysis Period (min) 15

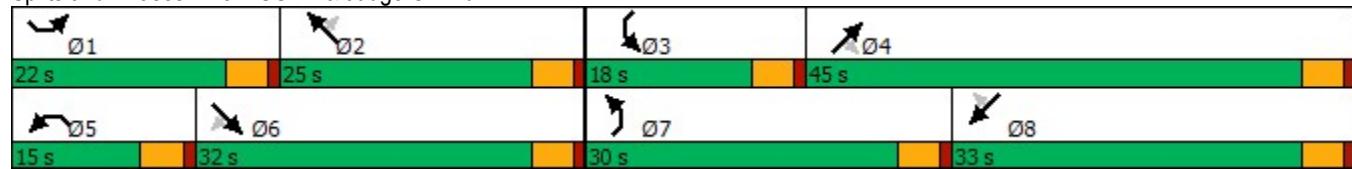
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 54: US 24 & Judge Orr Rd



Intersection									
Approach	EB		WB		NB		SB		
Entry Lanes		2		2		2		2	
Conflicting Circle Lanes		2		2		2		2	
Adj Approach Flow, veh/h	381		256		672		435		
Demand Flow Rate, veh/h	389		261		686		444		
Vehicles Circulating, veh/h	438		686		389		380		
Vehicles Exiting, veh/h	386		389		438		567		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	6.0		6.7		7.5		5.9		
Approach LOS	A		A		A		A		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR	
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	TR	
RT Channelized									
Lane Util	0.470	0.530	0.471	0.529	0.469	0.531	0.471	0.529	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	183	206	123	138	322	364	209	235	
Cap Entry Lane, veh/h	902	979	718	793	944	1020	952	1028	
Entry HV Adj Factor	0.979	0.980	0.979	0.984	0.981	0.979	0.978	0.981	
Flow Entry, veh/h	179	202	120	136	316	356	204	231	
Cap Entry, veh/h	883	960	703	780	926	999	931	1009	
V/C Ratio	0.203	0.211	0.171	0.174	0.341	0.357	0.220	0.229	
Control Delay, s/veh	6.1	5.8	7.0	6.5	7.6	7.4	6.0	5.8	
LOS	A	A	A	A	A	A	A	A	
95th %tile Queue, veh	1	1	1	1	2	2	1	1	

Intersection									
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	500		230		969		414		
Demand Flow Rate, veh/h	510		235		988		422		
Vehicles Circulating, veh/h	391		999		483		506		
Vehicles Exiting, veh/h	537		472		418		728		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	6.4		9.1		11.6		6.6		
Approach LOS	A		A		B		A		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR	
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	TR	
RT Channelized									
Lane Util	0.471	0.529	0.468	0.532	0.470	0.530	0.469	0.531	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	240	270	110	125	464	524	198	224	
Cap Entry Lane, veh/h	942	1019	539	607	866	942	847	924	
Entry HV Adj Factor	0.979	0.982	0.983	0.976	0.981	0.980	0.982	0.979	
Flow Entry, veh/h	235	265	108	122	455	513	194	219	
Cap Entry, veh/h	922	1000	529	593	849	923	832	904	
V/C Ratio	0.255	0.265	0.204	0.206	0.536	0.556	0.234	0.243	
Control Delay, s/veh	6.5	6.2	9.6	8.7	11.7	11.5	6.8	6.5	
LOS	A	A	A	A	B	B	A	A	
95th %tile Queue, veh	1	1	1	1	3	4	1	1	

Intersection

Int Delay, s/veh 25.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	5	250	5	10	150	350	5	125	25	250	150	25
Future Vol, veh/h	5	250	5	10	150	350	5	125	25	250	150	25
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									
Storage Length	0	-	0	0	-	235	0	-	-	385	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	87	87	87	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	272	5	11	163	380	6	144	29	272	163	27

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	543	0	0	277	0	0	752	847	272	556	472	163
Stage 1	-	-	-	-	-	-	282	282	-	185	185	-
Stage 2	-	-	-	-	-	-	470	565	-	371	287	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1026	-	-	1286	-	-	327	299	767	442	490	882
Stage 1	-	-	-	-	-	-	725	678	-	817	747	-
Stage 2	-	-	-	-	-	-	574	508	-	649	674	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1026	-	-	1286	-	-	232	295	767	~260	483	882
Mov Cap-2 Maneuver	-	-	-	-	-	-	232	295	-	~260	483	-
Stage 1	-	-	-	-	-	-	721	675	-	813	740	-
Stage 2	-	-	-	-	-	-	430	503	-	489	671	-

Approach	EB	WB			NB			SB				
HCM Control Delay, s	0.2	0.2			27.2			71.1				
HCM LOS					D			F				
Minor Lane/Major Mvmt		NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)		232	329	1026	-	-	1286	-	-	260	483	882
HCM Lane V/C Ratio		0.025	0.524	0.005	-	-	0.008	-	-	1.045	0.338	0.031
HCM Control Delay (s)		20.9	27.4	8.5	-	-	7.8	-	-	110.3	16.2	9.2
HCM Lane LOS		C	D	A	-	-	A	-	-	F	C	A
HCM 95th %tile Q(veh)		0.1	2.9	0	-	-	0	-	-	10.9	1.5	0.1

Notes

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

Lanes, Volumes, Timings
2: US 24 & New Meridian Rd

2042 Background + Site
AM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑↑	↑↑	↑	↑	↑↑↑	↑
Traffic Volume (vph)	30	375	650	50	225	250	250	950	50	225	2100	40
Future Volume (vph)	30	375	650	50	225	250	250	950	50	225	2100	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195		195	195		195	555		490	555		490
Storage Lanes	1		0	1		0	2		1	1		1
Taper Length (ft)	180			180			300			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.545			0.382			0.950			0.226		
Satd. Flow (perm)	1015	3539	1583	712	3539	1583	3433	5085	1583	421	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			422			269			95			95
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		1093			1072			1370			1144	
Travel Time (s)		18.6			18.3			17.0			14.2	
Peak Hour Factor	0.95	0.95	0.95	0.93	0.93	0.93	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	32	395	684	54	242	269	263	1000	53	237	2211	42
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	395	684	54	242	269	263	1000	53	237	2211	42
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Free	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		Free	2		2			4	8		8

Lanes, Volumes, Timings
2: US 24 & New Meridian Rd

2042 Background + Site
AM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	1	6		5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	13.0	30.0		10.0	27.0	27.0	23.0	59.0	59.0	21.0	57.0	57.0
Total Split (%)	10.8%	25.0%		8.3%	22.5%	22.5%	19.2%	49.2%	49.2%	17.5%	47.5%	47.5%
Maximum Green (s)	8.5	25.5		5.5	22.5	22.5	18.5	54.5	54.5	16.5	52.5	52.5
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max		None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	31.3	25.6	113.6	29.5	26.3	26.3	14.0	54.5	54.5	64.9	52.7	52.7
Actuated g/C Ratio	0.28	0.23	1.00	0.26	0.23	0.23	0.12	0.48	0.48	0.57	0.46	0.46
v/c Ratio	0.10	0.50	0.43	0.23	0.30	0.47	0.62	0.41	0.07	0.62	0.94	0.05
Control Delay	30.2	41.8	0.9	32.4	39.1	7.9	54.5	20.5	0.8	17.4	38.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.2	41.8	0.9	32.4	39.1	7.9	54.5	20.5	0.8	17.4	38.8	0.1
LOS	C	D	A	C	D	A	D	C	A	B	D	A
Approach Delay		16.3			23.6			26.5			36.1	
Approach LOS		B			C			C			D	
Queue Length 50th (ft)	17	136	0	29	81	0	97	175	0	73	568	0
Queue Length 95th (ft)	43	195	0	63	127	74	140	226	5	112	#741	0
Internal Link Dist (ft)		1013			992			1290			1064	
Turn Bay Length (ft)	195		195	195		195	555		490	555		490
Base Capacity (vph)	344	797	1583	236	819	573	561	2449	811	451	2358	785
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.50	0.43	0.23	0.30	0.47	0.47	0.41	0.07	0.53	0.94	0.05

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 113.6

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 28.5

Intersection LOS: C

Intersection Capacity Utilization 77.2%

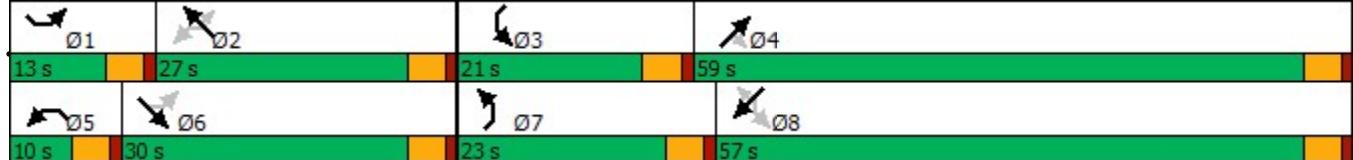
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: US 24 & New Meridian Rd



Lanes, Volumes, Timings
4: US 24 & Curtis Rd/Stapleton Dr

2042 Background + Site

AM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	174	479	600	85	380	60	300	451	53	164	809	341
Future Volume (vph)	174	479	600	85	380	60	300	451	53	164	809	341
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		325	235		235	890		1000	790		790
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	240			200			190			190		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			305			95			95			189
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		687			651			1501			1327	
Travel Time (s)		10.4			9.9			18.6			16.5	
Peak Hour Factor	0.95	0.95	0.95	0.93	0.93	0.93	0.93	0.93	0.93	0.95	0.95	0.95
Adj. Flow (vph)	183	504	632	91	409	65	323	485	57	173	852	359
Shared Lane Traffic (%)												
Lane Group Flow (vph)	183	504	632	91	409	65	323	485	57	173	852	359
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm									
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8

Lanes, Volumes, Timings
4: US 24 & Curtis Rd/Stapleton Dr

2042 Background + Site

AM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	13.0	30.0	30.0	10.0	27.0	27.0	23.0	59.0	59.0	21.0	57.0	57.0
Total Split (%)	10.8%	25.0%	25.0%	8.3%	22.5%	22.5%	19.2%	49.2%	49.2%	17.5%	47.5%	47.5%
Maximum Green (s)	8.5	25.5	25.5	5.5	22.5	22.5	18.5	54.5	54.5	16.5	52.5	52.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	8.4	28.0	28.0	5.6	22.8	22.8	14.1	34.9	34.9	10.2	31.0	31.0
Actuated g/C Ratio	0.09	0.30	0.30	0.06	0.24	0.24	0.15	0.37	0.37	0.11	0.33	0.33
v/c Ratio	0.60	0.48	0.93	0.45	0.48	0.14	0.63	0.37	0.09	0.47	0.73	0.56
Control Delay	52.4	32.0	40.0	53.7	34.9	3.9	44.8	22.4	1.4	45.5	32.2	15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.4	32.0	40.0	53.7	34.9	3.9	44.8	22.4	1.4	45.5	32.2	15.2
LOS	D	C	D	D	C	A	D	C	A	D	C	B
Approach Delay		38.7			34.4				29.4			29.4
Approach LOS		D			C				C			C
Queue Length 50th (ft)	55	134	215	27	110	0	94	108	0	51	234	77
Queue Length 95th (ft)	#110	225	#534	60	188	18	155	156	8	93	319	170
Internal Link Dist (ft)		607			571			1421			1247	
Turn Bay Length (ft)	190		325	235		235	890		1000	790		790
Base Capacity (vph)	312	1049	683	202	853	453	680	2066	963	606	1990	972
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.48	0.93	0.45	0.48	0.14	0.47	0.23	0.06	0.29	0.43	0.37

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 94.5

Natural Cycle: 70

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 33.0

Intersection LOS: C

Intersection Capacity Utilization 74.9%

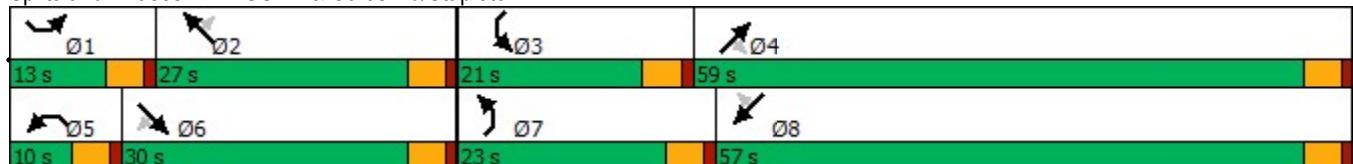
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: US 24 & Curtis Rd/Stapleton Dr



Lanes, Volumes, Timings
54: US 24 & Judge Orr Rd

2042 Background + Site
AM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (vph)	75	196	346	265	144	50	260	671	199	100	1206	150
Future Volume (vph)	75	196	346	265	144	50	260	671	199	100	1206	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		325	215		215	890		1000	790		790
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	240			200			190			190		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			175			104			209			158
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		1050			925			1430			1303	
Travel Time (s)		15.9			14.0			17.7			16.2	
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	81	211	372	288	157	54	274	706	209	105	1269	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	81	211	372	288	157	54	274	706	209	105	1269	158
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm									
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8

Lanes, Volumes, Timings
54: US 24 & Judge Orr Rd

2042 Background + Site
AM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	12.0	21.0	21.0	16.0	25.0	25.0	17.0	59.0	59.0	14.0	56.0	56.0
Total Split (%)	10.9%	19.1%	19.1%	14.5%	22.7%	22.7%	15.5%	53.6%	53.6%	12.7%	50.9%	50.9%
Maximum Green (s)	7.5	16.5	16.5	11.5	20.5	20.5	12.5	54.5	54.5	9.5	51.5	51.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag									
Lead-Lag Optimize?	Yes											
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	Min	Min	Min	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	7.1	16.5	16.5	11.4	20.8	20.8	12.5	54.5	54.5	9.5	51.5	51.5
Actuated g/C Ratio	0.06	0.15	0.15	0.10	0.19	0.19	0.11	0.50	0.50	0.09	0.47	0.47
v/c Ratio	0.36	0.40	0.96	0.81	0.24	0.14	0.70	0.40	0.23	0.35	0.77	0.19
Control Delay	54.0	44.8	63.3	66.6	39.1	1.3	57.4	18.3	2.7	51.0	28.0	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.0	44.8	63.3	66.6	39.1	1.3	57.4	18.3	2.7	51.0	28.0	3.2
LOS	D	D	E	E	D	A	E	B	A	D	C	A
Approach Delay		56.3			50.9			24.6			27.0	
Approach LOS			E			D			C		C	
Queue Length 50th (ft)	28	71	147	104	50	0	97	159	0	36	380	0
Queue Length 95th (ft)	53	110	#340	#169	81	4	142	205	38	64	468	35
Internal Link Dist (ft)		970			845			1350			1223	
Turn Bay Length (ft)	190		325	215		215	890		1000	790		790
Base Capacity (vph)	234	531	386	359	668	383	390	1755	890	296	1658	826
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.40	0.96	0.80	0.24	0.14	0.70	0.40	0.23	0.35	0.77	0.19

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 109.9

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 34.4

Intersection LOS: C

Intersection Capacity Utilization 73.6%

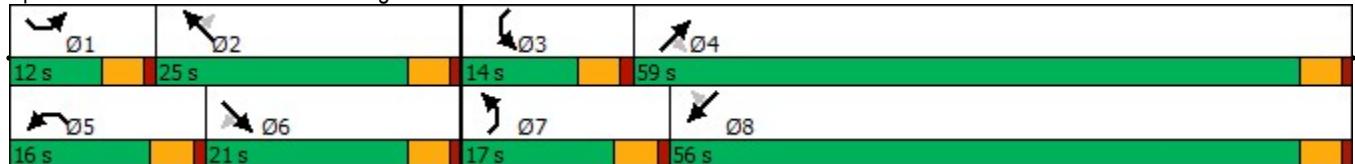
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 54: US 24 & Judge Orr Rd





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑ ↘	↑ ↘	↖ ↗	↑	↓	↖ ↗
Traffic Volume (vph)	81	30	133	304	143	777
Future Volume (vph)	81	30	133	304	143	777
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	245			195
Storage Lanes	1	1	1			1
Taper Length (ft)	25		180			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.850	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.659			
Satd. Flow (perm)	1770	1583	1228	1863	1863	1583
Right Turn on Red		Yes			Yes	
Satd. Flow (RTOR)		33			835	
Link Speed (mph)	30		45	45		
Link Distance (ft)	338		593	690		
Travel Time (s)	7.7		9.0	10.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.93	0.93
Adj. Flow (vph)	88	33	145	330	154	835
Shared Lane Traffic (%)						
Lane Group Flow (vph)	88	33	145	330	154	835
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12		12	12		
Link Offset(ft)	0		0	0		
Crosswalk Width(ft)	16		16	16		
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)			94	94		
Detector 2 Size(ft)			6	6		
Detector 2 Type			Cl+Ex	Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)			0.0	0.0		
Turn Type	Prot	Perm	Perm	NA	NA	Perm
Protected Phases	4			2	6	
Permitted Phases		4	2		6	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	30.5	30.5	29.5	29.5	29.5	29.5
Total Split (%)	50.8%	50.8%	49.2%	49.2%	49.2%	49.2%
Maximum Green (s)	26.0	26.0	25.0	25.0	25.0	25.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	C-Max	C-Max	C-Max	C-Max
Act Effect Green (s)	8.4	8.4	42.6	42.6	42.6	42.6
Actuated g/C Ratio	0.14	0.14	0.71	0.71	0.71	0.71
v/c Ratio	0.36	0.13	0.17	0.25	0.12	0.61
Control Delay	26.6	9.8	3.9	4.0	3.4	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.6	9.8	3.9	4.0	3.4	2.5
LOS	C	A	A	A	A	A
Approach Delay	22.0			4.0	2.7	
Approach LOS	C			A	A	
Queue Length 50th (ft)	29	0	13	32	13	0
Queue Length 95th (ft)	62	19	35	70	33	30
Internal Link Dist (ft)	258			513	610	
Turn Bay Length (ft)			245			195
Base Capacity (vph)	767	704	871	1322	1322	1366
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.05	0.17	0.25	0.12	0.61

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 4.5

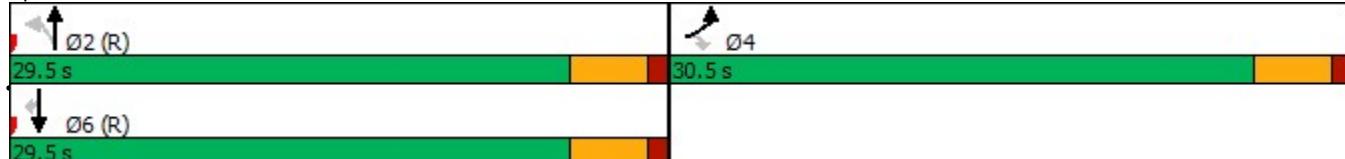
Intersection LOS: A

Intersection Capacity Utilization 63.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 61: Curtis Rd & Richland Dr



Intersection									
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	321		427		516		714		
Demand Flow Rate, veh/h	327		436		527		729		
Vehicles Circulating, veh/h	759		515		155		459		
Vehicles Exiting, veh/h	429		167		931		492		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	8.1		6.8		5.0		8.5		
Approach LOS	A		A		A		A		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR	
Assumed Moves	LT	R	LT	TR	LT	TR	LT	TR	
RT Channelized									
Lane Util	0.306	0.694	0.470	0.530	0.471	0.529	0.471	0.529	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	100	227	205	231	248	279	343	386	
Cap Entry Lane, veh/h	672	745	841	917	1170	1245	885	961	
Entry HV Adj Factor	0.984	0.982	0.980	0.980	0.979	0.981	0.979	0.981	
Flow Entry, veh/h	98	223	201	226	243	274	336	379	
Cap Entry, veh/h	660	732	823	899	1145	1221	866	943	
V/C Ratio	0.149	0.305	0.244	0.252	0.212	0.224	0.388	0.402	
Control Delay, s/veh	7.1	8.6	7.0	6.6	5.0	4.9	8.7	8.4	
LOS	A	A	A	A	A	A	A	A	
95th %tile Queue, veh	1	1	1	1	1	1	2	2	

Intersection			
Intersection Delay, s/veh	15.9		
Intersection LOS	C		
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	134	475	989
Demand Flow Rate, veh/h	137	485	1009
Vehicles Circulating, veh/h	157	100	148
Vehicles Exiting, veh/h	1000	194	437
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	4.1	6.8	21.8
Approach LOS	A	A	C
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	137	485	1009
Cap Entry Lane, veh/h	1176	1246	1187
Entry HV Adj Factor	0.978	0.980	0.980
Flow Entry, veh/h	134	475	989
Cap Entry, veh/h	1150	1221	1163
V/C Ratio	0.117	0.389	0.850
Control Delay, s/veh	4.1	6.8	21.8
LOS	A	A	C
95th %tile Queue, veh	0	2	11

Intersection					
Approach	EB	NB	SB		
Entry Lanes	1	2	2		
Conflicting Circle Lanes	2	2	2		
Adj Approach Flow, veh/h	121	475	989		
Demand Flow Rate, veh/h	124	485	1009		
Vehicles Circulating, veh/h	157	90	148		
Vehicles Exiting, veh/h	1000	191	427		
Ped Vol Crossing Leg, #/h	0	0	0		
Ped Cap Adj	1.000	1.000	1.000		
Approach Delay, s/veh	3.8	4.5	11.1		
Approach LOS	A	A	B		
Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	R
RT Channelized					
Lane Util	1.000	0.470	0.530	0.156	0.844
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	124	228	257	157	852
Cap Entry Lane, veh/h	1243	1243	1316	1178	1252
Entry HV Adj Factor	0.976	0.980	0.980	0.980	0.980
Flow Entry, veh/h	121	223	252	154	835
Cap Entry, veh/h	1213	1218	1290	1155	1227
V/C Ratio	0.100	0.183	0.195	0.133	0.680
Control Delay, s/veh	3.8	4.5	4.4	4.3	12.3
LOS	A	A	A	A	B
95th %tile Queue, veh	0	1	1	0	6

Intersection									
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	406		535		515		749		
Demand Flow Rate, veh/h	414		546		525		764		
Vehicles Circulating, veh/h	664		561		188		624		
Vehicles Exiting, veh/h	724		152		890		483		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	8.0		8.0		5.1		11.1		
Approach LOS	A		A		A		B		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR	
Assumed Moves	LT	R	LT	TR	LT	TR	LT	TR	
RT Channelized									
Lane Util	0.353	0.647	0.471	0.529	0.470	0.530	0.470	0.530	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	146	268	257	289	247	278	359	405	
Cap Entry Lane, veh/h	733	808	806	881	1135	1210	760	835	
Entry HV Adj Factor	0.982	0.981	0.979	0.981	0.979	0.981	0.980	0.980	
Flow Entry, veh/h	143	263	252	284	242	273	352	397	
Cap Entry, veh/h	720	792	789	865	1112	1187	745	819	
V/C Ratio	0.199	0.332	0.319	0.328	0.218	0.230	0.472	0.485	
Control Delay, s/veh	7.2	8.4	8.3	7.8	5.2	5.1	11.4	10.9	
LOS	A	A	A	A	A	A	B	B	
95th %tile Queue, veh	1	1	1	1	1	1	3	3	

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑	↑	↗	↗	↗
Traffic Vol, veh/h	319	374	572	84	0	53
Future Vol, veh/h	319	374	572	84	0	53
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	385	-	-	235	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	343	402	615	90	0	64
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	705	0	-	0	-	615
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	893	-	-	-	0	491
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	893	-	-	-	-	491
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB	SB			
HCM Control Delay, s	5.3	0	13.4			
HCM LOS			B			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	893	-	-	-	491	
HCM Lane V/C Ratio	0.384	-	-	-	0.13	
HCM Control Delay (s)	11.5	-	-	-	13.4	
HCM Lane LOS	B	-	-	-	B	
HCM 95th %tile Q(veh)	1.8	-	-	-	0.4	

Intersection

Int Delay, s/veh 404.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	10	360	5	12	393	286	5	125	18	407	100	25
Future Vol, veh/h	10	360	5	12	393	286	5	125	18	407	100	25
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									
Storage Length	0	-	0	0	-	235	0	-	-	385	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	93	93	93	92	92	92	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	391	5	13	423	308	5	136	20	438	108	27

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	731	0	0	396	0	0	1084	1170	391	943	867	423
Stage 1	-	-	-	-	-	-	413	413	-	449	449	-
Stage 2	-	-	-	-	-	-	671	757	-	494	418	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	873	-	-	1163	-	-	194	193	658	~ 243	291	631
Stage 1	-	-	-	-	-	-	616	594	-	589	572	-
Stage 2	-	-	-	-	-	-	446	416	-	557	591	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	873	-	-	1163	-	-	129	188	658	~ 95	284	631
Mov Cap-2 Maneuver	-	-	-	-	-	-	129	188	-	~ 95	284	-
Stage 1	-	-	-	-	-	-	608	586	-	581	566	-
Stage 2	-	-	-	-	-	-	342	411	-	~ 410	583	-

Approach	EB	WB			NB			SB			
HCM Control Delay, s	0.2	0.1			60.4			\$ 1315.7			
HCM LOS					F			F			
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3
Capacity (veh/h)	129	207	873	-	-	1163	-	-	95	284	631
HCM Lane V/C Ratio	0.042	0.751	0.012	-	-	0.011	-	-	4.607	0.379	0.043
HCM Control Delay (s)	34.1	61.3	9.2	-	-	8.1	-	\$ 1712.9	25.2	11	
HCM Lane LOS	D	F	A	-	-	A	-	-	F	D	B
HCM 95th %tile Q(veh)	0.1	5.1	0	-	-	0	-	-	46.4	1.7	0.1

Notes

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

Intersection						
Int Delay, s/veh	8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	81	30	133	304	777	143
Future Vol, veh/h	81	30	133	304	777	143
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	0	245	-	-	195
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	93	34	145	330	835	154
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1455	835	989	0	-	0
Stage 1	835	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	143	368	699	-	-	-
Stage 1	426	-	-	-	-	-
Stage 2	536	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	113	368	699	-	-	-
Mov Cap-2 Maneuver	113	-	-	-	-	-
Stage 1	338	-	-	-	-	-
Stage 2	536	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	86.7	3.5	0			
HCM LOS	F					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	699	-	113	368	-	-
HCM Lane V/C Ratio	0.207	-	0.824	0.094	-	-
HCM Control Delay (s)	11.5	-	112.9	15.8	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	0.8	-	4.8	0.3	-	-

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↑		↑	↑	↑
Traffic Vol, veh/h	0	86	0	436	610	197
Future Vol, veh/h	0	86	0	436	610	197
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	-	-	-	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	104	0	474	656	212
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	656	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	465	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	465	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB	SB			
HCM Control Delay, s	14.9	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	465	-	-		
HCM Lane V/C Ratio	-	0.223	-	-		
HCM Control Delay (s)	-	14.9	-	-		
HCM Lane LOS	-	B	-	-		
HCM 95th %tile Q(veh)	-	0.8	-	-		

Lanes, Volumes, Timings
2: US 24 & New Meridian Rd

2042 Background + Site
PM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑↑	↑↑	↑	↑	↑↑↑	↑
Traffic Volume (vph)	85	425	300	100	425	250	525	1950	100	175	1200	60
Future Volume (vph)	85	425	300	100	425	250	525	1950	100	175	1200	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195		195	195		195	555		490	555		490
Storage Lanes	1		0	1		0	2		1	1		1
Taper Length (ft)	180			180			300			300		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	1.00	0.91	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.296			0.333			0.950			0.094		
Satd. Flow (perm)	551	3539	1583	620	3539	1583	3433	5085	1583	175	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			323			269			105			136
Link Speed (mph)		40			40			55			55	
Link Distance (ft)		1093			1072			1370			1144	
Travel Time (s)		18.6			18.3			17.0			14.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	91	457	323	108	457	269	553	2053	105	184	1263	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	457	323	108	457	269	553	2053	105	184	1263	63
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Free	pm+pt	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		Free	2		2			4	8		8

Lanes, Volumes, Timings
2: US 24 & New Meridian Rd

2042 Background + Site
PM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	1	6		5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5		9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	13.0	30.0		10.0	27.0	27.0	31.0	59.0	59.0	21.0	49.0	49.0
Total Split (%)	10.8%	25.0%		8.3%	22.5%	22.5%	25.8%	49.2%	49.2%	17.5%	40.8%	40.8%
Maximum Green (s)	8.5	25.5		5.5	22.5	22.5	26.5	54.5	54.5	16.5	44.5	44.5
Yellow Time (s)	3.5	3.5		3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max		None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	33.6	25.6	114.7	29.8	25.5	25.5	22.9	52.9	52.9	55.3	42.7	42.7
Actuated g/C Ratio	0.29	0.22	1.00	0.26	0.22	0.22	0.20	0.46	0.46	0.48	0.37	0.37
v/c Ratio	0.37	0.58	0.20	0.50	0.58	0.48	0.81	0.88	0.13	0.71	0.67	0.09
Control Delay	34.9	44.0	0.3	41.4	45.5	8.1	54.0	33.4	4.0	41.0	32.4	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	44.0	0.3	41.4	45.5	8.1	54.0	33.4	4.0	41.0	32.4	0.3
LOS	C	D	A	D	D	A	D	C	A	D	C	A
Approach Delay		26.9			32.9			36.5			32.1	
Approach LOS		C			C			D			C	
Queue Length 50th (ft)	50	163	0	60	168	0	205	491	0	79	284	0
Queue Length 95th (ft)	95	226	0	111	234	74	270	594	31	157	349	0
Internal Link Dist (ft)		1013			992			1290			1064	
Turn Bay Length (ft)	195		195	195		195	555		490	555		490
Base Capacity (vph)	254	789	1583	216	785	560	795	2423	809	320	1978	699
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.58	0.20	0.50	0.58	0.48	0.70	0.85	0.13	0.57	0.64	0.09

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 114.7

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 33.5

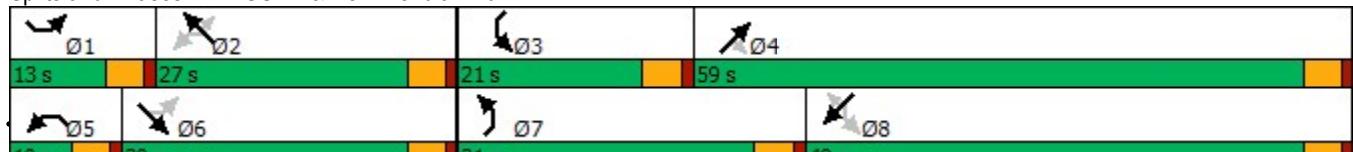
Intersection LOS: C

Intersection Capacity Utilization 79.7%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: US 24 & New Meridian Rd



Lanes, Volumes, Timings

Lanes, Volumes, Timings
4: US 24 & Curtis Rd/Stapleton Dr

2042 Background + Site

PM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (vph)	329	318	400	130	557	190	650	886	174	161	601	349
Future Volume (vph)	329	318	400	130	557	190	650	886	174	161	601	349
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		325	235		235	890		1000	790		790
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	240			200			190			190		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	3539	1583	3433	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			421			204			183			273
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		687			651			1501			1327	
Travel Time (s)		10.4			9.9			18.6			16.5	
Peak Hour Factor	0.95	0.95	0.95	0.93	0.93	0.93	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	346	335	421	140	599	204	684	933	183	169	633	367
Shared Lane Traffic (%)												
Lane Group Flow (vph)	346	335	421	140	599	204	684	933	183	169	633	367
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm									
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8

Lanes, Volumes, Timings
4: US 24 & Curtis Rd/Stapleton Dr

2042 Background + Site

PM

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	22.0	32.0	32.0	15.0	25.0	25.0	30.0	45.0	45.0	18.0	33.0	33.0
Total Split (%)	20.0%	29.1%	29.1%	13.6%	22.7%	22.7%	27.3%	40.9%	40.9%	16.4%	30.0%	30.0%
Maximum Green (s)	17.5	27.5	27.5	10.5	20.5	20.5	25.5	40.5	40.5	13.5	28.5	28.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag									
Lead-Lag Optimize?	Yes											
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	Max	Max	None	Max	Max	None	None	None	None	None	None
Act Effect Green (s)	15.0	27.7	27.7	9.1	21.8	21.8	23.6	37.7	37.7	10.4	24.5	24.5
Actuated g/C Ratio	0.15	0.27	0.27	0.09	0.21	0.21	0.23	0.37	0.37	0.10	0.24	0.24
v/c Ratio	0.69	0.35	0.57	0.46	0.80	0.41	0.87	0.72	0.26	0.49	0.75	0.63
Control Delay	50.4	33.2	6.8	51.2	49.5	8.2	52.0	32.1	4.5	49.8	42.9	14.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.4	33.2	6.8	51.2	49.5	8.2	52.0	32.1	4.5	49.8	42.9	14.9
LOS	D	C	A	D	D	A	D	C	A	D	D	B
Approach Delay		28.5			40.8			36.8			35.1	
Approach LOS		C			D			D			D	
Queue Length 50th (ft)	117	100	0	47	211	0	231	276	0	57	210	52
Queue Length 95th (ft)	168	146	81	80	#322	62	#333	369	45	91	277	150
Internal Link Dist (ft)			607		571			1421			1247	
Turn Bay Length (ft)	190		325	235		235	890		1000	790		790
Base Capacity (vph)	587	950	733	351	748	495	855	1417	743	452	985	637
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.35	0.57	0.40	0.80	0.41	0.80	0.66	0.25	0.37	0.64	0.58

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 103.1

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 35.4

Intersection LOS: D

Intersection Capacity Utilization 74.9%

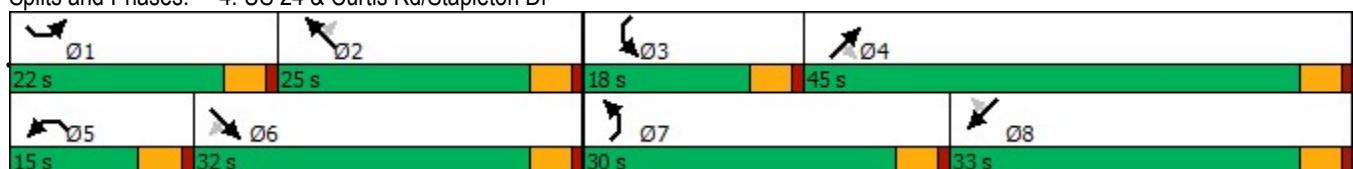
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: US 24 & Curtis Rd/Stapleton Dr



Lanes, Volumes, Timings
54: US 24 & Judge Orr Rd

2042 Background + Site
PM

	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑↑	↑	↑↑	↑↑↑	↑
Traffic Volume (vph)	200	202	400	440	252	175	490	1234	444	150	794	175
Future Volume (vph)	200	202	400	440	252	175	490	1234	444	150	794	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		325	215		215	890		1000	790		790
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	240			200			190			190		
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.86	0.86	0.97	0.91	1.00
Frt			0.850			0.850		0.992	0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	4767	1362	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	4767	1362	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			274			188		10	392			193
Link Speed (mph)		45			45			55			55	
Link Distance (ft)		1050			925			1430			1303	
Travel Time (s)		15.9			14.0			17.7			16.2	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	215	217	430	473	271	188	516	1299	467	158	836	184
Shared Lane Traffic (%)										16%		
Lane Group Flow (vph)	215	217	430	473	271	188	516	1374	392	158	836	184
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm									
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8

Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	15.0	17.0	17.0	21.0	23.0	23.0	24.0	53.0	53.0	19.0	48.0	48.0
Total Split (%)	13.6%	15.5%	15.5%	19.1%	20.9%	20.9%	21.8%	48.2%	48.2%	17.3%	43.6%	43.6%
Maximum Green (s)	10.5	12.5	12.5	16.5	18.5	18.5	19.5	48.5	48.5	14.5	43.5	43.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag									
Lead-Lag Optimize?	Yes											
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Min	Min	Min	Min	Max	Max	Max	Max	Max	Max
Act Effect Green (s)	10.2	12.5	12.5	16.5	18.8	18.8	19.5	48.5	48.5	14.5	43.5	43.5
Actuated g/C Ratio	0.09	0.11	0.11	0.15	0.17	0.17	0.18	0.44	0.44	0.13	0.40	0.40
v/c Ratio	0.68	0.54	1.02	0.92	0.45	0.44	0.85	0.65	0.48	0.35	0.42	0.25
Control Delay	59.8	51.5	67.2	70.9	43.7	9.4	58.1	25.8	4.0	45.9	24.8	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.8	51.5	67.2	70.9	43.7	9.4	58.1	25.8	4.0	45.9	24.8	3.6
LOS	E	D	E	E	D	A	E	C	A	D	C	A
Approach Delay		61.4			50.6			29.3			24.4	
Approach LOS		E			D			C			C	
Queue Length 50th (ft)	76	77	~128	172	91	0	184	286	0	53	153	0
Queue Length 95th (ft)	117	117	#336	#267	134	61	#268	341	62	85	190	39
Internal Link Dist (ft)		970			845			1350			1223	
Turn Bay Length (ft)	190		325	215		215	890		1000	790		790
Base Capacity (vph)	327	402	422	514	606	426	608	2107	819	452	2010	742
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.54	1.02	0.92	0.45	0.44	0.85	0.65	0.48	0.35	0.42	0.25

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Natural Cycle: 80

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 37.2

Intersection LOS: D

Intersection Capacity Utilization 64.6%

ICU Level of Service C

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 54: US 24 & Judge Orr Rd





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑ ↘	↑ ↘	↗ ↙	↑	↓	↖ ↗
Traffic Volume (vph)	410	120	66	680	448	63
Future Volume (vph)	410	120	66	680	448	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	0	245			195
Storage Lanes	1	1	1			1
Taper Length (ft)	25		180			
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850			0.850	
Flt Protected	0.950		0.950			
Satd. Flow (prot)	1770	1583	1770	1863	1863	1583
Flt Permitted	0.950		0.412			
Satd. Flow (perm)	1770	1583	767	1863	1863	1583
Right Turn on Red		Yes			Yes	
Satd. Flow (RTOR)		129			68	
Link Speed (mph)	30			45	45	
Link Distance (ft)	338			593	690	
Travel Time (s)	7.7			9.0	10.5	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.92	0.92
Adj. Flow (vph)	441	129	71	731	487	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	441	129	71	731	487	68
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Number of Detectors	1	1	1	2	2	1
Detector Template	Left	Right	Left	Thru	Thru	Right
Leading Detector (ft)	20	20	20	100	100	20
Trailing Detector (ft)	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0
Detector 1 Size(ft)	20	20	20	6	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)				94	94	
Detector 2 Size(ft)				6	6	
Detector 2 Type			Cl+Ex	Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)				0.0	0.0	
Turn Type	Prot	Perm	Perm	NA	NA	Perm
Protected Phases	4			2	6	
Permitted Phases		4	2		6	



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Detector Phase	4	4	2	2	6	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	22.5
Total Split (s)	22.0	22.0	38.0	38.0	38.0	38.0
Total Split (%)	36.7%	36.7%	63.3%	63.3%	63.3%	63.3%
Maximum Green (s)	17.5	17.5	33.5	33.5	33.5	33.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Min	Min	Max	Max	Max	Max
Act Effect Green (s)	16.8	16.8	33.5	33.5	33.5	33.5
Actuated g/C Ratio	0.28	0.28	0.56	0.56	0.56	0.56
v/c Ratio	0.88	0.24	0.16	0.69	0.46	0.07
Control Delay	42.3	5.0	7.7	13.9	9.6	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.3	5.0	7.7	13.9	9.6	2.2
LOS	D	A	A	B	A	A
Approach Delay	33.9			13.3	8.7	
Approach LOS	C			B	A	
Queue Length 50th (ft)	149	0	11	171	94	0
Queue Length 95th (ft)	#296	32	29	287	157	13
Internal Link Dist (ft)	258			513	610	
Turn Bay Length (ft)			245			195
Base Capacity (vph)	522	558	433	1052	1052	923
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.23	0.16	0.69	0.46	0.07

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 59.3

Natural Cycle: 55

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 18.1

Intersection LOS: B

Intersection Capacity Utilization 66.0%

ICU Level of Service C

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 61: Curtis Rd & Richland Dr



Intersection									
Approach	EB		WB		NB		SB		
Entry Lanes	2		2		2		2		
Conflicting Circle Lanes	2		2		2		2		
Adj Approach Flow, veh/h	414		266		1079		526		
Demand Flow Rate, veh/h	423		272		1100		537		
Vehicles Circulating, veh/h	542		1071		382		490		
Vehicles Exiting, veh/h	485		411		583		853		
Ped Vol Crossing Leg, #/h	0		0		0		0		
Ped Cap Adj	1.000		1.000		1.000		1.000		
Approach Delay, s/veh	6.9		10.4		11.1		7.3		
Approach LOS	A		B		B		A		
Lane	Left	Right	Left	Right	Left	Right	Left	Right	
Designated Moves	LT	TR	LT	TR	LT	TR	LT	TR	
Assumed Moves	LT	TR	LT	TR	LT	TR	LT	TR	
RT Channelized									
Lane Util	0.470	0.530	0.471	0.529	0.470	0.530	0.469	0.531	
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.667	2.535	2.667	2.535	
Critical Headway, s	4.645	4.328	4.645	4.328	4.645	4.328	4.645	4.328	
Entry Flow, veh/h	199	224	128	144	517	583	252	285	
Cap Entry Lane, veh/h	820	896	504	571	950	1026	860	936	
Entry HV Adj Factor	0.978	0.980	0.978	0.980	0.981	0.981	0.981	0.979	
Flow Entry, veh/h	195	220	125	141	507	572	247	279	
Cap Entry, veh/h	802	878	493	560	932	1007	844	916	
V/C Ratio	0.243	0.250	0.254	0.252	0.544	0.568	0.293	0.304	
Control Delay, s/veh	7.1	6.7	11.0	9.8	11.1	11.0	7.5	7.2	
LOS	A	A	B	A	B	B	A	A	
95th %tile Queue, veh	1	1	1	1	3	4	1	1	

Intersection			
Approach	EB	NB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	570	802	555
Demand Flow Rate, veh/h	582	818	566
Vehicles Circulating, veh/h	497	450	72
Vehicles Exiting, veh/h	141	629	1196
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	17.6	39.4	7.3
Approach LOS	C	E	A
Lane	Left	Left	Left
Designated Moves	LR	LT	TR
Assumed Moves	LR	LT	TR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	582	818	566
Cap Entry Lane, veh/h	831	872	1282
Entry HV Adj Factor	0.979	0.981	0.981
Flow Entry, veh/h	570	802	555
Cap Entry, veh/h	814	855	1258
V/C Ratio	0.700	0.938	0.441
Control Delay, s/veh	17.6	39.4	7.3
LOS	C	E	A
95th %tile Queue, veh	6	14	2

Intersection					
Approach	EB	NB	SB		
Entry Lanes	1	2	2		
Conflicting Circle Lanes	2	2	2		
Adj Approach Flow, veh/h	576	811	550		
Demand Flow Rate, veh/h	588	827	561		
Vehicles Circulating, veh/h	492	455	73		
Vehicles Exiting, veh/h	142	625	1209		
Ped Vol Crossing Leg, #/h	0	0	0		
Ped Cap Adj	1.000	1.000	1.000		
Approach Delay, s/veh	13.5	9.3	4.7		
Approach LOS	B	A	A		
Lane	Left	Left	Right	Left	Right
Designated Moves	LR	LT	TR	LT	TR
Assumed Moves	LR	LT	TR	LT	TR
RT Channelized					
Lane Util	1.000	0.470	0.530	0.471	0.529
Follow-Up Headway, s	2.535	2.667	2.535	2.667	2.535
Critical Headway, s	4.328	4.645	4.328	4.645	4.328
Entry Flow, veh/h	588	389	438	264	297
Cap Entry Lane, veh/h	935	888	965	1262	1335
Entry HV Adj Factor	0.980	0.980	0.982	0.980	0.982
Flow Entry, veh/h	576	381	430	259	292
Cap Entry, veh/h	916	871	947	1237	1311
V/C Ratio	0.629	0.438	0.454	0.209	0.223
Control Delay, s/veh	13.5	9.5	9.2	4.7	4.6
LOS	B	A	A	A	A
95th %tile Queue, veh	5	2	2	1	1

Intersection									
Intersection Delay, s/veh		12.5							
Intersection LOS		B							
Approach		EB		WB		NB		SB	
Entry Lanes		2		2		2		2	
Conflicting Circle Lanes		2		2		2		2	
Adj Approach Flow, veh/h		597		245		1007		833	
Demand Flow Rate, veh/h		608		250		1027		849	
Vehicles Circulating, veh/h		553		1119		653		551	
Vehicles Exiting, veh/h		847		561		508		818	
Ped Vol Crossing Leg, #/h		0		0		0		0	
Ped Cap Adj		1.000		1.000		1.000		1.000	
Approach Delay, s/veh		8.5		10.6		16.7		11.0	
Approach LOS		A		B		C		B	
Lane		Left		Right		Left		Right	
Designated Moves		LT		TR		LT		TR	
Assumed Moves		LT		TR		LT		TR	
RT Channelized									
Lane Util		0.470		0.530		0.472		0.528	
Follow-Up Headway, s		2.667		2.535		2.667		2.535	
Critical Headway, s		4.645		4.328		4.645		4.328	
Entry Flow, veh/h		286		322		118		132	
Cap Entry Lane, veh/h		812		887		482		549	
Entry HV Adj Factor		0.981		0.982		0.976		0.984	
Flow Entry, veh/h		280		316		115		130	
Cap Entry, veh/h		796		872		471		540	
V/C Ratio		0.352		0.363		0.245		0.241	
Control Delay, s/veh		8.7		8.3		11.3		10.0	
LOS		A		A		B		A	
95th %tile Queue, veh		2		2		1		1	

Intersection				
Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	750	268	1016	813
Demand Flow Rate, veh/h	765	274	1037	829
Vehicles Circulating, veh/h	554	1307	804	538
Vehicles Exiting, veh/h	813	534	515	1043
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	49.7	39.1	342.9	65.9
Approach LOS	E	E	F	F
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976	4.976
Entry Flow, veh/h	765	274	1037	829
Cap Entry Lane, veh/h	784	364	608	797
Entry HV Adj Factor	0.980	0.977	0.980	0.980
Flow Entry, veh/h	750	268	1016	813
Cap Entry, veh/h	769	356	595	781
V/C Ratio	0.975	0.753	1.706	1.040
Control Delay, s/veh	49.7	39.1	342.9	65.9
LOS	E	E	F	F
95th %tile Queue, veh	16	6	59	20

Intersection						
Int Delay, s/veh	3.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	192	555	689	82	0	173
Future Vol, veh/h	192	555	689	82	0	173
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Stop
Storage Length	385	-	-	235	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	206	597	741	88	0	199
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	829	0	-	0	-	741
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	803	-	-	-	0	416
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	803	-	-	-	-	416
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB	SB			
HCM Control Delay, s	2.8	0	21.3			
HCM LOS			C			
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	803	-	-	-	416	
HCM Lane V/C Ratio	0.257	-	-	-	0.478	
HCM Control Delay (s)	11	-	-	-	21.3	
HCM Lane LOS	B	-	-	-	C	
HCM 95th %tile Q(veh)	1	-	-	-	2.5	

Intersection

Int Delay, s/veh 799.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	5	374	5	18	378	480	5	125	28	314	150	25
Future Vol, veh/h	5	374	5	18	378	480	5	125	28	314	150	25
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									
Storage Length	236	-	235	235	-	235	235	-	-	385	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	93	93	93	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	407	5	19	406	516	5	136	30	341	163	27

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	922	0	0	412	0	0	1214	1377	407	947	866	406
Stage 1	-	-	-	-	-	-	417	417	-	444	444	-
Stage 2	-	-	-	-	-	-	797	960	-	503	422	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	741	-	-	1147	-	-	158	145	644	~241	291	645
Stage 1	-	-	-	-	-	-	613	591	-	593	575	-
Stage 2	-	-	-	-	-	-	380	335	-	551	588	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	741	-	-	1147	-	-	81	142	644	~31	284	645
Mov Cap-2 Maneuver	-	-	-	-	-	-	81	142	-	~31	284	-
Stage 1	-	-	-	-	-	-	609	587	-	589	565	-
Stage 2	-	-	-	-	-	-	255	329	-	401	584	-

Approach	EB	WB			NB			SB				
HCM Control Delay, s	0.1	0.2			123.7			\$ 3060.8				
HCM LOS					F			F				
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	SBLn3	
Capacity (veh/h)	81	166	741	-	-	1147	-	-	31	284	645	
HCM Lane V/C Ratio	0.067	1.002	0.007	-	-	0.017	-	-	11.01	0.574	0.042	
HCM Control Delay (s)	52.6	126	9.9	-	-	8.2	-	\$ 4749.8	33.5	10.8		
HCM Lane LOS	F	F	A	-	-	A	-	-	F	D	B	
HCM 95th %tile Q(veh)	0.2	7.9	0	-	-	0.1	-	-	41.8	3.3	0.1	

Notes

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

Intersection

Int Delay, s/veh 209.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑
Traffic Vol, veh/h	410	120	66	680	448	63
Future Vol, veh/h	410	120	66	680	448	63
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	0	245	-	-	195
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	441	129	71	731	487	68

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1360	487	555	0	-	0
Stage 1	487	-	-	-	-	-
Stage 2	873	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 164	581	1015	-	-	-
Stage 1	618	-	-	-	-	-
Stage 2	~ 409	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 153	581	1015	-	-	-
Mov Cap-2 Maneuver	~ 153	-	-	-	-	-
Stage 1	575	-	-	-	-	-
Stage 2	~ 409	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s\$	706.8	0.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBln1	EBln2	SBT	SBR
Capacity (veh/h)	1015	-	153	581	-	-
HCM Lane V/C Ratio	0.07	-	2.881	0.222	-	-
HCM Control Delay (s)	8.8	-	\$ 909.8	13	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	40.1	0.8	-	-

Notes

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

Intersection						
Int Delay, s/veh	4.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↑		↑	↑	↑
Traffic Vol, veh/h	0	298	0	746	477	91
Future Vol, veh/h	0	298	0	746	477	91
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	-	-	-	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	343	0	802	513	98
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	-	513	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	561	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	561	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	21	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR		
Capacity (veh/h)	-	561	-	-		
HCM Lane V/C Ratio	-	0.611	-	-		
HCM Control Delay (s)	-	21	-	-		
HCM Lane LOS	-	C	-	-		
HCM 95th %tile Q(veh)	-	4.1	-	-		