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Esteban Rodriguez Subdivision Sketch Plan Master Traffic Impact Study (LSC #S224630) August 15, 2023

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.

Date

Esteban Rodriguez Subdivision Sketch Plan

Master Traffic Impact Study

Prepared for:

Bill Guman, PLA, ASLA, APA
William Guman & Associates, Ltd.
731 North Weber Street, Suite 10
Colorado Springs, CO 80903

AUGUST 15, 2023

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

LSC #S224640



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August 15, 2023

Bill Guman, PLA, ASLA, APA
William Guman & Associates, Ltd.
731 North Weber Street, Suite 10
Colorado Springs, CO 80903

RE: Esteban Rodriguez Subdivision
Sketch Plan
El Paso County, CO
Master Traffic Impact Study
LSC #S224640

Dear Mr. Guman,

LSC Transportation Consultants, Inc. has prepared this Master Traffic Impact Study for the proposed 493-acre Esteban Rodriguez Ranch Subdivision Sketch Plan in El Paso County, Colorado. The site is located southeast of the intersection of Judge Orr Road and Elbert Road. Approximately 144 single-family dwelling units and 19 acres of commercial uses are planned for the site. Access to the site is proposed to Judge Orr Road.

This report has been prepared for 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, Weekday peak-hour turning-movement traffic counts at the following study-area intersections:

- US Highway 24/Stapleton Road
- US Highway 24/Judge Orr Road
- US Highway 24/Elbert Road
- Judge Orr Road/Curtis Road/Stapleton Road
- Judge Orr Road/Elbert Road

- Estimated average daily traffic (ADT) volumes on the following study area roadway segments: US Highway 24, Judge Orr Road, Stapleton Road, Curtis Road, Elbert Road;
- Projections of 20-year background traffic volumes on the following study area roadways: US Highway 24, Judge Orr Road, Stapleton Road, Curtis Road, Elbert Road;
- The proposed sketch plan land uses and access plan;
- Estimates of average weekday and weekday peak-hour trip generation for the proposed development 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:
 - US Highway 24/Stapleton Road
 - US Highway 24/Judge Orr Road
 - US Highway 24/Elbert Road
 - Judge Orr Road/Curtis Road/Stapleton Road
 - Judge Orr Road/Elbert Road
 - Judge Orr/proposed east access (full-movement)
- Projected total daily and peak-hour traffic volumes at the study-area intersections;
- Intersection level of service (LOS) analysis at the study-area intersections;
- Evaluation of short- and 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
- Findings and recommendations for submittal to El Paso County.

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

The following previously-completed traffic reports are located adjacent to the proposed Esteban Rodriguez Ranch subdivision and were used to provide reference and background information:

- Davis Sketch Plan
- Saddlehorn Ranch - Several
- Meadowlake Industrial Park

LAND USE AND ACCESS

Proposed Land Uses

Figure 1 shows the site location relative to the adjacent and nearby roadways. The proposed 493-acre Esteban Rodriguez Ranch Subdivision Sketch Plan in El Paso County, Colorado is located southeast of the intersection of Judge Orr Road and Elbert Road. Approximately 144 single-family dwelling units and approximately 19 acres of commercial uses are the land uses shown on the proposed sketch plan. For purposes of estimating trip generation, this report assumes 10,000 square feet of "strip retail" building square footage and 190,000 square feet of warehousing uses

for the parcels with the “commercial” designation. The strip retail use is assumed to be located on the southeast corner of the Judge Orr/Elbert Road intersection.

Access and Circulation

The Sketch Plan shows the following proposed public roadway intersection spacings:

- Full-movement access as a new southern leg to Judge Orr/Elbert (currently a T-intersection)
- Full-movement access on Judge Orr Road 2,230 feet east of Elbert Road

Figure 2 contains the proposed Sketch Plan showing the proposed general sketch plan land uses, on-site roadway network, and proposed access points to Judge Orr Road.

SIGHT DISTANCE

Intersection sight distance at all proposed public road/site access intersection locations on Judge Orr Road, and Elbert Road shown in the site plan must meet intersection sight distance requirements in *ECM* Table 2-21. Intersections not meeting sight distance may need to be shifted or otherwise mitigated for sight distance. Lines of sight for all public road intersections/access points will need to be kept clear of any sight distance obstructions, including landscaping, signage, etc.

ROAD AND TRAFFIC CONDITIONS AND MTCP CLASSIFICATION

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

US Highway 24 (US Hwy 24) is a state highway extending locally from the City of Colorado Springs to Peyton in a northeasterly direction and then continuing east. US Hwy 24 is planned to be widened to four lanes through the Falcon area and is classified as an E-X – Expressway by the Colorado Department of Transportation (CDOT) and a 4-lane Principal Arterial on the *El Paso County Major Transportation Corridors Plan (MTCP)*. The posted speed limit on US Hwy 24 at Stapleton Road is 65 miles per hour (mph). Auxiliary left-turn lanes currently exist on the northbound and southbound approaches at the signalized intersections of Stapleton/US Hwy 24 and US Hwy 24/Judge Orr.

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 adjacent to the site (and west of Curtis Road). Posted speed limits within the study area range from 45 to 55 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*. In the vicinity of Judge Orr Road, 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. However, upgrades are planned as part of the Saddlehorn Development.

Stapleton Road is shown as an Urban four-lane Principal Arterial on the El Paso County *Major Transportation Corridors Plan (MTCP)* and El Paso County *Corridor Preservation Plan (CPP)*. Stapleton Road extends east from Towner Drive to US Hwy 24. Stapleton continues southeast then south as Curtis Road. It is planned to be ultimately extended west to connect with the Briargate Parkway extension. Stapleton Road currently is a half-section of a four-lane Principal Arterial (one through lane in each direction) between Meridian Road and US Hwy 24.

Elbert Road is a two-lane roadway that extends north from Judge Orr Road in El Paso County to State Highway 86 in Elbert Road. Shown on the *El Paso County 2040 Major Transportation Corridors Plan* as a four-lane Minor Arterial, the posted speed on Elbert Road is 55 mph. Elbert Road is paved without shoulders in the vicinity of the site (paved, unimproved roadway).

Existing Traffic Volumes

Vehicular turning-movement counts were conducted for the following dates and times at the following intersections. Raw count data is attached.

- Judge Orr Road/Elbert Road
 - Wednesday, January 11, 2023 from 6:30 – 8:30 a.m.
 - Wednesday, January 11, 2023 from 4:00 – 6:00 p.m.
- Judge Orr Road/Curtis Road
 - Thursday, April 21, 2022 from 6:30 – 8:30 a.m.
 - Thursday, April 21, 2022 from 4:00 – 6:00 p.m.
- US Hwy 24/Elbert Road
 - Tuesday, January 17, 2023 from 6:30 – 8:30 a.m.
 - Tuesday, January 17, 2023 from 4:00 – 6:00 p.m.
- US Hwy 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 Hwy 24/Stapleton Road

- Tuesday, January 10, 2023 from 6:30 – 8:30 a.m.
- Tuesday, January 10, 2023 from 4:00 – 6:00 p.m.

PEDESTRIAN AND BICYCLE FACILITIES

Judge Orr Road, Stapleton Road, and Elbert Road do not currently have sidewalks. Stapleton Road between Judge Orr and US Highway 24 has paved outside shoulders, which accommodate bicycles. Proposed subdivision roads are likely to be primarily Rural Local and potentially Minor Collector roadways and, per *ECM* criteria, would not require sidewalks.

TRIP GENERATION

Estimates of the vehicle trips projected to be generated by the proposed Esteban Rodriguez Subdivision residential development 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 ITE Land Use category “210 – Single-Family Detached Housing” have been used to develop trip-generation estimates for the proposed 144-dwelling units. ITE Land Use categories “821 – Strip Retail Plaza without a Supermarket (40-150 KSF)” and “150 – Warehousing” were used to estimate potential trip generation for the approximately 19 acres of commercial on the property (on two separate parcels). LSC has assumed that a 15-percent floor-area-ratio for the assumed 10,000 square feet of “strip retail” space, with the remainder of the 19 acres associated with warehousing land uses.

Table 1 below presents a summary of the estimated site trip generation. A detailed trip-generation estimate for the site, including ITE rates land uses, is presented in Table 4 (attached). The proposed sketch plan is attached for reference.

The sketch plan land uses are projected to generate about 2,425 total 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 73 entering vehicles and 94 exiting vehicles are estimated to be generated. Approximately 127 entering and 114 exiting vehicles are estimated to be generated by the site during the afternoon peak hour.

Table 1: Estimated Site Vehicle-Trip Generation

| Analysis Period | Total Driveway Trips | | |
|---------------------|----------------------|------|-------|
| | In | Out | Total |
| Morning Peak Hour | 73 | 94 | 168 |
| Afternoon Peak Hour | 127 | 114 | 241 |
| Daily/24-hour | 1212 | 1212 | 2425 |
| Analysis Period | Primary Trips | | |
| | In | Out | Total |
| Morning Peak Hour | 67 | 90 | 157 |
| Afternoon Peak Hour | 113 | 98 | 211 |
| Daily/24-hour | 1017 | 1017 | 2033 |
| Analysis Period | Pass-By Trips | | |
| | In | Out | Total |
| Morning Peak Hour | 4 | 2 | 6 |
| Afternoon Peak Hour | 9 | 9 | 18 |
| Daily/24-hour | 115 | 115 | 230 |
| Analysis Period | Diverted Trips | | |
| | In | Out | Total |
| Morning Peak Hour | 3 | 2 | 4 |
| Afternoon Peak Hour | 6 | 6 | 12 |
| Daily/24-hour | 81 | 81 | 162 |

Pass-By and Diverted Trips

The ITE total trip-generation estimate for assumed 10,000 square feet of “strip retail” use on about 1.5 acres southeast of Judge Orr and Elbert Road site has also been aggregated by trip type to account for pass-by and diverted trips.

A pass-by trip is one made by a motorist who would already be on an adjacent street 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 destination in the original direction. Table 4 (attached) shows the percent of the trips generated that were assumed to be pass-by trips.

Analysis also accounts for diverted trips from nearby US Hwy 24, Curtis Road, and Falcon Highway. Recommended ITE-average percent diverted trips for retail-related land uses were used for this study, as summarized in Table 4. Resulting primary and non-primary trips are shown in the table.

Average pass-by trip percentages from the *Trip Generation Handbook – An ITE Proposed Recommended Practice, 3rd Edition, 2014* by ITE have been assumed.

TRIP DISTRIBUTION AND ASSIGNMENT

Trip Directional Distribution

The directional-distribution estimate of site-generated vehicle trips to the study-area roads and intersections is a necessary component in determining the site's traffic impacts. The attached trip distribution exhibits and Vistro trip distribution reports show the percentages of the site-generated vehicle trips projected to be oriented to and from the site's major approaches. Estimates have been based on the following factors: the proposed new 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. The attached reports show estimated distribution splits.

Site-Generated Traffic

Site-generated traffic volumes have been estimated at the following intersections:

- US Hwy 24/Stapleton Road
- US Hwy 24/Judge Orr Road
- US Hwy 24/Elbert Road
- Judge Orr Road/Curtis Road/Stapleton Road
- Judge Orr Road/Elbert Road
- Judge Orr/proposed east access (full-movement)

Site-generated volumes have been calculated by applying the directional-distribution percentages estimated by LSC (from the attached distribution exhibit and Vistro trip distribution tables) to the trip-generation estimates (from Table 4). The attached Vistro volume printouts include the projected short-term site-generated traffic volumes ("net new site trips") for the weekday morning and afternoon peak hours.

Short-Term Total Traffic Volumes

The attached Vistro traffic volume reports show the sum of the short-term total traffic volumes and short-term site-generated peak-hour traffic volumes. 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 the attached Synchro reports.

Note: short-term background traffic volumes assume buildout of the entire Saddlehorn residential development to the south.

2043 Background Traffic Volumes

Long-term background traffic volumes are estimates by LSC, based on projected 2043 volumes adjacent to the site shown in Map 9 of the *MTCP*. Additionally, traffic generated by planned adjacent and nearby developments, such as Saddlehorn Ranch, Meadowlake Ranch, Meadowlake

Industrial Park, Davis Ranch, and Falcon Crossing, has been included in 2043 background traffic volumes. Please refer to the attached Vistro traffic volume reports for estimated long-term background volumes and assumed laneage at the study-area intersections.

Projected long-term background traffic volume projections in this vicinity have been based on LSC's recent Saddlehorn and Meadowlake Industrial Park traffic studies. Site-generated traffic from other nearby planned developments has also been considered.

Note: long-term background traffic volumes assume buildout of the entire Saddlehorn residential development to the south and estimates of future residential development to the southeast.

2043 Total Traffic Volumes

The attached Vistro traffic volume reports show the sum of 2043 background traffic volumes plus long-term site-generated traffic volumes.

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 2 shows the level of service delay ranges for signalized and unsignalized intersections.

Table 2: 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.

The attached **LOS Tables 1-9** show the LOS values results for the weekday morning and afternoon peak hours for the proposed site-access intersections and off-site intersections in the study area. All LOS calculations for long-term scenarios were based upon the recommended lane geometries and traffic controls shown in the attached Vistro Lane Configuration and Traffic Control reports and in the Synchro LOS reports.

Judge Orr Road/Proposed East Site Access

All individual turning movements and approaches are projected to operate at LOS B or better through the long term with the addition of site-generated traffic.

Judge Orr Road/Curtis Road

Short Term

All individual turning movements are projected to operate at LOS C or better during the short term with the addition of site-generated traffic. Short-term analysis assumes two-way stop-sign control (TWSC) at Judge Orr/Curtis.

Long Term

Assuming the intersection of Judge Orr/Curtis is converted from TWSC to a two-lane roundabout in the future, 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, eastbound and westbound approaches on Judge Orr Road and the southbound approach on Curtis Road are assumed to be two through lanes in each direction (per the 2040 *MTCP*).

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 are projected to 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, the northeast-left, northwest-

through, and southwest-left turn lanes are projected to operate at LOS E during at least one peak hour.

All other 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 the attached Synchro sheets for anticipated/assumed future lane geometry and LOS at this intersection.

US Highway 24/Judge Orr Road

Short Term

The intersection of US Hwy 24/Judge Orr is currently signalized. The *US 24 Access Control Plan* shows this intersection realigned to one of two alternate alignments that would provide an intersection angle closer to 90 degrees. All movements at this intersection except for the westbound-and eastbound single-lane turning movements are currently operating at LOS D or better during both peak hours.

Short-term analysis assumes the proposed realignment has not yet been constructed, nor does it assume that the future southbound right-turn deceleration, a southbound right-turn acceleration, and an eastbound right-turn lane would be constructed in the short term. These turn lanes are shown at the intersection of US Hwy 24/Judge Orr in CDOT's *US 24 Planning & Environmental Linkages (PEL) Study*.

Long-Term

By 2043, it was assumed that this intersection would be realigned and both Judge Orr Road and US Hwy 24 would be widened to provide two through lanes in each direction. Based on the projected 2043 background and total traffic volumes and lane geometry shown in the Synchro reports, this intersection is projected to operate at an overall LOS C during the peak hours. Some minor movements are projected to operate at LOS E during the peak hours simply because of the likelihood of arrival at the traffic signal at the beginning of the red phase at an intersection with many phases and a long cycle length. These movements would not be considered "failing" since the volume-to-capacity ratios would be less than 1.0. The justification is that to progress through traffic along an arterial corridor, the traffic signal offsets and left-turn and side street phase times have been adjusted to favor the through traffic band, which can often result in higher delay for the left-turn movements even though there is sufficient capacity for them.

US Highway 24/Elbert Road

Short Term

All individual turning movements are projected to operate at LOS D or better during the short-term with the addition of site-generated traffic. Short-term analysis assumes two-way stop-sign control (TWSC) at US Hwy 24/Elbert Road.

Judge Orr Road/Elbert Road

All single-lane approaches are projected to operate at LOS C or better through the long term with the addition of site-generated traffic.

ROADWAY IMPROVEMENTS

Auxiliary Turn-Lane Thresholds

Section 2.3.7.D of the *ECM* lists ingress/egress volume thresholds in which exclusive right- or left-turn lanes would be required, by classification:

- Principal Arterial
- Left-turn deceleration lane – 10 vehicles per hour (vph) or greater
- Right-turn deceleration lane – 25 vph or greater
- Right-turn acceleration lane – 50 vph or greater (if speed limit greater than 40 mph)
- Minor Arterial
- Left-turn deceleration lane – 25 vph or greater
- Right-turn deceleration lane – 50 vph or greater
- Right-turn acceleration lane – not generally required

Major roadways in the study area have the following 2040 *ECM* roadway classifications:

- Stapleton Road – Principal Arterial
- Judge Orr Road – Minor Arterial
- Elbert Road – Minor Arterial

All proposed auxiliary turn lanes would be required to meet design criteria outlined in Section 2.3.7.E of the *ECM*.

This assessment and findings are based on the preliminary estimates of trip generation and traffic volumes in this report. Additional turn lanes may be needed if trip generation is higher than projected herein. The evaluation of auxiliary turn lane needs should be revisited with the Preliminary Plan(s).

Judge Orr Road/Elbert Road

Based on projected left-turn and right-turn peak-hour turning volumes, the following auxiliary turn lane would be required at the proposed site access at Judge Orr Road/Elbert Road:

- Eastbound-right-turn deceleration lane

The following auxiliary turn lanes would **not** be required at the proposed northwest site access on Stapleton Road:

- Westbound-left-turn deceleration lane
- Northbound-to-eastbound-right-turn acceleration lane

Judge Orr Road/Proposed East Site Access

Based on projected northbound-left and southbound-right peak-hour turning volumes, no auxiliary turn lanes would be required at the proposed east site access on Judge Orr Road.

US Highway 24/Judge Orr Road

Auxiliary turn lanes are planned to be added at this intersection as part of El Paso County intersection improvement project C14. This roadway improvement project has been identified as being needed by the year 2040 per Map 13 and Table 4 of El Paso County's 2016 *MTCP*:

- C14 – Judge Orr Road from Eastonville Road to Peyton Highway (\$38,248,000)
- Existing conditions – 2-lane Rural Minor Arterial
- Future conditions – 4-lane Rural Minor Arterial

As such, no modifications would be required by the applicant at the intersection of US Hwy 24/Judge Orr as a result of additional site-generated traffic from this development.

Intersection Configuration and Traffic Control

All proposed site-access points would be two-way, Stop sign-controlled intersections.

ROADWAY CLASSIFICATIONS

Generally, roadways within the sketch plan should be classified as Rural Local or Rural Minor Collector as shown in Figure 3. The entry street segments are projected to carry about 1,500 and 675 vehicles per day (ADT) for the west and east access street connections to Judge Orr, respectively. Most of the streets south of these entry streets are projected to carry ADT volumes below 750 vehicles per day. These recommended classifications should be revisited at the preliminary plan stage when commercial land uses are more defined relative to trip generation. The classifications shown in Figure 3 are preliminary recommendations by LSC based on

estimated daily traffic volumes and other factors such as land uses served, design vehicles, and roadway continuity.

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(s).

Reimbursable Improvements

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*:

- C12 – Stapleton Road from Towner to Judge Orr Road (\$41,076,000)
 - Existing conditions – 2-lane Urban Principal Arterial
 - Future conditions – 4-lane Urban Principal Arterial
- C14 – Judge Orr Road from Eastonville Road to Peyton Highway (\$38,248,000)
 - Existing conditions – 2-lane Rural Minor Arterial
 - Future conditions – 4-lane Rural Minor Arterial

See the attached *MTCP* maps for reference.

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*:

- M7 – Elbert Road from Judge Orr Road to US Hwy 24
 - Bicycle improvements (7.00 miles)
- M8 – Judge Orr Road from Eastonville Road to South Peyton Highway
 - Bicycle improvements (2.98 miles)

Pedestrian and Bicycle Accommodations

There are no existing public schools located within two miles of the site.

The following is a list of known and planned multi-modal and pedestrian accommodations in the general area:

- A park-and-ride facility has been constructed near Meridian Road and US Highway 24.
- The Rock Island Regional Trail runs along the north side of Highway 24 generally between Falcon and Peyton.
- Many of the area County roads have been or will be upgraded to provide paved shoulders for cyclists. Stapleton is shown as a future “bike route.”
- The Highway 24 PEL study also includes multi-modal elements.

DEVIATIONS

Potentially-Required Deviations

None with this Sketch Plan submittal. However, the locations of future commercial access points south of Judge Orr along the entry roads will need to be evaluated against criteria in ECM section 2.4. Also, internal public roads/streets not depicted on the sketch plan but shown on the preliminary plan(s) will need to meet intersection criteria, including spacing criteria shown in ECM Table 2-5 for Rural Minor Collector roadways (or Rural Local roadways, as applicable). Deviation(s) will likely be required for any internal commercial access or internal public street intersection spacing not meeting criteria.

Approved Deviations (for Reference)

Judge Orr Road

As part of the Saddlehorn Ranch development, a deviation (by JR Engineering, dated September 4, 2020) was approved for modification to the standard *ECM* cross section of Judge Orr Road, which has a 2040 classification of Rural Four-Lane, Minor Arterial roadway (*ECM* Section 2.2.4 criteria). Although Judge Orr Road is shown as a four-lane Rural Minor Arterial in the 2040 *MTCP*, the *ECM* does not have a standard cross-section for this type of roadway functional classification. The deviation shows an interim four-lane Rural Minor Arterial cross-section with an additional eastbound 12-foot travel lane on the south side (Saddlehorn side).

Additional ROW would be required for completion of the full 4-lane section, but additional ROW is not available (not controlled by this development) on the north side of Judge Orr. Currently, Saddlehorn Ranch is dedicating an additional 40 feet of ROW to facilitate this in the future.

CDOT PROCESS AND REQUIREMENTS

The following is for information only, as this is a sketch plan application. The following can be revisited at the next stage of the process.

- US Hwy 24/Stapleton is planned to be signalized. The CDOT has indicated for other area projects a requirement to escrow a fair share amount toward this future traffic signal.
- The “formula” for calculating the development responsibility has been based on the average AM & PM site-generated passenger cars directly impacting the 4-hour warrant, the development would be responsible an amount based on the number of site-generated new vehicles / 60 vehicles-to-warrant x ~\$700K/signal cost.
- **LSC Note:** There are a number of developments – in progress and future/planned – in the area which will also add traffic to this intersection and impact the 4-hour warrant. As CDOT collects escrow for other developments, LSC recommends that as the collective impact trips (directly impacting the 4-hour warrant volumes) by area developments begins to exceed the 60-vehicle-per-hour denominator, fair-share recalculation of pro-rata share escrow amounts and credit be provided to developments according to the updated fair-share calculations. Also, once the signal is installed, credit should be provided from the Countywide Fee Program based on a ratio of fee program unit signal cost divided by the \$700K signal cost.

FINDINGS AND CONCLUSIONS

- The site is projected to generate about 2,425 new driveway vehicle-trips on the average weekday.
- During the weekday morning peak hour of adjacent street traffic, 73 vehicles would enter the site while 94 vehicles would exit.
- During the weekday afternoon peak hour of adjacent street traffic, 127 vehicles would enter the site while 114 vehicles would exit.
- Projected levels of service would be LOS C or better at all proposed site access locations. Please refer to the “Level of Service” section above for detailed LOS results and discussion regarding all study-area intersections.
- Please refer to the “Auxiliary Turn-Lane Analysis” section for evaluation of potential turn-lane needs at the study-area intersections.
- All internal site access roadways are proposed to be public streets with LSC-recommended classifications (preliminary) of Rural Minor Collector and Rural Local.
- Deviations are not included with this submittal.

* * * * *

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: Table 4
LOS Tables 1-12
Figures 1-3
Vistro Reports
Traffic Count Reports
Synchro LOS Reports

Tables



Table 3: Detailed Trip Generation Estimate

| ITE | | Value ³ | Units ¹ | Trip Generation Rates ² | | | | Driveway Trips Generated | | | | % Primary | % Pass-By | % Diverted | External Trips Generated | | | | | | |
|------|---|--------------------|--------------------|------------------------------------|------|------|------|--------------------------|-------------|-----------|-----------|------------|------------|------------|--------------------------|--------------|-------------|-----------|-----------|------------|-----------|
| Code | Description | | | Average | A.M. | | P.M. | | Average | A.M. | | | | | P.M. | | Average | A.M. | | P.M. | |
| | | | | Weekday | In | Out | In | Out | Weekday | In | Out | | | | In | Out | Weekday | In | Out | In | Out |
| 210 | Single-Family (Detached) Housing | 144 | DU | 9.80 | 0.19 | 0.53 | 0.61 | 0.36 | 1411 | 27 | 77 | 88 | 52 | 100% | 0% | 0% | 1411 | 27 | 77 | 88 | 52 |
| 150 | Warehouse | 190.000 | KSF | 1.78 | 0.19 | 0.06 | 0.07 | 0.19 | 338 | 36 | 11 | 14 | 35 | 100% | 0% | 0% | 338 | 36 | 11 | 14 | 35 |
| 821 | Strip Retail Plaza w/o Supermarket (40-150 KSF) | 10.000 | KSF | 67.52 | 1.07 | 0.66 | 2.54 | 2.65 | 675 | 11 | 7 | 25 | 26 | 42% | 34% | 24% | 284 | 5 | 3 | 11 | 11 |
| | | | | | | | | Total | 2425 | 73 | 94 | 127 | 114 | | | Total | 2033 | 67 | 90 | 113 | 98 |

¹ DU = dwelling units, KSF = 1,000 square feet

² Source: *Trip Generation, 11th Edition (2021)* by the Institute of Transportation Engineers (ITE)

³ Assumes 15% floor-area ratio for retail land uses and 25% for warehouse land uses

Table 1: LOS Summary – US 24 + Judge Orr Road (Short Term)

| Traffic Control | Signal | | Signal | |
|-----------------|-------------|----|--------------------|----|
| | ST Baseline | | ST Baseline + Site | |
| | AM | PM | AM | PM |
| SW T/R | D | C | D | C |
| SWL | B | C | B | C |
| WB | E | D | E | E |
| NE T/R | B | C | B | D |
| NEL | B | B | C | C |
| EB | D | E | D | E |
| Overall | D | D | D | D |

Table 2: LOS Summary – US 24 + Judge Orr Road (Long Term)

| Traffic Control | Signal | | Signal | |
|-----------------|---------|----|----------------|----|
| | 2043 BG | | 2043 BG + Site | |
| | AM | PM | AM | PM |
| SWR | A | A | A | A |
| SWT | C | C | C | C |
| SWL | B | D | B | E |
| NWR | A | A | A | A |
| NWT | D | D | D | D |
| NWL | D | E | E | E |
| NER | A | A | A | A |
| NET | B | C | B | C |
| NEL | D | E | D | E |
| SER | C | D | C | D |
| SET | D | D | D | D |
| SEL | C | C | C | C |
| Overall | C | C | C | C |

Table 3: LOS Summary – US 24 + Stapleton Road

| Traffic Control | TWSC | | TWSC | | Signal | | Signal | |
|-----------------|-------------|----|--------------------|----|---------|----|----------------|----|
| | ST Baseline | | ST Baseline + Site | | 2043 BG | | 2043 BG + Site | |
| | AM | PM | AM | PM | AM | PM | AM | PM |
| SWR | free | | free | | A | B | B | C |
| SWT | free | | free | | D | D | D | D |
| SWL | A | A | A | A | E | E | E | E |
| NWR | B | B | B | B | A | A | A | A |
| NWT | E | F | F | F | C | D | D | E |
| NWL | F | F | F | F | B | C | C | C |
| NER | free | | free | | A | A | A | A |
| NET | free | | free | | D | C | C | C |
| NEL | A | A | A | A | E | E | E | D |
| SER | B | B | B | B | B | C | C | D |
| SET | F | E | F | F | C | D | D | D |
| SEL | F | F | F | F | B | C | C | D |
| Overall | | | | | C | C | C | D |

Table 4: LOS Summary – US 24 + Elbert Road

| Traffic Control | TWSC | | TWSC | |
|-----------------|-------------|----|--------------------|----|
| | ST Baseline | | ST Baseline + Site | |
| | AM | PM | AM | PM |
| SWR | free | | free | |
| SWT | free | | free | |
| SWL | A | A | A | A |
| NWR | A | A | A | A |
| NWT | C | C | C | D |
| NWL | C | D | C | D |
| NER | free | | free | |
| NET | free | | free | |
| NEL | A | A | A | A |
| SER | A | A | A | A |
| SET | C | C | C | D |
| SEL | C | D | C | D |

Table 5: LOS Summary – Judge Orr Road + Elbert Road (Background Traffic Only)

| Traffic Control | TWSC | | TWSC | |
|-----------------|-------------|----|---------|----|
| | ST Baseline | | 2043 BG | |
| | AM | PM | AM | PM |
| SB | A | A | B | B |
| WB | free | | free | |
| EB | A | A | A | A |

Table 6: LOS Summary – Judge Orr Road + Elbert Road (Background + Site Traffic)

| Traffic Control | TWSC | | TWSC | |
|-----------------|--------------------|----|----------------|----|
| | ST Baseline + Site | | 2043 BG + Site | |
| | AM | PM | AM | PM |
| SB | B | B | B | C |
| WBR | free | | free | |
| WB T/L | A | A | A | A |
| NB | B | B | B | C |
| EBR | free | | free | |
| EB T/L | A | A | A | A |

Table 7: LOS Summary – Judge Orr Road + East Site Access

| Traffic Control | TWSC | | TWSC | | TWSC | | TWSC | |
|-----------------|-------------|----|--------------------|----|---------|----|----------------|----|
| | ST Baseline | | ST Baseline + Site | | 2043 BG | | 2043 BG + Site | |
| | AM | PM | AM | PM | AM | PM | AM | PM |
| NB | | | B | B | | | B | C |
| WB | free | | free | | free | | free | |
| EB | free | | A | A | | | A | A |

Table 8: LOS Summary – Judge Orr Road + Curtis Road/Stapleton Road (Short Term)

| Traffic Control | TWSC | | TWSC | |
|-----------------|-------------|----|--------------------|----|
| | ST Baseline | | ST Baseline + Site | |
| | AM | PM | AM | PM |
| SB T/R | C | B | C | C |
| SBL | B | C | C | E |
| WB T/R | free | | free | |
| WBL | A | A | A | A |
| NB T/R | B | C | B | C |
| NBL | C | C | C | C |
| EBR | free | | free | |
| EB T/L | A | A | A | A |

Table 9: LOS Summary – Judge Orr Road + Curtis Road/Stapleton Road (LongTerm)

| Traffic Control | Roundabout | | Roundabout | |
|-----------------|------------|----|----------------|----|
| | 2043 BG | | 2043 BG + Site | |
| | AM | PM | AM | PM |
| SB T/L | A | A | A | A |
| SB T/R | A | A | A | A |
| WB T/L | A | A | A | B |
| WB T/R | A | A | A | A |
| NB T/L | A | B | A | B |
| NB T/R | A | B | A | B |
| EB T/L | A | A | A | A |
| EB T/R | A | A | A | A |
| Overall | A | A | A | A |

Figures



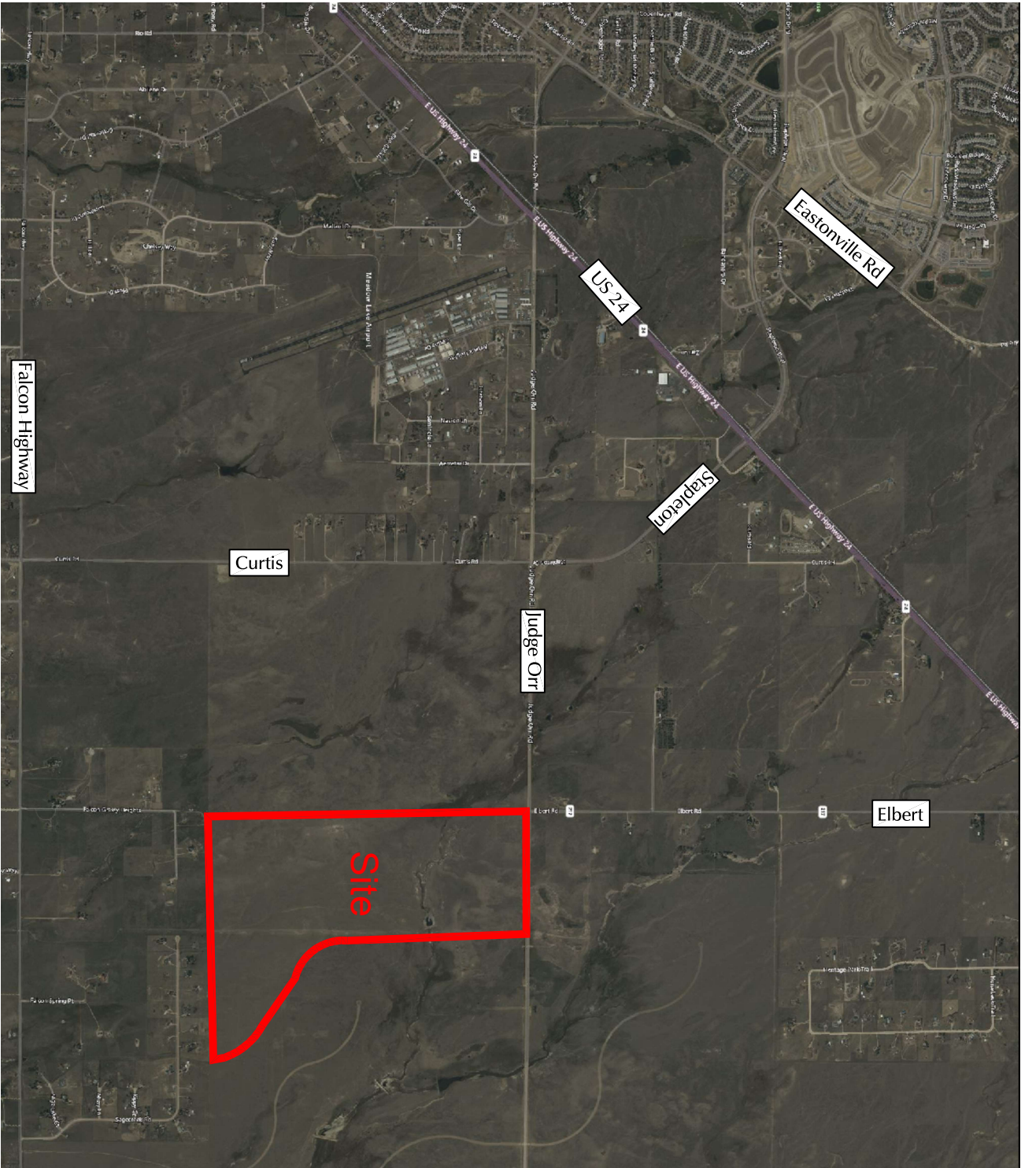


Figure 1

Vicinity Map

Esteban Rodriguez Sketch Plan (LSC# S22.4630)

Approximate
Scale
1" = 1,000'

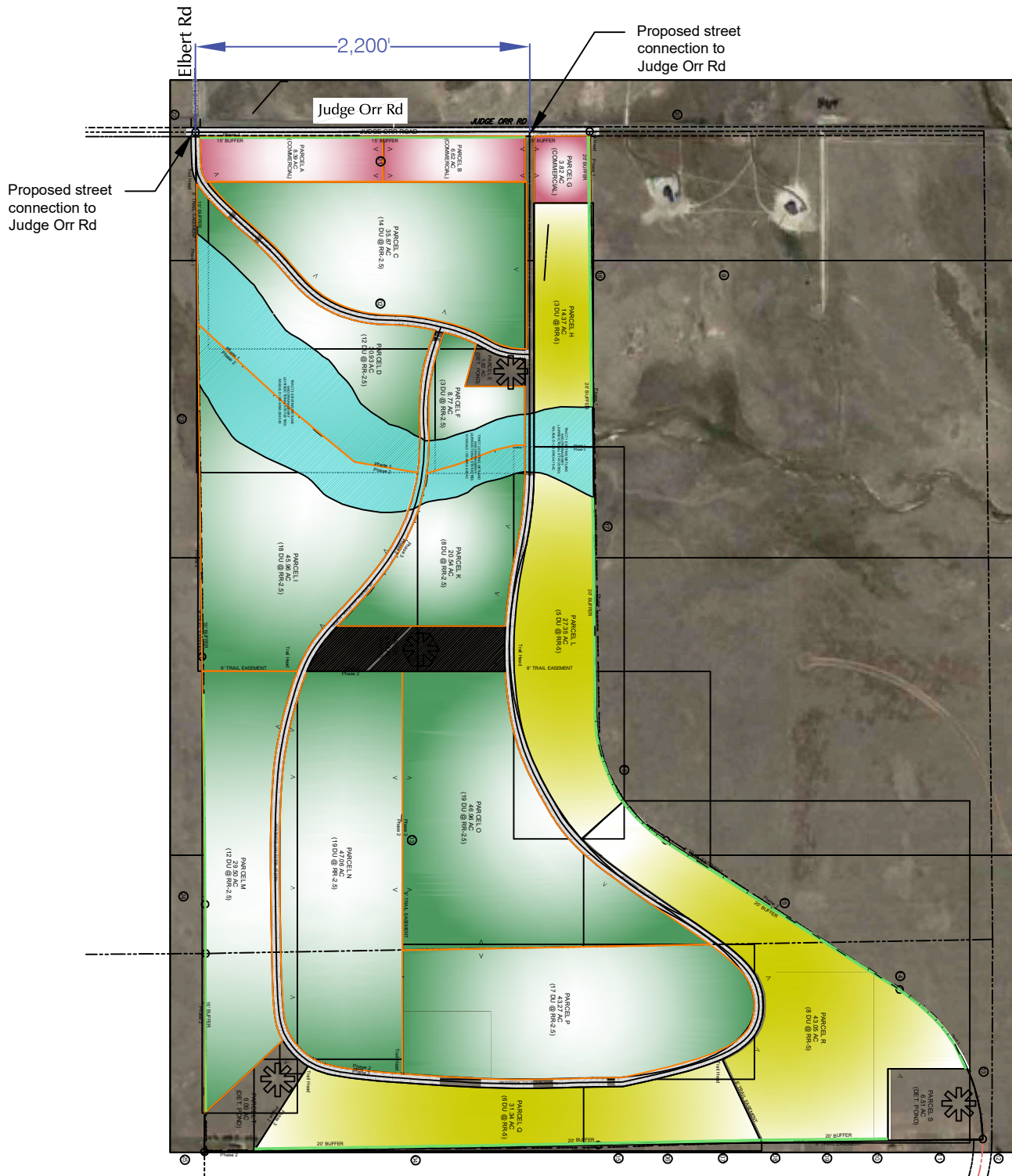
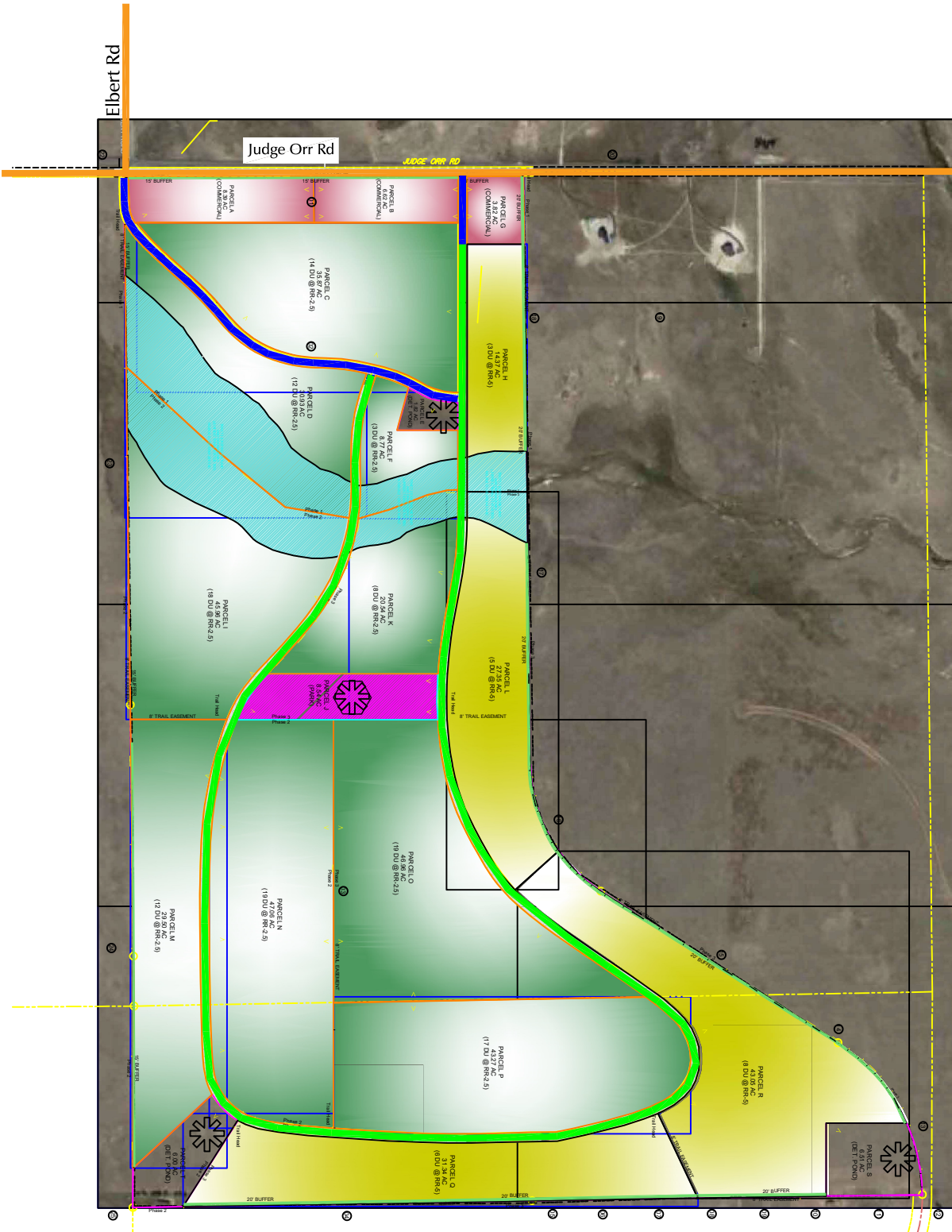


Figure 2
Site Plan

Esteban Rodriguez Sketch Plan (LSC# S224630)



Approximate
Scale
1" = 1,000'



- Rural Local
- Rural Minor Collector
- Rural Minor Arterial

Figure 3
Roadway Classifications

Esteban Rodriguez Sketch Plan (LSC# S224630)



Traffic Counts



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

| 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 | |
| 06:30 | 0 | 15 | 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 | 14 | 1 | 10 | 1 | 0 | 12 | 0 | 2 | 2 | 0 | 4 | 6 | 1 | 0 | 0 | 7 | 37 |
| 06:40 | 0 | 14 | 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 | 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 |
| 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 | 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 |
| 07:45 | 0 | 18 | 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 | 14 | 0 | 12 | 0 | 0 | 12 | 0 | 3 | 1 | 0 | 4 | 4 | 2 | 0 | 0 | 6 | 36 |
| 07:55 | 1 | 11 | 1 | 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 | 10 | 1 | 4 | 1 | 0 | 6 | 0 | 3 | 3 | 0 | 6 | 2 | 2 | 0 | 0 | 4 | 26 |
| 08:05 | 0 | 8 | 3 | 0 | 11 | 2 | 6 | 1 | 0 | 9 | 0 | 2 | 0 | 0 | 2 | 1 | 2 | 0 | 0 | 3 | 25 |
| 08:10 | 0 | 1 | 3 | 0 | 4 | 1 | 8 | 0 | 0 | 9 | 0 | 3 | 0 | 0 | 3 | 2 | 3 | 1 | 0 | 6 | 22 |
| 08:15 | 0 | 7 | 1 | 0 | 8 | 0 | 6 | 1 | 0 | 7 | 0 | 3 | 1 | 0 | 4 | 1 | 4 | 0 | 0 | 5 | 24 |
| 08:20 | 0 | 6 | 2 | 0 | 8 | 3 | 9 | 0 | 0 | 12 | 0 | 7 | 1 | 0 | 8 | 4 | 3 | 0 | 0 | 7 | 35 |
| 08:25 | 1 | 4 | 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 | 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 | |

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2504 E. Pikes Peak Ave, Suite 304
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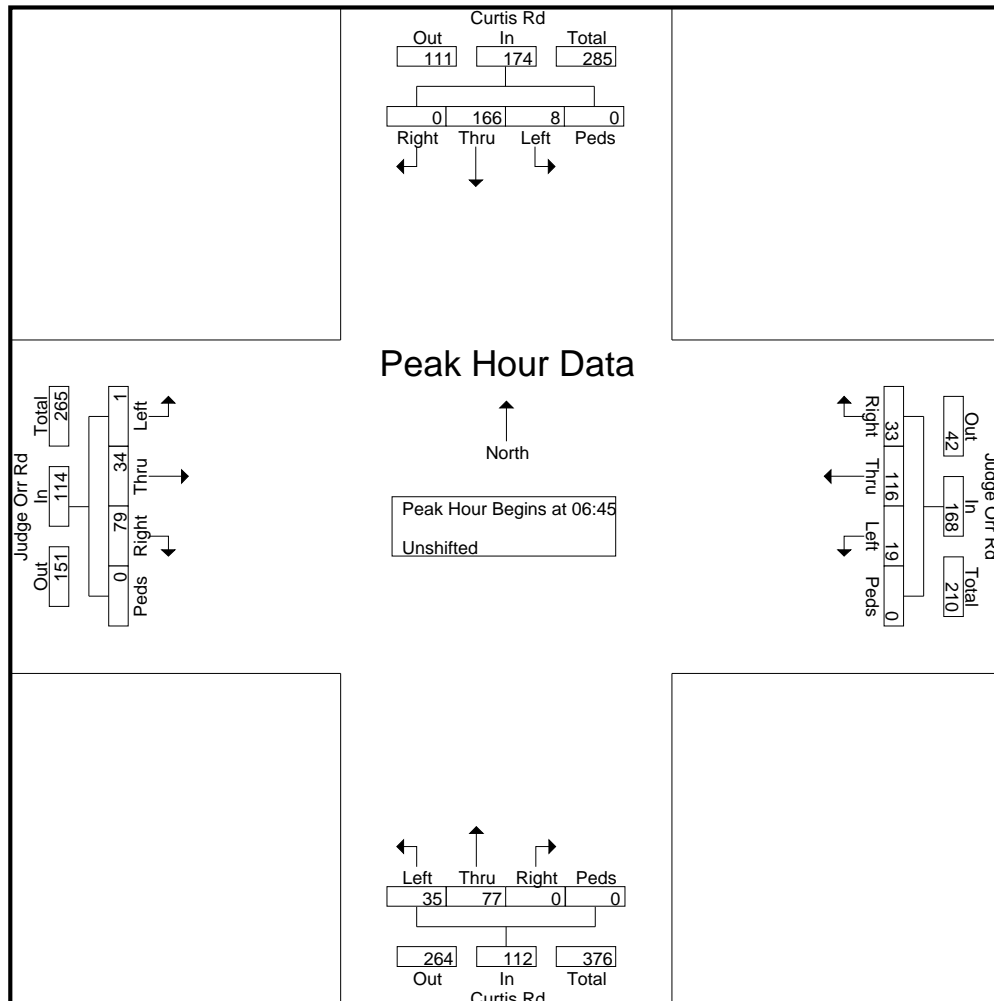
File Name : Curtis Rd - Judge Orr Rd AM

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 | | | | | 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 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 |



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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 AM

Site Code : S214950

Start Date : 4/21/2022

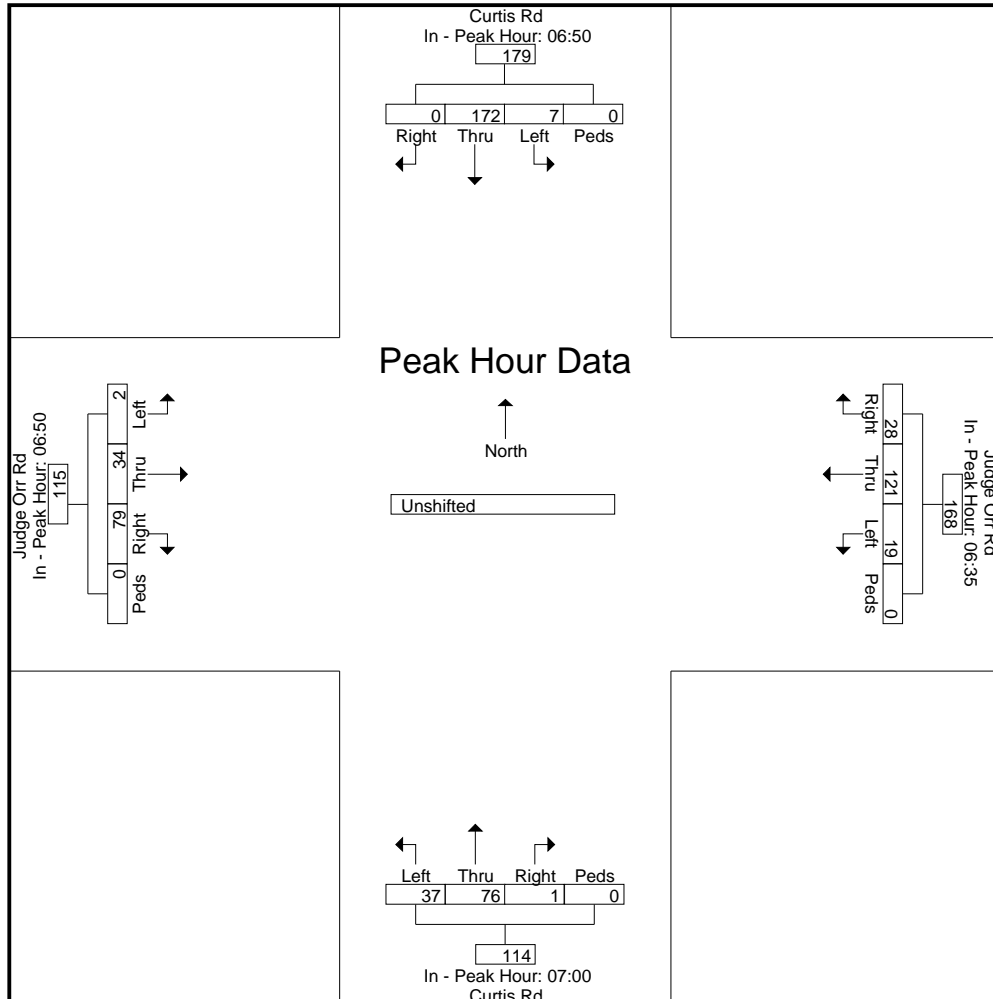
Page No : 3

| 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 | | | | | 06:35 | | | | | 07:00 | | | | | 06:50 | | | | |
|--------------|-------|------|------|------|------|-------|------|------|------|------|-------|------|------|------|------|-------|------|------|------|------|
| +0 mins. | 0 | 14 | 0 | 0 | 14 | 1 | 10 | 1 | 0 | 12 | 0 | 11 | 2 | 0 | 13 | 4 | 5 | 0 | 0 | 9 |
| +5 mins. | 0 | 14 | 2 | 0 | 16 | 0 | 11 | 1 | 0 | 12 | 0 | 6 | 3 | 0 | 9 | 4 | 3 | 0 | 0 | 7 |
| +10 mins. | 0 | 13 | 0 | 0 | 13 | 2 | 12 | 1 | 0 | 15 | 0 | 9 | 4 | 0 | 13 | 4 | 4 | 0 | 0 | 8 |
| +15 mins. | 0 | 13 | 0 | 0 | 13 | 4 | 6 | 0 | 0 | 10 | 0 | 9 | 2 | 0 | 11 | 6 | 3 | 0 | 0 | 9 |
| +20 mins. | 0 | 18 | 0 | 0 | 18 | 0 | 9 | 4 | 0 | 13 | 0 | 9 | 4 | 0 | 13 | 9 | 3 | 0 | 0 | 12 |
| +25 mins. | 0 | 16 | 0 | 0 | 16 | 1 | 9 | 2 | 0 | 12 | 0 | 7 | 4 | 0 | 11 | 7 | 3 | 0 | 0 | 10 |
| +30 mins. | 0 | 15 | 0 | 0 | 15 | 5 | 16 | 2 | 0 | 23 | 0 | 4 | 2 | 0 | 6 | 7 | 3 | 0 | 0 | 10 |
| +35 mins. | 0 | 9 | 1 | 0 | 10 | 2 | 9 | 1 | 0 | 12 | 0 | 5 | 3 | 0 | 8 | 8 | 2 | 0 | 0 | 10 |
| +40 mins. | 0 | 20 | 0 | 0 | 20 | 6 | 11 | 4 | 0 | 21 | 0 | 5 | 5 | 0 | 10 | 7 | 4 | 1 | 0 | 12 |
| +45 mins. | 0 | 9 | 1 | 0 | 10 | 1 | 9 | 1 | 0 | 11 | 0 | 3 | 2 | 0 | 5 | 9 | 1 | 0 | 0 | 10 |
| +50 mins. | 0 | 13 | 3 | 0 | 16 | 5 | 11 | 1 | 0 | 17 | 0 | 3 | 1 | 0 | 4 | 9 | 2 | 0 | 0 | 11 |
| +55 mins. | 0 | 18 | 0 | 0 | 18 | 1 | 8 | 1 | 0 | 10 | 1 | 5 | 5 | 0 | 11 | 5 | 1 | 1 | 0 | 7 |
| Total Volume | 0 | 172 | 7 | 0 | 179 | 28 | 121 | 19 | 0 | 168 | 1 | 76 | 37 | 0 | 114 | 79 | 34 | 2 | 0 | 115 |
| % App. Total | 0 | 96.1 | 3.9 | 0 | | 16.7 | 72 | 11.3 | 0 | | 0.9 | 66.7 | 32.5 | 0 | | 68.7 | 29.6 | 1.7 | 0 | |
| PHF | .000 | .717 | .194 | .000 | .746 | .389 | .630 | .396 | .000 | .609 | .083 | .576 | .617 | .000 | .731 | .731 | .567 | .167 | .000 | .799 |



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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 : 1

Groups Printed- Unshifted

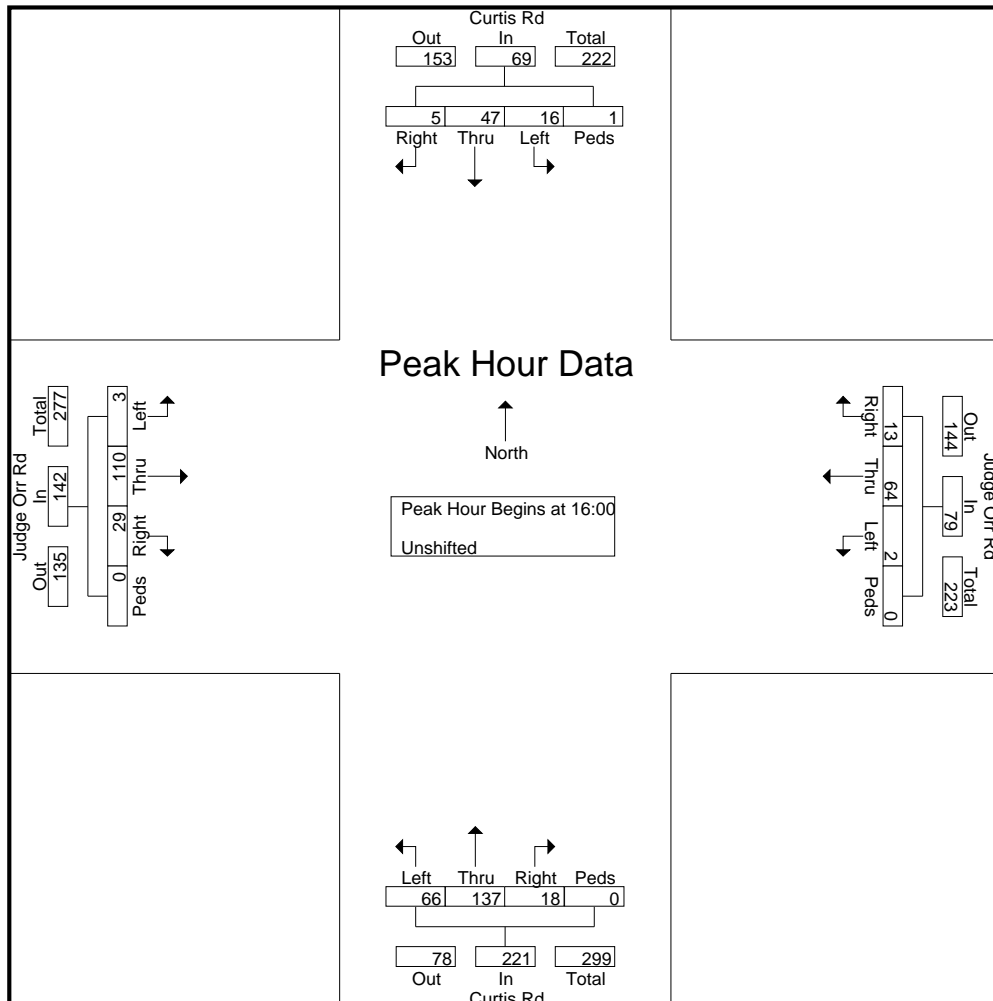
| Start Time | Curtis Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | Curtis Rd Northbound | | | | | Judge Orr Rd Eastbound | | | | | Int. Total |
|--------------------|----------------------|-------------|------------|------------|-------------|------------------------|-------------|------------|----------|-------------|----------------------|-------------|-------------|----------|-------------|------------------------|-------------|------------|----------|------------|------------|
| | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | |
| 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 | |

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 : 2

| 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 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 |

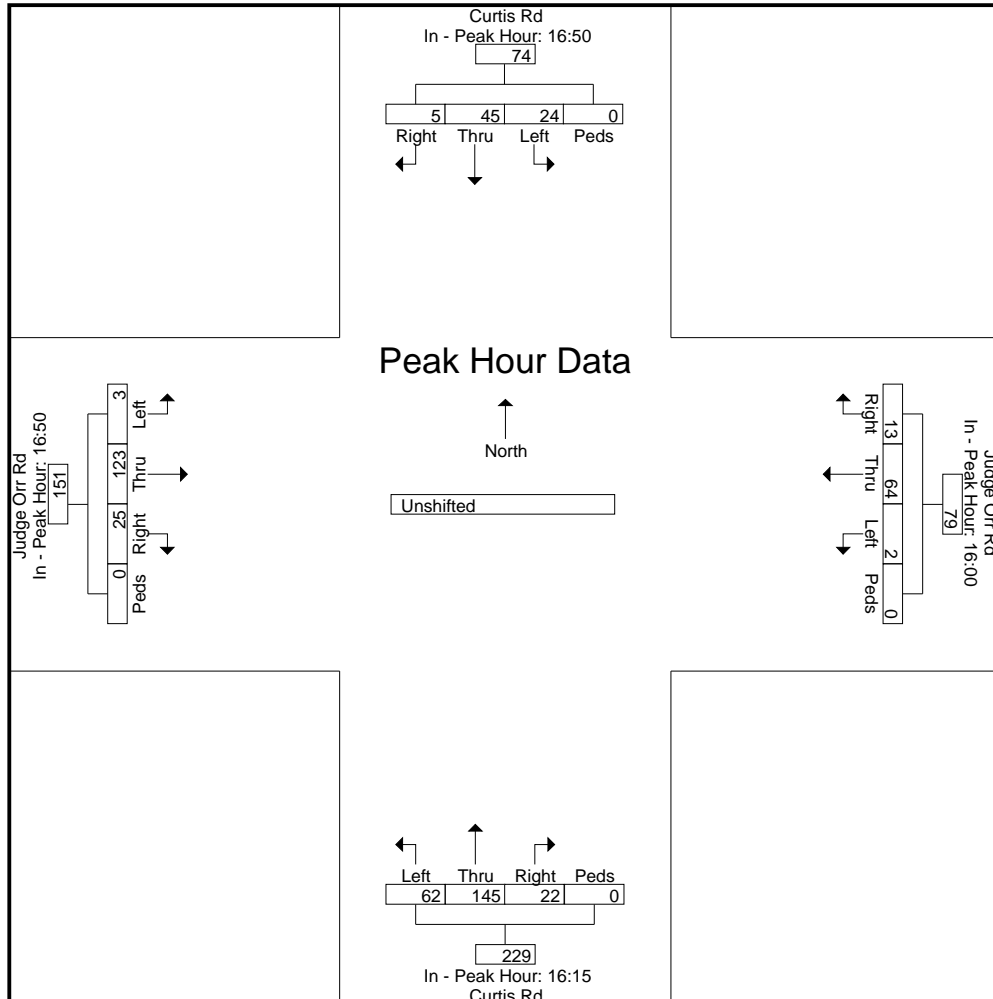


LSC Transportation Consultants, Inc.

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 : 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 16:00 to 17:55 - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 16:50 | | | | | 16:00 | | | | | 16:15 | | | | | 16:50 | | | | | |
| +0 mins. | 1 | 4 | 3 | 0 | 8 | 0 | 7 | 0 | 0 | 7 | 1 | 11 | 3 | 0 | 15 | 2 | 14 | 1 | 0 | 17 | |
| +5 mins. | 1 | 3 | 1 | 0 | 5 | 1 | 8 | 0 | 0 | 9 | 3 | 11 | 9 | 0 | 23 | 1 | 7 | 0 | 0 | 8 | |
| +10 mins. | 0 | 3 | 2 | 0 | 5 | 0 | 10 | 1 | 0 | 11 | 0 | 16 | 6 | 0 | 22 | 4 | 11 | 0 | 0 | 15 | |
| +15 mins. | 0 | 2 | 1 | 0 | 3 | 1 | 3 | 1 | 0 | 5 | 1 | 9 | 5 | 0 | 15 | 0 | 5 | 0 | 0 | 5 | |
| +20 mins. | 0 | 4 | 1 | 0 | 5 | 1 | 5 | 0 | 0 | 6 | 1 | 13 | 3 | 0 | 17 | 1 | 16 | 1 | 0 | 18 | |
| +25 mins. | 1 | 7 | 0 | 0 | 8 | 2 | 5 | 0 | 0 | 7 | 3 | 8 | 5 | 0 | 16 | 2 | 8 | 0 | 0 | 10 | |
| +30 mins. | 0 | 6 | 2 | 0 | 8 | 2 | 6 | 0 | 0 | 8 | 3 | 9 | 5 | 0 | 17 | 3 | 8 | 1 | 0 | 12 | |
| +35 mins. | 0 | 2 | 0 | 0 | 2 | 1 | 3 | 0 | 0 | 4 | 1 | 15 | 10 | 0 | 26 | 3 | 6 | 0 | 0 | 9 | |
| +40 mins. | 0 | 1 | 2 | 0 | 3 | 2 | 2 | 0 | 0 | 4 | 3 | 12 | 5 | 0 | 20 | 3 | 15 | 0 | 0 | 18 | |
| +45 mins. | 0 | 5 | 4 | 0 | 9 | 1 | 3 | 0 | 0 | 4 | 2 | 9 | 3 | 0 | 14 | 3 | 7 | 0 | 0 | 10 | |
| +50 mins. | 1 | 4 | 3 | 0 | 8 | 2 | 7 | 0 | 0 | 9 | 3 | 21 | 3 | 0 | 27 | 0 | 14 | 0 | 0 | 14 | |
| +55 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 | |



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 Colorado Springs, CO 80909
 719-633-2868

File Name : Elbert Rd - Judge Orr Rd AM 1-23

Site Code : S224640

Start Date : 1/11/2023

Page No : 1

Groups Printed- Unshifted

| Start Time | Elbert Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | 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 | |
| 06:30 | 1 | 0 | 1 | 0 | 2 | 0 | 15 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 20 |
| 06:35 | 0 | 0 | 1 | 0 | 1 | 1 | 6 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 9 |
| 06:40 | 0 | 0 | 0 | 0 | 0 | 1 | 14 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 17 |
| 06:45 | 0 | 0 | 2 | 0 | 2 | 0 | 11 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 14 |
| 06:50 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 12 |
| 06:55 | 1 | 0 | 0 | 0 | 1 | 2 | 8 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 14 |
| Total | 2 | 0 | 4 | 0 | 6 | 7 | 62 | 0 | 0 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 0 | 11 | 86 |
| | | | | | | | | | | | | | | | | | | | | | |
| 07:00 | 1 | 0 | 0 | 0 | 1 | 1 | 10 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 18 |
| 07:05 | 0 | 0 | 0 | 0 | 0 | 2 | 13 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 17 |
| 07:10 | 0 | 0 | 1 | 0 | 1 | 2 | 20 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 24 |
| 07:15 | 2 | 0 | 0 | 0 | 2 | 1 | 14 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 21 |
| 07:20 | 0 | 0 | 0 | 0 | 0 | 2 | 11 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 16 |
| 07:25 | 0 | 0 | 1 | 0 | 1 | 0 | 14 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 19 |
| 07:30 | 1 | 0 | 1 | 0 | 2 | 1 | 15 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 19 |
| 07:35 | 2 | 0 | 1 | 0 | 3 | 0 | 6 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 11 |
| 07:40 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 20 |
| 07:45 | 2 | 0 | 0 | 0 | 2 | 0 | 11 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 15 |
| 07:50 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 15 |
| 07:55 | 1 | 0 | 0 | 0 | 1 | 0 | 6 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 10 |
| Total | 9 | 0 | 4 | 0 | 13 | 12 | 142 | 0 | 0 | 154 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 0 | 38 | 205 |
| | | | | | | | | | | | | | | | | | | | | | |
| 08:00 | 1 | 0 | 0 | 0 | 1 | 3 | 5 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 12 |
| 08:05 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 9 |
| 08:10 | 1 | 0 | 0 | 0 | 1 | 1 | 12 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 18 |
| 08:15 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 11 |
| 08:20 | 0 | 0 | 1 | 0 | 1 | 0 | 9 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 5 | 15 |
| 08:25 | 1 | 0 | 0 | 0 | 1 | 2 | 5 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 11 |
| Grand Total | 14 | 0 | 9 | 0 | 23 | 25 | 251 | 0 | 0 | 276 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 3 | 0 | 68 | 367 |
| Apprch % | 60.9 | 0 | 39.1 | 0 | | 9.1 | 90.9 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 95.6 | 4.4 | 0 | | |
| Total % | 3.8 | 0 | 2.5 | 0 | 6.3 | 6.8 | 68.4 | 0 | 0 | 75.2 | 0 | 0 | 0 | 0 | 0 | 0 | 17.7 | 0.8 | 0 | 18.5 | |

LSC Transportation Consultants, Inc.

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 Colorado Springs, CO 80909
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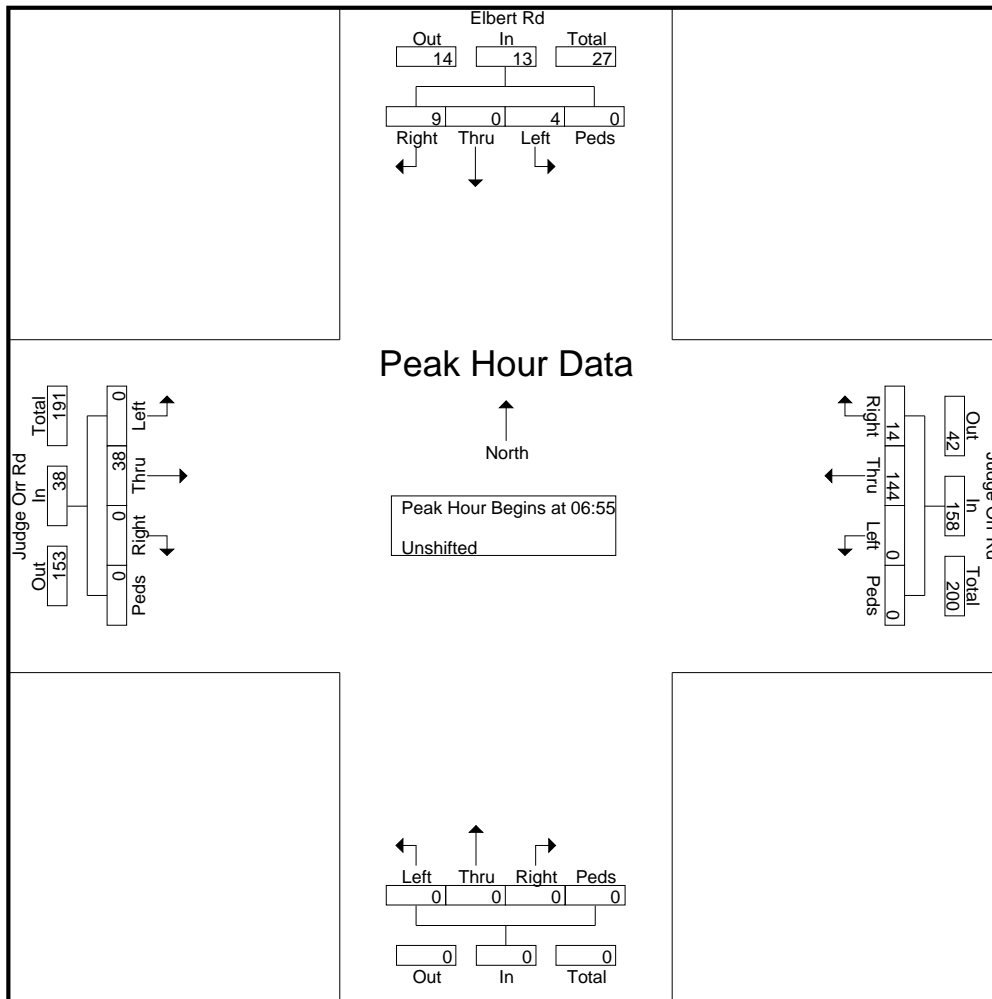
File Name : Elbert Rd - Judge Orr Rd AM 1-23

Site Code : S224640

Start Date : 1/11/2023

Page No : 2

| Start Time | Elbert Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | 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 Entire Intersection Begins at 06:55 | | | | | | | | | | | | | | | | | | | | | |
| 06:55 | 1 | 0 | 0 | 0 | 1 | 2 | 8 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 14 |
| 07:00 | 1 | 0 | 0 | 0 | 1 | 1 | 10 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 18 |
| 07:05 | 0 | 0 | 0 | 0 | 0 | 2 | 13 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 17 |
| 07:10 | 0 | 0 | 1 | 0 | 1 | 2 | 20 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 24 |
| 07:15 | 2 | 0 | 0 | 0 | 2 | 1 | 14 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 21 |
| 07:20 | 0 | 0 | 0 | 0 | 0 | 2 | 11 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 16 |
| 07:25 | 0 | 0 | 1 | 0 | 1 | 0 | 14 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 19 |
| 07:30 | 1 | 0 | 1 | 0 | 2 | 1 | 15 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 19 |
| 07:35 | 2 | 0 | 1 | 0 | 3 | 0 | 6 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 11 |
| 07:40 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 20 |
| 07:45 | 2 | 0 | 0 | 0 | 2 | 0 | 11 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 15 |
| 07:50 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 15 |
| Total Volume | 9 | 0 | 4 | 0 | 13 | 14 | 144 | 0 | 0 | 158 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 0 | 38 | 209 |
| % App. Total | 69.2 | 0 | 30.8 | 0 | | 8.9 | 91.1 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 100 | 0 | 0 | | |
| PHF | .375 | .000 | .333 | .000 | .361 | .389 | .600 | .000 | .000 | .598 | .000 | .000 | .000 | .000 | .000 | .000 | .528 | .000 | .000 | .528 | .726 |



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

File Name : Elbert Rd - Judge Orr Rd AM 1-23

Site Code : S224640

Start Date : 1/11/2023

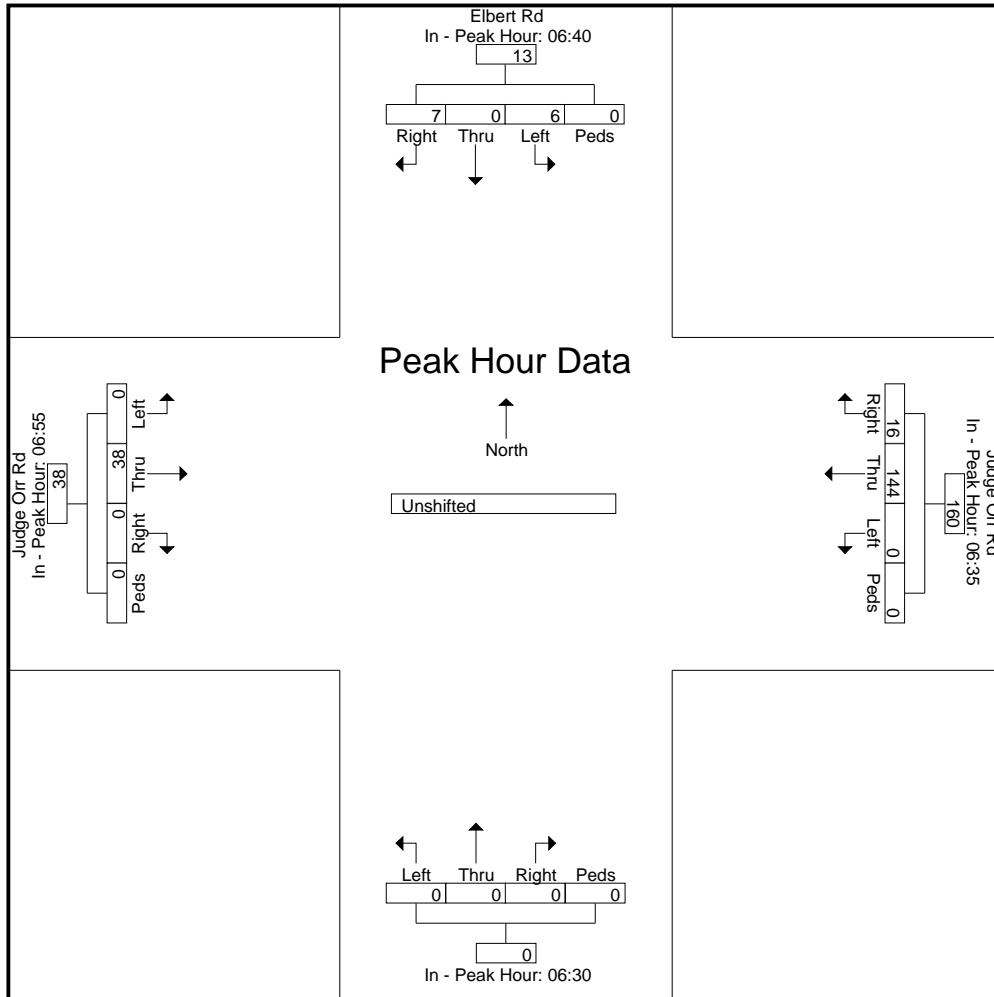
Page No : 3

| Start Time | Elbert Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | 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:

| | 06:40 | | | | | 06:35 | | | | | 06:30 | | | | | 06:55 | | | | |
|--------------|-------|------|------|------|------|-------|------|------|------|------|-------|------|------|------|------|-------|------|------|------|------|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| +5 mins. | 0 | 0 | 2 | 0 | 2 | 1 | 14 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 |
| +10 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| +15 mins. | 1 | 0 | 0 | 0 | 1 | 3 | 8 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| +20 mins. | 1 | 0 | 0 | 0 | 1 | 2 | 8 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 |
| +25 mins. | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 |
| +30 mins. | 0 | 0 | 1 | 0 | 1 | 2 | 13 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 |
| +35 mins. | 2 | 0 | 0 | 0 | 2 | 2 | 20 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| +40 mins. | 0 | 0 | 0 | 0 | 0 | 1 | 14 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| +45 mins. | 0 | 0 | 1 | 0 | 1 | 2 | 11 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 |
| +50 mins. | 1 | 0 | 1 | 0 | 2 | 0 | 14 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 |
| +55 mins. | 2 | 0 | 1 | 0 | 3 | 1 | 15 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 |
| Total Volume | 7 | 0 | 6 | 0 | 13 | 16 | 144 | 0 | 0 | 160 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 0 | 38 |
| % App. Total | 53.8 | 0 | 46.2 | 0 | | 10 | 90 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 100 | 0 | 0 | |
| PHF | .292 | .000 | .250 | .000 | .361 | .444 | .600 | .000 | .000 | .606 | .000 | .000 | .000 | .000 | .000 | .000 | .528 | .000 | .000 | .528 |



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File Name : Elbert Rd - Judge Orr Rd AM PM

Site Code : S224640

Start Date : 1/11/2023

Page No : 1

Groups Printed- Unshifted

| Start Time | Elbert Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | 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 | |
| 06:30 | 1 | 0 | 1 | 0 | 2 | 0 | 15 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 20 |
| 06:35 | 0 | 0 | 1 | 0 | 1 | 1 | 6 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 9 |
| 06:40 | 0 | 0 | 0 | 0 | 0 | 1 | 14 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 17 |
| 06:45 | 0 | 0 | 2 | 0 | 2 | 0 | 11 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 14 |
| 06:50 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 12 |
| 06:55 | 1 | 0 | 0 | 0 | 1 | 2 | 8 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 14 |
| Total | 2 | 0 | 4 | 0 | 6 | 7 | 62 | 0 | 0 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 1 | 0 | 11 | 86 |
| | | | | | | | | | | | | | | | | | | | | | |
| 07:00 | 1 | 0 | 0 | 0 | 1 | 1 | 10 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 18 |
| 07:05 | 0 | 0 | 0 | 0 | 0 | 2 | 13 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 17 |
| 07:10 | 0 | 0 | 1 | 0 | 1 | 2 | 20 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 24 |
| 07:15 | 2 | 0 | 0 | 0 | 2 | 1 | 14 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 21 |
| 07:20 | 0 | 0 | 0 | 0 | 0 | 2 | 11 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 16 |
| 07:25 | 0 | 0 | 1 | 0 | 1 | 0 | 14 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 19 |
| 07:30 | 1 | 0 | 1 | 0 | 2 | 1 | 15 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 19 |
| 07:35 | 2 | 0 | 1 | 0 | 3 | 0 | 6 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 11 |
| 07:40 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 20 |
| 07:45 | 2 | 0 | 0 | 0 | 2 | 0 | 11 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 15 |
| 07:50 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 15 |
| 07:55 | 1 | 0 | 0 | 0 | 1 | 0 | 6 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 10 |
| Total | 9 | 0 | 4 | 0 | 13 | 12 | 142 | 0 | 0 | 154 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 | 0 | 38 | 205 |
| | | | | | | | | | | | | | | | | | | | | | |
| 08:00 | 1 | 0 | 0 | 0 | 1 | 3 | 5 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 12 |
| 08:05 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 9 |
| 08:10 | 1 | 0 | 0 | 0 | 1 | 1 | 12 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 18 |
| 08:15 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 11 |
| 08:20 | 0 | 0 | 1 | 0 | 1 | 0 | 9 | 0 | 0 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 0 | 5 | 15 |
| 08:25 | 1 | 0 | 0 | 0 | 1 | 2 | 5 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 11 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| Total | 3 | 0 | 1 | 0 | 4 | 6 | 47 | 0 | 0 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 2 | 0 | 19 | 76 |
| | | | | | | | | | | | | | | | | | | | | | |
| 16:00 | 0 | 0 | 1 | 0 | 1 | 1 | 6 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 1 | 0 | 10 | 18 |
| 16:05 | 0 | 0 | 1 | 0 | 1 | 1 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 7 | 13 |
| 16:10 | 0 | 0 | 1 | 0 | 1 | 1 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 8 | 14 |
| 16:15 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 16 | 19 |
| 16:20 | 1 | 0 | 1 | 0 | 2 | 1 | 5 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 9 | 17 |
| 16:25 | 1 | 0 | 1 | 0 | 2 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 13 | 19 |
| 16:30 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 1 | 0 | 17 | 23 |
| 16:35 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 1 | 0 | 15 | 18 |
| 16:40 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 1 | 0 | 15 | 19 |
| 16:45 | 1 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 1 | 0 | 17 | 21 |
| 16:50 | 0 | 0 | 1 | 0 | 1 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 8 | 13 |

LSC Transportation Consultants, Inc.

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

File Name : Elbert Rd - Judge Orr Rd AM PM

Site Code : S224640

Start Date : 1/11/2023

Page No : 2

Groups Printed- Unshifted

| Start Time | Elbert Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | 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 | | |
| 16:55 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 9 | 12 |
| Total | 3 | 0 | 8 | 0 | 11 | 5 | 46 | 0 | 0 | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 137 | 7 | 0 | 144 | 206 | |
| 17:00 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 1 | 0 | 14 | 16 | |
| 17:05 | 0 | 0 | 4 | 0 | 4 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 14 | 21 | |
| 17:10 | 0 | 0 | 1 | 0 | 1 | 0 | 6 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 | 12 | |
| 17:15 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 1 | 0 | 10 | 12 | |
| 17:20 | 1 | 0 | 0 | 0 | 1 | 2 | 5 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 12 | 20 | |
| 17:25 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 | 7 | |
| 17:30 | 0 | 0 | 2 | 0 | 2 | 1 | 6 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 12 | 21 | |
| 17:35 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 13 | |
| 17:40 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 19 | 21 | |
| 17:45 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 4 | |
| 17:50 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 5 | 7 | |
| 17:55 | 0 | 0 | 2 | 0 | 2 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 8 | |
| Total | 2 | 0 | 12 | 0 | 14 | 5 | 36 | 0 | 0 | 41 | 0 | 0 | 0 | 0 | 0 | 0 | 105 | 2 | 0 | 107 | 162 | |
| Grand Total | 19 | 0 | 29 | 0 | 48 | 35 | 333 | 0 | 0 | 368 | 0 | 0 | 0 | 0 | 0 | 0 | 307 | 12 | 0 | 319 | 735 | |
| Apprch % | 39.6 | 0 | 60.4 | 0 | | 9.5 | 90.5 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 96.2 | 3.8 | 0 | | | |
| Total % | 2.6 | 0 | 3.9 | 0 | 6.5 | 4.8 | 45.3 | 0 | 0 | 50.1 | 0 | 0 | 0 | 0 | 0 | 0 | 41.8 | 1.6 | 0 | 43.4 | | |

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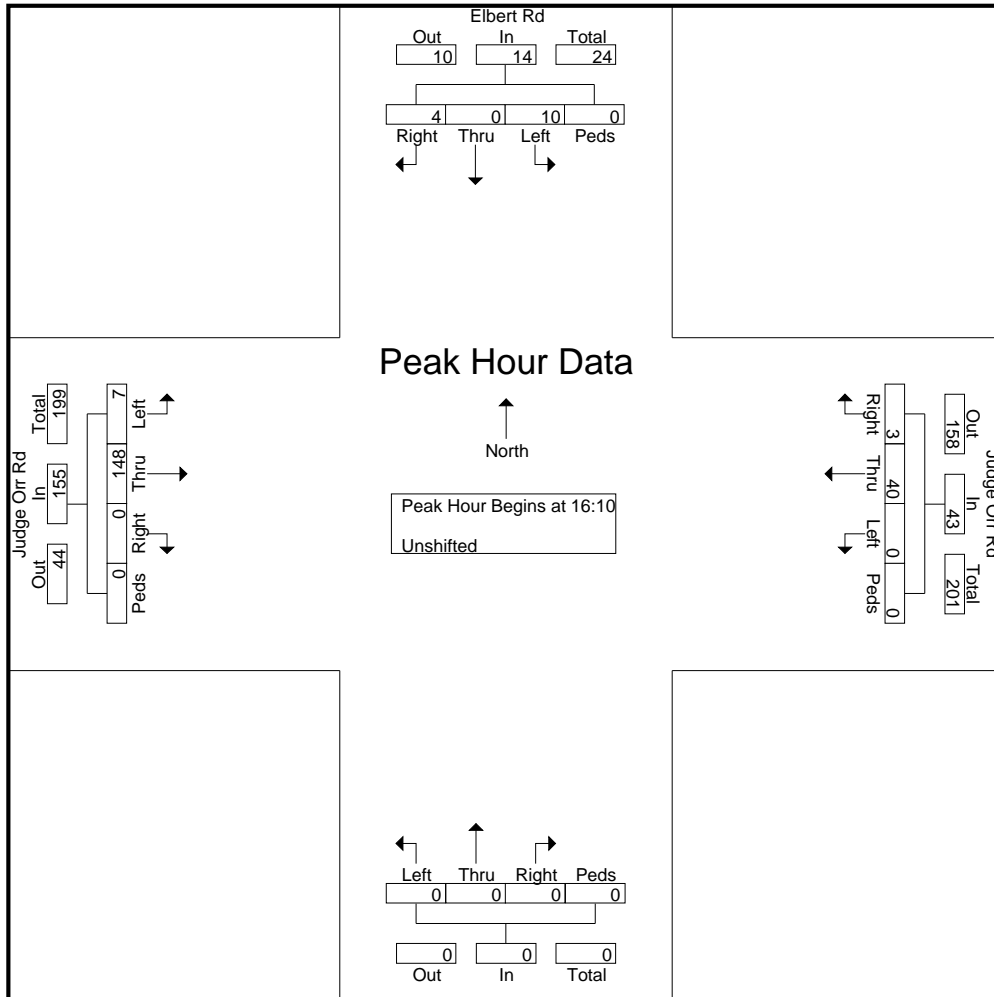
File Name : Elbert Rd - Judge Orr Rd AM PM

Site Code : S224640

Start Date : 1/11/2023

Page No : 3

| Start Time | Elbert Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | 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 17:55 - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 16:10 | | | | | | | | | | | | | | | | | | | | | |
| 16:10 | 0 | 0 | 1 | 0 | 1 | 1 | 4 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 8 | 14 |
| 16:15 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 16 | 19 |
| 16:20 | 1 | 0 | 1 | 0 | 2 | 1 | 5 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 9 | 17 |
| 16:25 | 1 | 0 | 1 | 0 | 2 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 13 | 19 |
| 16:30 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 1 | 0 | 17 | 23 |
| 16:35 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 1 | 0 | 15 | 18 |
| 16:40 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 1 | 0 | 15 | 19 |
| 16:45 | 1 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 1 | 0 | 17 | 21 |
| 16:50 | 0 | 0 | 1 | 0 | 1 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 8 | 13 |
| 16:55 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 9 | 12 |
| 17:00 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 1 | 0 | 14 | 16 |
| 17:05 | 0 | 0 | 4 | 0 | 4 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 14 | 21 |
| Total Volume | 4 | 0 | 10 | 0 | 14 | 3 | 40 | 0 | 0 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 148 | 7 | 0 | 155 | 212 |
| % App. Total | 28.6 | 0 | 71.4 | 0 | | 7 | 93 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 95.5 | 4.5 | 0 | | |
| PHF | .333 | .000 | .208 | .000 | .292 | .250 | .556 | .000 | .000 | .597 | .000 | .000 | .000 | .000 | .000 | .000 | .771 | .583 | .000 | .760 | .768 |



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

File Name : Elbert Rd - Judge Orr Rd AM PM

Site Code : S224640

Start Date : 1/11/2023

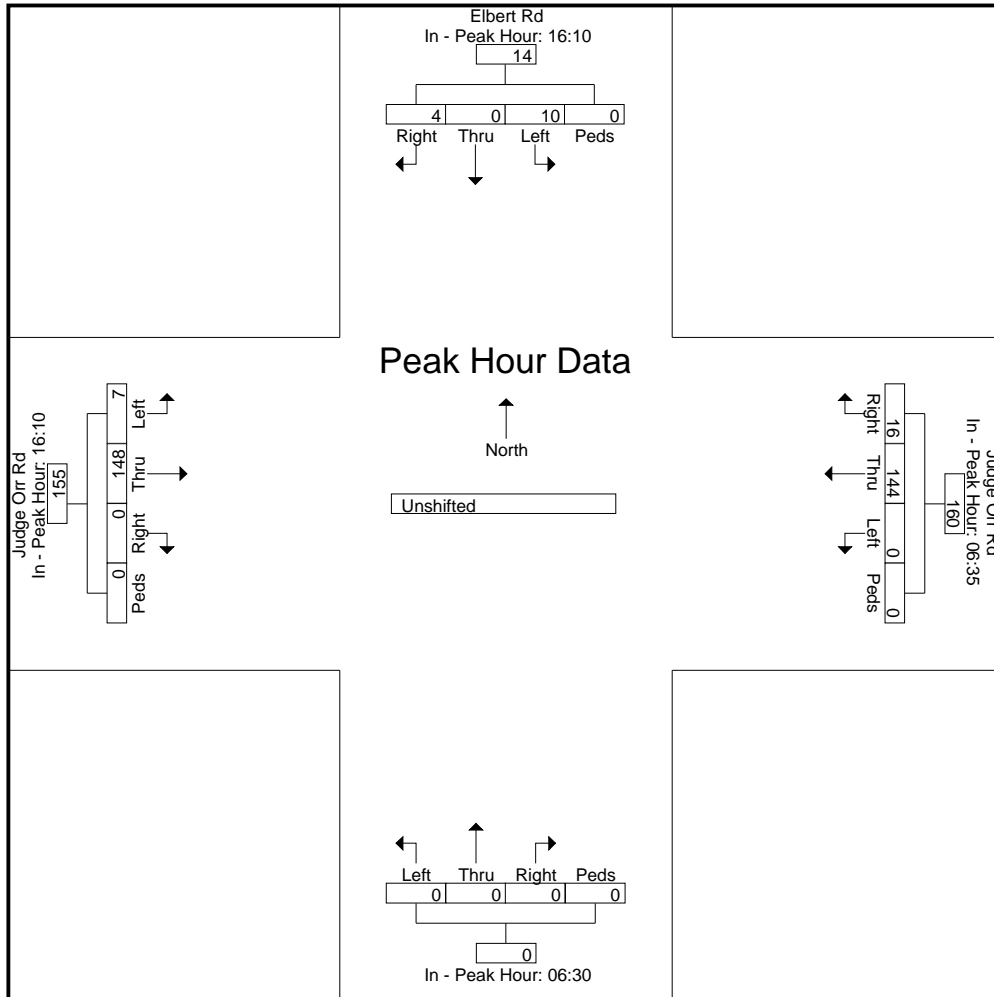
Page No : 4

| Start Time | Elbert Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | 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 17:55 - Peak 1 of 1

Peak Hour for Each Approach Begins at:

| | 16:10 | | | | | 06:35 | | | | | 06:30 | | | | | 16:10 | | | | |
|--------------|-------|------|------|------|------|-------|------|------|------|------|-------|------|------|------|------|-------|------|------|------|------|
| +0 mins. | 0 | 0 | 1 | 0 | 1 | 1 | 6 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 8 |
| +5 mins. | 0 | 0 | 1 | 0 | 1 | 1 | 14 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 0 | 16 |
| +10 mins. | 1 | 0 | 1 | 0 | 2 | 0 | 11 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 9 |
| +15 mins. | 1 | 0 | 1 | 0 | 2 | 3 | 8 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 13 |
| +20 mins. | 0 | 0 | 0 | 0 | 0 | 2 | 8 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 1 | 0 | 17 |
| +25 mins. | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 1 | 0 | 15 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 2 | 13 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 1 | 0 | 15 |
| +35 mins. | 1 | 0 | 0 | 0 | 1 | 2 | 20 | 0 | 0 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 1 | 0 | 17 |
| +40 mins. | 0 | 0 | 1 | 0 | 1 | 1 | 14 | 0 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 0 | 8 |
| +45 mins. | 0 | 0 | 1 | 0 | 1 | 2 | 11 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 9 |
| +50 mins. | 1 | 0 | 0 | 0 | 1 | 0 | 14 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 1 | 0 | 14 |
| +55 mins. | 0 | 0 | 4 | 0 | 4 | 1 | 15 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 0 | 0 | 14 |
| Total Volume | 4 | 0 | 10 | 0 | 14 | 16 | 144 | 0 | 0 | 160 | 0 | 0 | 0 | 0 | 0 | 0 | 148 | 7 | 0 | 155 |
| % App. Total | 28.6 | 0 | 71.4 | 0 | | 10 | 90 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 95.5 | 4.5 | 0 | |
| PHF | .333 | .000 | .208 | .000 | .292 | .444 | .600 | .000 | .000 | .606 | .000 | .000 | .000 | .000 | .000 | .000 | .771 | .583 | .000 | .760 |



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 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

| 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 | App. Total | |
| 06:30 | 1 | 130 | 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 | 180 | 0 | 10 | 20 | 0 | 30 | 18 | 92 | 8 | 0 | 118 | 34 | 10 | 4 | 0 | 48 | 376 |
| Total | 5 | 303 | 3 | 0 | 311 | 1 | 17 | 56 | 0 | 74 | 22 | 158 | 16 | 0 | 196 | 77 | 24 | 6 | 0 | 107 | 688 |
| 07:00 | 2 | 132 | 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 | 142 | 1 | 23 | 26 | 0 | 50 | 19 | 82 | 18 | 0 | 119 | 43 | 16 | 2 | 0 | 61 | 372 |
| 07:30 | 9 | 137 | 2 | 0 | 148 | 0 | 17 | 30 | 0 | 47 | 9 | 71 | 24 | 0 | 104 | 51 | 20 | 0 | 0 | 71 | 370 |
| 07:45 | 1 | 102 | 1 | 0 | 104 | 1 | 15 | 15 | 0 | 31 | 21 | 67 | 17 | 0 | 105 | 21 | 15 | 3 | 0 | 39 | 279 |
| Total | 15 | 508 | 5 | 0 | 528 | 5 | 62 | 110 | 0 | 177 | 67 | 318 | 82 | 0 | 467 | 165 | 67 | 14 | 0 | 246 | 1418 |
| 08:00 | 2 | 108 | 1 | 0 | 111 | 1 | 8 | 22 | 0 | 31 | 23 | 68 | 12 | 1 | 104 | 28 | 20 | 5 | 0 | 53 | 299 |
| 08:15 | 5 | 96 | 1 | 0 | 102 | 2 | 3 | 29 | 0 | 34 | 15 | 70 | 14 | 0 | 99 | 15 | 13 | 4 | 0 | 32 | 267 |
| Grand Total | 27 | 1015 | 10 | 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 | 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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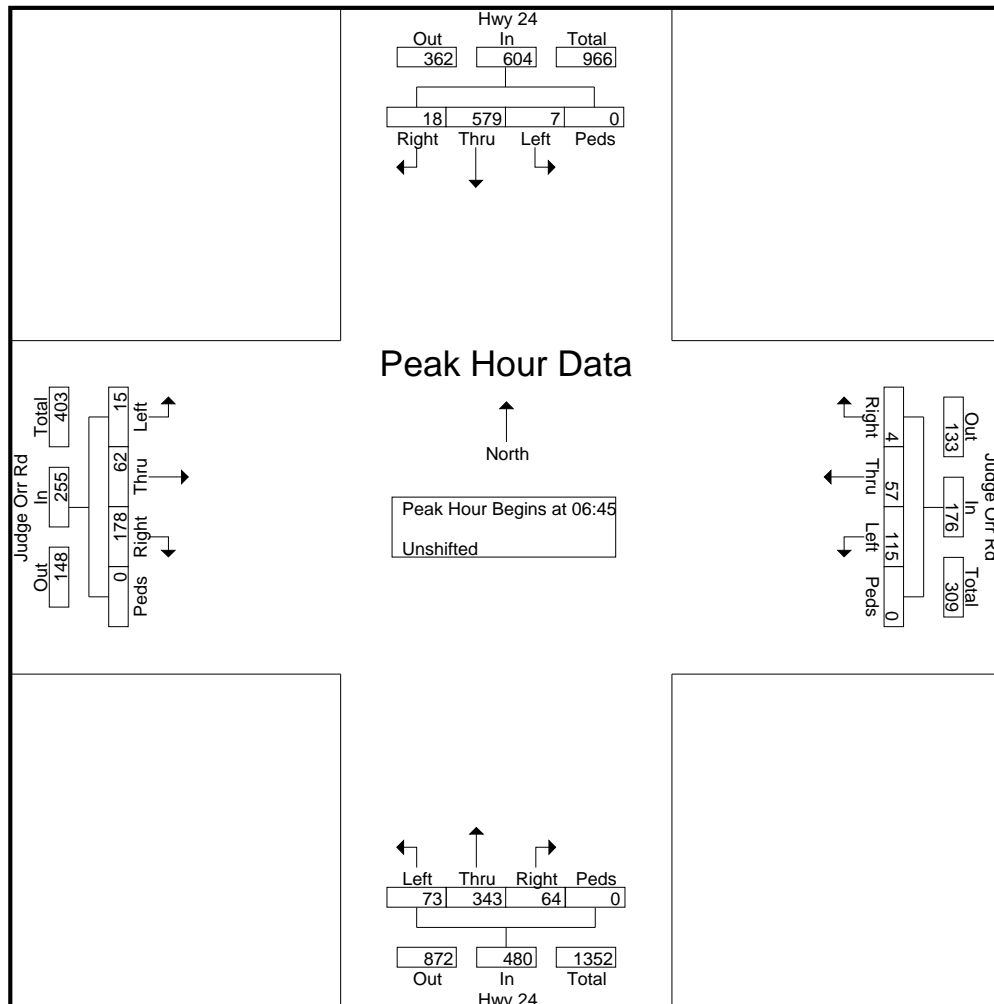
File Name : Hwy 24 - Judge Orr Rd AM

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 | | | | | 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 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 |

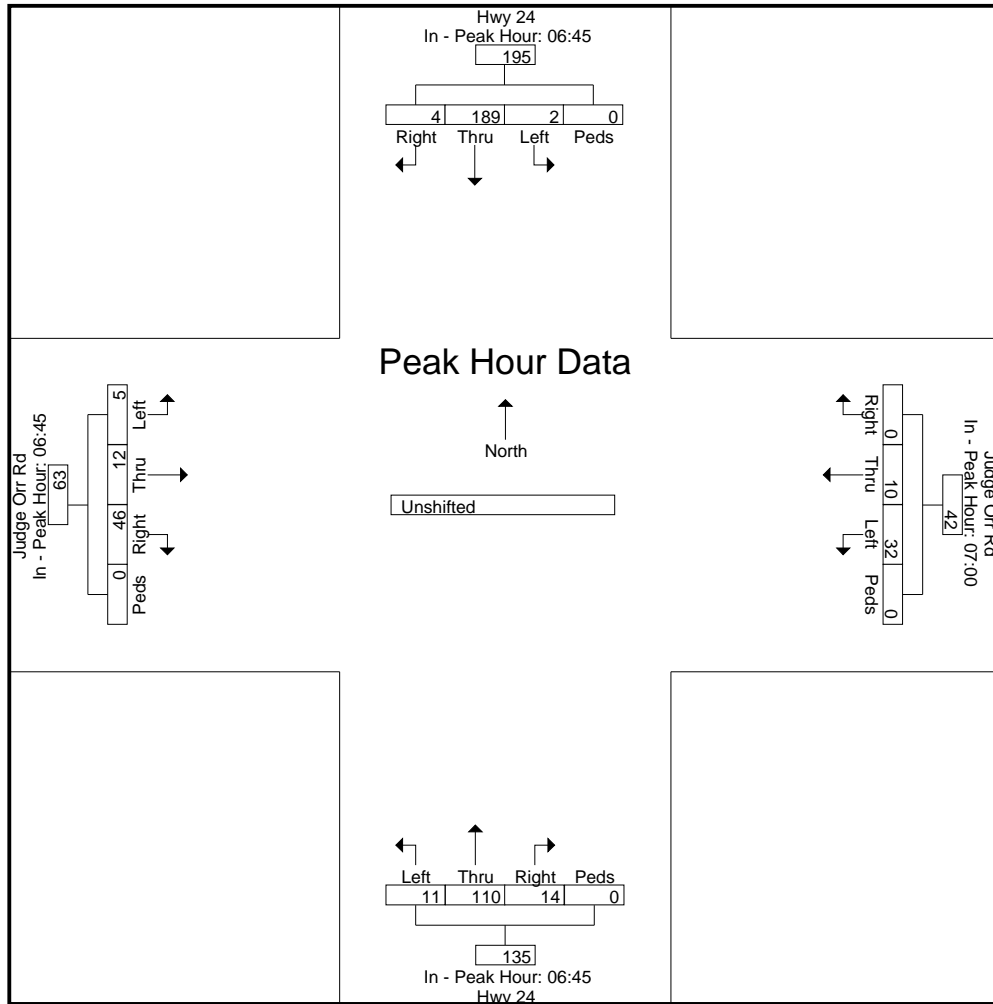


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 719-633-2868

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 | App. 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: | | | | | | | | | | | | | | | | | | | | | |
| | 6:45:00 AM | | | | | 7:00:00 AM | | | | | 6:45:00 AM | | | | | 6:45:00 AM | | | | | |
| +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 | |



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 PM

Site Code : S214950

Start Date : 5/10/2022

Page No : 1

Groups Printed- Unshifted

| 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 | 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 | |

LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
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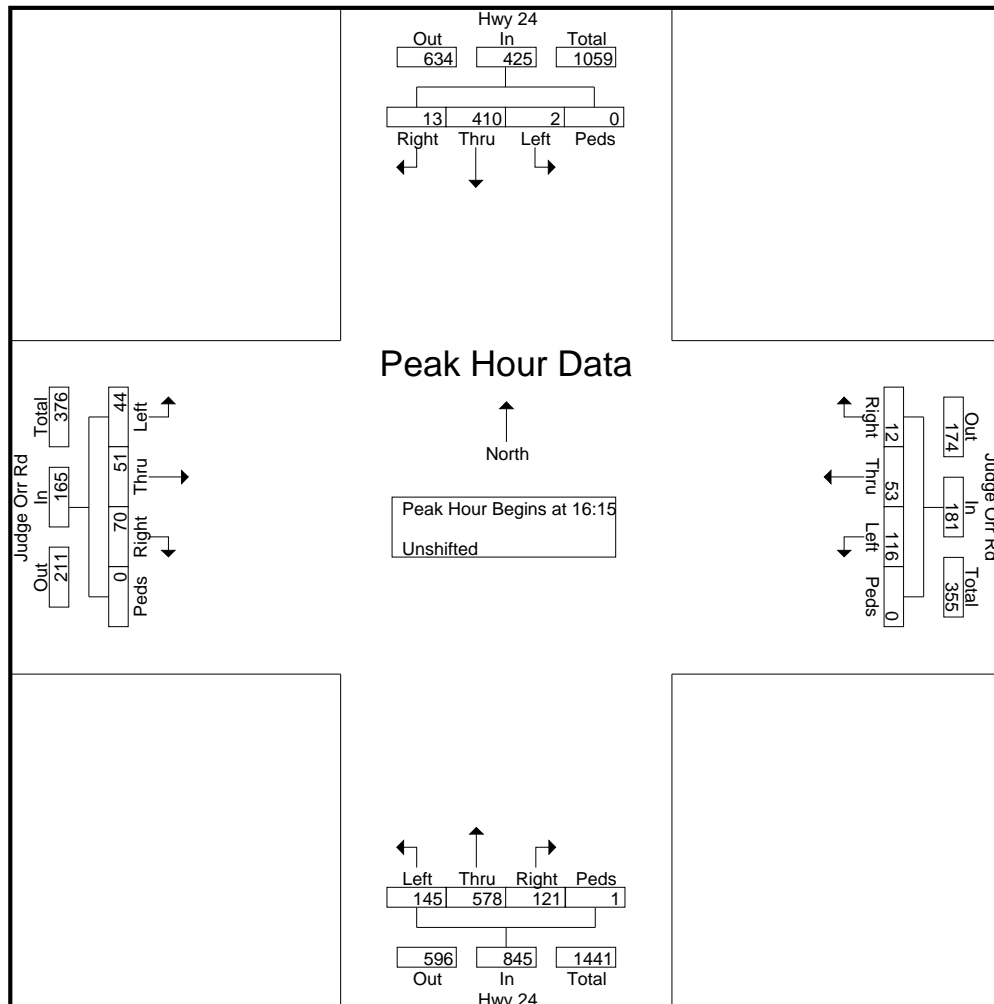
File Name : Hwy 24 - Judge Orr Rd PM

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 | | | | | 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 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 |



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 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 | | | | | 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 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 |

LSC Transportation Consultants, Inc.

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

File Name : Hwy 24 - Stapleton Rd AM PM
 Site Code : S224640
 Start Date : 1/10/2023
 Page No : 1

Groups Printed- Unshifted

| Start Time | Hwy 24 Southbound | | | | | Stapleton Dr Westbound | | | | | Hwy 24 Northbound | | | | | Stapleton Dr 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 | |
| 06:30 | 1 | 29 | 1 | 0 | 31 | 0 | 1 | 1 | 0 | 2 | 1 | 7 | 1 | 0 | 9 | 20 | 11 | 1 | 0 | 32 | 74 |
| 06:35 | 0 | 33 | 0 | 0 | 33 | 1 | 4 | 0 | 0 | 5 | 0 | 12 | 0 | 0 | 12 | 11 | 11 | 2 | 0 | 24 | 74 |
| 06:40 | 0 | 35 | 2 | 0 | 37 | 1 | 0 | 0 | 0 | 1 | 0 | 13 | 2 | 0 | 15 | 16 | 8 | 2 | 0 | 26 | 79 |
| 06:45 | 3 | 41 | 3 | 0 | 47 | 1 | 6 | 3 | 0 | 10 | 1 | 22 | 4 | 0 | 27 | 13 | 9 | 2 | 0 | 24 | 108 |
| 06:50 | 3 | 32 | 1 | 0 | 36 | 1 | 3 | 0 | 0 | 4 | 1 | 15 | 7 | 0 | 23 | 14 | 7 | 1 | 0 | 22 | 85 |
| 06:55 | 2 | 22 | 1 | 0 | 25 | 2 | 8 | 0 | 0 | 10 | 0 | 24 | 6 | 0 | 30 | 16 | 13 | 0 | 0 | 29 | 94 |
| Total | 9 | 192 | 8 | 0 | 209 | 6 | 22 | 4 | 0 | 32 | 3 | 93 | 20 | 0 | 116 | 90 | 59 | 8 | 0 | 157 | 514 |
| | | | | | | | | | | | | | | | | | | | | | |
| 07:00 | 4 | 35 | 3 | 0 | 42 | 2 | 6 | 0 | 0 | 8 | 0 | 29 | 2 | 0 | 31 | 7 | 13 | 1 | 0 | 21 | 102 |
| 07:05 | 4 | 33 | 4 | 0 | 41 | 1 | 10 | 0 | 0 | 11 | 0 | 22 | 4 | 0 | 26 | 7 | 11 | 6 | 0 | 24 | 102 |
| 07:10 | 0 | 33 | 3 | 0 | 36 | 4 | 11 | 1 | 0 | 16 | 0 | 30 | 5 | 0 | 35 | 15 | 12 | 2 | 0 | 29 | 116 |
| 07:15 | 2 | 36 | 2 | 0 | 40 | 4 | 14 | 1 | 0 | 19 | 0 | 29 | 7 | 0 | 36 | 13 | 15 | 3 | 0 | 31 | 126 |
| 07:20 | 4 | 46 | 1 | 0 | 51 | 1 | 6 | 0 | 0 | 7 | 0 | 30 | 4 | 0 | 34 | 11 | 13 | 1 | 0 | 25 | 117 |
| 07:25 | 5 | 51 | 8 | 0 | 64 | 0 | 7 | 0 | 0 | 7 | 0 | 28 | 0 | 0 | 28 | 10 | 7 | 1 | 0 | 18 | 117 |
| 07:30 | 2 | 34 | 2 | 0 | 38 | 0 | 7 | 0 | 0 | 7 | 1 | 16 | 6 | 0 | 23 | 9 | 20 | 2 | 0 | 31 | 99 |
| 07:35 | 6 | 40 | 5 | 0 | 51 | 0 | 9 | 1 | 0 | 10 | 0 | 9 | 2 | 0 | 11 | 12 | 7 | 2 | 0 | 21 | 93 |
| 07:40 | 4 | 31 | 1 | 0 | 36 | 0 | 7 | 2 | 0 | 9 | 0 | 9 | 3 | 0 | 12 | 5 | 9 | 0 | 0 | 14 | 71 |
| 07:45 | 1 | 31 | 1 | 0 | 33 | 2 | 5 | 1 | 0 | 8 | 0 | 13 | 6 | 0 | 19 | 6 | 17 | 2 | 0 | 25 | 85 |
| 07:50 | 3 | 21 | 4 | 0 | 28 | 0 | 5 | 0 | 0 | 5 | 1 | 18 | 1 | 0 | 20 | 10 | 15 | 2 | 0 | 27 | 80 |
| 07:55 | 2 | 15 | 3 | 0 | 20 | 1 | 1 | 0 | 0 | 2 | 0 | 16 | 4 | 0 | 20 | 8 | 5 | 1 | 0 | 14 | 56 |
| Total | 37 | 406 | 37 | 0 | 480 | 15 | 88 | 6 | 0 | 109 | 2 | 249 | 44 | 0 | 295 | 113 | 144 | 23 | 0 | 280 | 1164 |
| | | | | | | | | | | | | | | | | | | | | | |
| 08:00 | 3 | 39 | 2 | 0 | 44 | 0 | 6 | 0 | 0 | 6 | 0 | 10 | 5 | 0 | 15 | 4 | 10 | 2 | 0 | 16 | 81 |
| 08:05 | 1 | 30 | 0 | 0 | 31 | 1 | 2 | 1 | 0 | 4 | 2 | 19 | 5 | 0 | 26 | 4 | 6 | 4 | 0 | 14 | 75 |
| 08:10 | 2 | 27 | 2 | 0 | 31 | 2 | 2 | 1 | 0 | 5 | 0 | 13 | 4 | 0 | 17 | 5 | 6 | 0 | 0 | 11 | 64 |
| 08:15 | 4 | 31 | 0 | 0 | 35 | 5 | 1 | 2 | 0 | 8 | 0 | 7 | 5 | 0 | 12 | 8 | 5 | 2 | 0 | 15 | 70 |
| 08:20 | 5 | 22 | 3 | 0 | 30 | 1 | 7 | 0 | 0 | 8 | 0 | 3 | 3 | 0 | 6 | 7 | 4 | 1 | 0 | 12 | 56 |
| 08:25 | 4 | 34 | 1 | 0 | 39 | 0 | 2 | 0 | 0 | 2 | 1 | 14 | 0 | 0 | 15 | 4 | 7 | 5 | 0 | 16 | 72 |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| Total | 19 | 183 | 8 | 0 | 210 | 9 | 20 | 4 | 0 | 33 | 3 | 66 | 22 | 0 | 91 | 32 | 38 | 14 | 0 | 84 | 418 |
| | | | | | | | | | | | | | | | | | | | | | |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| 16:00 | 2 | 26 | 0 | 0 | 28 | 3 | 7 | 1 | 0 | 11 | 0 | 41 | 13 | 0 | 54 | 3 | 3 | 4 | 0 | 10 | 103 |
| 16:05 | 3 | 25 | 0 | 0 | 28 | 4 | 6 | 0 | 0 | 10 | 0 | 46 | 15 | 0 | 61 | 1 | 2 | 5 | 0 | 8 | 107 |
| 16:10 | 3 | 32 | 0 | 0 | 35 | 2 | 8 | 0 | 0 | 10 | 3 | 35 | 15 | 0 | 53 | 6 | 4 | 2 | 0 | 12 | 110 |
| 16:15 | 3 | 36 | 1 | 0 | 40 | 3 | 9 | 1 | 0 | 13 | 4 | 45 | 7 | 0 | 56 | 4 | 1 | 2 | 0 | 7 | 116 |
| 16:20 | 0 | 31 | 3 | 0 | 34 | 1 | 7 | 1 | 0 | 9 | 2 | 46 | 15 | 0 | 63 | 4 | 2 | 1 | 0 | 7 | 113 |
| 16:25 | 1 | 24 | 1 | 0 | 26 | 2 | 11 | 0 | 0 | 13 | 3 | 47 | 8 | 0 | 58 | 5 | 10 | 3 | 0 | 18 | 115 |
| 16:30 | 1 | 23 | 0 | 0 | 24 | 0 | 10 | 2 | 0 | 12 | 1 | 42 | 7 | 0 | 50 | 5 | 3 | 2 | 0 | 10 | 96 |
| 16:35 | 2 | 32 | 1 | 0 | 35 | 1 | 5 | 1 | 0 | 7 | 4 | 34 | 4 | 0 | 42 | 2 | 1 | 1 | 0 | 4 | 88 |
| 16:40 | 5 | 29 | 1 | 0 | 35 | 2 | 13 | 0 | 0 | 15 | 1 | 29 | 7 | 0 | 37 | 4 | 9 | 1 | 0 | 14 | 101 |
| 16:45 | 3 | 31 | 2 | 0 | 36 | 5 | 10 | 3 | 0 | 18 | 2 | 31 | 13 | 0 | 46 | 3 | 2 | 2 | 0 | 7 | 107 |
| 16:50 | 1 | 32 | 1 | 0 | 34 | 2 | 11 | 0 | 0 | 13 | 4 | 39 | 7 | 0 | 50 | 6 | 4 | 2 | 0 | 12 | 109 |

LSC Transportation Consultants, Inc.

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

File Name : Hwy 24 - Stapleton Rd AM PM

Site Code : S224640

Start Date : 1/10/2023

Page No : 2

Groups Printed- Unshifted

| Start Time | Hwy 24 Southbound | | | | | Stapleton Dr Westbound | | | | | Hwy 24 Northbound | | | | | Stapleton Dr 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 | |
| 16:55 | 5 | 29 | 1 | 0 | 35 | 3 | 15 | 2 | 0 | 20 | 3 | 31 | 15 | 0 | 49 | 2 | 4 | 2 | 0 | 8 | 112 |
| Total | 29 | 350 | 11 | 0 | 390 | 28 | 112 | 11 | 0 | 151 | 27 | 466 | 126 | 0 | 619 | 45 | 45 | 27 | 0 | 117 | 1277 |
| 17:00 | 3 | 22 | 0 | 0 | 25 | 0 | 20 | 0 | 0 | 20 | 1 | 37 | 13 | 0 | 51 | 8 | 1 | 0 | 0 | 9 | 105 |
| 17:05 | 2 | 30 | 0 | 0 | 32 | 4 | 6 | 1 | 0 | 11 | 7 | 47 | 14 | 0 | 68 | 2 | 4 | 0 | 0 | 6 | 117 |
| 17:10 | 3 | 45 | 1 | 0 | 49 | 3 | 19 | 1 | 0 | 23 | 1 | 31 | 9 | 0 | 41 | 4 | 1 | 1 | 0 | 6 | 119 |
| 17:15 | 3 | 29 | 1 | 0 | 33 | 1 | 4 | 1 | 0 | 6 | 0 | 46 | 7 | 0 | 53 | 3 | 1 | 1 | 0 | 5 | 97 |
| 17:20 | 3 | 27 | 1 | 0 | 31 | 4 | 11 | 1 | 0 | 16 | 3 | 34 | 8 | 0 | 45 | 3 | 5 | 2 | 0 | 10 | 102 |
| 17:25 | 3 | 21 | 0 | 0 | 24 | 3 | 2 | 0 | 0 | 5 | 0 | 30 | 11 | 0 | 41 | 2 | 4 | 2 | 0 | 8 | 78 |
| 17:30 | 3 | 18 | 0 | 0 | 21 | 5 | 8 | 0 | 0 | 13 | 2 | 43 | 8 | 0 | 53 | 1 | 3 | 0 | 0 | 4 | 91 |
| 17:35 | 3 | 17 | 0 | 0 | 20 | 2 | 6 | 0 | 0 | 8 | 0 | 33 | 14 | 0 | 47 | 2 | 1 | 3 | 0 | 6 | 81 |
| 17:40 | 1 | 18 | 0 | 0 | 19 | 2 | 6 | 2 | 0 | 10 | 1 | 32 | 6 | 0 | 39 | 0 | 1 | 3 | 0 | 4 | 72 |
| 17:45 | 4 | 24 | 1 | 0 | 29 | 2 | 4 | 1 | 0 | 7 | 1 | 51 | 7 | 0 | 59 | 3 | 2 | 1 | 0 | 6 | 101 |
| 17:50 | 1 | 13 | 0 | 0 | 14 | 1 | 6 | 1 | 0 | 8 | 0 | 48 | 13 | 0 | 61 | 2 | 5 | 3 | 0 | 10 | 93 |
| 17:55 | 3 | 18 | 0 | 0 | 21 | 3 | 7 | 0 | 0 | 10 | 1 | 23 | 9 | 0 | 33 | 4 | 7 | 2 | 0 | 13 | 77 |
| Total | 32 | 282 | 4 | 0 | 318 | 30 | 99 | 8 | 0 | 137 | 17 | 455 | 119 | 0 | 591 | 34 | 35 | 18 | 0 | 87 | 1133 |
| Grand Total | 126 | 1413 | 68 | 0 | 1607 | 88 | 341 | 33 | 0 | 462 | 52 | 1329 | 331 | 0 | 1712 | 314 | 321 | 90 | 0 | 725 | 4506 |
| Apprch % | 7.8 | 87.9 | 4.2 | 0 | | 19 | 73.8 | 7.1 | 0 | | 3 | 77.6 | 19.3 | 0 | | 43.3 | 44.3 | 12.4 | 0 | | |
| Total % | 2.8 | 31.4 | 1.5 | 0 | 35.7 | 2 | 7.6 | 0.7 | 0 | 10.3 | 1.2 | 29.5 | 7.3 | 0 | 38 | 7 | 7.1 | 2 | 0 | 16.1 | |

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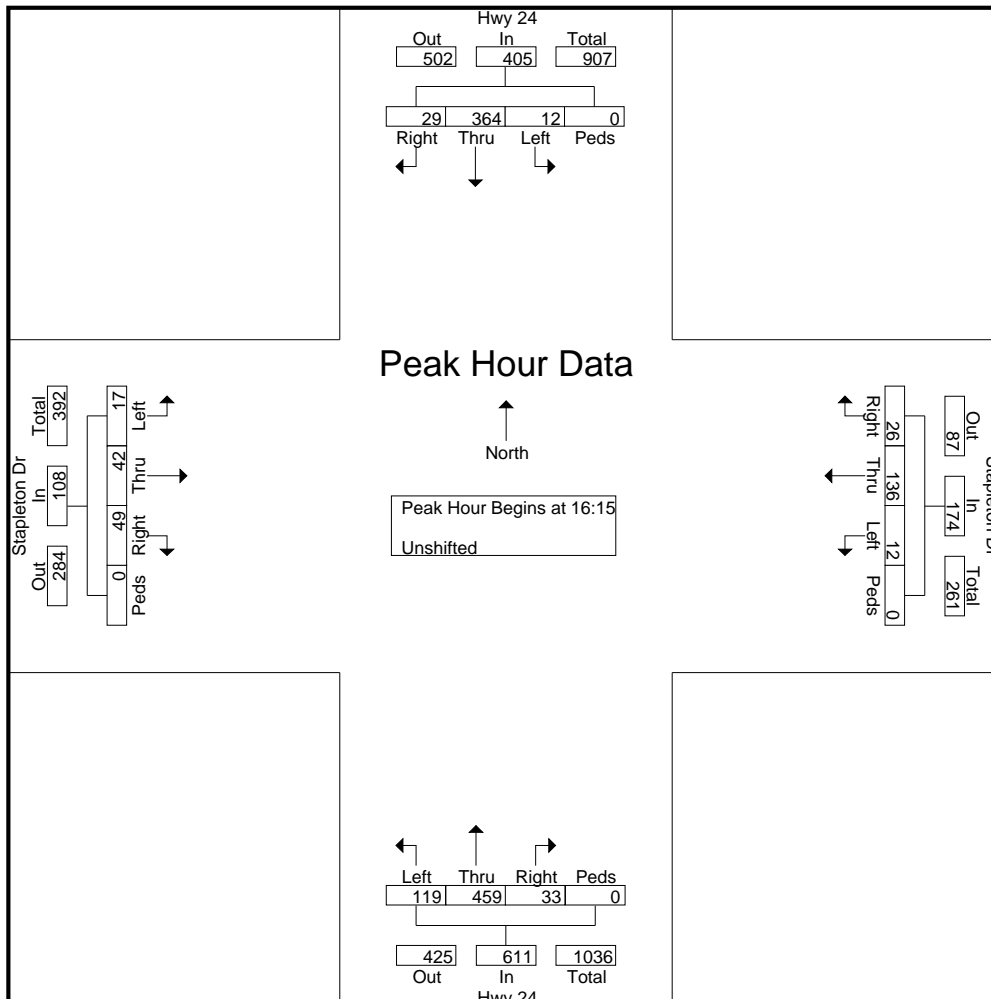
File Name : Hwy 24 - Stapleton Rd AM PM

Site Code : S224640

Start Date : 1/10/2023

Page No : 3

| Start Time | Hwy 24 Southbound | | | | | Stapleton Dr Westbound | | | | | Hwy 24 Northbound | | | | | Stapleton Dr 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 17:55 - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 16:15 | | | | | | | | | | | | | | | | | | | | | |
| 16:15 | 3 | 36 | 1 | 0 | 40 | 3 | 9 | 1 | 0 | 13 | 4 | 45 | 7 | 0 | 56 | 4 | 1 | 2 | 0 | 7 | 116 |
| 16:20 | 0 | 31 | 3 | 0 | 34 | 1 | 7 | 1 | 0 | 9 | 2 | 46 | 15 | 0 | 63 | 4 | 2 | 1 | 0 | 7 | 113 |
| 16:25 | 1 | 24 | 1 | 0 | 26 | 2 | 11 | 0 | 0 | 13 | 3 | 47 | 8 | 0 | 58 | 5 | 10 | 3 | 0 | 18 | 115 |
| 16:30 | 1 | 23 | 0 | 0 | 24 | 0 | 10 | 2 | 0 | 12 | 1 | 42 | 7 | 0 | 50 | 5 | 3 | 2 | 0 | 10 | 96 |
| 16:35 | 2 | 32 | 1 | 0 | 35 | 1 | 5 | 1 | 0 | 7 | 4 | 34 | 4 | 0 | 42 | 2 | 1 | 1 | 0 | 4 | 88 |
| 16:40 | 5 | 29 | 1 | 0 | 35 | 2 | 13 | 0 | 0 | 15 | 1 | 29 | 7 | 0 | 37 | 4 | 9 | 1 | 0 | 14 | 101 |
| 16:45 | 3 | 31 | 2 | 0 | 36 | 5 | 10 | 3 | 0 | 18 | 2 | 31 | 13 | 0 | 46 | 3 | 2 | 2 | 0 | 7 | 107 |
| 16:50 | 1 | 32 | 1 | 0 | 34 | 2 | 11 | 0 | 0 | 13 | 4 | 39 | 7 | 0 | 50 | 6 | 4 | 2 | 0 | 12 | 109 |
| 16:55 | 5 | 29 | 1 | 0 | 35 | 3 | 15 | 2 | 0 | 20 | 3 | 31 | 15 | 0 | 49 | 2 | 4 | 2 | 0 | 8 | 112 |
| 17:00 | 3 | 22 | 0 | 0 | 25 | 0 | 20 | 0 | 0 | 20 | 1 | 37 | 13 | 0 | 51 | 8 | 1 | 0 | 0 | 9 | 105 |
| 17:05 | 2 | 30 | 0 | 0 | 32 | 4 | 6 | 1 | 0 | 11 | 7 | 47 | 14 | 0 | 68 | 2 | 4 | 0 | 0 | 6 | 117 |
| 17:10 | 3 | 45 | 1 | 0 | 49 | 3 | 19 | 1 | 0 | 23 | 1 | 31 | 9 | 0 | 41 | 4 | 1 | 1 | 0 | 6 | 119 |
| Total Volume | 29 | 364 | 12 | 0 | 405 | 26 | 136 | 12 | 0 | 174 | 33 | 459 | 119 | 0 | 611 | 49 | 42 | 17 | 0 | 108 | 1298 |
| % App. Total | 7.2 | 89.9 | 3 | 0 | | 14.9 | 78.2 | 6.9 | 0 | | 5.4 | 75.1 | 19.5 | 0 | | 45.4 | 38.9 | 15.7 | 0 | | |
| PHF | .483 | .674 | .333 | .000 | .689 | .433 | .567 | .333 | .000 | .630 | .393 | .814 | .661 | .000 | .749 | .510 | .350 | .472 | .000 | .500 | .909 |



LSC Transportation Consultants, Inc.

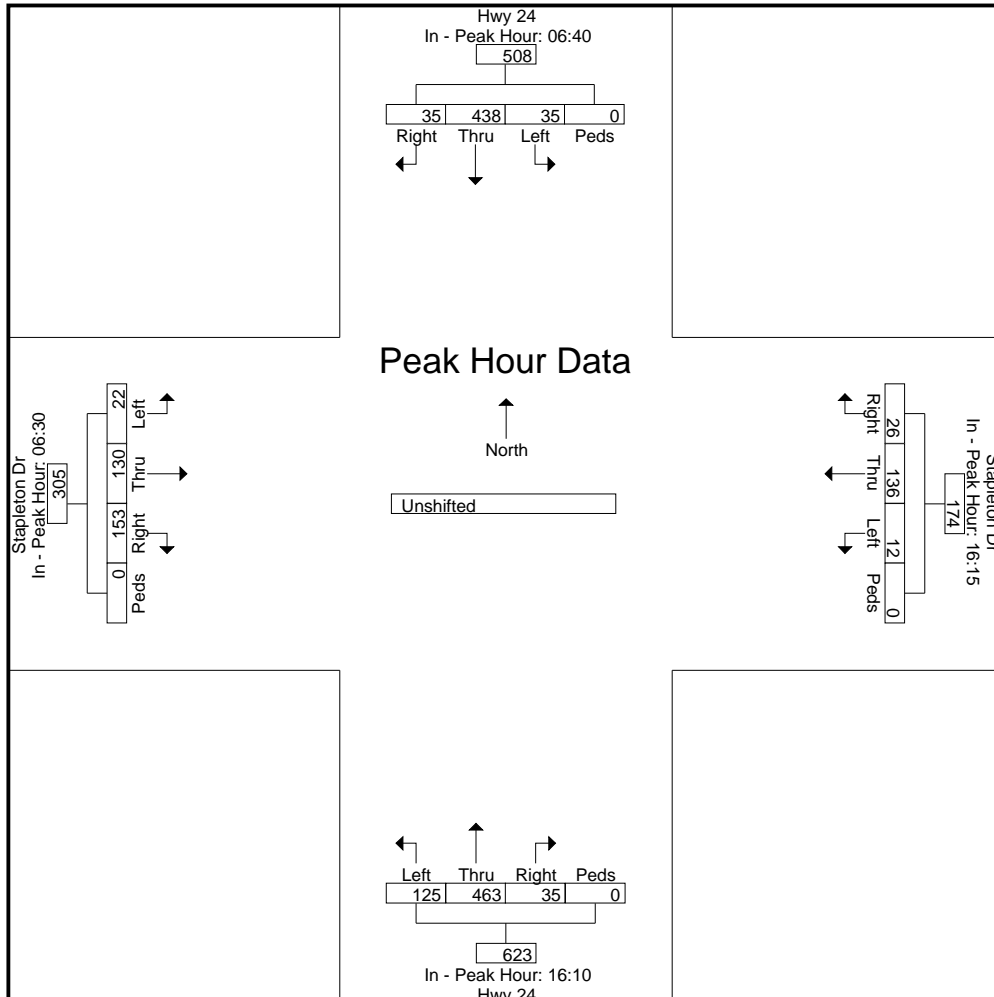
2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : Hwy 24 - Stapleton Rd AM PM
 Site Code : S224640
 Start Date : 1/10/2023
 Page No : 4

| Start Time | Hwy 24 Southbound | | | | | Stapleton Dr Westbound | | | | | Hwy 24 Northbound | | | | | Stapleton Dr 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 17:55 - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

| | 06:40 | | | | | 16:15 | | | | | 16:10 | | | | | 06:30 | | | | |
|--------------|-------|------|------|------|------|-------|------|------|------|------|-------|------|------|------|------|-------|------|------|------|------|
| +0 mins. | 0 | 35 | 2 | 0 | 37 | 3 | 9 | 1 | 0 | 13 | 3 | 35 | 15 | 0 | 53 | 20 | 11 | 1 | 0 | 32 |
| +5 mins. | 3 | 41 | 3 | 0 | 47 | 1 | 7 | 1 | 0 | 9 | 4 | 45 | 7 | 0 | 56 | 11 | 11 | 2 | 0 | 24 |
| +10 mins. | 3 | 32 | 1 | 0 | 36 | 2 | 11 | 0 | 0 | 13 | 2 | 46 | 15 | 0 | 63 | 16 | 8 | 2 | 0 | 26 |
| +15 mins. | 2 | 22 | 1 | 0 | 25 | 0 | 10 | 2 | 0 | 12 | 3 | 47 | 8 | 0 | 58 | 13 | 9 | 2 | 0 | 24 |
| +20 mins. | 4 | 35 | 3 | 0 | 42 | 1 | 5 | 1 | 0 | 7 | 1 | 42 | 7 | 0 | 50 | 14 | 7 | 1 | 0 | 22 |
| +25 mins. | 4 | 33 | 4 | 0 | 41 | 2 | 13 | 0 | 0 | 15 | 4 | 34 | 4 | 0 | 42 | 16 | 13 | 0 | 0 | 29 |
| +30 mins. | 0 | 33 | 3 | 0 | 36 | 5 | 10 | 3 | 0 | 18 | 1 | 29 | 7 | 0 | 37 | 7 | 13 | 1 | 0 | 21 |
| +35 mins. | 2 | 36 | 2 | 0 | 40 | 2 | 11 | 0 | 0 | 13 | 2 | 31 | 13 | 0 | 46 | 7 | 11 | 6 | 0 | 24 |
| +40 mins. | 4 | 46 | 1 | 0 | 51 | 3 | 15 | 2 | 0 | 20 | 4 | 39 | 7 | 0 | 50 | 15 | 12 | 2 | 0 | 29 |
| +45 mins. | 5 | 51 | 8 | 0 | 64 | 0 | 20 | 0 | 0 | 20 | 3 | 31 | 15 | 0 | 49 | 13 | 15 | 3 | 0 | 31 |
| +50 mins. | 2 | 34 | 2 | 0 | 38 | 4 | 6 | 1 | 0 | 11 | 1 | 37 | 13 | 0 | 51 | 11 | 13 | 1 | 0 | 25 |
| +55 mins. | 6 | 40 | 5 | 0 | 51 | 3 | 19 | 1 | 0 | 23 | 7 | 47 | 14 | 0 | 68 | 10 | 7 | 1 | 0 | 18 |
| Total Volume | 35 | 438 | 35 | 0 | 508 | 26 | 136 | 12 | 0 | 174 | 35 | 463 | 125 | 0 | 623 | 153 | 130 | 22 | 0 | 305 |
| % App. Total | 6.9 | 86.2 | 6.9 | 0 | | 14.9 | 78.2 | 6.9 | 0 | | 5.6 | 74.3 | 20.1 | 0 | | 50.2 | 42.6 | 7.2 | 0 | |
| PHF | .486 | .716 | .365 | .000 | .661 | .433 | .567 | .333 | .000 | .630 | .417 | .821 | .694 | .000 | .763 | .638 | .722 | .306 | .000 | .794 |



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 Colorado Springs, CO 80909
 719-633-2868

File Name : Elbert Rd - Hwy 24 PM

Site Code : S224640

Start Date : 1/17/2023

Page No : 1

Groups Printed- Unshifted

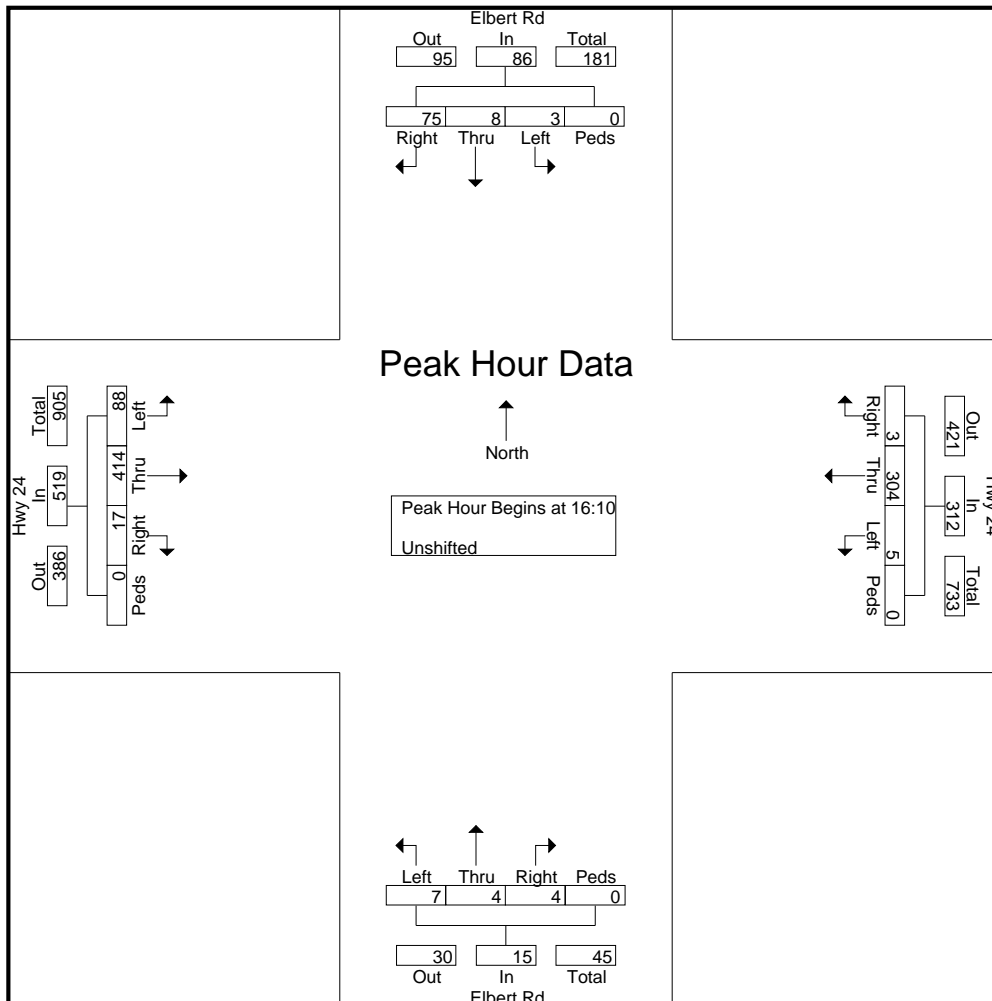
| Start Time | Elbert Rd Southbound | | | | | Hwy 24 Westbound | | | | | Elbert Rd Northbound | | | | | Hwy 24 Eastbound | | | | | Int. Total |
|--------------------|----------------------|-------------|------------|----------|------------|------------------|-------------|------------|----------|-------------|----------------------|-------------|-------------|----------|------------|------------------|-------------|-------------|----------|-------------|-------------|
| | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | |
| 16:00 | 3 | 3 | 1 | 0 | 7 | 0 | 21 | 0 | 0 | 21 | 0 | 0 | 2 | 0 | 2 | 2 | 33 | 7 | 0 | 42 | 72 |
| 16:05 | 1 | 1 | 1 | 0 | 3 | 0 | 21 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 8 | 0 | 41 | 65 |
| 16:10 | 3 | 0 | 0 | 0 | 3 | 0 | 42 | 0 | 0 | 42 | 1 | 0 | 0 | 0 | 1 | 2 | 33 | 4 | 0 | 39 | 85 |
| 16:15 | 4 | 0 | 0 | 0 | 4 | 1 | 20 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 2 | 32 | 9 | 0 | 43 | 68 |
| 16:20 | 5 | 0 | 1 | 0 | 6 | 1 | 17 | 0 | 0 | 18 | 1 | 0 | 0 | 0 | 1 | 0 | 44 | 10 | 0 | 54 | 79 |
| 16:25 | 6 | 1 | 0 | 0 | 7 | 0 | 29 | 0 | 0 | 29 | 0 | 1 | 1 | 0 | 2 | 2 | 20 | 7 | 0 | 29 | 67 |
| 16:30 | 7 | 2 | 0 | 0 | 9 | 0 | 18 | 1 | 0 | 19 | 0 | 1 | 0 | 0 | 1 | 2 | 47 | 9 | 0 | 58 | 87 |
| 16:35 | 5 | 0 | 0 | 0 | 5 | 1 | 43 | 0 | 0 | 44 | 0 | 0 | 2 | 0 | 2 | 1 | 36 | 9 | 0 | 46 | 97 |
| 16:40 | 11 | 1 | 0 | 0 | 12 | 0 | 30 | 1 | 0 | 31 | 0 | 0 | 1 | 0 | 1 | 1 | 29 | 8 | 0 | 38 | 82 |
| 16:45 | 10 | 1 | 0 | 0 | 11 | 0 | 22 | 1 | 0 | 23 | 0 | 0 | 1 | 0 | 1 | 0 | 42 | 4 | 0 | 46 | 81 |
| 16:50 | 5 | 2 | 1 | 0 | 8 | 0 | 24 | 1 | 0 | 25 | 1 | 1 | 1 | 0 | 3 | 2 | 25 | 10 | 0 | 37 | 73 |
| 16:55 | 5 | 1 | 0 | 0 | 6 | 0 | 19 | 1 | 0 | 20 | 0 | 1 | 0 | 0 | 1 | 3 | 29 | 9 | 0 | 41 | 68 |
| Total | 65 | 12 | 4 | 0 | 81 | 3 | 306 | 5 | 0 | 314 | 3 | 4 | 8 | 0 | 15 | 17 | 403 | 94 | 0 | 514 | 924 |
| 17:00 | 9 | 0 | 0 | 0 | 9 | 0 | 16 | 0 | 0 | 16 | 1 | 0 | 1 | 0 | 2 | 0 | 38 | 2 | 0 | 40 | 67 |
| 17:05 | 5 | 0 | 1 | 0 | 6 | 0 | 24 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 2 | 39 | 7 | 0 | 48 | 78 |
| 17:10 | 6 | 1 | 1 | 0 | 8 | 0 | 20 | 0 | 0 | 20 | 1 | 0 | 0 | 0 | 1 | 0 | 34 | 12 | 0 | 46 | 75 |
| 17:15 | 5 | 0 | 1 | 0 | 6 | 0 | 24 | 1 | 0 | 25 | 1 | 0 | 0 | 0 | 1 | 3 | 36 | 3 | 0 | 42 | 74 |
| 17:20 | 3 | 1 | 0 | 0 | 4 | 0 | 16 | 0 | 0 | 16 | 0 | 1 | 0 | 0 | 1 | 3 | 32 | 5 | 0 | 40 | 61 |
| 17:25 | 3 | 4 | 0 | 0 | 7 | 0 | 14 | 0 | 0 | 14 | 0 | 1 | 0 | 0 | 1 | 1 | 39 | 7 | 0 | 47 | 69 |
| 17:30 | 4 | 2 | 0 | 0 | 6 | 0 | 11 | 0 | 0 | 11 | 0 | 1 | 0 | 0 | 1 | 0 | 39 | 12 | 0 | 51 | 69 |
| 17:35 | 3 | 1 | 1 | 0 | 5 | 0 | 21 | 0 | 0 | 21 | 0 | 0 | 2 | 0 | 2 | 1 | 50 | 11 | 0 | 62 | 90 |
| 17:40 | 5 | 1 | 0 | 0 | 6 | 1 | 14 | 0 | 0 | 15 | 1 | 0 | 2 | 0 | 3 | 2 | 28 | 9 | 0 | 39 | 63 |
| 17:45 | 4 | 2 | 0 | 0 | 6 | 0 | 17 | 0 | 0 | 17 | 0 | 1 | 0 | 0 | 1 | 2 | 45 | 9 | 0 | 56 | 80 |
| 17:50 | 4 | 1 | 1 | 0 | 6 | 0 | 15 | 0 | 0 | 15 | 1 | 0 | 1 | 0 | 2 | 1 | 36 | 8 | 0 | 45 | 68 |
| 17:55 | 5 | 2 | 1 | 0 | 8 | 0 | 16 | 0 | 0 | 16 | 0 | 1 | 1 | 0 | 2 | 2 | 38 | 7 | 0 | 47 | 73 |
| Total | 56 | 15 | 6 | 0 | 77 | 1 | 208 | 1 | 0 | 210 | 5 | 5 | 7 | 0 | 17 | 17 | 454 | 92 | 0 | 563 | 867 |
| Grand Total | 121 | 27 | 10 | 0 | 158 | 4 | 514 | 6 | 0 | 524 | 8 | 9 | 15 | 0 | 32 | 34 | 857 | 186 | 0 | 1077 | 1791 |
| Apprch % | 76.6 | 17.1 | 6.3 | 0 | | 0.8 | 98.1 | 1.1 | 0 | | 25 | 28.1 | 46.9 | 0 | | 3.2 | 79.6 | 17.3 | 0 | | |
| Total % | 6.8 | 1.5 | 0.6 | 0 | 8.8 | 0.2 | 28.7 | 0.3 | 0 | 29.3 | 0.4 | 0.5 | 0.8 | 0 | 1.8 | 1.9 | 47.9 | 10.4 | 0 | 60.1 | |

LSC Transportation Consultants, Inc.

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File Name : Elbert Rd - Hwy 24 PM
 Site Code : S224640
 Start Date : 1/17/2023
 Page No : 2

| Start Time | Elbert Rd Southbound | | | | | Hwy 24 Westbound | | | | | Elbert Rd Northbound | | | | | Hwy 24 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 16:00 to 17:55 - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 16:10 | | | | | | | | | | | | | | | | | | | | | |
| 16:10 | 3 | 0 | 0 | 0 | 3 | 0 | 42 | 0 | 0 | 42 | 1 | 0 | 0 | 0 | 1 | 2 | 33 | 4 | 0 | 39 | 85 |
| 16:15 | 4 | 0 | 0 | 0 | 4 | 1 | 20 | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 2 | 32 | 9 | 0 | 43 | 68 |
| 16:20 | 5 | 0 | 1 | 0 | 6 | 1 | 17 | 0 | 0 | 18 | 1 | 0 | 0 | 0 | 1 | 0 | 44 | 10 | 0 | 54 | 79 |
| 16:25 | 6 | 1 | 0 | 0 | 7 | 0 | 29 | 0 | 0 | 29 | 0 | 1 | 1 | 0 | 2 | 2 | 20 | 7 | 0 | 29 | 67 |
| 16:30 | 7 | 2 | 0 | 0 | 9 | 0 | 18 | 1 | 0 | 19 | 0 | 1 | 0 | 0 | 1 | 2 | 47 | 9 | 0 | 58 | 87 |
| 16:35 | 5 | 0 | 0 | 0 | 5 | 1 | 43 | 0 | 0 | 44 | 0 | 0 | 2 | 0 | 2 | 1 | 36 | 9 | 0 | 46 | 97 |
| 16:40 | 11 | 1 | 0 | 0 | 12 | 0 | 30 | 1 | 0 | 31 | 0 | 0 | 1 | 0 | 1 | 1 | 29 | 8 | 0 | 38 | 82 |
| 16:45 | 10 | 1 | 0 | 0 | 11 | 0 | 22 | 1 | 0 | 23 | 0 | 0 | 1 | 0 | 1 | 0 | 42 | 4 | 0 | 46 | 81 |
| 16:50 | 5 | 2 | 1 | 0 | 8 | 0 | 24 | 1 | 0 | 25 | 1 | 1 | 1 | 0 | 3 | 2 | 25 | 10 | 0 | 37 | 73 |
| 16:55 | 5 | 1 | 0 | 0 | 6 | 0 | 19 | 1 | 0 | 20 | 0 | 1 | 0 | 0 | 1 | 3 | 29 | 9 | 0 | 41 | 68 |
| 17:00 | 9 | 0 | 0 | 0 | 9 | 0 | 16 | 0 | 0 | 16 | 1 | 0 | 1 | 0 | 2 | 0 | 38 | 2 | 0 | 40 | 67 |
| 17:05 | 5 | 0 | 1 | 0 | 6 | 0 | 24 | 0 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 2 | 39 | 7 | 0 | 48 | 78 |
| Total Volume | 75 | 8 | 3 | 0 | 86 | 3 | 304 | 5 | 0 | 312 | 4 | 4 | 7 | 0 | 15 | 17 | 414 | 88 | 0 | 519 | 932 |
| % App. Total | 87.2 | 9.3 | 3.5 | 0 | | 1 | 97.4 | 1.6 | 0 | | 26.7 | 26.7 | 46.7 | 0 | | 3.3 | 79.8 | 17 | 0 | | |
| PHF | .568 | .333 | .250 | .000 | .597 | .250 | .589 | .417 | .000 | .591 | .333 | .333 | .292 | .000 | .417 | .472 | .734 | .733 | .000 | .746 | .801 |

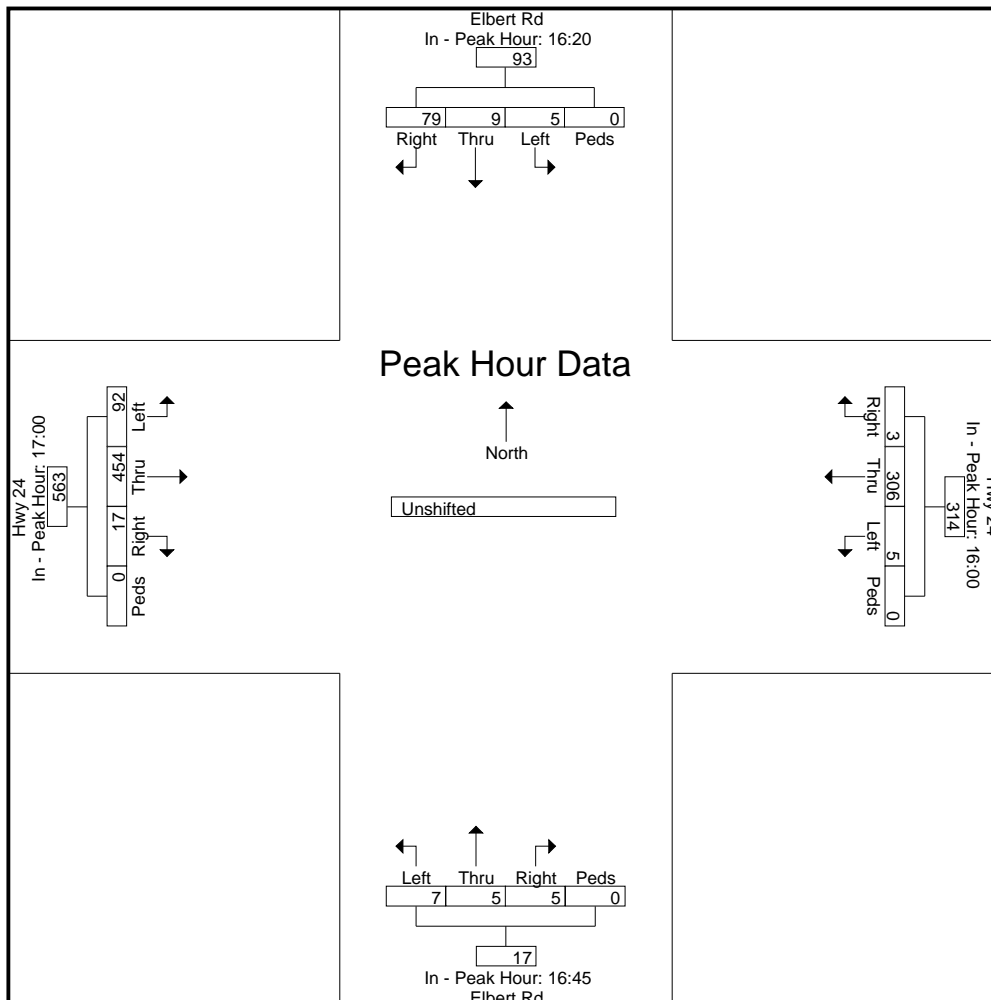


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File Name : Elbert Rd - Hwy 24 PM
 Site Code : S224640
 Start Date : 1/17/2023
 Page No : 3

| Start Time | Elbert Rd Southbound | | | | | Hwy 24 Westbound | | | | | Elbert Rd Northbound | | | | | Hwy 24 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 16:00 to 17:55 - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 16:20 | | | | | 16:00 | | | | | 16:45 | | | | | 17:00 | | | | | |
| +0 mins. | 5 | 0 | 1 | 0 | 6 | 0 | 21 | 0 | 0 | 21 | 0 | 0 | 1 | 0 | 1 | 0 | 38 | 2 | 0 | 40 | |
| +5 mins. | 6 | 1 | 0 | 0 | 7 | 0 | 21 | 0 | 0 | 21 | 1 | 1 | 1 | 0 | 3 | 2 | 39 | 7 | 0 | 48 | |
| +10 mins. | 7 | 2 | 0 | 0 | 9 | 0 | 42 | 0 | 0 | 42 | 0 | 1 | 0 | 0 | 1 | 0 | 34 | 12 | 0 | 46 | |
| +15 mins. | 5 | 0 | 0 | 0 | 5 | 1 | 20 | 0 | 0 | 21 | 1 | 0 | 1 | 0 | 2 | 3 | 36 | 3 | 0 | 42 | |
| +20 mins. | 11 | 1 | 0 | 0 | 12 | 1 | 17 | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 3 | 32 | 5 | 0 | 40 | |
| +25 mins. | 10 | 1 | 0 | 0 | 11 | 0 | 29 | 0 | 0 | 29 | 1 | 0 | 0 | 0 | 1 | 1 | 39 | 7 | 0 | 47 | |
| +30 mins. | 5 | 2 | 1 | 0 | 8 | 0 | 18 | 1 | 0 | 19 | 1 | 0 | 0 | 0 | 1 | 0 | 39 | 12 | 0 | 51 | |
| +35 mins. | 5 | 1 | 0 | 0 | 6 | 1 | 43 | 0 | 0 | 44 | 0 | 1 | 0 | 0 | 1 | 1 | 50 | 11 | 0 | 62 | |
| +40 mins. | 9 | 0 | 0 | 0 | 9 | 0 | 30 | 1 | 0 | 31 | 0 | 1 | 0 | 0 | 1 | 2 | 28 | 9 | 0 | 39 | |
| +45 mins. | 5 | 0 | 1 | 0 | 6 | 0 | 22 | 1 | 0 | 23 | 0 | 1 | 0 | 0 | 1 | 2 | 45 | 9 | 0 | 56 | |
| +50 mins. | 6 | 1 | 1 | 0 | 8 | 0 | 24 | 1 | 0 | 25 | 0 | 0 | 2 | 0 | 2 | 1 | 36 | 8 | 0 | 45 | |
| +55 mins. | 5 | 0 | 1 | 0 | 6 | 0 | 19 | 1 | 0 | 20 | 1 | 0 | 2 | 0 | 3 | 2 | 38 | 7 | 0 | 47 | |
| Total Volume | 79 | 9 | 5 | 0 | 93 | 3 | 306 | 5 | 0 | 314 | 5 | 5 | 7 | 0 | 17 | 17 | 454 | 92 | 0 | 563 | |
| % App. Total | 84.9 | 9.7 | 5.4 | 0 | | 1 | 97.5 | 1.6 | 0 | | 29.4 | 29.4 | 41.2 | 0 | | 3 | 80.6 | 16.3 | 0 | | |
| PHF | .598 | .375 | .417 | .000 | .646 | .250 | .593 | .417 | .000 | .595 | .417 | .417 | .292 | .000 | .472 | .472 | .757 | .639 | .000 | .757 | |



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 Colorado Springs, CO 80909
 719-633-2868

File Name : Elbert Rd - Hwy 24 AM

Site Code : S224640

Start Date : 1/17/2023

Page No : 1

Groups Printed- Unshifted

| Start Time | Elbert Rd Southbound | | | | | Hwy 24 Westbound | | | | | Elbert Rd Northbound | | | | | Hwy 24 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 | |
| 06:30 | 5 | 0 | 0 | 0 | 5 | 0 | 29 | 0 | 0 | 29 | 0 | 0 | 1 | 0 | 1 | 0 | 6 | 2 | 0 | 8 | 43 |
| 06:35 | 7 | 0 | 0 | 0 | 7 | 0 | 27 | 0 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 40 |
| 06:40 | 10 | 0 | 0 | 0 | 10 | 0 | 27 | 0 | 0 | 27 | 0 | 0 | 1 | 0 | 1 | 0 | 14 | 1 | 0 | 15 | 53 |
| 06:45 | 6 | 2 | 0 | 0 | 8 | 0 | 25 | 0 | 0 | 25 | 0 | 2 | 1 | 0 | 3 | 1 | 11 | 4 | 0 | 16 | 52 |
| 06:50 | 12 | 2 | 0 | 0 | 14 | 0 | 21 | 0 | 0 | 21 | 0 | 0 | 3 | 0 | 3 | 1 | 23 | 1 | 0 | 25 | 63 |
| 06:55 | 7 | 1 | 1 | 0 | 9 | 2 | 26 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 19 | 56 |
| Total | 47 | 5 | 1 | 0 | 53 | 2 | 155 | 0 | 0 | 157 | 0 | 2 | 6 | 0 | 8 | 2 | 79 | 8 | 0 | 89 | 307 |
| | | | | | | | | | | | | | | | | | | | | | |
| 07:00 | 12 | 1 | 1 | 0 | 14 | 1 | 31 | 0 | 0 | 32 | 0 | 0 | 4 | 0 | 4 | 1 | 23 | 6 | 0 | 30 | 80 |
| 07:05 | 6 | 1 | 0 | 0 | 7 | 0 | 31 | 1 | 0 | 32 | 0 | 1 | 1 | 0 | 2 | 0 | 25 | 4 | 0 | 29 | 70 |
| 07:10 | 5 | 0 | 0 | 0 | 5 | 0 | 40 | 0 | 0 | 40 | 0 | 3 | 0 | 0 | 3 | 0 | 25 | 2 | 0 | 27 | 75 |
| 07:15 | 16 | 0 | 1 | 0 | 17 | 0 | 32 | 0 | 0 | 32 | 0 | 2 | 1 | 0 | 3 | 0 | 28 | 4 | 0 | 32 | 84 |
| 07:20 | 8 | 0 | 0 | 0 | 8 | 1 | 28 | 0 | 0 | 29 | 0 | 2 | 0 | 0 | 2 | 0 | 26 | 6 | 0 | 32 | 71 |
| 07:25 | 7 | 0 | 0 | 0 | 7 | 0 | 40 | 0 | 0 | 40 | 0 | 2 | 0 | 0 | 2 | 0 | 19 | 9 | 0 | 28 | 77 |
| 07:30 | 4 | 2 | 0 | 0 | 6 | 0 | 35 | 1 | 0 | 36 | 0 | 1 | 1 | 0 | 2 | 0 | 19 | 5 | 0 | 24 | 68 |
| 07:35 | 3 | 1 | 0 | 0 | 4 | 0 | 36 | 1 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 1 | 0 | 16 | 57 |
| 07:40 | 19 | 0 | 0 | 0 | 19 | 0 | 35 | 0 | 0 | 35 | 0 | 1 | 2 | 0 | 3 | 0 | 11 | 0 | 0 | 11 | 68 |
| 07:45 | 4 | 0 | 0 | 0 | 4 | 0 | 26 | 0 | 0 | 26 | 0 | 1 | 1 | 0 | 2 | 0 | 12 | 2 | 0 | 14 | 46 |
| 07:50 | 8 | 2 | 0 | 0 | 10 | 0 | 20 | 0 | 0 | 20 | 0 | 2 | 2 | 0 | 4 | 1 | 16 | 3 | 0 | 20 | 54 |
| 07:55 | 6 | 1 | 1 | 0 | 8 | 1 | 21 | 0 | 0 | 22 | 0 | 1 | 4 | 0 | 5 | 0 | 18 | 2 | 0 | 20 | 55 |
| Total | 98 | 8 | 3 | 0 | 109 | 3 | 375 | 3 | 0 | 381 | 0 | 16 | 16 | 0 | 32 | 2 | 237 | 44 | 0 | 283 | 805 |
| | | | | | | | | | | | | | | | | | | | | | |
| 08:00 | 7 | 0 | 0 | 0 | 7 | 0 | 29 | 0 | 0 | 29 | 0 | 2 | 1 | 0 | 3 | 0 | 20 | 6 | 0 | 26 | 65 |
| 08:05 | 4 | 0 | 0 | 0 | 4 | 0 | 28 | 0 | 0 | 28 | 0 | 2 | 3 | 0 | 5 | 0 | 8 | 4 | 0 | 12 | 49 |
| 08:10 | 5 | 1 | 0 | 0 | 6 | 1 | 27 | 0 | 0 | 28 | 0 | 0 | 3 | 0 | 3 | 2 | 9 | 2 | 0 | 13 | 50 |
| 08:15 | 11 | 1 | 0 | 0 | 12 | 0 | 30 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 5 | 0 | 16 | 58 |
| 08:20 | 4 | 0 | 1 | 0 | 5 | 0 | 31 | 0 | 0 | 31 | 0 | 0 | 3 | 0 | 3 | 1 | 8 | 2 | 0 | 11 | 50 |
| 08:25 | 5 | 0 | 0 | 0 | 5 | 1 | 22 | 0 | 0 | 23 | 0 | 2 | 0 | 0 | 2 | 0 | 19 | 3 | 0 | 22 | 52 |
| Grand Total | 181 | 15 | 5 | 0 | 201 | 7 | 697 | 3 | 0 | 707 | 0 | 24 | 32 | 0 | 56 | 7 | 391 | 74 | 0 | 472 | 1436 |
| Apprch % | 90 | 7.5 | 2.5 | 0 | | 1 | 98.6 | 0.4 | 0 | | 0 | 42.9 | 57.1 | 0 | | 1.5 | 82.8 | 15.7 | 0 | | |
| Total % | 12.6 | 1 | 0.3 | 0 | 14 | 0.5 | 48.5 | 0.2 | 0 | 49.2 | 0 | 1.7 | 2.2 | 0 | 3.9 | 0.5 | 27.2 | 5.2 | 0 | 32.9 | |

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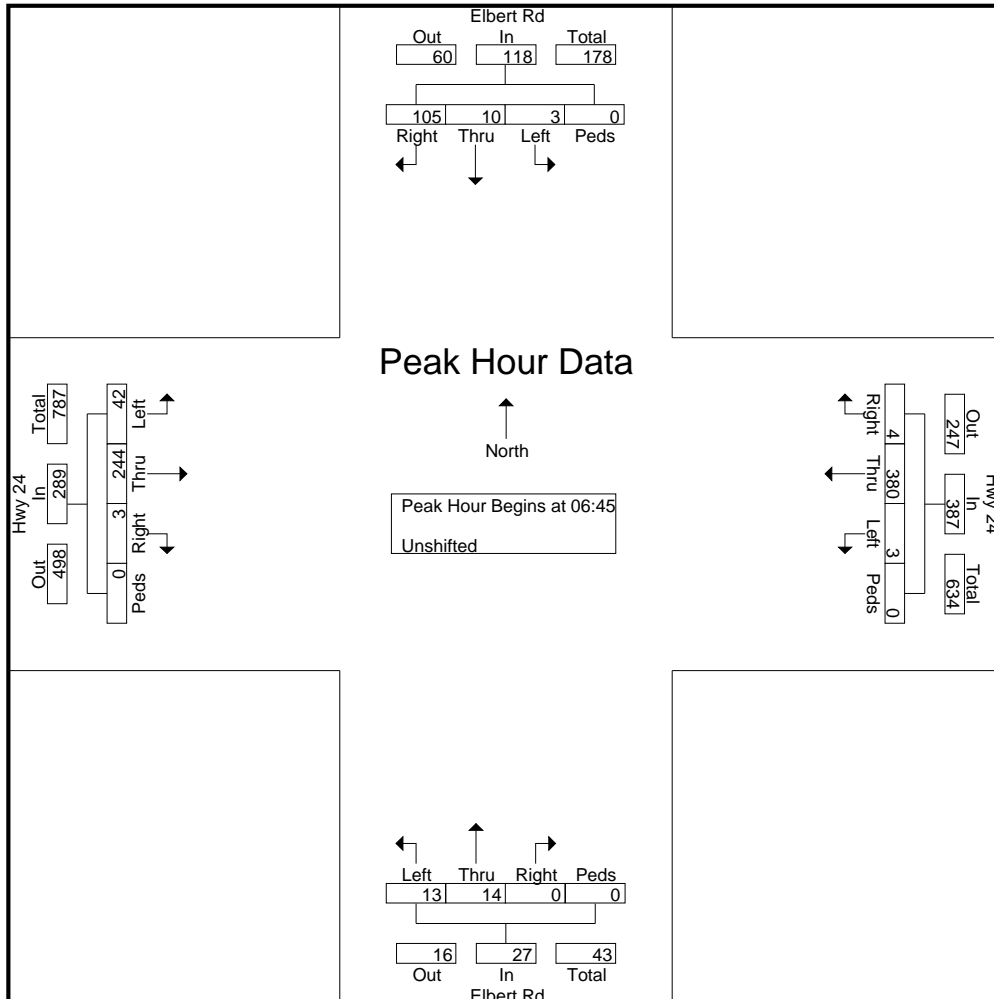
File Name : Elbert Rd - Hwy 24 AM

Site Code : S224640

Start Date : 1/17/2023

Page No : 2

| Start Time | Elbert Rd Southbound | | | | | Hwy 24 Westbound | | | | | Elbert Rd Northbound | | | | | Hwy 24 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 Entire Intersection Begins at 06:45 | | | | | | | | | | | | | | | | | | | | | |
| 06:45 | 6 | 2 | 0 | 0 | 8 | 0 | 25 | 0 | 0 | 25 | 0 | 2 | 1 | 0 | 3 | 1 | 11 | 4 | 0 | 16 | 52 |
| 06:50 | 12 | 2 | 0 | 0 | 14 | 0 | 21 | 0 | 0 | 21 | 0 | 0 | 3 | 0 | 3 | 1 | 23 | 1 | 0 | 25 | 63 |
| 06:55 | 7 | 1 | 1 | 0 | 9 | 2 | 26 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 19 | 56 |
| 07:00 | 12 | 1 | 1 | 0 | 14 | 1 | 31 | 0 | 0 | 32 | 0 | 0 | 4 | 0 | 4 | 1 | 23 | 6 | 0 | 30 | 80 |
| 07:05 | 6 | 1 | 0 | 0 | 7 | 0 | 31 | 1 | 0 | 32 | 0 | 1 | 1 | 0 | 2 | 0 | 25 | 4 | 0 | 29 | 70 |
| 07:10 | 5 | 0 | 0 | 0 | 5 | 0 | 40 | 0 | 0 | 40 | 0 | 3 | 0 | 0 | 3 | 0 | 25 | 2 | 0 | 27 | 75 |
| 07:15 | 16 | 0 | 1 | 0 | 17 | 0 | 32 | 0 | 0 | 32 | 0 | 2 | 1 | 0 | 3 | 0 | 28 | 4 | 0 | 32 | 84 |
| 07:20 | 8 | 0 | 0 | 0 | 8 | 1 | 28 | 0 | 0 | 29 | 0 | 2 | 0 | 0 | 2 | 0 | 26 | 6 | 0 | 32 | 71 |
| 07:25 | 7 | 0 | 0 | 0 | 7 | 0 | 40 | 0 | 0 | 40 | 0 | 2 | 0 | 0 | 2 | 0 | 19 | 9 | 0 | 28 | 77 |
| 07:30 | 4 | 2 | 0 | 0 | 6 | 0 | 35 | 1 | 0 | 36 | 0 | 1 | 1 | 0 | 2 | 0 | 19 | 5 | 0 | 24 | 68 |
| 07:35 | 3 | 1 | 0 | 0 | 4 | 0 | 36 | 1 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 1 | 0 | 16 | 57 |
| 07:40 | 19 | 0 | 0 | 0 | 19 | 0 | 35 | 0 | 0 | 35 | 0 | 1 | 2 | 0 | 3 | 0 | 11 | 0 | 0 | 11 | 68 |
| Total Volume | 105 | 10 | 3 | 0 | 118 | 4 | 380 | 3 | 0 | 387 | 0 | 14 | 13 | 0 | 27 | 3 | 244 | 42 | 0 | 289 | 821 |
| % App. Total | 89 | 8.5 | 2.5 | 0 | | 1 | 98.2 | 0.8 | 0 | | 0 | 51.9 | 48.1 | 0 | | 1 | 84.4 | 14.5 | 0 | | |
| PHF | .461 | .417 | .250 | .000 | .518 | .167 | .792 | .250 | .000 | .806 | .000 | .389 | .271 | .000 | .563 | .250 | .726 | .389 | .000 | .753 | .814 |



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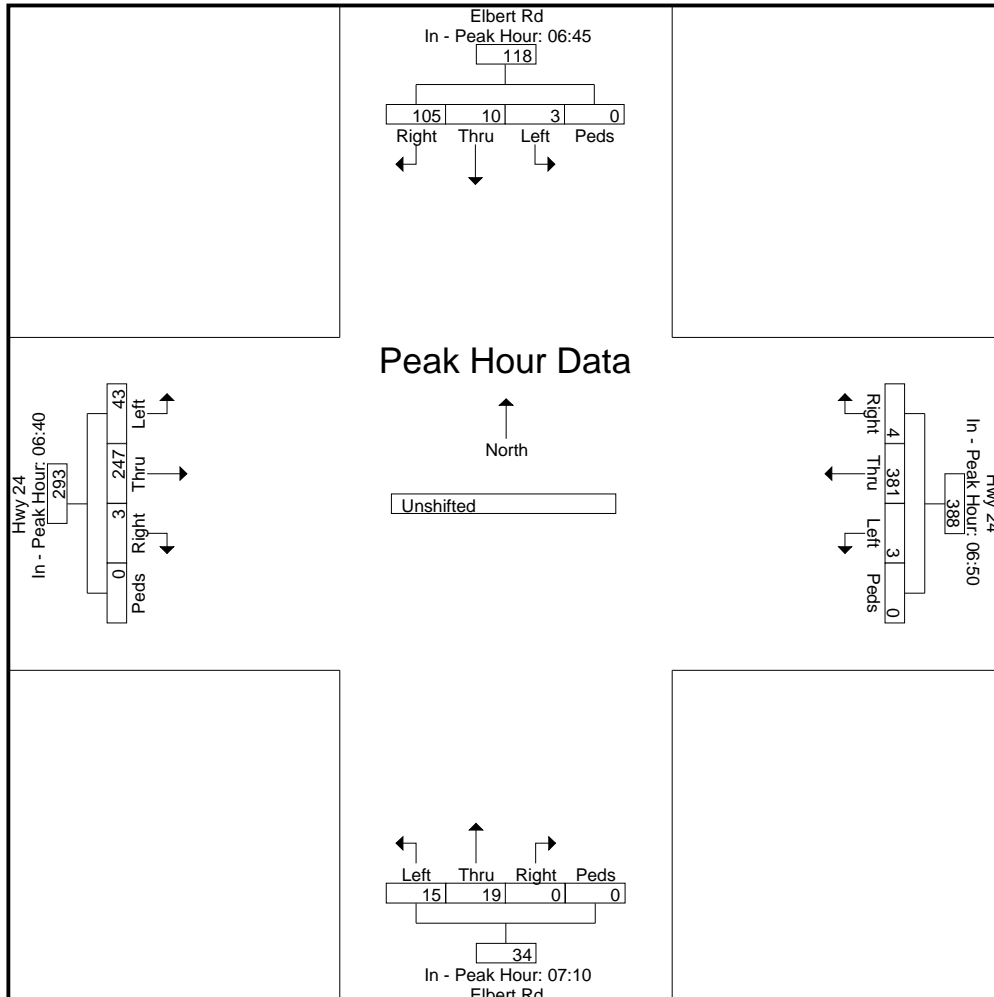
2504 E. Pikes Peak Ave, Suite 304
 Colorado Springs, CO 80909
 719-633-2868

File Name : Elbert Rd - Hwy 24 AM
 Site Code : S224640
 Start Date : 1/17/2023
 Page No : 3

| Start Time | Elbert Rd Southbound | | | | | Hwy 24 Westbound | | | | | Elbert Rd Northbound | | | | | Hwy 24 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:

| | 06:45 | | | | | 06:50 | | | | | 07:10 | | | | | 06:40 | | | | |
|--------------|-------|------|------|------|------|-------|------|------|------|------|-------|------|------|------|------|-------|------|------|------|------|
| +0 mins. | 6 | 2 | 0 | 0 | 8 | 0 | 21 | 0 | 0 | 21 | 0 | 3 | 0 | 0 | 3 | 0 | 14 | 1 | 0 | 15 |
| +5 mins. | 12 | 2 | 0 | 0 | 14 | 2 | 26 | 0 | 0 | 28 | 0 | 2 | 1 | 0 | 3 | 1 | 11 | 4 | 0 | 16 |
| +10 mins. | 7 | 1 | 1 | 0 | 9 | 1 | 31 | 0 | 0 | 32 | 0 | 2 | 0 | 0 | 2 | 1 | 23 | 1 | 0 | 25 |
| +15 mins. | 12 | 1 | 1 | 0 | 14 | 0 | 31 | 1 | 0 | 32 | 0 | 2 | 0 | 0 | 2 | 0 | 19 | 0 | 0 | 19 |
| +20 mins. | 6 | 1 | 0 | 0 | 7 | 0 | 40 | 0 | 0 | 40 | 0 | 1 | 1 | 0 | 2 | 1 | 23 | 6 | 0 | 30 |
| +25 mins. | 5 | 0 | 0 | 0 | 5 | 0 | 32 | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 4 | 0 | 29 |
| +30 mins. | 16 | 0 | 1 | 0 | 17 | 1 | 28 | 0 | 0 | 29 | 0 | 1 | 2 | 0 | 3 | 0 | 25 | 2 | 0 | 27 |
| +35 mins. | 8 | 0 | 0 | 0 | 8 | 0 | 40 | 0 | 0 | 40 | 0 | 1 | 1 | 0 | 2 | 0 | 28 | 4 | 0 | 32 |
| +40 mins. | 7 | 0 | 0 | 0 | 7 | 0 | 35 | 1 | 0 | 36 | 0 | 2 | 2 | 0 | 4 | 0 | 26 | 6 | 0 | 32 |
| +45 mins. | 4 | 2 | 0 | 0 | 6 | 0 | 36 | 1 | 0 | 37 | 0 | 1 | 4 | 0 | 5 | 0 | 19 | 9 | 0 | 28 |
| +50 mins. | 3 | 1 | 0 | 0 | 4 | 0 | 35 | 0 | 0 | 35 | 0 | 2 | 1 | 0 | 3 | 0 | 19 | 5 | 0 | 24 |
| +55 mins. | 19 | 0 | 0 | 0 | 19 | 0 | 26 | 0 | 0 | 26 | 0 | 2 | 3 | 0 | 5 | 0 | 15 | 1 | 0 | 16 |
| Total Volume | 105 | 10 | 3 | 0 | 118 | 4 | 381 | 3 | 0 | 388 | 0 | 19 | 15 | 0 | 34 | 3 | 247 | 43 | 0 | 293 |
| % App. Total | 89 | 8.5 | 2.5 | 0 | | 1 | 98.2 | 0.8 | 0 | | 0 | 55.9 | 44.1 | 0 | | 1 | 84.3 | 14.7 | 0 | |
| PHF | .461 | .417 | .250 | .000 | .518 | .167 | .794 | .250 | .000 | .808 | .000 | .528 | .313 | .000 | .567 | .250 | .735 | .398 | .000 | .763 |



LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304

Colorado Springs, CO 80909

719-633-2868

Levels of Service



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

Short-Term Baseline
AM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | ↕ | | | ↕ | | ↕ | ↕ | | ↕ | ↕ | |
| Traffic Volume (vph) | 19 | 71 | 204 | 149 | 74 | 4 | 84 | 345 | 78 | 7 | 585 | 19 |
| Future Volume (vph) | 19 | 71 | 204 | 149 | 74 | 4 | 84 | 345 | 78 | 7 | 585 | 19 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 870 | | 0 | 695 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 300 | | | 280 | | |
| 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 | | 0.906 | | | 0.997 | | | 0.972 | | | 0.995 | |
| Flt Protected | | 0.997 | | | 0.968 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1683 | 0 | 0 | 1798 | 0 | 1770 | 1811 | 0 | 1770 | 1853 | 0 |
| Flt Permitted | | 0.997 | | | 0.968 | | 0.113 | | | 0.476 | | |
| Satd. Flow (perm) | 0 | 1683 | 0 | 0 | 1798 | 0 | 210 | 1811 | 0 | 887 | 1853 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 111 | | | 1 | | | 18 | | | | 2 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | | 55 |
| Link Distance (ft) | | 927 | | | 7314 | | | 1546 | | | | 3606 |
| Travel Time (s) | | 14.0 | | | 110.8 | | | 19.2 | | | | 44.7 |
| 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) | 21 | 77 | 222 | 171 | 85 | 5 | 91 | 375 | 85 | 8 | 629 | 20 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 320 | 0 | 0 | 261 | 0 | 91 | 460 | 0 | 8 | 649 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | 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) | 60 | | 60 | 60 | | 60 | 60 | | 60 | 60 | | 60 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | 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 | | 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 | | 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 | Split | NA | | Split | NA | | pm+pt | NA | | Perm | NA | |
| Protected Phases | 4 | 4 | | 8 | 8 | | 5 | 2 | | | | 6 |
| Permitted Phases | | | | | | | 2 | | | 6 | | |

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

Short-Term Baseline
AM

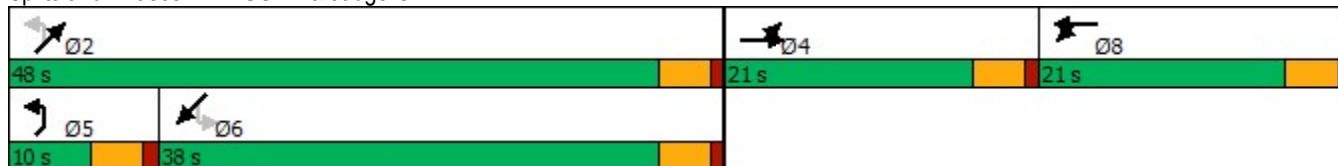


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 6 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 22.5 | 22.5 | | 22.5 | 22.5 | | 9.5 | 22.5 | | 22.5 | 22.5 | |
| Total Split (s) | 21.0 | 21.0 | | 21.0 | 21.0 | | 10.0 | 48.0 | | 38.0 | 38.0 | |
| Total Split (%) | 23.3% | 23.3% | | 23.3% | 23.3% | | 11.1% | 53.3% | | 42.2% | 42.2% | |
| Maximum Green (s) | 16.5 | 16.5 | | 16.5 | 16.5 | | 5.5 | 43.5 | | 33.5 | 33.5 | |
| 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 | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | | | 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 | | Max | Max | |
| Walk Time (s) | 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 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | 0 | 0 | |
| Act Effct Green (s) | | 14.6 | | | 15.3 | | 43.6 | 43.6 | | 35.8 | 35.8 | |
| Actuated g/C Ratio | | 0.17 | | | 0.18 | | 0.50 | 0.50 | | 0.41 | 0.41 | |
| v/c Ratio | | 0.86 | | | 0.82 | | 0.45 | 0.50 | | 0.02 | 0.85 | |
| Control Delay | | 45.4 | | | 57.1 | | 19.7 | 17.0 | | 18.3 | 38.3 | |
| Queue Delay | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 45.4 | | | 57.1 | | 19.7 | 17.0 | | 18.3 | 38.3 | |
| LOS | | D | | | E | | B | B | | B | D | |
| Approach Delay | | 45.4 | | | 57.1 | | | 17.4 | | | 38.1 | |
| Approach LOS | | D | | | E | | | B | | | D | |
| Queue Length 50th (ft) | | 115 | | | 143 | | 27 | 166 | | 3 | 349 | |
| Queue Length 95th (ft) | | #250 | | | #249 | | 53 | 253 | | 12 | #574 | |
| Internal Link Dist (ft) | | 847 | | | 7234 | | | 1466 | | | 3526 | |
| Turn Bay Length (ft) | | | | | | | 870 | | | 695 | | |
| Base Capacity (vph) | | 409 | | | 342 | | 203 | 916 | | 365 | 763 | |
| 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 | | 0.78 | | | 0.76 | | 0.45 | 0.50 | | 0.02 | 0.85 | |

Intersection Summary

| | |
|---|------------------------|
| Area Type: | Other |
| Cycle Length: | 90 |
| Actuated Cycle Length: | 87.1 |
| Natural Cycle: | 90 |
| Control Type: | Actuated-Uncoordinated |
| Maximum v/c Ratio: | 0.86 |
| Intersection Signal Delay: | 35.8 |
| Intersection LOS: | D |
| Intersection Capacity Utilization: | 81.3% |
| 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: 1: US 24 & Judge Orr



| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 14.2 | | | | | | | | | | | |
| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
| Lane Configurations | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ |
| Traffic Vol, veh/h | 23 | 154 | 143 | 12 | 115 | 21 | 49 | 267 | 6 | 38 | 438 | 37 |
| Future Vol, veh/h | 23 | 154 | 143 | 12 | 115 | 21 | 49 | 267 | 6 | 38 | 438 | 37 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 190 | - | 325 | 215 | - | 215 | 890 | - | 1000 | 790 | - | 790 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 83 | 83 | 83 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 25 | 167 | 155 | 14 | 139 | 25 | 53 | 290 | 7 | 41 | 476 | 40 |

| Major/Minor | Minor2 | | Minor1 | | | Major1 | | | Major2 | | | |
|----------------------|--------|-------|--------|-------|-------|--------|-------|---|--------|-------|---|---|
| Conflicting Flow All | 1040 | 961 | 476 | 1135 | 994 | 290 | 516 | 0 | 0 | 297 | 0 | 0 |
| Stage 1 | 558 | 558 | - | 396 | 396 | - | - | - | - | - | - | - |
| Stage 2 | 482 | 403 | - | 739 | 598 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| 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 | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 208 | 256 | 589 | 179 | 245 | 749 | 1050 | - | - | 1264 | - | - |
| Stage 1 | 514 | 512 | - | 629 | 604 | - | - | - | - | - | - | - |
| Stage 2 | 565 | 600 | - | 409 | 491 | - | - | - | - | - | - | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 97 | 236 | 589 | 53 | 225 | 749 | 1050 | - | - | 1264 | - | - |
| Mov Cap-2 Maneuver | 97 | 236 | - | 53 | 225 | - | - | - | - | - | - | - |
| Stage 1 | 488 | 496 | - | 598 | 574 | - | - | - | - | - | - | - |
| Stage 2 | 393 | 570 | - | 193 | 475 | - | - | - | - | - | - | - |

| Approach | SE | | NW | | | NE | | | SW | | | |
|----------------------|------|--|------|--|--|-----|--|--|-----|--|--|--|
| HCM Control Delay, s | 34.2 | | 43.2 | | | 1.3 | | | 0.6 | | | |
| HCM LOS | D | | E | | | | | | | | | |

| Minor Lane/Major Mvmt | NEL | NET | NERN | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|-----------------------|-------|-----|------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1050 | - | - | 53 | 225 | 749 | 97 | 236 | 589 | 1264 | - | - |
| HCM Lane V/C Ratio | 0.051 | - | - | 0.273 | 0.616 | 0.034 | 0.258 | 0.709 | 0.264 | 0.033 | - | - |
| HCM Control Delay (s) | 8.6 | - | - | 96.7 | 43.7 | 10 | 54.5 | 50.5 | 13.3 | 7.9 | - | - |
| HCM Lane LOS | A | - | - | F | E | B | F | F | B | A | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.9 | 3.6 | 0.1 | 0.9 | 4.7 | 1.1 | 0.1 | - | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| Int Delay, s/veh | 2 | | | | | | | | | | | |
| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
| Lane Configurations | ↘ | ↑ | ↗ | ↘ | ↑ | ↗ | ↘ | ↑ | ↗ | ↘ | ↑ | ↗ |
| Traffic Vol, veh/h | 5 | 12 | 110 | 17 | 15 | 4 | 45 | 251 | 5 | 9 | 383 | 5 |
| Future Vol, veh/h | 5 | 12 | 110 | 17 | 15 | 4 | 45 | 251 | 5 | 9 | 383 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | Free | - | - | Free | - | - | Yield | - | - | Yield |
| Storage Length | 120 | - | 240 | 85 | - | 25 | 600 | - | 480 | 495 | - | 485 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 83 | 83 | 83 | 78 | 78 | 78 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 6 | 14 | 133 | 22 | 19 | 5 | 49 | 273 | 5 | 10 | 416 | 5 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|-------|--------|-------|--------|---|-------|--------|---|-------|---|---|
| Conflicting Flow All | 817 | 807 | - | 814 | 807 | - | 416 | 0 | 0 | 273 | 0 | 0 |
| Stage 1 | 436 | 436 | - | 371 | 371 | - | - | - | - | - | - | - |
| Stage 2 | 381 | 371 | - | 443 | 436 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | - | 7.12 | 6.52 | - | 4.12 | - | - | 4.12 | - | - |
| 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 | 3.518 | 4.018 | - | 3.518 | 4.018 | - | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 295 | 315 | 0 | 297 | 315 | 0 | 1143 | - | - | 1290 | - | - |
| Stage 1 | 599 | 580 | 0 | 649 | 620 | 0 | - | - | - | - | - | - |
| Stage 2 | 641 | 620 | 0 | 594 | 580 | 0 | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | | | | | |
| Mov Cap-1 Maneuver | 270 | 299 | - | 275 | 299 | - | 1143 | - | - | 1290 | - | - |
| Mov Cap-2 Maneuver | 270 | 299 | - | 275 | 299 | - | - | - | - | - | - | - |
| Stage 1 | 573 | 575 | - | 621 | 593 | - | - | - | - | - | - | - |
| Stage 2 | 594 | 593 | - | 575 | 575 | - | - | - | - | - | - | - |

| Approach | SE | | NW | | NE | | SW | |
|----------------------|----|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 18 | | 18.6 | | 1.2 | | 0.2 | |
| HCM LOS | C | | C | | | | | |

| Minor Lane/Major Mvmt | NEL | NET | NERN | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|-----------------------|-------|-----|------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1143 | - | - | 275 | 299 | - | 270 | 299 | - | 1290 | - | - |
| HCM Lane V/C Ratio | 0.043 | - | - | 0.079 | 0.064 | - | 0.022 | 0.048 | - | 0.008 | - | - |
| HCM Control Delay (s) | 8.3 | - | - | 19.2 | 17.9 | 0 | 18.6 | 17.7 | 0 | 7.8 | - | - |
| HCM Lane LOS | A | - | - | C | C | A | C | C | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.3 | 0.2 | - | 0.1 | 0.2 | - | 0 | - | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 7.5 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↖ | ↗ | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↗ | |
| Traffic Vol, veh/h | 1 | 47 | 84 | 20 | 157 | 49 | 54 | 90 | 0 | 13 | 171 | 0 |
| Future Vol, veh/h | 1 | 47 | 84 | 20 | 157 | 49 | 54 | 90 | 0 | 13 | 171 | 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 | - | - | None | - | - | None | - | - | None |
| Storage Length | 245 | - | 0 | 235 | - | - | 265 | - | - | 265 | - | - |
| 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 | 57 | 101 | 23 | 180 | 56 | 65 | 108 | 0 | 15 | 197 | 0 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-------|-------|--------|-------|-------|
| Conflicting Flow All | 236 | 0 | 0 | 158 | 0 | 0 | 412 | 341 | 57 | 418 | 414 | 208 |
| Stage 1 | - | - | - | - | - | - | 59 | 59 | - | 254 | 254 | - |
| Stage 2 | - | - | - | - | - | - | 353 | 282 | - | 164 | 160 | - |
| 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 | 1331 | - | - | 1422 | - | - | 550 | 581 | 1009 | 545 | 529 | 832 |
| Stage 1 | - | - | - | - | - | - | 953 | 846 | - | 750 | 697 | - |
| Stage 2 | - | - | - | - | - | - | 664 | 678 | - | 838 | 766 | - |
| Platoon blocked, % | | - | - | - | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1331 | - | - | 1422 | - | - | 383 | 571 | 1009 | 459 | 520 | 832 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 383 | 571 | - | 459 | 520 | - |
| Stage 1 | - | - | - | - | - | - | 952 | 845 | - | 749 | 686 | - |
| Stage 2 | - | - | - | - | - | - | 466 | 667 | - | 730 | 765 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.1 | | | 0.7 | | | 14.1 | | | 15.9 | | |
| HCM LOS | | | | | | | B | | | C | | |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-------|-------|-----|-----|-------|-----|-----|-------|-------|
| Capacity (veh/h) | 383 | 571 | 1331 | - | - | 1422 | - | - | 459 | 520 |
| HCM Lane V/C Ratio | 0.17 | 0.19 | 0.001 | - | - | 0.016 | - | - | 0.033 | 0.378 |
| HCM Control Delay (s) | 16.3 | 12.8 | 7.7 | 0 | - | 7.6 | - | - | 13.1 | 16.1 |
| HCM Lane LOS | C | B | A | A | - | A | - | - | B | C |
| HCM 95th %tile Q(veh) | 0.6 | 0.7 | 0 | - | - | 0 | - | - | 0.1 | 1.7 |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↶ | ↷ | | ↶ | |
| Traffic Vol, veh/h | 3 | 42 | 156 | 15 | 5 | 15 |
| Future Vol, veh/h | 3 | 42 | 156 | 15 | 5 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 83 | 83 | 87 | 87 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 51 | 179 | 17 | 6 | 19 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 196 | 0 | - | 0 | 247 188 |
| Stage 1 | - | - | - | - | 188 - |
| Stage 2 | - | - | - | - | 59 - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 3.318 |
| Pot Cap-1 Maneuver | 1377 | - | - | - | 741 854 |
| Stage 1 | - | - | - | - | 844 - |
| Stage 2 | - | - | - | - | 964 - |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 1377 | - | - | - | 739 854 |
| Mov Cap-2 Maneuver | - | - | - | - | 739 - |
| Stage 1 | - | - | - | - | 841 - |
| Stage 2 | - | - | - | - | 964 - |

| Approach | EB | WB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 0.5 | 0 | 9.5 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 1377 | - | - | - | 822 |
| HCM Lane V/C Ratio | 0.003 | - | - | - | 0.031 |
| HCM Control Delay (s) | 7.6 | 0 | - | - | 9.5 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

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

Short-Term Baseline
PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | ↕ | | | ↕ | | ↗ | ↖ | | ↗ | ↖ | |
| Traffic Volume (vph) | 39 | 46 | 72 | 150 | 130 | 15 | 159 | 571 | 181 | 5 | 424 | 22 |
| Future Volume (vph) | 39 | 46 | 72 | 150 | 130 | 15 | 159 | 571 | 181 | 5 | 424 | 22 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 870 | | 0 | 695 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 300 | | | 280 | | |
| 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 | | 0.938 | | | 0.993 | | | 0.964 | | | 0.993 | |
| Flt Protected | | 0.988 | | | 0.975 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1726 | 0 | 0 | 1803 | 0 | 1770 | 1796 | 0 | 1770 | 1850 | 0 |
| Flt Permitted | | 0.988 | | | 0.975 | | 0.230 | | | 0.153 | | |
| Satd. Flow (perm) | 0 | 1726 | 0 | 0 | 1803 | 0 | 428 | 1796 | 0 | 285 | 1850 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 38 | | | 3 | | | 25 | | | 3 | |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 927 | | | 7314 | | | 1546 | | | 3606 | |
| Travel Time (s) | | 14.0 | | | 110.8 | | | 19.2 | | | 44.7 | |
| 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) | 45 | 53 | 83 | 163 | 141 | 16 | 171 | 614 | 195 | 5 | 461 | 24 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 181 | 0 | 0 | 320 | 0 | 171 | 809 | 0 | 5 | 485 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | 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) | 60 | | 60 | 60 | | 60 | 60 | | 60 | 60 | | 60 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | 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 | | 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 | | 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 | Split | NA | | Split | NA | | pm+pt | NA | | Perm | NA | |
| Protected Phases | 4 | 4 | | 8 | 8 | | 5 | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | | 6 | | |

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

Short-Term Baseline
PM

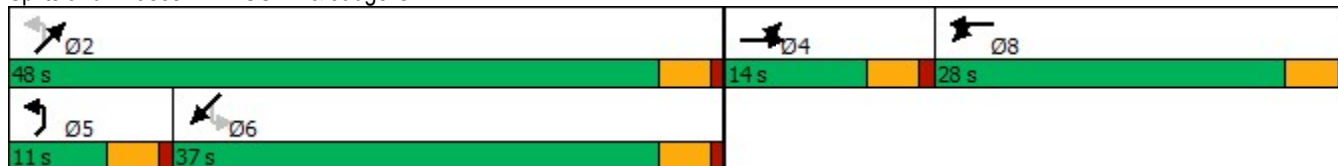


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 6 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 22.5 | 22.5 | | 22.5 | 22.5 | | 9.5 | 22.5 | | 22.5 | 22.5 | |
| Total Split (s) | 14.0 | 14.0 | | 28.0 | 28.0 | | 11.0 | 48.0 | | 37.0 | 37.0 | |
| Total Split (%) | 15.6% | 15.6% | | 31.1% | 31.1% | | 12.2% | 53.3% | | 41.1% | 41.1% | |
| Maximum Green (s) | 9.5 | 9.5 | | 23.5 | 23.5 | | 6.5 | 43.5 | | 32.5 | 32.5 | |
| 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 | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | | | 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 | | Max | Max | |
| Walk Time (s) | 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 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | 0 | 0 | |
| Act Effct Green (s) | | 9.3 | | | 19.2 | | 43.6 | 43.6 | | 32.6 | 32.6 | |
| Actuated g/C Ratio | | 0.11 | | | 0.22 | | 0.51 | 0.51 | | 0.38 | 0.38 | |
| v/c Ratio | | 0.82 | | | 0.79 | | 0.54 | 0.87 | | 0.05 | 0.69 | |
| Control Delay | | 59.8 | | | 45.5 | | 19.3 | 31.7 | | 20.2 | 29.2 | |
| Queue Delay | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 59.8 | | | 45.5 | | 19.3 | 31.7 | | 20.2 | 29.2 | |
| LOS | | E | | | D | | B | C | | C | C | |
| Approach Delay | | 59.8 | | | 45.5 | | | 29.5 | | | 29.1 | |
| Approach LOS | | E | | | D | | | C | | | C | |
| Queue Length 50th (ft) | | 77 | | | 162 | | 49 | 368 | | 2 | 219 | |
| Queue Length 95th (ft) | | #185 | | | 254 | | 92 | #658 | | 10 | 350 | |
| Internal Link Dist (ft) | | 847 | | | 7234 | | | 1466 | | | 3526 | |
| Turn Bay Length (ft) | | | | | | | 870 | | | 695 | | |
| Base Capacity (vph) | | 225 | | | 498 | | 319 | 926 | | 108 | 705 | |
| 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 | | 0.80 | | | 0.64 | | 0.54 | 0.87 | | 0.05 | 0.69 | |

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 85.7
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.87
 Intersection Signal Delay: 34.8
 Intersection LOS: C
 Intersection Capacity Utilization 79.2%
 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: 1: US 24 & Judge Orr



| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 32.3 | | | | | | | | | | | |
| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
| Lane Configurations | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ |
| Traffic Vol, veh/h | 14 | 91 | 49 | 30 | 171 | 35 | 119 | 459 | 42 | 20 | 364 | 30 |
| Future Vol, veh/h | 14 | 91 | 49 | 30 | 171 | 35 | 119 | 459 | 42 | 20 | 364 | 30 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 190 | - | 325 | 215 | - | 215 | 890 | - | 1000 | 790 | - | 790 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 83 | 83 | 83 | 87 | 87 | 87 | 93 | 93 | 93 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 17 | 110 | 59 | 34 | 197 | 40 | 128 | 494 | 45 | 22 | 396 | 33 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 1331 | 1235 | 396 | 1291 | 1223 | 494 | 429 | 0 | 0 | 539 | 0 | 0 |
| Stage 1 | 440 | 440 | - | 750 | 750 | - | - | - | - | - | - | - |
| Stage 2 | 891 | 795 | - | 541 | 473 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| 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 | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 132 | 176 | 653 | 140 | ~ 179 | 575 | 1130 | - | - | 1029 | - | - |
| Stage 1 | 596 | 578 | - | 403 | 419 | - | - | - | - | - | - | - |
| Stage 2 | 337 | 399 | - | 525 | 558 | - | - | - | - | - | - | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | 153 | 653 | 49 | ~ 155 | 575 | 1130 | - | - | 1029 | - | - |
| Mov Cap-2 Maneuver | - | 153 | - | 49 | ~ 155 | - | - | - | - | - | - | - |
| Stage 1 | 529 | 566 | - | 357 | 372 | - | - | - | - | - | - | - |
| Stage 2 | 131 | 354 | - | 377 | 546 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|----------------------|----|-------|-----|-----|
| HCM Control Delay, s | | 182.7 | 1.6 | 0.4 |
| HCM LOS | - | F | | |

| Minor Lane/Major Mvmt | NEL | NET | NERN | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|-----------------------|-------|-----|------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1130 | - | - | 49 | 155 | 575 | - | 153 | 653 | 1029 | - | - |
| HCM Lane V/C Ratio | 0.113 | - | - | 0.704 | 1.268 | 0.07 | - | 0.717 | 0.09 | 0.021 | - | - |
| HCM Control Delay (s) | 8.6 | - | - | 178.3 | 218.5 | 11.7 | - | 72.7 | 11.1 | 8.6 | - | - |
| HCM Lane LOS | A | - | - | F | F | B | - | F | B | A | - | - |
| HCM 95th %tile Q(veh) | 0.4 | - | - | 2.8 | 11.6 | 0.2 | - | 4.3 | 0.3 | 0.1 | - | - |

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

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| Int Delay, s/veh | 2.1 | | | | | | | | | | | |
| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
| Lane Configurations | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ |
| Traffic Vol, veh/h | 5 | 13 | 81 | 11 | 8 | 15 | 91 | 431 | 20 | 14 | 389 | 5 |
| Future Vol, veh/h | 5 | 13 | 81 | 11 | 8 | 15 | 91 | 431 | 20 | 14 | 389 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | Free | - | - | Free | - | - | Yield | - | - | Yield |
| Storage Length | 120 | - | 240 | 85 | - | 25 | 600 | - | 480 | 495 | - | 485 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 83 | 83 | 83 | 78 | 78 | 78 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 6 | 16 | 98 | 14 | 10 | 19 | 99 | 468 | 22 | 15 | 423 | 5 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|-------|--------|-------|--------|---|-------|--------|---|-------|---|---|
| Conflicting Flow All | 1124 | 1119 | - | 1127 | 1119 | - | 423 | 0 | 0 | 468 | 0 | 0 |
| Stage 1 | 453 | 453 | - | 666 | 666 | - | - | - | - | - | - | - |
| Stage 2 | 671 | 666 | - | 461 | 453 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | - | 7.12 | 6.52 | - | 4.12 | - | - | 4.12 | - | - |
| 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 | 3.518 | 4.018 | - | 3.518 | 4.018 | - | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 183 | 207 | 0 | 182 | 207 | 0 | 1136 | - | - | 1094 | - | - |
| Stage 1 | 586 | 570 | 0 | 449 | 457 | 0 | - | - | - | - | - | - |
| Stage 2 | 446 | 457 | 0 | 581 | 570 | 0 | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 162 | 186 | - | 157 | 186 | - | 1136 | - | - | 1094 | - | - |
| Mov Cap-2 Maneuver | 162 | 186 | - | 157 | 186 | - | - | - | - | - | - | - |
| Stage 1 | 535 | 562 | - | 410 | 417 | - | - | - | - | - | - | - |
| Stage 2 | 397 | 417 | - | 557 | 562 | - | - | - | - | - | - | - |

| Approach | SE | | NW | | NE | | SW | |
|----------------------|------|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 26.7 | | 28.2 | | 1.4 | | 0.3 | |
| HCM LOS | D | | D | | | | | |

| Minor Lane/Major Mvmt | NEL | NET | NERN | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|-----------------------|-------|-----|------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1136 | - | - | 157 | 186 | - | 162 | 186 | - | 1094 | - | - |
| HCM Lane V/C Ratio | 0.087 | - | - | 0.09 | 0.055 | - | 0.037 | 0.084 | - | 0.014 | - | - |
| HCM Control Delay (s) | 8.5 | - | - | 30.2 | 25.5 | 0 | 28.1 | 26.1 | 0 | 8.3 | - | - |
| HCM Lane LOS | A | - | - | D | D | A | D | D | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.3 | - | - | 0.3 | 0.2 | - | 0.1 | 0.3 | - | 0 | - | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 8.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↖ | ↗ | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↗ | |
| Traffic Vol, veh/h | 31 | 191 | 48 | 10 | 114 | 36 | 90 | 151 | 30 | 50 | 66 | 28 |
| Future Vol, veh/h | 31 | 191 | 48 | 10 | 114 | 36 | 90 | 151 | 30 | 50 | 66 | 28 |
| 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 | 245 | - | 0 | 235 | - | - | 265 | - | - | 265 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 83 | 83 | 83 | 92 | 92 | 92 | 83 | 83 | 83 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 36 | 220 | 55 | 12 | 137 | 43 | 98 | 164 | 33 | 60 | 80 | 34 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-------|-------|--------|-------|-------|
| Conflicting Flow All | 180 | 0 | 0 | 275 | 0 | 0 | 532 | 496 | 220 | 601 | 530 | 159 |
| Stage 1 | - | - | - | - | - | - | 292 | 292 | - | 183 | 183 | - |
| Stage 2 | - | - | - | - | - | - | 240 | 204 | - | 418 | 347 | - |
| 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 | 1396 | - | - | 1288 | - | - | 458 | 475 | 820 | 412 | 455 | 886 |
| Stage 1 | - | - | - | - | - | - | 716 | 671 | - | 819 | 748 | - |
| Stage 2 | - | - | - | - | - | - | 763 | 733 | - | 612 | 635 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1396 | - | - | 1288 | - | - | 368 | 456 | 820 | 277 | 437 | 886 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 368 | 456 | - | 277 | 437 | - |
| Stage 1 | - | - | - | - | - | - | 694 | 650 | - | 794 | 741 | - |
| Stage 2 | - | - | - | - | - | - | 649 | 726 | - | 426 | 615 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.9 | | | 0.5 | | | 17.5 | | | 16.6 | | |
| HCM LOS | | | | | | | C | | | C | | |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-------|-------|-----|-----|-------|-----|-----|-------|-------|
| Capacity (veh/h) | 368 | 492 | 1396 | - | - | 1288 | - | - | 277 | 515 |
| HCM Lane V/C Ratio | 0.266 | 0.4 | 0.026 | - | - | 0.009 | - | - | 0.217 | 0.22 |
| HCM Control Delay (s) | 18.3 | 17.1 | 7.6 | 0 | - | 7.8 | - | - | 21.6 | 14 |
| HCM Lane LOS | C | C | A | A | - | A | - | - | C | B |
| HCM 95th %tile Q(veh) | 1.1 | 1.9 | 0.1 | - | - | 0 | - | - | 0.8 | 0.8 |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.4 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↶ | ↷ | | ↶ | ↷ |
| Traffic Vol, veh/h | 20 | 163 | 55 | 6 | 11 | 11 |
| Future Vol, veh/h | 20 | 163 | 55 | 6 | 11 | 11 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 83 | 83 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 23 | 187 | 66 | 7 | 14 | 14 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 73 | 0 | - | 0 | 303 70 |
| Stage 1 | - | - | - | - | 70 - |
| Stage 2 | - | - | - | - | 233 - |
| Critical Hdwy | 4.12 | - | - | - | 6.42 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 - |
| Follow-up Hdwy | 2.218 | - | - | - | 3.518 3.318 |
| Pot Cap-1 Maneuver | 1527 | - | - | - | 689 993 |
| Stage 1 | - | - | - | - | 953 - |
| Stage 2 | - | - | - | - | 806 - |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 1527 | - | - | - | 677 993 |
| Mov Cap-2 Maneuver | - | - | - | - | 677 - |
| Stage 1 | - | - | - | - | 937 - |
| Stage 2 | - | - | - | - | 806 - |

| Approach | EB | WB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 0.8 | 0 | 9.6 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 1527 | - | - | - | 805 |
| HCM Lane V/C Ratio | 0.015 | - | - | - | 0.035 |
| HCM Control Delay (s) | 7.4 | 0 | - | - | 9.6 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

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

Short-Term Baseline + Site
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| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | ↕ | | | ↕ | | ↕ | ↕ | | ↕ | ↕ | |
| Traffic Volume (vph) | 19 | 77 | 204 | 203 | 80 | 4 | 84 | 345 | 107 | 7 | 585 | 19 |
| Future Volume (vph) | 19 | 77 | 204 | 203 | 80 | 4 | 84 | 345 | 107 | 7 | 585 | 19 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 870 | | 0 | 695 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 300 | | | 280 | | |
| 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 | | 0.908 | | | 0.998 | | | 0.965 | | | 0.995 | |
| Flt Protected | | 0.997 | | | 0.966 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1686 | 0 | 0 | 1796 | 0 | 1770 | 1798 | 0 | 1770 | 1853 | 0 |
| Flt Permitted | | 0.997 | | | 0.966 | | 0.100 | | | 0.433 | | |
| Satd. Flow (perm) | 0 | 1686 | 0 | 0 | 1796 | 0 | 186 | 1798 | 0 | 807 | 1853 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 102 | | | 1 | | | 24 | | | | 2 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | | 55 |
| Link Distance (ft) | | 927 | | | 7314 | | | 1546 | | | | 3606 |
| Travel Time (s) | | 14.0 | | | 110.8 | | | 19.2 | | | | 44.7 |
| 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) | 21 | 84 | 222 | 233 | 92 | 5 | 91 | 375 | 116 | 8 | 629 | 20 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 327 | 0 | 0 | 330 | 0 | 91 | 491 | 0 | 8 | 649 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | 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) | 60 | | 60 | 60 | | 60 | 60 | | 60 | 60 | | 60 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | 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 | | 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 | | 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 | Split | NA | | Split | NA | | pm+pt | NA | | Perm | NA | |
| Protected Phases | 4 | 4 | | 8 | 8 | | 5 | 2 | | | | 6 |
| Permitted Phases | | | | | | | 2 | | | 6 | | |

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

Short-Term Baseline + Site
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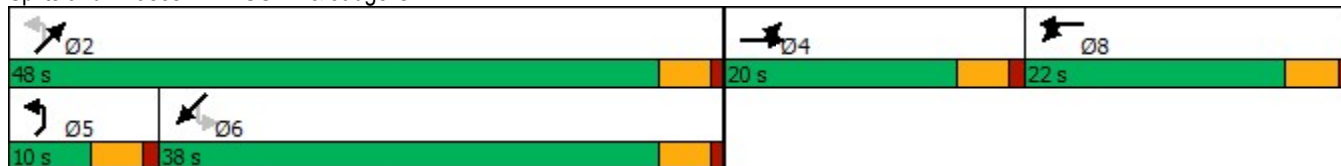


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 6 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 22.5 | 22.5 | | 22.5 | 22.5 | | 9.5 | 22.5 | | 22.5 | 22.5 | |
| Total Split (s) | 20.0 | 20.0 | | 22.0 | 22.0 | | 10.0 | 48.0 | | 38.0 | 38.0 | |
| Total Split (%) | 22.2% | 22.2% | | 24.4% | 24.4% | | 11.1% | 53.3% | | 42.2% | 42.2% | |
| Maximum Green (s) | 15.5 | 15.5 | | 17.5 | 17.5 | | 5.5 | 43.5 | | 33.5 | 33.5 | |
| 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 | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | | | 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 | | Max | Max | |
| Walk Time (s) | 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 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | 0 | 0 | |
| Act Effct Green (s) | | 14.7 | | | 17.5 | | 43.5 | 43.5 | | 35.6 | 35.6 | |
| Actuated g/C Ratio | | 0.16 | | | 0.20 | | 0.49 | 0.49 | | 0.40 | 0.40 | |
| v/c Ratio | | 0.90 | | | 0.93 | | 0.48 | 0.55 | | 0.02 | 0.88 | |
| Control Delay | | 54.6 | | | 71.4 | | 21.6 | 18.3 | | 18.4 | 41.5 | |
| Queue Delay | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 54.6 | | | 71.4 | | 21.6 | 18.3 | | 18.4 | 41.5 | |
| LOS | | D | | | E | | C | B | | B | D | |
| Approach Delay | | 54.6 | | | 71.4 | | | 18.8 | | | 41.3 | |
| Approach LOS | | D | | | E | | | B | | | D | |
| Queue Length 50th (ft) | | 128 | | | 186 | | 27 | 179 | | 3 | 349 | |
| Queue Length 95th (ft) | | #280 | | | #333 | | 53 | 274 | | 12 | #574 | |
| Internal Link Dist (ft) | | 847 | | | 7234 | | | 1466 | | | 3526 | |
| Turn Bay Length (ft) | | | | | | | 870 | | | 695 | | |
| Base Capacity (vph) | | 376 | | | 353 | | 188 | 889 | | 321 | 739 | |
| 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 | | 0.87 | | | 0.93 | | 0.48 | 0.55 | | 0.02 | 0.88 | |

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 89.2
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.93
 Intersection Signal Delay: 41.9
 Intersection LOS: D
 Intersection Capacity Utilization 84.9%
 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.

Splits and Phases: 1: US 24 & Judge Orr



| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.2 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑ | ↑ | | ↑ | ↑ | |
| Traffic Vol, veh/h | 44 | 25 | 3 | 171 | 28 | 1 |
| Future Vol, veh/h | 44 | 25 | 3 | 171 | 28 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 235 | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 83 | 83 | 87 | 87 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 53 | 30 | 3 | 197 | 36 | 1 |

| Major/Minor | Major1 | Major2 | Minor1 | | |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 0 | 0 | 83 | 0 | 256 53 |
| Stage 1 | - | - | - | - | 53 - |
| Stage 2 | - | - | - | - | 203 - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 3.318 |
| Pot Cap-1 Maneuver | - | - | 1514 | - | 733 1014 |
| Stage 1 | - | - | - | - | 970 - |
| Stage 2 | - | - | - | - | 831 - |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1514 | - | 732 1014 |
| Mov Cap-2 Maneuver | - | - | - | - | 732 - |
| Stage 1 | - | - | - | - | 970 - |
| Stage 2 | - | - | - | - | 829 - |

| Approach | EB | WB | NB |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0 | 0.1 | 10.1 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 739 | - | - | 1514 | - |
| HCM Lane V/C Ratio | 0.05 | - | - | 0.002 | - |
| HCM Control Delay (s) | 10.1 | - | - | 7.4 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0 | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.8 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | ↗ | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 3 | 63 | 34 | 6 | 178 | 17 | 64 | 4 | 2 | 8 | 4 | 15 |
| Future Vol, veh/h | 3 | 63 | 34 | 6 | 178 | 17 | 64 | 4 | 2 | 8 | 4 | 15 |
| 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 | - | - | 235 | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 3 | 68 | 37 | 7 | 193 | 18 | 70 | 4 | 2 | 9 | 4 | 16 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-------|-------|--------|-------|-------|
| Conflicting Flow All | 211 | 0 | 0 | 105 | 0 | 0 | 300 | 299 | 68 | 312 | 327 | 202 |
| Stage 1 | - | - | - | - | - | - | 74 | 74 | - | 216 | 216 | - |
| Stage 2 | - | - | - | - | - | - | 226 | 225 | - | 96 | 111 | - |
| 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 | 1360 | - | - | 1486 | - | - | 652 | 613 | 995 | 641 | 591 | 839 |
| Stage 1 | - | - | - | - | - | - | 935 | 833 | - | 786 | 724 | - |
| Stage 2 | - | - | - | - | - | - | 777 | 718 | - | 911 | 804 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1360 | - | - | 1486 | - | - | 632 | 609 | 995 | 633 | 587 | 839 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 632 | 609 | - | 633 | 587 | - |
| Stage 1 | - | - | - | - | - | - | 933 | 831 | - | 784 | 720 | - |
| Stage 2 | - | - | - | - | - | - | 754 | 714 | - | 902 | 802 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 0.2 | | | 11.4 | | | 10.2 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 637 | 1360 | - | - | 1486 | - | - | 723 |
| HCM Lane V/C Ratio | 0.119 | 0.002 | - | - | 0.004 | - | - | 0.041 |
| HCM Control Delay (s) | 11.4 | 7.7 | 0 | - | 7.4 | 0 | - | 10.2 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.4 | 0 | - | - | 0 | - | - | 0.1 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 18 | | | | | | | | | | | |
| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
| Lane Configurations | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ |
| Traffic Vol, veh/h | 23 | 169 | 143 | 12 | 136 | 21 | 49 | 267 | 6 | 38 | 438 | 37 |
| Future Vol, veh/h | 23 | 169 | 143 | 12 | 136 | 21 | 49 | 267 | 6 | 38 | 438 | 37 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 190 | - | 325 | 215 | - | 215 | 890 | - | 1000 | 790 | - | 790 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 83 | 83 | 83 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 25 | 184 | 155 | 14 | 164 | 25 | 53 | 290 | 7 | 41 | 476 | 40 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|-------|--------|---|-------|---|---|
| Conflicting Flow All | 1052 | 961 | 476 | 1144 | 994 | 290 | 516 | 0 | 0 | 297 | 0 | 0 |
| Stage 1 | 558 | 558 | - | 396 | 396 | - | - | - | - | - | - | - |
| Stage 2 | 494 | 403 | - | 748 | 598 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| 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 | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 204 | 256 | 589 | 177 | 245 | 749 | 1050 | - | - | 1264 | - | - |
| Stage 1 | 514 | 512 | - | 629 | 604 | - | - | - | - | - | - | - |
| Stage 2 | 557 | 600 | - | 404 | 491 | - | - | - | - | - | - | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 76 | 236 | 589 | 44 | 225 | 749 | 1050 | - | - | 1264 | - | - |
| Mov Cap-2 Maneuver | 76 | 236 | - | 44 | 225 | - | - | - | - | - | - | - |
| Stage 1 | 488 | 496 | - | 598 | 574 | - | - | - | - | - | - | - |
| Stage 2 | 365 | 570 | - | 181 | 475 | - | - | - | - | - | - | - |

| Approach | SE | | NW | | NE | | SW | |
|----------------------|------|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 40.5 | | 53.9 | | 1.3 | | 0.6 | |
| HCM LOS | E | | F | | | | | |

| Minor Lane/Major Mvmt | NEL | NET | NERNWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR | |
|-----------------------|-------|-----|----------|-------|-------|-------|-------|-------|-------|-------|-----|---|
| Capacity (veh/h) | 1050 | - | - | 44 | 225 | 749 | 76 | 236 | 589 | 1264 | - | - |
| HCM Lane V/C Ratio | 0.051 | - | - | 0.329 | 0.728 | 0.034 | 0.329 | 0.778 | 0.264 | 0.033 | - | - |
| HCM Control Delay (s) | 8.6 | - | - | 122.6 | 54.6 | 10 | 74 | 58.9 | 13.3 | 7.9 | - | - |
| HCM Lane LOS | A | - | - | F | F | B | F | F | B | A | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 1.1 | 4.9 | 0.1 | 1.2 | 5.7 | 1.1 | 0.1 | - | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| Int Delay, s/veh | 2.1 | | | | | | | | | | | |
| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
| Lane Configurations | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ |
| Traffic Vol, veh/h | 5 | 14 | 110 | 17 | 17 | 8 | 45 | 251 | 5 | 14 | 383 | 5 |
| Future Vol, veh/h | 5 | 14 | 110 | 17 | 17 | 8 | 45 | 251 | 5 | 14 | 383 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | Free | - | - | Free | - | - | Yield | - | - | Yield |
| Storage Length | 120 | - | 240 | 85 | - | 25 | 600 | - | 480 | 495 | - | 485 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 83 | 83 | 83 | 78 | 78 | 78 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 6 | 17 | 133 | 22 | 22 | 10 | 49 | 273 | 5 | 15 | 416 | 5 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|-------|--------|-------|--------|---|-------|--------|---|-------|---|---|
| Conflicting Flow All | 828 | 817 | - | 826 | 817 | - | 416 | 0 | 0 | 273 | 0 | 0 |
| Stage 1 | 446 | 446 | - | 371 | 371 | - | - | - | - | - | - | - |
| Stage 2 | 382 | 371 | - | 455 | 446 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | - | 7.12 | 6.52 | - | 4.12 | - | - | 4.12 | - | - |
| 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 | 3.518 | 4.018 | - | 3.518 | 4.018 | - | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 290 | 311 | 0 | 291 | 311 | 0 | 1143 | - | - | 1290 | - | - |
| Stage 1 | 591 | 574 | 0 | 649 | 620 | 0 | - | - | - | - | - | - |
| Stage 2 | 640 | 620 | 0 | 585 | 574 | 0 | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 262 | 294 | - | 267 | 294 | - | 1143 | - | - | 1290 | - | - |
| Mov Cap-2 Maneuver | 262 | 294 | - | 267 | 294 | - | - | - | - | - | - | - |
| Stage 1 | 566 | 567 | - | 621 | 593 | - | - | - | - | - | - | - |
| Stage 2 | 590 | 593 | - | 561 | 567 | - | - | - | - | - | - | - |

| Approach | SE | | NW | | NE | | SW | |
|----------------------|------|--|----|--|-----|--|-----|--|
| HCM Control Delay, s | 18.3 | | 19 | | 1.2 | | 0.3 | |
| HCM LOS | C | | C | | | | | |

| Minor Lane/Major Mvmt | NEL | NET | NERN | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|-----------------------|-------|-----|------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1143 | - | - | 267 | 294 | - | 262 | 294 | - | 1290 | - | - |
| HCM Lane V/C Ratio | 0.043 | - | - | 0.082 | 0.074 | - | 0.023 | 0.057 | - | 0.012 | - | - |
| HCM Control Delay (s) | 8.3 | - | - | 19.7 | 18.2 | 0 | 19.1 | 18 | 0 | 7.8 | - | - |
| HCM Lane LOS | A | - | - | C | C | A | C | C | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.3 | 0.2 | - | 0.1 | 0.2 | - | 0 | - | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 8.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↖ | ↗ | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↗ | |
| Traffic Vol, veh/h | 1 | 82 | 84 | 25 | 217 | 70 | 54 | 90 | 5 | 15 | 171 | 13 |
| Future Vol, veh/h | 1 | 82 | 84 | 25 | 217 | 70 | 54 | 90 | 5 | 15 | 171 | 13 |
| 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 | 245 | - | 0 | 235 | - | - | 265 | - | - | 265 | - | - |
| 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 | 99 | 101 | 29 | 249 | 80 | 65 | 108 | 6 | 17 | 197 | 15 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-------|-------|--------|-------|-------|
| Conflicting Flow All | 329 | 0 | 0 | 200 | 0 | 0 | 554 | 488 | 99 | 556 | 549 | 289 |
| Stage 1 | - | - | - | - | - | - | 101 | 101 | - | 347 | 347 | - |
| Stage 2 | - | - | - | - | - | - | 453 | 387 | - | 209 | 202 | - |
| 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 | 1231 | - | - | 1372 | - | - | 443 | 480 | 957 | 442 | 443 | 750 |
| Stage 1 | - | - | - | - | - | - | 905 | 811 | - | 669 | 635 | - |
| Stage 2 | - | - | - | - | - | - | 586 | 610 | - | 793 | 734 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1231 | - | - | 1372 | - | - | 276 | 469 | 957 | 355 | 433 | 750 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 276 | 469 | - | 355 | 433 | - |
| Stage 1 | - | - | - | - | - | - | 904 | 810 | - | 668 | 622 | - |
| Stage 2 | - | - | - | - | - | - | 385 | 597 | - | 682 | 733 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0 | | | 0.6 | | | 17.4 | | | 19.8 | | |
| HCM LOS | | | | | | | C | | | C | | |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-------|-------|-----|-----|-------|-----|-----|-------|-------|
| Capacity (veh/h) | 276 | 482 | 1231 | - | - | 1372 | - | - | 355 | 446 |
| HCM Lane V/C Ratio | 0.236 | 0.237 | 0.001 | - | - | 0.021 | - | - | 0.049 | 0.474 |
| HCM Control Delay (s) | 22 | 14.8 | 7.9 | 0 | - | 7.7 | - | - | 15.7 | 20.1 |
| HCM Lane LOS | C | B | A | A | - | A | - | - | C | C |
| HCM 95th %tile Q(veh) | 0.9 | 0.9 | 0 | - | - | 0.1 | - | - | 0.2 | 2.5 |

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

Short-Term Baseline + Site
PM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | ↕ | | | ↕ | | ↗ | ↖ | | ↗ | ↖ | |
| Traffic Volume (vph) | 39 | 58 | 72 | 196 | 140 | 15 | 159 | 571 | 245 | 5 | 424 | 22 |
| Future Volume (vph) | 39 | 58 | 72 | 196 | 140 | 15 | 159 | 571 | 245 | 5 | 424 | 22 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 870 | | 0 | 695 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 300 | | | 280 | | |
| 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 | | 0.943 | | | 0.994 | | | 0.955 | | | 0.993 | |
| Flt Protected | | 0.989 | | | 0.973 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1737 | 0 | 0 | 1802 | 0 | 1770 | 1779 | 0 | 1770 | 1850 | 0 |
| Flt Permitted | | 0.989 | | | 0.973 | | 0.215 | | | 0.123 | | |
| Satd. Flow (perm) | 0 | 1737 | 0 | 0 | 1802 | 0 | 400 | 1779 | 0 | 229 | 1850 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 34 | | | 2 | | | 33 | | | 3 | |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 927 | | | 7314 | | | 1546 | | | 3606 | |
| Travel Time (s) | | 14.0 | | | 110.8 | | | 19.2 | | | 44.7 | |
| 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) | 45 | 67 | 83 | 213 | 152 | 16 | 171 | 614 | 263 | 5 | 461 | 24 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 195 | 0 | 0 | 381 | 0 | 171 | 877 | 0 | 5 | 485 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | 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) | 60 | | 60 | 60 | | 60 | 60 | | 60 | 60 | | 60 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | 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 | | 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 | | 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 | Split | NA | | Split | NA | | pm+pt | NA | | Perm | NA | |
| Protected Phases | 4 | 4 | | 8 | 8 | | 5 | 2 | | | 6 | |
| Permitted Phases | | | | | | | 2 | | | 6 | | |

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

Short-Term Baseline + Site
PM



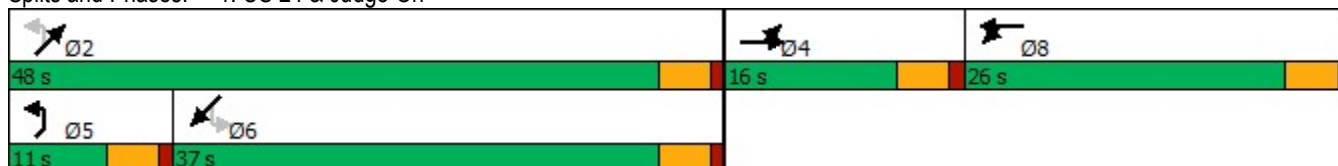
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-----|
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 6 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | |
| Minimum Split (s) | 22.5 | 22.5 | | 22.5 | 22.5 | | 9.5 | 22.5 | | 22.5 | 22.5 | |
| Total Split (s) | 16.0 | 16.0 | | 26.0 | 26.0 | | 11.0 | 48.0 | | 37.0 | 37.0 | |
| Total Split (%) | 17.8% | 17.8% | | 28.9% | 28.9% | | 12.2% | 53.3% | | 41.1% | 41.1% | |
| Maximum Green (s) | 11.5 | 11.5 | | 21.5 | 21.5 | | 6.5 | 43.5 | | 32.5 | 32.5 | |
| 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 | Lag | |
| Lead-Lag Optimize? | | | | | | | Yes | | | 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 | | Max | Max | |
| Walk Time (s) | 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 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | | | 0 | | 0 | 0 | |
| Act Effct Green (s) | | 10.9 | | | 20.6 | | 43.6 | 43.6 | | 32.6 | 32.6 | |
| Actuated g/C Ratio | | 0.12 | | | 0.23 | | 0.49 | 0.49 | | 0.37 | 0.37 | |
| v/c Ratio | | 0.81 | | | 0.90 | | 0.58 | 0.98 | | 0.06 | 0.71 | |
| Control Delay | | 56.7 | | | 59.9 | | 21.8 | 50.2 | | 21.2 | 31.3 | |
| Queue Delay | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 56.7 | | | 59.9 | | 21.8 | 50.2 | | 21.2 | 31.3 | |
| LOS | | E | | | E | | C | D | | C | C | |
| Approach Delay | | 56.7 | | | 59.9 | | | 45.6 | | | 31.2 | |
| Approach LOS | | E | | | E | | | D | | | C | |
| Queue Length 50th (ft) | | 90 | | | 209 | | 53 | ~466 | | 2 | 234 | |
| Queue Length 95th (ft) | | #186 | | | #372 | | 92 | #746 | | 10 | 350 | |
| Internal Link Dist (ft) | | 847 | | | 7234 | | | 1466 | | | 3526 | |
| Turn Bay Length (ft) | | | | | | | 870 | | | 695 | | |
| Base Capacity (vph) | | 255 | | | 439 | | 297 | 891 | | 83 | 681 | |
| 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 | | 0.76 | | | 0.87 | | 0.58 | 0.98 | | 0.06 | 0.71 | |

Intersection Summary

| | |
|---|------------------------|
| Area Type: | Other |
| Cycle Length: | 90 |
| Actuated Cycle Length: | 88.6 |
| Natural Cycle: | 100 |
| Control Type: | Actuated-Uncoordinated |
| Maximum v/c Ratio: | 0.98 |
| Intersection Signal Delay: | 45.9 |
| Intersection LOS: | D |
| Intersection Capacity Utilization: | 92.9% |
| ICU Level of Service: | F |
| 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: 1: US 24 & Judge Orr



| Intersection | | | | | | |
|--------------------------|--------|--------|--------|-------|-------|-------|
| Int Delay, s/veh | 1 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | ↑ | ↑ | | ↑ | ↑ | |
| Traffic Vol, veh/h | 170 | 39 | 3 | 62 | 22 | 3 |
| Future Vol, veh/h | 170 | 39 | 3 | 62 | 22 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 235 | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 87 | 87 | 83 | 83 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 195 | 45 | 4 | 75 | 28 | 4 |
| Major/Minor | Major1 | Major2 | Minor1 | | | |
| Conflicting Flow All | 0 | 0 | 240 | 0 | 278 | 195 |
| Stage 1 | - | - | - | - | 195 | - |
| Stage 2 | - | - | - | - | 83 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 | 3.318 |
| Pot Cap-1 Maneuver | - | - | 1327 | - | 712 | 846 |
| Stage 1 | - | - | - | - | 838 | - |
| Stage 2 | - | - | - | - | 940 | - |
| Platoon blocked, % | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1327 | - | 710 | 846 |
| Mov Cap-2 Maneuver | - | - | - | - | 710 | - |
| Stage 1 | - | - | - | - | 838 | - |
| Stage 2 | - | - | - | - | 937 | - |
| Approach | EB | WB | NB | | | |
| HCM Control Delay, s | 0 | 0.4 | 10.2 | | | |
| HCM LOS | | | B | | | |
| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT | |
| Capacity (veh/h) | 724 | - | - | 1327 | - | |
| HCM Lane V/C Ratio | 0.044 | - | - | 0.003 | - | |
| HCM Control Delay (s) | 10.2 | - | - | 7.7 | 0 | |
| HCM Lane LOS | B | - | - | A | A | |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - | |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↔ | ↔ | | ↔ | | | ↔ | | | ↔ | |
| Traffic Vol, veh/h | 20 | 192 | 77 | 6 | 73 | 7 | 69 | 11 | 10 | 13 | 9 | 11 |
| Future Vol, veh/h | 20 | 192 | 77 | 6 | 73 | 7 | 69 | 11 | 10 | 13 | 9 | 11 |
| 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 | - | - | 235 | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 83 | 83 | 83 | 83 | 83 | 83 | 78 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 209 | 84 | 7 | 88 | 8 | 83 | 13 | 12 | 17 | 12 | 14 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-------|-------|--------|-------|-------|
| Conflicting Flow All | 96 | 0 | 0 | 293 | 0 | 0 | 372 | 363 | 209 | 414 | 443 | 92 |
| Stage 1 | - | - | - | - | - | - | 253 | 253 | - | 106 | 106 | - |
| Stage 2 | - | - | - | - | - | - | 119 | 110 | - | 308 | 337 | - |
| 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 | 1498 | - | - | 1269 | - | - | 585 | 565 | 831 | 549 | 509 | 965 |
| Stage 1 | - | - | - | - | - | - | 751 | 698 | - | 900 | 807 | - |
| Stage 2 | - | - | - | - | - | - | 885 | 804 | - | 702 | 641 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1498 | - | - | 1269 | - | - | 556 | 551 | 831 | 522 | 497 | 965 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 556 | 551 | - | 522 | 497 | - |
| Stage 1 | - | - | - | - | - | - | 737 | 685 | - | 884 | 802 | - |
| Stage 2 | - | - | - | - | - | - | 854 | 799 | - | 666 | 629 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.5 | | | 0.5 | | | 12.7 | | | 11.4 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 577 | 1498 | - | - | 1269 | - | - | 606 |
| HCM Lane V/C Ratio | 0.188 | 0.015 | - | - | 0.006 | - | - | 0.07 |
| HCM Control Delay (s) | 12.7 | 7.4 | 0 | - | 7.9 | 0 | - | 11.4 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.7 | 0 | - | - | 0 | - | - | 0.2 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 50.3 | | | | | | | | | | | |
| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
| Lane Configurations | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ | ↖ | ↗ | ↖ |
| Traffic Vol, veh/h | 14 | 114 | 49 | 30 | 193 | 35 | 119 | 459 | 42 | 20 | 364 | 30 |
| Future Vol, veh/h | 14 | 114 | 49 | 30 | 193 | 35 | 119 | 459 | 42 | 20 | 364 | 30 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 190 | - | 325 | 215 | - | 215 | 890 | - | 1000 | 790 | - | 790 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 83 | 83 | 83 | 87 | 87 | 87 | 93 | 93 | 93 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 17 | 137 | 59 | 34 | 222 | 40 | 128 | 494 | 45 | 22 | 396 | 33 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 1344 | 1235 | 396 | 1305 | 1223 | 494 | 429 | 0 | 0 | 539 | 0 | 0 |
| Stage 1 | 440 | 440 | - | 750 | 750 | - | - | - | - | - | - | - |
| Stage 2 | 904 | 795 | - | 555 | 473 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| 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 | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 129 | 176 | 653 | 137 | ~ 179 | 575 | 1130 | - | - | 1029 | - | - |
| Stage 1 | 596 | 578 | - | 403 | 419 | - | - | - | - | - | - | - |
| Stage 2 | 331 | 399 | - | 516 | 558 | - | - | - | - | - | - | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | 153 | 653 | ~ 26 | ~ 155 | 575 | 1130 | - | - | 1029 | - | - |
| Mov Cap-2 Maneuver | - | 153 | - | ~ 26 | ~ 155 | - | - | - | - | - | - | - |
| Stage 1 | 529 | 566 | - | 357 | 372 | - | - | - | - | - | - | - |
| Stage 2 | 110 | 354 | - | 348 | 546 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|----------------------|----|-------|-----|-----|
| HCM Control Delay, s | | 271.8 | 1.6 | 0.4 |
| HCM LOS | - | F | | |

| Minor Lane/Major Mvmt | NEL | NET | NERNWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR | |
|-----------------------|-------|-----|----------|----------|-------|-------|-------|-------|------|-------|-----|---|
| Capacity (veh/h) | 1130 | - | - | 26 | 155 | 575 | - | 153 | 653 | 1029 | - | - |
| HCM Lane V/C Ratio | 0.113 | - | - | 1.326 | 1.431 | 0.07 | - | 0.898 | 0.09 | 0.021 | - | - |
| HCM Control Delay (s) | 8.6 | - | - | \$ 513.6 | 281.4 | 11.7 | - | 105.7 | 11.1 | 8.6 | - | - |
| HCM Lane LOS | A | - | - | F | F | B | - | F | B | A | - | - |
| HCM 95th %tile Q(veh) | 0.4 | - | - | 4.2 | 14.2 | 0.2 | - | 6.3 | 0.3 | 0.1 | - | - |

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

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|-------|------|------|-------|
| Int Delay, s/veh | 2.3 | | | | | | | | | | | |
| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
| Lane Configurations | ↘ | ↑ | ↗ | ↘ | ↑ | ↗ | ↘ | ↑ | ↗ | ↘ | ↑ | ↗ |
| Traffic Vol, veh/h | 5 | 16 | 81 | 11 | 11 | 24 | 91 | 431 | 20 | 22 | 389 | 5 |
| Future Vol, veh/h | 5 | 16 | 81 | 11 | 11 | 24 | 91 | 431 | 20 | 22 | 389 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | Free | - | - | Free | - | - | Yield | - | - | Yield |
| Storage Length | 120 | - | 240 | 85 | - | 25 | 600 | - | 480 | 495 | - | 485 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 83 | 83 | 83 | 78 | 78 | 78 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 6 | 19 | 98 | 14 | 14 | 31 | 99 | 468 | 22 | 24 | 423 | 5 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | | Major2 | | | | |
|----------------------|--------|-------|--------|-------|--------|---|-------|--------|---|-------|---|---|
| Conflicting Flow All | 1144 | 1137 | - | 1147 | 1137 | - | 423 | 0 | 0 | 468 | 0 | 0 |
| Stage 1 | 471 | 471 | - | 666 | 666 | - | - | - | - | - | - | - |
| Stage 2 | 673 | 666 | - | 481 | 471 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | - | 7.12 | 6.52 | - | 4.12 | - | - | 4.12 | - | - |
| 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 | 3.518 | 4.018 | - | 3.518 | 4.018 | - | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 177 | 202 | 0 | 176 | 202 | 0 | 1136 | - | - | 1094 | - | - |
| Stage 1 | 573 | 560 | 0 | 449 | 457 | 0 | - | - | - | - | - | - |
| Stage 2 | 445 | 457 | 0 | 566 | 560 | 0 | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 153 | 180 | - | 149 | 180 | - | 1136 | - | - | 1094 | - | - |
| Mov Cap-2 Maneuver | 153 | 180 | - | 149 | 180 | - | - | - | - | - | - | - |
| Stage 1 | 523 | 548 | - | 410 | 417 | - | - | - | - | - | - | - |
| Stage 2 | 392 | 417 | - | 534 | 548 | - | - | - | - | - | - | - |

| Approach | SE | | NW | | NE | | SW | |
|----------------------|------|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 27.9 | | 29.2 | | 1.4 | | 0.4 | |
| HCM LOS | D | | D | | | | | |

| Minor Lane/Major Mvmt | NEL | NET | NERN | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|-----------------------|-------|-----|------|-------|-------|-------|-------|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1136 | - | - | 149 | 180 | - | 153 | 180 | - | 1094 | - | - |
| HCM Lane V/C Ratio | 0.087 | - | - | 0.095 | 0.078 | - | 0.039 | 0.107 | - | 0.022 | - | - |
| HCM Control Delay (s) | 8.5 | - | - | 31.7 | 26.7 | 0 | 29.5 | 27.4 | 0 | 8.4 | - | - |
| HCM Lane LOS | A | - | - | D | D | A | D | D | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.3 | - | - | 0.3 | 0.3 | - | 0.1 | 0.4 | - | 0.1 | - | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 10.5 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↖ | ↗ | ↖ | ↗ | | ↖ | ↗ | | ↖ | ↗ | |
| Traffic Vol, veh/h | 31 | 267 | 48 | 17 | 172 | 58 | 90 | 151 | 37 | 73 | 66 | 28 |
| Future Vol, veh/h | 31 | 267 | 48 | 17 | 172 | 58 | 90 | 151 | 37 | 73 | 66 | 28 |
| 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 | 245 | - | 0 | 235 | - | - | 265 | - | - | 265 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 87 | 87 | 87 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 34 | 290 | 52 | 18 | 187 | 63 | 98 | 164 | 40 | 84 | 76 | 32 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-------|-------|--------|-------|-------|
| Conflicting Flow All | 250 | 0 | 0 | 342 | 0 | 0 | 667 | 644 | 290 | 741 | 665 | 219 |
| Stage 1 | - | - | - | - | - | - | 358 | 358 | - | 255 | 255 | - |
| Stage 2 | - | - | - | - | - | - | 309 | 286 | - | 486 | 410 | - |
| 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 | 1316 | - | - | 1217 | - | - | 372 | 391 | 749 | 332 | 381 | 821 |
| Stage 1 | - | - | - | - | - | - | 660 | 628 | - | 749 | 696 | - |
| Stage 2 | - | - | - | - | - | - | 701 | 675 | - | 563 | 595 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1316 | - | - | 1217 | - | - | 290 | 373 | 749 | 199 | 363 | 821 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 290 | 373 | - | 199 | 363 | - |
| Stage 1 | - | - | - | - | - | - | 639 | 608 | - | 725 | 686 | - |
| Stage 2 | - | - | - | - | - | - | 590 | 665 | - | 377 | 576 | - |

























| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.7 | | | 0.6 | | | 22.5 | | | 24.6 | | |
| HCM LOS | | | | | | | C | | | C | | |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|-----------------------|-------|-------|-------|-----|-----|-------|-----|-----|-------|-------|
| Capacity (veh/h) | 290 | 414 | 1316 | - | - | 1217 | - | - | 199 | 435 |
| HCM Lane V/C Ratio | 0.337 | 0.494 | 0.026 | - | - | 0.015 | - | - | 0.422 | 0.248 |
| HCM Control Delay (s) | 23.6 | 21.9 | 7.8 | 0 | - | 8 | - | - | 35.7 | 16 |
| HCM Lane LOS | C | C | A | A | - | A | - | - | E | C |
| HCM 95th %tile Q(veh) | 1.4 | 2.7 | 0.1 | - | - | 0 | - | - | 1.9 | 1 |

| Intersection | | | | | | | | | |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| Intersection Delay, s/veh | 6.8 | | | | | | | | |
| Intersection LOS | A | | | | | | | | |
| Approach | EB | | WB | | NB | | SB | | |
| Entry Lanes | 2 | | 2 | | 2 | | 2 | | |
| Conflicting Circle Lanes | 2 | | 2 | | 2 | | 2 | | |
| Adj Approach Flow, veh/h | 324 | | 476 | | 548 | | 581 | | |
| Demand Flow Rate, veh/h | 331 | | 485 | | 560 | | 592 | | |
| Vehicles Circulating, veh/h | 601 | | 554 | | 164 | | 508 | | |
| Vehicles Exiting, veh/h | 499 | | 170 | | 767 | | 531 | | |
| 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 | | 7.5 | | 5.2 | | 7.9 | | |
| 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 | R | LT | TR | LT | TR | LT | TR | |
| RT Channelized | | | | | | | | | |
| Lane Util | 0.314 | 0.686 | 0.470 | 0.530 | 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 | 104 | 227 | 228 | 257 | 263 | 297 | 278 | 314 | |
| Cap Entry Lane, veh/h | 777 | 852 | 811 | 887 | 1161 | 1235 | 846 | 922 | |
| Entry HV Adj Factor | 0.976 | 0.982 | 0.981 | 0.981 | 0.980 | 0.978 | 0.982 | 0.980 | |
| Flow Entry, veh/h | 101 | 223 | 224 | 252 | 258 | 291 | 273 | 308 | |
| Cap Entry, veh/h | 758 | 837 | 795 | 870 | 1137 | 1208 | 830 | 904 | |
| V/C Ratio | 0.134 | 0.266 | 0.281 | 0.290 | 0.227 | 0.240 | 0.329 | 0.341 | |
| Control Delay, s/veh | 6.2 | 7.2 | 7.7 | 7.3 | 5.2 | 5.1 | 8.1 | 7.7 | |
| LOS | A | A | A | A | A | A | A | A | |
| 95th %tile Queue, veh | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |

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

2043 Background
AM

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 69 | 159 | 298 | 279 | 140 | 50 | 239 | 677 | 197 | 100 | 1206 | 102 |
| Future Volume (vph) | 69 | 159 | 298 | 279 | 140 | 50 | 239 | 677 | 197 | 100 | 1206 | 102 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 235 | | 0 | 235 | | 235 | 860 | | 290 | 695 | | 290 |
| Storage Lanes | 1 | | 1 | 2 | | 1 | 2 | | 1 | 1 | | 1 |
| Taper Length (ft) | 200 | | | 200 | | | 300 | | | 300 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 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 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 |
| Flt Permitted | 0.656 | | | 0.950 | | | 0.950 | | | 0.352 | | |
| Satd. Flow (perm) | 1222 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | 656 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 246 | | | 149 | | | 207 | | | 149 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 1222 | | | 928 | | | 1307 | | | 1572 | |
| Travel Time (s) | | 18.5 | | | 14.1 | | | 16.2 | | | 19.5 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 75 | 173 | 324 | 303 | 152 | 54 | 252 | 713 | 207 | 105 | 1269 | 107 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 75 | 173 | 324 | 303 | 152 | 54 | 252 | 713 | 207 | 105 | 1269 | 107 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | 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) | 60 | | 60 | 60 | | 60 | 60 | | 60 | 60 | | 60 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | 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 | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | 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 | 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 | Prot | NA | Perm | Prot | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | | | 8 | | | 2 | 6 | | 6 |

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

2043 Background
AM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | 6 |
| 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) | 17.0 | 24.0 | 24.0 | 19.0 | 26.0 | 26.0 | 23.0 | 55.0 | 55.0 | 12.0 | 44.0 | 44.0 |
| Total Split (%) | 15.5% | 21.8% | 21.8% | 17.3% | 23.6% | 23.6% | 20.9% | 50.0% | 50.0% | 10.9% | 40.0% | 40.0% |
| Maximum Green (s) | 12.5 | 19.5 | 19.5 | 14.5 | 21.5 | 21.5 | 18.5 | 50.5 | 50.5 | 7.5 | 39.5 | 39.5 |
| 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 | None | None | None | None | None | None | Max | Max | None | Max | Max |
| 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 Effct Green (s) | 21.1 | 12.5 | 12.5 | 13.0 | 19.3 | 19.3 | 12.8 | 50.7 | 50.7 | 52.1 | 45.0 | 45.0 |
| Actuated g/C Ratio | 0.21 | 0.12 | 0.12 | 0.13 | 0.19 | 0.19 | 0.13 | 0.50 | 0.50 | 0.51 | 0.44 | 0.44 |
| v/c Ratio | 0.25 | 0.40 | 0.79 | 0.69 | 0.23 | 0.13 | 0.58 | 0.40 | 0.23 | 0.25 | 0.81 | 0.14 |
| Control Delay | 28.1 | 43.5 | 26.2 | 51.7 | 36.9 | 0.6 | 48.1 | 17.7 | 3.1 | 11.7 | 31.3 | 1.8 |
| 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 | 28.1 | 43.5 | 26.2 | 51.7 | 36.9 | 0.6 | 48.1 | 17.7 | 3.1 | 11.7 | 31.3 | 1.8 |
| LOS | C | D | C | D | D | A | D | B | A | B | C | A |
| Approach Delay | | 31.7 | | | 41.9 | | | 21.6 | | | 27.7 | |
| Approach LOS | | C | | | D | | | C | | | C | |
| Queue Length 50th (ft) | 36 | 55 | 48 | 96 | 45 | 0 | 80 | 146 | 0 | 25 | 362 | 0 |
| Queue Length 95th (ft) | 69 | 88 | 147 | 153 | 76 | 0 | 125 | 225 | 40 | 58 | #607 | 16 |
| Internal Link Dist (ft) | | 1142 | | | 848 | | | 1227 | | | 1492 | |
| Turn Bay Length (ft) | 235 | | | 235 | | 235 | 860 | | 290 | 695 | | 290 |
| Base Capacity (vph) | 369 | 683 | 504 | 492 | 762 | 458 | 628 | 1769 | 894 | 422 | 1572 | 786 |
| 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 | 0.20 | 0.25 | 0.64 | 0.62 | 0.20 | 0.12 | 0.40 | 0.40 | 0.23 | 0.25 | 0.81 | 0.14 |

Intersection Summary

























Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 101.4
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 28.3
 Intersection LOS: C
 Intersection Capacity Utilization 71.0%
 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: 1: US 24 & Judge Orr



Lanes, Volumes, Timings
2: US 24 & Stapleton

2043 Background
AM

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 175 | 405 | 600 | 81 | 398 | 56 | 30 | 540 | 53 | 126 | 800 | 352 |
| Future Volume (vph) | 175 | 405 | 600 | 81 | 398 | 56 | 30 | 540 | 53 | 126 | 800 | 352 |
| 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 | | 2 | 1 | | 0 | 2 | | 1 | 2 | | 1 |
| Taper Length (ft) | 240 | | | 200 | | | 190 | | | 190 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 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) | 1770 | 3539 | 1583 | 1770 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 |
| Flt Permitted | 0.401 | | | 0.490 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 747 | 3539 | 1583 | 913 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 479 | | | 136 | | | 95 | | | 371 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 1349 | | | 5480 | | | 1382 | | | 1435 | |
| Travel Time (s) | | 20.4 | | | 83.0 | | | 17.1 | | | 17.8 | |
| 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) | 188 | 435 | 645 | 87 | 428 | 60 | 32 | 568 | 56 | 133 | 842 | 371 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 188 | 435 | 645 | 87 | 428 | 60 | 32 | 568 | 56 | 133 | 842 | 371 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | 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 | Left | Thru | Right | Left | Thru | Right | 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 | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | 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 | 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 | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | Perm |
| Protected Phases | 1 | 6 | | 5 | 2 | | 7 | 4 | | 3 | 8 | |
| Permitted Phases | 6 | | 6 | 2 | | 2 | | | 4 | | | 8 |

Lanes, Volumes, Timings
2: US 24 & Stapleton

2043 Background
AM

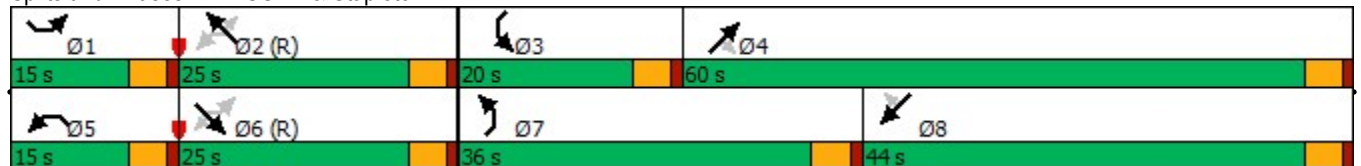


| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase | 1 | 6 | 6 | 5 | 2 | 2 | 7 | 4 | 4 | 3 | 8 | 8 |
| Switch Phase | | | | | | | | | | | | |
| 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) | 15.0 | 25.0 | 25.0 | 15.0 | 25.0 | 25.0 | 36.0 | 60.0 | 60.0 | 20.0 | 44.0 | 44.0 |
| Total Split (%) | 12.5% | 20.8% | 20.8% | 12.5% | 20.8% | 20.8% | 30.0% | 50.0% | 50.0% | 16.7% | 36.7% | 36.7% |
| Maximum Green (s) | 10.5 | 20.5 | 20.5 | 10.5 | 20.5 | 20.5 | 31.5 | 55.5 | 55.5 | 15.5 | 39.5 | 39.5 |
| 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 | C-Min | C-Min | None | C-Min | C-Min | None | None | None | None | None | None |
| Act Effct Green (s) | 65.9 | 53.5 | 53.5 | 57.4 | 48.9 | 48.9 | 6.6 | 30.0 | 30.0 | 10.0 | 37.5 | 37.5 |
| Actuated g/C Ratio | 0.55 | 0.45 | 0.45 | 0.48 | 0.41 | 0.41 | 0.06 | 0.25 | 0.25 | 0.08 | 0.31 | 0.31 |
| v/c Ratio | 0.36 | 0.28 | 0.66 | 0.18 | 0.30 | 0.08 | 0.17 | 0.64 | 0.12 | 0.47 | 0.76 | 0.50 |
| Control Delay | 17.7 | 24.1 | 11.7 | 16.6 | 27.7 | 0.2 | 55.7 | 42.9 | 1.9 | 57.4 | 41.9 | 5.1 |
| 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 | 17.7 | 24.1 | 11.7 | 16.6 | 27.7 | 0.2 | 55.7 | 42.9 | 1.9 | 57.4 | 41.9 | 5.1 |
| LOS | B | C | B | B | C | A | E | D | A | E | D | A |
| Approach Delay | | 16.8 | | | 23.2 | | | 40.0 | | | 33.3 | |
| Approach LOS | | B | | | C | | | D | | | C | |
| Queue Length 50th (ft) | 74 | 115 | 90 | 32 | 121 | 0 | 12 | 200 | 0 | 51 | 312 | 0 |
| Queue Length 95th (ft) | 138 | 184 | 282 | 70 | 196 | 0 | 29 | 241 | 8 | 82 | 353 | 63 |
| Internal Link Dist (ft) | | 1269 | | | 5400 | | | 1302 | | | 1355 | |
| Turn Bay Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Base Capacity (vph) | 528 | 1578 | 971 | 530 | 1441 | 725 | 901 | 1636 | 783 | 443 | 1192 | 779 |
| 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 | 0.28 | 0.66 | 0.16 | 0.30 | 0.08 | 0.04 | 0.35 | 0.07 | 0.30 | 0.71 | 0.48 |

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 27.5
 Intersection LOS: C
 Intersection Capacity Utilization 75.0%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 2: US 24 & Stapleton



| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.9 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↑↑ | ↑↑ | | ↑↑ | |
| Traffic Vol, veh/h | 8 | 143 | 330 | 23 | 10 | 25 |
| Future Vol, veh/h | 8 | 143 | 330 | 23 | 10 | 25 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 92 | 92 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 9 | 164 | 359 | 25 | 13 | 32 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|------|------|
| Conflicting Flow All | 384 | 0 | 0 | 472 | 192 |
| Stage 1 | - | - | - | 372 | - |
| Stage 2 | - | - | - | 100 | - |
| Critical Hdwy | 4.14 | - | - | 6.84 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | 5.84 | - |
| Critical Hdwy Stg 2 | - | - | - | 5.84 | - |
| Follow-up Hdwy | 2.22 | - | - | 3.52 | 3.32 |
| Pot Cap-1 Maneuver | 1171 | - | - | 521 | 817 |
| Stage 1 | - | - | - | 667 | - |
| Stage 2 | - | - | - | 913 | - |
| Platoon blocked, % | | - | - | | |
| Mov Cap-1 Maneuver | 1171 | - | - | 517 | 817 |
| Mov Cap-2 Maneuver | - | - | - | 517 | - |
| Stage 1 | - | - | - | 662 | - |
| Stage 2 | - | - | - | 913 | - |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.4 | 0 | 10.5 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 1171 | - | - | - | 701 |
| HCM Lane V/C Ratio | 0.008 | - | - | - | 0.064 |
| HCM Control Delay (s) | 8.1 | 0 | - | - | 10.5 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.2 |

| Intersection | | | | | | | | | |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| Intersection Delay, s/veh | 9.2 | | | | | | | | |
| Intersection LOS | A | | | | | | | | |
| Approach | EB | | WB | | NB | | SB | | |
| Entry Lanes | 2 | | 2 | | 2 | | 2 | | |
| Conflicting Circle Lanes | 2 | | 2 | | 2 | | 2 | | |
| Adj Approach Flow, veh/h | 494 | | 257 | | 898 | | 590 | | |
| Demand Flow Rate, veh/h | 504 | | 262 | | 916 | | 601 | | |
| Vehicles Circulating, veh/h | 587 | | 908 | | 516 | | 441 | | |
| Vehicles Exiting, veh/h | 455 | | 524 | | 575 | | 729 | | |
| Ped Vol Crossing Leg, #/h | 0 | | 0 | | 0 | | 0 | | |
| Ped Cap Adj | 1.000 | | 1.000 | | 1.000 | | 1.000 | | |
| Approach Delay, s/veh | 7.9 | | 8.5 | | 11.3 | | 7.3 | | |
| 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 | 0.470 | 0.530 | 0.469 | 0.531 | 0.471 | 0.529 | 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 | 237 | 267 | 123 | 139 | 431 | 485 | 282 | 319 | |
| Cap Entry Lane, veh/h | 787 | 862 | 586 | 656 | 840 | 916 | 900 | 976 | |
| Entry HV Adj Factor | 0.980 | 0.981 | 0.981 | 0.979 | 0.979 | 0.981 | 0.983 | 0.980 | |
| Flow Entry, veh/h | 232 | 262 | 121 | 136 | 422 | 476 | 277 | 312 | |
| Cap Entry, veh/h | 771 | 846 | 574 | 642 | 822 | 899 | 884 | 956 | |
| V/C Ratio | 0.301 | 0.310 | 0.210 | 0.212 | 0.513 | 0.530 | 0.313 | 0.327 | |
| Control Delay, s/veh | 8.2 | 7.7 | 9.0 | 8.2 | 11.5 | 11.1 | 7.5 | 7.2 | |
| LOS | A | A | A | A | B | B | A | A | |
| 95th %tile Queue, veh | 1 | 1 | 1 | 1 | 3 | 3 | 1 | 1 | |

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

2043 Background
PM

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 196 | 211 | 357 | 415 | 231 | 165 | 420 | 1240 | 464 | 150 | 794 | 159 |
| Future Volume (vph) | 196 | 211 | 357 | 415 | 231 | 165 | 420 | 1240 | 464 | 150 | 794 | 159 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 235 | | 0 | 235 | | 235 | 860 | | 290 | 695 | | 290 |
| Storage Lanes | 1 | | 1 | 2 | | 1 | 2 | | 1 | 1 | | 1 |
| Taper Length (ft) | 200 | | | 200 | | | 300 | | | 300 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 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 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 |
| Flt Permitted | 0.598 | | | 0.950 | | | 0.950 | | | 0.123 | | |
| Satd. Flow (perm) | 1114 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | 229 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 236 | | | 177 | | | 484 | | | 167 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 1222 | | | 928 | | | 1307 | | | 1572 | |
| Travel Time (s) | | 18.5 | | | 14.1 | | | 16.2 | | | 19.5 | |
| Peak Hour Factor | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.95 | 0.99 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 211 | 227 | 384 | 446 | 248 | 177 | 442 | 1253 | 488 | 158 | 836 | 167 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 211 | 227 | 384 | 446 | 248 | 177 | 442 | 1253 | 488 | 158 | 836 | 167 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | 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) | 60 | | 60 | 60 | | 60 | 60 | | 60 | 60 | | 60 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | 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 | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | 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 | 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 | Prot | NA | Perm | Prot | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | | | 8 | | | 2 | 6 | | 6 |

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

2043 Background
PM











| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | 6 |
| 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) | 17.0 | 24.0 | 24.0 | 20.0 | 27.0 | 27.0 | 21.0 | 55.0 | 55.0 | 11.0 | 45.0 | 45.0 |
| Total Split (%) | 15.5% | 21.8% | 21.8% | 18.2% | 24.5% | 24.5% | 19.1% | 50.0% | 50.0% | 10.0% | 40.9% | 40.9% |
| Maximum Green (s) | 12.5 | 19.5 | 19.5 | 15.5 | 22.5 | 22.5 | 16.5 | 50.5 | 50.5 | 6.5 | 40.5 | 40.5 |
| 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 | None | None | None | None | None | None | Max | Max | None | Max | Max |
| 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 Effct Green (s) | 27.8 | 15.8 | 15.8 | 15.5 | 19.4 | 19.4 | 16.0 | 50.6 | 50.6 | 47.6 | 41.1 | 41.1 |
| Actuated g/C Ratio | 0.26 | 0.15 | 0.15 | 0.15 | 0.18 | 0.18 | 0.15 | 0.48 | 0.48 | 0.45 | 0.39 | 0.39 |
| v/c Ratio | 0.58 | 0.43 | 0.88 | 0.89 | 0.39 | 0.41 | 0.86 | 0.75 | 0.49 | 0.81 | 0.61 | 0.23 |
| Control Delay | 34.0 | 43.5 | 39.0 | 67.0 | 40.0 | 8.7 | 61.5 | 26.7 | 3.5 | 48.7 | 29.4 | 4.5 |
| 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 | 34.0 | 43.5 | 39.0 | 67.0 | 40.0 | 8.7 | 61.5 | 26.7 | 3.5 | 48.7 | 29.4 | 4.5 |
| LOS | C | D | D | E | D | A | E | C | A | D | C | A |
| Approach Delay | | 39.0 | | | 47.5 | | | 28.6 | | | 28.5 | |
| Approach LOS | | D | | | D | | | C | | | C | |
| Queue Length 50th (ft) | 107 | 74 | 102 | 161 | 79 | 0 | 158 | 377 | 1 | 51 | 253 | 0 |
| Queue Length 95th (ft) | 170 | 113 | #256 | #257 | 117 | 57 | #241 | 467 | 58 | #163 | 322 | 44 |
| Internal Link Dist (ft) | | 1142 | | | 848 | | | 1227 | | | 1492 | |
| Turn Bay Length (ft) | 235 | | | 235 | | 235 | 860 | | 290 | 695 | | 290 |
| Base Capacity (vph) | 373 | 649 | 483 | 500 | 749 | 474 | 532 | 1681 | 1006 | 196 | 1365 | 713 |
| 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 | 0.57 | 0.35 | 0.80 | 0.89 | 0.33 | 0.37 | 0.83 | 0.75 | 0.49 | 0.81 | 0.61 | 0.23 |

Intersection Summary

























| | |
|---|------------------------|
| Area Type: | Other |
| Cycle Length: | 110 |
| Actuated Cycle Length: | 106.5 |
| Natural Cycle: | 90 |
| Control Type: | Actuated-Uncoordinated |
| Maximum v/c Ratio: | 0.89 |
| Intersection Signal Delay: | 33.5 |
| 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: 1: US 24 & Judge Orr

| | | | |
|--|--|---|--|
|  Ø1 |  Ø2 |  Ø3 |  Ø4 |
| 11 s | 55 s | 20 s | 24 s |
|  Ø5 |  Ø6 |  Ø7 |  Ø8 |
| 21 s | 45 s | 17 s | 27 s |

Lanes, Volumes, Timings
2: US 24 & Stapleton

2043 Background
PM

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 350 | 302 | 700 | 125 | 405 | 179 | 650 | 850 | 125 | 145 | 600 | 350 |
| Future Volume (vph) | 350 | 302 | 700 | 125 | 405 | 179 | 650 | 850 | 125 | 145 | 600 | 350 |
| 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 | | 2 | 1 | | 0 | 2 | | 1 | 2 | | 1 |
| Taper Length (ft) | 240 | | | 200 | | | 190 | | | 190 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 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) | 1770 | 3539 | 1583 | 1770 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 |
| Flt Permitted | 0.250 | | | 0.419 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 466 | 3539 | 1583 | 780 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 477 | | | 192 | | | 132 | | | 225 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 1349 | | | 5480 | | | 1382 | | | 1435 | |
| Travel Time (s) | | 20.4 | | | 83.0 | | | 17.1 | | | 17.8 | |
| 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) | 368 | 318 | 737 | 134 | 435 | 192 | 684 | 895 | 132 | 153 | 632 | 368 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 368 | 318 | 737 | 134 | 435 | 192 | 684 | 895 | 132 | 153 | 632 | 368 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | 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 | Left | Thru | Right | Left | Thru | Right | 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 | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | 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 | 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 | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | Perm |
| Protected Phases | 1 | 6 | | 5 | 2 | | 7 | 4 | | 3 | 8 | |
| Permitted Phases | 6 | | 6 | 2 | | 2 | | | 4 | | | 8 |

Lanes, Volumes, Timings
2: US 24 & Stapleton

2043 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) | 15.0 | 25.0 | 25.0 | 15.0 | 25.0 | 25.0 | 36.0 | 60.0 | 60.0 | 20.0 | 44.0 | 44.0 |
| Total Split (%) | 12.5% | 20.8% | 20.8% | 12.5% | 20.8% | 20.8% | 30.0% | 50.0% | 50.0% | 16.7% | 36.7% | 36.7% |
| Maximum Green (s) | 10.5 | 20.5 | 20.5 | 10.5 | 20.5 | 20.5 | 31.5 | 55.5 | 55.5 | 15.5 | 39.5 | 39.5 |
| 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 | C-Min | C-Min | None | C-Min | C-Min | None | None | None | None | Max | Max |
| Act Effct Green (s) | 31.5 | 21.0 | 21.0 | 30.5 | 20.5 | 20.5 | 28.2 | 60.3 | 60.3 | 10.7 | 42.8 | 42.8 |
| Actuated g/C Ratio | 0.26 | 0.18 | 0.18 | 0.25 | 0.17 | 0.17 | 0.24 | 0.50 | 0.50 | 0.09 | 0.36 | 0.36 |
| v/c Ratio | 1.56 | 0.51 | 1.10 | 0.48 | 0.72 | 0.45 | 0.85 | 0.50 | 0.15 | 0.50 | 0.50 | 0.52 |
| Control Delay | 300.8 | 48.5 | 82.6 | 38.7 | 54.7 | 9.6 | 54.4 | 21.4 | 3.3 | 57.5 | 32.5 | 14.7 |
| 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 | 300.8 | 48.5 | 82.6 | 38.7 | 54.7 | 9.6 | 54.4 | 21.4 | 3.3 | 57.5 | 32.5 | 14.7 |
| LOS | F | D | F | D | D | A | D | C | A | E | C | B |
| Approach Delay | | 131.4 | | | 40.5 | | | 33.2 | | | 30.2 | |
| Approach LOS | | F | | | D | | | C | | | C | |
| Queue Length 50th (ft) | ~337 | 119 | ~324 | 79 | 169 | 0 | 260 | 235 | 0 | 59 | 202 | 81 |
| Queue Length 95th (ft) | #537 | 167 | #565 | 133 | 227 | 64 | 322 | 308 | 33 | 91 | 269 | 183 |
| Internal Link Dist (ft) | | 1269 | | | 5400 | | | 1302 | | | 1355 | |
| Turn Bay Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Base Capacity (vph) | 236 | 618 | 670 | 288 | 604 | 429 | 901 | 1779 | 861 | 443 | 1262 | 709 |
| 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 | 1.56 | 0.51 | 1.10 | 0.47 | 0.72 | 0.45 | 0.76 | 0.50 | 0.15 | 0.35 | 0.50 | 0.52 |

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.56
 Intersection Signal Delay: 61.3 Intersection LOS: E
 Intersection Capacity Utilization 80.7% ICU Level of Service D
 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: 2: US 24 & Stapleton



| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.8 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↑↑ | ↑↑ | | ↑↑ | |
| Traffic Vol, veh/h | 27 | 354 | 284 | 15 | 51 | 21 |
| Future Vol, veh/h | 27 | 354 | 284 | 15 | 51 | 21 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 83 | 83 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 29 | 385 | 309 | 16 | 61 | 25 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|------|
| Conflicting Flow All | 325 | 0 | - | 0 | 568 |
| Stage 1 | - | - | - | - | 317 |
| Stage 2 | - | - | - | - | 251 |
| Critical Hdwy | 4.14 | - | - | - | 6.84 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.84 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.84 |
| Follow-up Hdwy | 2.22 | - | - | - | 3.52 |
| Pot Cap-1 Maneuver | 1231 | - | - | - | 453 |
| Stage 1 | - | - | - | - | 711 |
| Stage 2 | - | - | - | - | 768 |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 1231 | - | - | - | 439 |
| Mov Cap-2 Maneuver | - | - | - | - | 439 |
| Stage 1 | - | - | - | - | 690 |
| Stage 2 | - | - | - | - | 768 |

| Approach | EB | WB | SB |
|----------------------|-----|----|------|
| HCM Control Delay, s | 0.7 | 0 | 13.5 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 1231 | - | - | - | 511 |
| HCM Lane V/C Ratio | 0.024 | - | - | - | 0.17 |
| HCM Control Delay (s) | 8 | 0.1 | - | - | 13.5 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.1 | - | - | - | 0.6 |

| Intersection | | | | | | | | | |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| Intersection Delay, s/veh | 7.4 | | | | | | | | |
| Intersection LOS | A | | | | | | | | |
| Approach | EB | | WB | | NB | | SB | | |
| Entry Lanes | 2 | | 2 | | 2 | | 2 | | |
| Conflicting Circle Lanes | 2 | | 2 | | 2 | | 2 | | |
| Adj Approach Flow, veh/h | 362 | | 544 | | 560 | | 591 | | |
| Demand Flow Rate, veh/h | 369 | | 554 | | 572 | | 602 | | |
| Vehicles Circulating, veh/h | 613 | | 560 | | 217 | | 564 | | |
| Vehicles Exiting, veh/h | 553 | | 229 | | 764 | | 550 | | |
| Ped Vol Crossing Leg, #/h | 0 | | 0 | | 0 | | 0 | | |
| Ped Cap Adj | 1.000 | | 1.000 | | 1.000 | | 1.000 | | |
| Approach Delay, s/veh | 7.1 | | 8.1 | | 5.5 | | 8.6 | | |
| 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 | 0.385 | 0.615 | 0.469 | 0.531 | 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 | 142 | 227 | 260 | 294 | 269 | 303 | 283 | 319 | |
| Cap Entry Lane, veh/h | 768 | 843 | 806 | 882 | 1106 | 1181 | 803 | 879 | |
| Entry HV Adj Factor | 0.977 | 0.982 | 0.983 | 0.980 | 0.979 | 0.980 | 0.981 | 0.981 | |
| Flow Entry, veh/h | 139 | 223 | 256 | 288 | 263 | 297 | 278 | 313 | |
| Cap Entry, veh/h | 750 | 828 | 793 | 865 | 1082 | 1157 | 788 | 863 | |
| V/C Ratio | 0.185 | 0.269 | 0.322 | 0.333 | 0.243 | 0.257 | 0.352 | 0.363 | |
| Control Delay, s/veh | 6.8 | 7.3 | 8.3 | 7.9 | 5.6 | 5.5 | 8.8 | 8.3 | |
| LOS | A | A | A | A | A | A | A | A | |
| 95th %tile Queue, veh | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | |

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

2043 Background + Site
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| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 69 | 165 | 298 | 333 | 146 | 50 | 239 | 677 | 226 | 100 | 1206 | 102 |
| Future Volume (vph) | 69 | 165 | 298 | 333 | 146 | 50 | 239 | 677 | 226 | 100 | 1206 | 102 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 235 | | 0 | 235 | | 235 | 860 | | 290 | 695 | | 290 |
| Storage Lanes | 1 | | 1 | 2 | | 1 | 2 | | 1 | 1 | | 1 |
| Taper Length (ft) | 200 | | | 200 | | | 300 | | | 300 | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 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 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 |
| Flt Permitted | 0.651 | | | 0.950 | | | 0.950 | | | 0.355 | | |
| Satd. Flow (perm) | 1213 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | 661 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 272 | | | 149 | | | 238 | | | 149 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 1222 | | | 928 | | | 1307 | | | 1572 | |
| Travel Time (s) | | 18.5 | | | 14.1 | | | 16.2 | | | 19.5 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 75 | 179 | 324 | 362 | 159 | 54 | 252 | 713 | 238 | 105 | 1269 | 107 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 75 | 179 | 324 | 362 | 159 | 54 | 252 | 713 | 238 | 105 | 1269 | 107 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | 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) | 60 | | 60 | 60 | | 60 | 60 | | 60 | 60 | | 60 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | 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 | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | 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 | 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 | Prot | NA | Perm | Prot | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | | | 8 | | | 2 | 6 | | 6 |

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

2043 Background + Site
AM



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | 6 |
| 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 | 24.0 | 24.0 | 17.0 | 26.0 | 26.0 | 25.0 | 57.0 | 57.0 | 12.0 | 44.0 | 44.0 |
| Total Split (%) | 13.6% | 21.8% | 21.8% | 15.5% | 23.6% | 23.6% | 22.7% | 51.8% | 51.8% | 10.9% | 40.0% | 40.0% |
| Maximum Green (s) | 10.5 | 19.5 | 19.5 | 12.5 | 21.5 | 21.5 | 20.5 | 52.5 | 52.5 | 7.5 | 39.5 | 39.5 |
| 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 | None | None | None | None | None | None | Max | Max | None | Max | Max |
| 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 Effct Green (s) | 20.5 | 12.1 | 12.1 | 12.5 | 18.4 | 18.4 | 12.8 | 52.6 | 52.6 | 54.0 | 46.9 | 46.9 |
| Actuated g/C Ratio | 0.20 | 0.12 | 0.12 | 0.12 | 0.18 | 0.18 | 0.12 | 0.51 | 0.51 | 0.53 | 0.46 | 0.46 |
| v/c Ratio | 0.26 | 0.43 | 0.76 | 0.86 | 0.25 | 0.13 | 0.59 | 0.39 | 0.26 | 0.25 | 0.78 | 0.13 |
| Control Delay | 29.7 | 44.8 | 21.1 | 65.7 | 38.6 | 0.7 | 48.4 | 16.6 | 2.8 | 10.7 | 29.1 | 1.7 |
| 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 | 29.7 | 44.8 | 21.1 | 65.7 | 38.6 | 0.7 | 48.4 | 16.6 | 2.8 | 10.7 | 29.1 | 1.7 |
| LOS | C | D | C | E | D | A | D | B | A | B | C | A |
| Approach Delay | | 29.6 | | | 52.1 | | | 20.5 | | | 25.8 | |
| Approach LOS | | C | | | D | | | C | | | C | |
| Queue Length 50th (ft) | 37 | 58 | 32 | 119 | 48 | 0 | 79 | 138 | 0 | 24 | 344 | 0 |
| Queue Length 95th (ft) | 71 | 92 | 125 | #221 | 81 | 0 | 125 | 216 | 41 | 55 | #583 | 15 |
| Internal Link Dist (ft) | | 1142 | | | 848 | | | 1227 | | | 1492 | |
| Turn Bay Length (ft) | 235 | | | 235 | | 235 | 860 | | 290 | 695 | | 290 |
| Base Capacity (vph) | 325 | 675 | 522 | 420 | 767 | 460 | 688 | 1818 | 928 | 433 | 1622 | 806 |
| 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 | 0.23 | 0.27 | 0.62 | 0.86 | 0.21 | 0.12 | 0.37 | 0.39 | 0.26 | 0.24 | 0.78 | 0.13 |

Intersection Summary


























Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 102.4
 Natural Cycle: 90
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay: 28.6
 Intersection LOS: C
 Intersection Capacity Utilization 72.5%
 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: 1: US 24 & Judge Orr

| | | | |
|--|--|---|--|
|  Ø1 |  Ø2 |  Ø3 |  Ø4 |
| 12 s | 57 s | 17 s | 24 s |
|  Ø5 |  Ø6 |  Ø7 |  Ø8 |
| 25 s | 44 s | 15 s | 26 s |

Lanes, Volumes, Timings
2: US 24 & Stapleton

2043 Background + Site
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| |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|---|
| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR | |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  | |
| Traffic Volume (vph) | 175 | 420 | 600 | 81 | 419 | 56 | 300 | 540 | 53 | 126 | 800 | 352 | |
| Future Volume (vph) | 175 | 420 | 600 | 81 | 419 | 56 | 300 | 540 | 53 | 126 | 800 | 352 | |
| 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 | | 2 | 1 | | 0 | 2 | | 1 | 2 | | 1 | |
| Taper Length (ft) | 240 | | | 200 | | | 190 | | | 190 | | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 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) | 1770 | 3539 | 1583 | 1770 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | |
| Flt Permitted | 0.324 | | | 0.445 | | | 0.950 | | | 0.950 | | | |
| Satd. Flow (perm) | 604 | 3539 | 1583 | 829 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes | |
| Satd. Flow (RTOR) | | | 373 | | | 136 | | | 95 | | | 289 | |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | | |
| Link Distance (ft) | | 1349 | | | 5480 | | | 1382 | | | 1435 | | |
| Travel Time (s) | | 20.4 | | | 83.0 | | | 17.1 | | | 17.8 | | |
| 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) | 188 | 452 | 645 | 88 | 455 | 61 | 316 | 568 | 56 | 133 | 842 | 371 | |
| Shared Lane Traffic (%) | | | | | | | | | | | | | |
| Lane Group Flow (vph) | 188 | 452 | 645 | 88 | 455 | 61 | 316 | 568 | 56 | 133 | 842 | 371 | |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No | |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | 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 | Left | Thru | Right | Left | Thru | Right | 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 | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | 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 | 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 | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | Perm | |
| Protected Phases | 1 | 6 | | 5 | 2 | | 7 | 4 | | 3 | 8 | | |
| Permitted Phases | 6 | | 6 | 2 | | 2 | | | 4 | | | 8 | |

Lanes, Volumes, Timings
2: US 24 & Stapleton

2043 Background + Site
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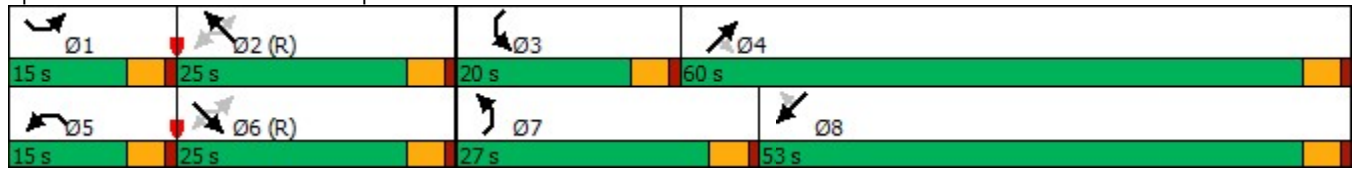
| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Detector Phase | 1 | 6 | 6 | 5 | 2 | 2 | 7 | 4 | 4 | 3 | 8 | 8 |
| Switch Phase | | | | | | | | | | | | |
| 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 | 25.0 | 25.0 | 15.0 | 25.0 | 25.0 | 27.0 | 60.0 | 60.0 | 20.0 | 53.0 | 53.0 |
| Total Split (%) | 12.5% | 20.8% | 20.8% | 12.5% | 20.8% | 20.8% | 22.5% | 50.0% | 50.0% | 16.7% | 44.2% | 44.2% |
| Maximum Green (s) | 10.5 | 20.5 | 20.5 | 10.5 | 20.5 | 20.5 | 22.5 | 55.5 | 55.5 | 15.5 | 48.5 | 48.5 |
| 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 | C-Min | C-Min | None | C-Min | C-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 Effct Green (s) | 52.2 | 39.0 | 39.0 | 43.6 | 34.4 | 34.4 | 16.3 | 43.7 | 43.7 | 10.0 | 37.4 | 37.4 |
| Actuated g/C Ratio | 0.44 | 0.32 | 0.32 | 0.36 | 0.29 | 0.29 | 0.14 | 0.36 | 0.36 | 0.08 | 0.31 | 0.31 |
| v/c Ratio | 0.47 | 0.39 | 0.84 | 0.24 | 0.45 | 0.11 | 0.68 | 0.44 | 0.09 | 0.47 | 0.76 | 0.54 |
| Control Delay | 27.8 | 35.3 | 28.4 | 25.0 | 39.6 | 0.4 | 56.8 | 29.3 | 1.2 | 57.4 | 41.8 | 10.2 |
| 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 | 27.8 | 35.3 | 28.4 | 25.0 | 39.6 | 0.4 | 56.8 | 29.3 | 1.2 | 57.4 | 41.8 | 10.2 |
| LOS | C | D | C | C | D | A | E | C | A | E | D | B |
| Approach Delay | | 30.7 | | | 33.5 | | | 36.8 | | | 34.6 | |
| Approach LOS | | C | | | C | | | D | | | C | |
| Queue Length 50th (ft) | 89 | 141 | 212 | 40 | 153 | 0 | 121 | 173 | 0 | 51 | 308 | 46 |
| Queue Length 95th (ft) | 171 | 231 | #535 | 87 | 237 | 0 | 163 | 195 | 7 | 82 | 345 | 122 |
| Internal Link Dist (ft) | | 1269 | | | 5400 | | | 1302 | | | 1355 | |
| Turn Bay Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Base Capacity (vph) | 400 | 1151 | 766 | 399 | 1013 | 550 | 643 | 1636 | 783 | 443 | 1430 | 811 |
| 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 | 0.47 | 0.39 | 0.84 | 0.22 | 0.45 | 0.11 | 0.49 | 0.35 | 0.07 | 0.30 | 0.59 | 0.46 |

Intersection Summary

| | |
|---|---|
| Area Type: | Other |
| Cycle Length: | 120 |
| Actuated Cycle Length: | 120 |
| Offset: | 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green |
| Natural Cycle: | 70 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.84 |
| Intersection Signal Delay: | 33.8 |
| 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.

Splits and Phases: 2: US 24 & Stapleton



| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.8 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 152 | 25 | 3 | 354 | 28 | 1 |
| Future Vol, veh/h | 152 | 25 | 3 | 354 | 28 | 1 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 87 | 87 | 92 | 92 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 175 | 29 | 3 | 385 | 36 | 1 |

| Major/Minor | Major1 | Major2 | Minor1 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 0 | 0 | 204 | 0 | 581 |
| Stage 1 | - | - | - | - | 190 |
| Stage 2 | - | - | - | - | 391 |
| Critical Hdwy | - | - | 4.12 | - | 6.42 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 |
| Pot Cap-1 Maneuver | - | - | 1368 | - | 476 |
| Stage 1 | - | - | - | - | 842 |
| Stage 2 | - | - | - | - | 683 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1368 | - | 475 |
| Mov Cap-2 Maneuver | - | - | - | - | 475 |
| Stage 1 | - | - | - | - | 842 |
| Stage 2 | - | - | - | - | 681 |

| Approach | EB | WB | NB |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0 | 0.1 | 13.1 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 482 | - | - | 1368 | - |
| HCM Lane V/C Ratio | 0.077 | - | - | 0.002 | - |
| HCM Control Delay (s) | 13.1 | - | - | 7.6 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0 | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.4 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕↕ | ↗ | | ↕↕ | ↗ | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 8 | 164 | 34 | 6 | 352 | 25 | 64 | 4 | 2 | 13 | 4 | 25 |
| Future Vol, veh/h | 8 | 164 | 34 | 6 | 352 | 25 | 64 | 4 | 2 | 13 | 4 | 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 | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | 235 | - | - | - | - | - | - |
| 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 | 78 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 9 | 189 | 39 | 7 | 383 | 27 | 77 | 5 | 2 | 17 | 5 | 32 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|------|
| Conflicting Flow All | 410 | 0 | 0 | 228 | 0 | 0 | 415 | 631 | 95 | 512 | 643 | 192 |
| Stage 1 | - | - | - | - | - | - | 207 | 207 | - | 397 | 397 | - |
| Stage 2 | - | - | - | - | - | - | 208 | 424 | - | 115 | 246 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1145 | - | - | 1337 | - | - | 522 | 397 | 943 | 445 | 390 | 817 |
| Stage 1 | - | - | - | - | - | - | 776 | 729 | - | 600 | 602 | - |
| Stage 2 | - | - | - | - | - | - | 775 | 585 | - | 877 | 701 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1145 | - | - | 1337 | - | - | 490 | 391 | 943 | 434 | 384 | 817 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 490 | 391 | - | 434 | 384 | - |
| Stage 1 | - | - | - | - | - | - | 769 | 722 | - | 595 | 598 | - |
| Stage 2 | - | - | - | - | - | - | 733 | 581 | - | 861 | 695 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.3 | | | 0.1 | | | 13.9 | | | 11.7 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 490 | 1145 | - | - | 1337 | - | - | 592 |
| HCM Lane V/C Ratio | 0.172 | 0.008 | - | - | 0.005 | - | - | 0.091 |
| HCM Control Delay (s) | 13.9 | 8.2 | 0 | - | 7.7 | 0 | - | 11.7 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.6 | 0 | - | - | 0 | - | - | 0.3 |

| Intersection | | | | | | | | | |
|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| Intersection Delay, s/veh | 10.7 | | | | | | | | |
| 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 | 576 | | 372 | | 905 | | 614 | | |
| Demand Flow Rate, veh/h | 587 | | 380 | | 923 | | 626 | | |
| Vehicles Circulating, veh/h | 622 | | 908 | | 624 | | 527 | | |
| Vehicles Exiting, veh/h | 531 | | 639 | | 585 | | 761 | | |
| Ped Vol Crossing Leg, #/h | 0 | | 0 | | 0 | | 0 | | |
| Ped Cap Adj | 1.000 | | 1.000 | | 1.000 | | 1.000 | | |
| Approach Delay, s/veh | 9.1 | | 10.0 | | 13.6 | | 8.4 | | |
| 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 | 0.470 | 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 | 276 | 311 | 179 | 201 | 434 | 489 | 294 | 332 | |
| Cap Entry Lane, veh/h | 762 | 837 | 586 | 656 | 760 | 835 | 831 | 907 | |
| Entry HV Adj Factor | 0.980 | 0.981 | 0.977 | 0.981 | 0.980 | 0.981 | 0.981 | 0.979 | |
| Flow Entry, veh/h | 271 | 305 | 175 | 197 | 425 | 480 | 288 | 325 | |
| Cap Entry, veh/h | 747 | 821 | 572 | 644 | 745 | 819 | 815 | 889 | |
| V/C Ratio | 0.362 | 0.372 | 0.306 | 0.306 | 0.571 | 0.585 | 0.354 | 0.366 | |
| Control Delay, s/veh | 9.3 | 8.8 | 10.6 | 9.6 | 13.9 | 13.3 | 8.6 | 8.2 | |
| LOS | A | A | B | A | B | B | A | A | |
| 95th %tile Queue, veh | 2 | 2 | 1 | 1 | 4 | 4 | 2 | 2 | |

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

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PM

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 196 | 223 | 357 | 463 | 241 | 165 | 420 | 1240 | 528 | 150 | 794 | 159 |
| Future Volume (vph) | 196 | 223 | 357 | 463 | 241 | 165 | 420 | 1240 | 528 | 150 | 794 | 159 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 235 | | 0 | 235 | | 235 | 860 | | 290 | 695 | | 290 |
| Storage Lanes | 1 | | 1 | 2 | | 1 | 2 | | 1 | 1 | | 1 |
| Taper Length (ft) | 200 | | | 200 | | | 300 | | 300 | | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 0.97 | 0.95 | 1.00 | 0.97 | 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 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 |
| Flt Permitted | 0.592 | | | 0.950 | | | 0.950 | | 0.115 | | | |
| Satd. Flow (perm) | 1103 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | 214 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 249 | | | 170 | | | 476 | | | 167 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 1222 | | | 928 | | | 1307 | | | 1572 | |
| Travel Time (s) | | 18.5 | | | 14.1 | | | 16.2 | | | 19.5 | |
| 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) | 211 | 240 | 384 | 498 | 259 | 177 | 442 | 1305 | 556 | 158 | 836 | 167 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 211 | 240 | 384 | 498 | 259 | 177 | 442 | 1305 | 556 | 158 | 836 | 167 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | 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 | Left | Thru | Right | Left | Thru | Right | 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 | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | 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 | 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 | Prot | NA | Perm | Prot | NA | Perm | pm+pt | NA | Perm |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | | | 8 | | | 2 | 6 | | 6 |

Lanes, Volumes, Timings
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| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | 6 |
| 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) | 17.0 | 23.0 | 23.0 | 21.0 | 27.0 | 27.0 | 22.0 | 56.0 | 56.0 | 10.0 | 44.0 | 44.0 |
| Total Split (%) | 15.5% | 20.9% | 20.9% | 19.1% | 24.5% | 24.5% | 20.0% | 50.9% | 50.9% | 9.1% | 40.0% | 40.0% |
| Maximum Green (s) | 12.5 | 18.5 | 18.5 | 16.5 | 22.5 | 22.5 | 17.5 | 51.5 | 51.5 | 5.5 | 39.5 | 39.5 |
| 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 | None | None | None | None | None | None | Max | Max | None | Max | Max |
| 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 Effct Green (s) | 27.1 | 15.2 | 15.2 | 16.5 | 19.7 | 19.7 | 16.7 | 51.6 | 51.6 | 45.9 | 40.4 | 40.4 |
| Actuated g/C Ratio | 0.25 | 0.14 | 0.14 | 0.15 | 0.18 | 0.18 | 0.16 | 0.48 | 0.48 | 0.43 | 0.38 | 0.38 |
| v/c Ratio | 0.60 | 0.48 | 0.88 | 0.94 | 0.40 | 0.41 | 0.83 | 0.76 | 0.55 | 0.92 | 0.62 | 0.24 |
| Control Delay | 34.7 | 45.2 | 37.3 | 72.4 | 40.1 | 9.6 | 58.0 | 26.9 | 5.5 | 73.2 | 30.3 | 4.7 |
| 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 | 34.7 | 45.2 | 37.3 | 72.4 | 40.1 | 9.6 | 58.0 | 26.9 | 5.5 | 73.2 | 30.3 | 4.7 |
| LOS | C | D | D | E | D | A | E | C | A | E | C | A |
| Approach Delay | | 38.9 | | | 51.5 | | | 27.7 | | | 32.4 | |
| Approach LOS | | D | | | D | | | C | | | C | |
| Queue Length 50th (ft) | 107 | 80 | 92 | 181 | 83 | 4 | 156 | 395 | 31 | 54 | 257 | 0 |
| Queue Length 95th (ft) | 170 | 120 | #247 | #288 | 122 | 62 | #229 | 488 | 111 | #187 | 327 | 44 |
| Internal Link Dist (ft) | | 1142 | | | 848 | | | 1227 | | | 1492 | |
| Turn Bay Length (ft) | 235 | | | 235 | | 235 | 860 | | 290 | 695 | | 290 |
| Base Capacity (vph) | 364 | 614 | 480 | 530 | 746 | 468 | 563 | 1708 | 1010 | 172 | 1339 | 703 |
| 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 | 0.58 | 0.39 | 0.80 | 0.94 | 0.35 | 0.38 | 0.79 | 0.76 | 0.55 | 0.92 | 0.62 | 0.24 |

Intersection Summary



























| | |
|---|------------------------|
| Area Type: | Other |
| Cycle Length: | 110 |
| Actuated Cycle Length: | 106.8 |
| Natural Cycle: | 90 |
| Control Type: | Actuated-Uncoordinated |
| Maximum v/c Ratio: | 0.94 |
| Intersection Signal Delay: | 34.8 |
| Intersection LOS: | C |
| Intersection Capacity Utilization: | 77.0% |
| 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. | |

Splits and Phases: 1: US 24 & Judge Orr

| | | | |
|--|--|--|--|
|  Ø1 |  Ø2 |  Ø3 |  Ø4 |
| 10 s | 56 s | 21 s | 23 s |
|  Ø5 |  Ø6 |  Ø7 |  Ø8 |
| 22 s | 44 s | 17 s | 27 s |

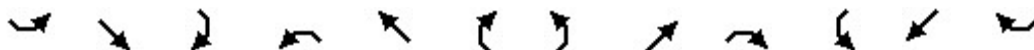
Lanes, Volumes, Timings
2: US 24 & Stapleton

2043 Background + Site
PM

| |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|---|
| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR | |
| Lane Configurations |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (vph) | 350 | 349 | 700 | 129 | 431 | 186 | 650 | 850 | 134 | 150 | 600 | 351 | |
| Future Volume (vph) | 350 | 349 | 700 | 129 | 431 | 186 | 650 | 850 | 134 | 150 | 600 | 351 | |
| 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 | | 2 | 1 | | 0 | 2 | | 1 | 2 | | 1 | |
| Taper Length (ft) | 240 | | | 200 | | | 190 | | | 190 | | | |
| Lane Util. Factor | 1.00 | 0.95 | 1.00 | 1.00 | 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) | 1770 | 3539 | 1583 | 1770 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | |
| Flt Permitted | 0.183 | | | 0.533 | | | 0.950 | | | 0.950 | | | |
| Satd. Flow (perm) | 341 | 3539 | 1583 | 993 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes | |
| Satd. Flow (RTOR) | | | 482 | | | 200 | | | 141 | | | 222 | |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | | 55 | |
| Link Distance (ft) | | 1349 | | | 5480 | | | 1382 | | | | 1435 | |
| Travel Time (s) | | 20.4 | | | 83.0 | | | 17.1 | | | | 17.8 | |
| 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) | 368 | 367 | 737 | 139 | 463 | 200 | 684 | 895 | 141 | 158 | 632 | 369 | |
| Shared Lane Traffic (%) | | | | | | | | | | | | | |
| Lane Group Flow (vph) | 368 | 367 | 737 | 139 | 463 | 200 | 684 | 895 | 141 | 158 | 632 | 369 | |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No | |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | 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 | Left | Thru | Right | Left | Thru | Right | 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 | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | 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 | 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 | pm+pt | NA | Perm | Prot | NA | Perm | Prot | NA | Perm | |
| Protected Phases | 1 | 6 | | 5 | 2 | | 7 | 4 | | 3 | 8 | | |
| Permitted Phases | 6 | | 6 | 2 | | 2 | | | 4 | | | 8 | |

Lanes, Volumes, Timings
2: US 24 & Stapleton

2043 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) | 15.0 | 25.0 | 25.0 | 15.0 | 25.0 | 25.0 | 36.0 | 60.0 | 60.0 | 20.0 | 44.0 | 44.0 |
| Total Split (%) | 12.5% | 20.8% | 20.8% | 12.5% | 20.8% | 20.8% | 30.0% | 50.0% | 50.0% | 16.7% | 36.7% | 36.7% |
| Maximum Green (s) | 10.5 | 20.5 | 20.5 | 10.5 | 20.5 | 20.5 | 31.5 | 55.5 | 55.5 | 15.5 | 39.5 | 39.5 |
| 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 | C-Min | C-Min | None | C-Min | C-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 Effct Green (s) | 48.4 | 33.6 | 33.6 | 31.7 | 20.5 | 20.5 | 28.2 | 46.4 | 46.4 | 10.8 | 29.0 | 29.0 |
| Actuated g/C Ratio | 0.40 | 0.28 | 0.28 | 0.26 | 0.17 | 0.17 | 0.24 | 0.39 | 0.39 | 0.09 | 0.24 | 0.24 |
| v/c Ratio | 0.86 | 0.37 | 0.93 | 0.42 | 0.77 | 0.46 | 0.85 | 0.65 | 0.20 | 0.51 | 0.74 | 0.67 |
| Control Delay | 52.6 | 38.9 | 35.5 | 30.5 | 56.9 | 9.6 | 54.4 | 32.1 | 3.9 | 57.6 | 47.1 | 21.4 |
| 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 | 52.6 | 38.9 | 35.5 | 30.5 | 56.9 | 9.6 | 54.4 | 32.1 | 3.9 | 57.6 | 47.1 | 21.4 |
| LOS | D | D | D | C | E | A | D | C | A | E | D | C |
| Approach Delay | | 40.6 | | | 40.5 | | | 38.7 | | | 40.3 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Queue Length 50th (ft) | 218 | 122 | 234 | 69 | 182 | 0 | 260 | 291 | 0 | 61 | 238 | 101 |
| Queue Length 95th (ft) | #534 | 192 | #558 | 132 | 242 | 65 | 322 | 326 | 36 | 94 | 280 | 194 |
| Internal Link Dist (ft) | | 1269 | | | 5400 | | | 1302 | | | 1355 | |
| Turn Bay Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Base Capacity (vph) | 426 | 990 | 790 | 346 | 604 | 436 | 901 | 1636 | 807 | 443 | 1164 | 669 |
| 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 | 0.86 | 0.37 | 0.93 | 0.40 | 0.77 | 0.46 | 0.76 | 0.55 | 0.17 | 0.36 | 0.54 | 0.55 |

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.93
 Intersection Signal Delay: 39.9 Intersection LOS: D
 Intersection Capacity Utilization 81.4% 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 & Stapleton



| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.6 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 440 | 39 | 3 | 402 | 22 | 3 |
| Future Vol, veh/h | 440 | 39 | 3 | 402 | 22 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 478 | 42 | 3 | 437 | 28 | 4 |

| Major/Minor | Major1 | Major2 | Minor1 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 0 | 0 | 520 | 0 | 942 |
| Stage 1 | - | - | - | - | 499 |
| Stage 2 | - | - | - | - | 443 |
| Critical Hdwy | - | - | 4.12 | - | 6.42 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 |
| Follow-up Hdwy | - | - | 2.218 | - | 3.518 |
| Pot Cap-1 Maneuver | - | - | 1046 | - | 292 |
| Stage 1 | - | - | - | - | 610 |
| Stage 2 | - | - | - | - | 647 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1046 | - | 291 |
| Mov Cap-2 Maneuver | - | - | - | - | 291 |
| Stage 1 | - | - | - | - | 610 |
| Stage 2 | - | - | - | - | 644 |

| Approach | EB | WB | NB |
|----------------------|----|-----|----|
| HCM Control Delay, s | 0 | 0.1 | 18 |
| HCM LOS | | | C |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 309 | - | - | 1046 | - |
| HCM Lane V/C Ratio | 0.104 | - | - | 0.003 | - |
| HCM Control Delay (s) | 18 | - | - | 8.5 | 0 |
| HCM Lane LOS | C | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.3 | - | - | 0 | - |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 4 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕↕ | ↗ | | ↕↕ | ↗ | | ↕↕ | | | ↕↕ | |
| Traffic Vol, veh/h | 27 | 383 | 77 | 6 | 302 | 16 | 69 | 11 | 10 | 53 | 9 | 21 |
| Future Vol, veh/h | 27 | 383 | 77 | 6 | 302 | 16 | 69 | 11 | 10 | 53 | 9 | 21 |
| 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 | - | - | 235 | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 83 | 83 | 83 | 83 | 83 | 83 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 29 | 416 | 84 | 7 | 328 | 17 | 83 | 13 | 12 | 64 | 11 | 25 |

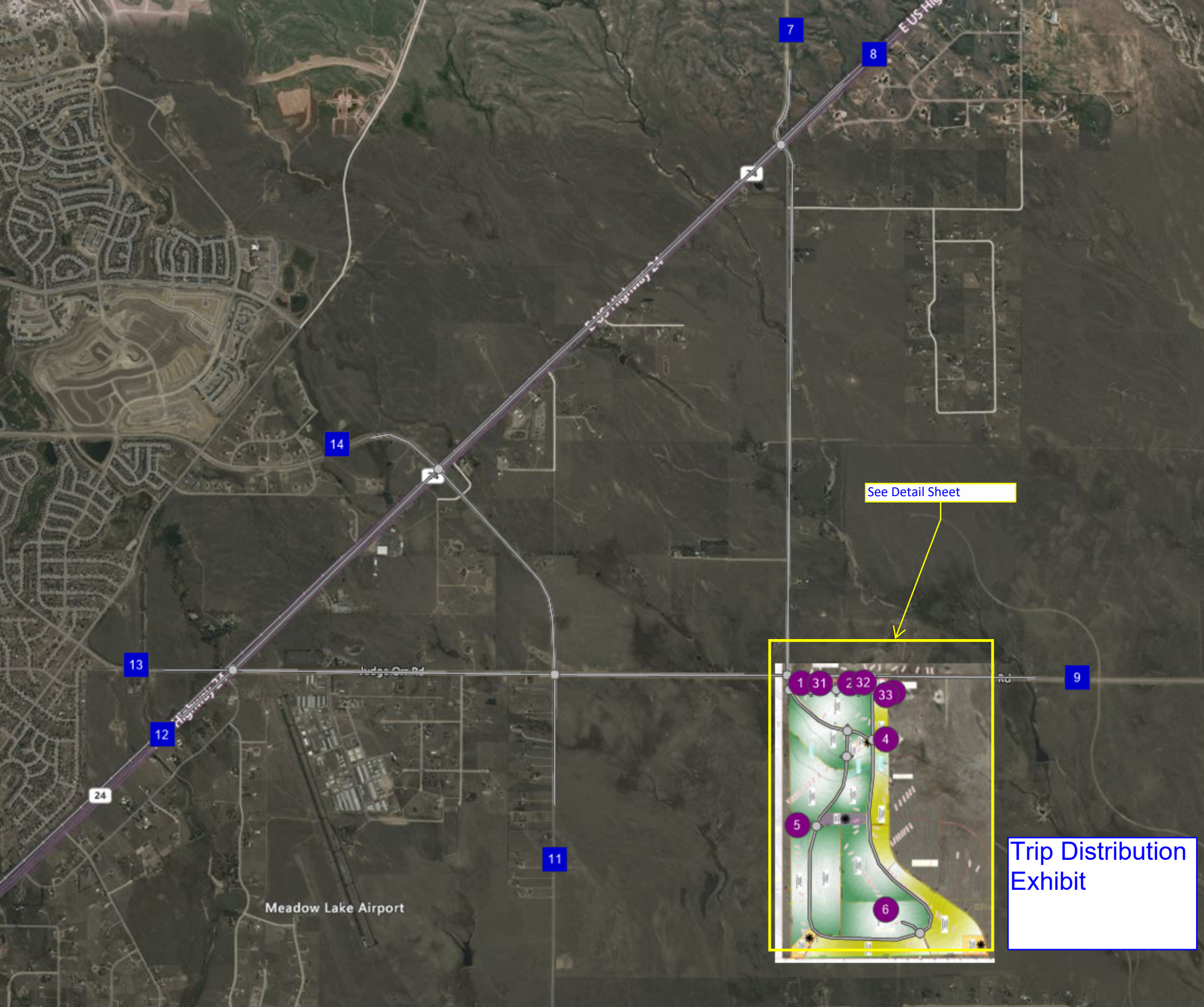
| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|------|--------|------|------|
| Conflicting Flow All | 345 | 0 | 0 | 500 | 0 | 0 | 658 | 833 | 208 | 615 | 900 | 164 |
| Stage 1 | - | - | - | - | - | - | 474 | 474 | - | 342 | 342 | - |
| Stage 2 | - | - | - | - | - | - | 184 | 359 | - | 273 | 558 | - |
| Critical Hdwy | 4.14 | - | - | 4.14 | - | - | 7.54 | 6.54 | 6.94 | 7.54 | 6.54 | 6.94 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.54 | 5.54 | - | 6.54 | 5.54 | - |
| Follow-up Hdwy | 2.22 | - | - | 2.22 | - | - | 3.52 | 4.02 | 3.32 | 3.52 | 4.02 | 3.32 |
| Pot Cap-1 Maneuver | 1211 | - | - | 1060 | - | - | 350 | 303 | 798 | 375 | 277 | 852 |
| Stage 1 | - | - | - | - | - | - | 540 | 556 | - | 646 | 637 | - |
| Stage 2 | - | - | - | - | - | - | 800 | 626 | - | 710 | 510 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1211 | - | - | 1060 | - | - | 319 | 290 | 798 | 345 | 265 | 852 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 319 | 290 | - | 345 | 265 | - |
| Stage 1 | - | - | - | - | - | - | 522 | 537 | - | 624 | 632 | - |
| Stage 2 | - | - | - | - | - | - | 757 | 621 | - | 659 | 493 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.5 | | | 0.2 | | | 20.7 | | | 17.3 | | |
| HCM LOS | | | | | | | C | | | C | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 337 | 1211 | - | - | 1060 | - | - | 391 |
| HCM Lane V/C Ratio | 0.322 | 0.024 | - | - | 0.006 | - | - | 0.256 |
| HCM Control Delay (s) | 20.7 | 8 | 0.1 | - | 8.4 | 0 | - | 17.3 |
| HCM Lane LOS | C | A | A | - | A | A | - | C |
| HCM 95th %tile Q(veh) | 1.4 | 0.1 | - | - | 0 | - | - | 1 |

Distribution Exhibit and Vistro Distribution Tables





See Detail Sheet

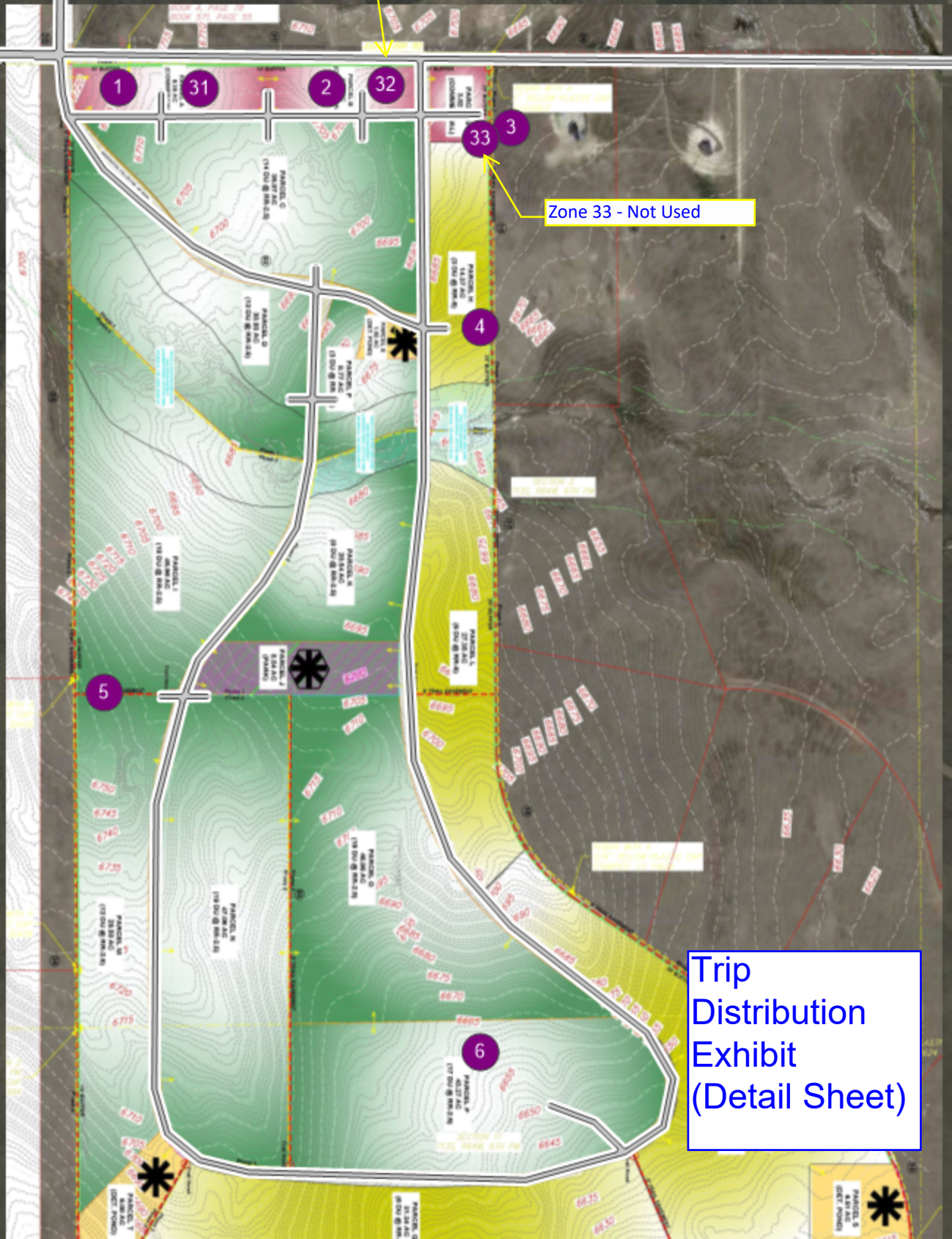


Trip Distribution Exhibit

Zone 32 - Not Used

Zone 33 - Not Used

Trip
Distribution
Exhibit
(Detail Sheet)



Esteban Rodriguez

Vistro File: G:\...\Esteban Rodriguez -- Vistro.vistro

Scenario 1 Short-Term AM

Report File: G:\...\IAM Distribution.pdf

8/15/2023

Trip Distribution summary

| Zone / Gate | Zone 1: Zone | | | |
|--------------|---------------|----------|---------------|----------|
| | To Zone: | | From Zone: | |
| | Share % | Trips | Share % | Trips |
| 2: Zone | 0.00 | 0 | 0.00 | 0 |
| 3: Zone | 0.00 | 0 | 0.00 | 0 |
| 4: Zone | 0.00 | 0 | 0.00 | 0 |
| 5: Zone | 0.00 | 0 | 0.00 | 0 |
| 6: Zone | 0.00 | 0 | 0.00 | 0 |
| 31: Zone | 0.00 | 0 | 0.00 | 0 |
| 32: Zone | 0.00 | 0 | 0.00 | 0 |
| 33: Zone | 0.00 | 0 | 0.00 | 0 |
| 7: Gate | 5.00 | 0 | 5.00 | 0 |
| 8: Gate | 16.00 | 1 | 16.00 | 0 |
| 9: Gate | 12.00 | 1 | 12.00 | 0 |
| 11: Gate | 12.00 | 1 | 12.00 | 0 |
| 12: Gate | 7.00 | 0 | 7.00 | 0 |
| 13: Gate | 23.00 | 1 | 23.00 | 1 |
| 14: Gate | 25.00 | 1 | 25.00 | 2 |
| Total | 100.00 | 5 | 100.00 | 3 |

| Zone / Gate | Zone 2: Zone | | | |
|--------------|---------------|-----------|---------------|----------|
| | To Zone: | | From Zone: | |
| | Share % | Trips | Share % | Trips |
| 1: Zone | 0.00 | 0 | 0.00 | 0 |
| 3: Zone | 0.00 | 0 | 0.00 | 0 |
| 4: Zone | 0.00 | 0 | 0.00 | 0 |
| 5: Zone | 0.00 | 0 | 0.00 | 0 |
| 6: Zone | 0.00 | 0 | 0.00 | 0 |
| 31: Zone | 0.00 | 0 | 0.00 | 0 |
| 32: Zone | 0.00 | 0 | 0.00 | 0 |
| 33: Zone | 0.00 | 0 | 0.00 | 0 |
| 7: Gate | 4.00 | 1 | 4.00 | 0 |
| 8: Gate | 10.00 | 2 | 10.00 | 1 |
| 9: Gate | 7.00 | 2 | 7.00 | 0 |
| 11: Gate | 9.00 | 2 | 9.00 | 1 |
| 12: Gate | 34.00 | 8 | 34.00 | 2 |
| 13: Gate | 11.00 | 3 | 11.00 | 1 |
| 14: Gate | 25.00 | 6 | 25.00 | 2 |
| Total | 100.00 | 24 | 100.00 | 7 |

| Zone / Gate | Zone 3: Zone | | | |
|--------------|---------------|-----------|---------------|----------|
| | To Zone: | | From Zone: | |
| | Share % | Trips | Share % | Trips |
| 1: Zone | 0.00 | 0 | 0.00 | 0 |
| 2: Zone | 0.00 | 0 | 0.00 | 0 |
| 4: Zone | 0.00 | 0 | 0.00 | 0 |
| 5: Zone | 0.00 | 0 | 0.00 | 0 |
| 6: Zone | 0.00 | 0 | 0.00 | 0 |
| 31: Zone | 0.00 | 0 | 0.00 | 0 |
| 32: Zone | 0.00 | 0 | 0.00 | 0 |
| 33: Zone | 0.00 | 0 | 0.00 | 0 |
| 7: Gate | 4.00 | 1 | 4.00 | 0 |
| 8: Gate | 10.00 | 1 | 10.00 | 0 |
| 9: Gate | 7.00 | 1 | 7.00 | 0 |
| 11: Gate | 9.00 | 1 | 9.00 | 0 |
| 12: Gate | 34.00 | 4 | 34.00 | 3 |
| 13: Gate | 11.00 | 1 | 11.00 | 0 |
| 14: Gate | 25.00 | 3 | 25.00 | 1 |
| Total | 100.00 | 12 | 100.00 | 4 |

| Zone / Gate | Zone 4: Zone | | | |
|--------------|---------------|----------|---------------|-----------|
| | To Zone: | | From Zone: | |
| | Share % | Trips | Share % | Trips |
| 1: Zone | 0.00 | 0 | 0.00 | 0 |
| 2: Zone | 0.00 | 0 | 0.00 | 0 |
| 3: Zone | 0.00 | 0 | 0.00 | 0 |
| 5: Zone | 0.00 | 0 | 0.00 | 0 |
| 6: Zone | 0.00 | 0 | 0.00 | 0 |
| 31: Zone | 0.00 | 0 | 0.00 | 0 |
| 32: Zone | 0.00 | 0 | 0.00 | 0 |
| 33: Zone | 0.00 | 0 | 0.00 | 0 |
| 7: Gate | 2.00 | 0 | 2.00 | 0 |
| 8: Gate | 3.00 | 0 | 3.00 | 1 |
| 9: Gate | 2.00 | 0 | 2.00 | 0 |
| 11: Gate | 5.00 | 0 | 5.00 | 1 |
| 12: Gate | 63.00 | 4 | 63.00 | 11 |
| 13: Gate | 5.00 | 0 | 5.00 | 1 |
| 14: Gate | 20.00 | 1 | 20.00 | 4 |
| Total | 100.00 | 5 | 100.00 | 18 |

| Zone / Gate | Zone 5: Zone | | | |
|-------------|--------------|-------|------------|-------|
| | To Zone: | | From Zone: | |
| | Share % | Trips | Share % | Trips |
| 1: Zone | 0.00 | 0 | 0.00 | 0 |
| 2: Zone | 0.00 | 0 | 0.00 | 0 |
| 3: Zone | 0.00 | 0 | 0.00 | 0 |
| 4: Zone | 0.00 | 0 | 0.00 | 0 |
| 6: Zone | 0.00 | 0 | 0.00 | 0 |
| 31: Zone | 0.00 | 0 | 0.00 | 0 |
| 32: Zone | 0.00 | 0 | 0.00 | 0 |

| Zone / Gate | Zone 6: Zone | | | |
|-------------|--------------|-------|------------|-------|
| | To Zone: | | From Zone: | |
| | Share % | Trips | Share % | Trips |
| 1: Zone | 0.00 | 0 | 0.00 | 0 |
| 2: Zone | 0.00 | 0 | 0.00 | 0 |
| 3: Zone | 0.00 | 0 | 0.00 | 0 |
| 4: Zone | 0.00 | 0 | 0.00 | 0 |
| 5: Zone | 0.00 | 0 | 0.00 | 0 |
| 31: Zone | 0.00 | 0 | 0.00 | 0 |
| 32: Zone | 0.00 | 0 | 0.00 | 0 |

Version 2023 (SP 0-7)

| | | | | |
|--------------|---------------|-----------|---------------|-----------|
| 33: Zone | 0.00 | 0 | 0.00 | 0 |
| 7: Gate | 2.00 | 0 | 2.00 | 1 |
| 8: Gate | 3.00 | 0 | 3.00 | 1 |
| 9: Gate | 2.00 | 0 | 2.00 | 1 |
| 11: Gate | 5.00 | 1 | 5.00 | 2 |
| 12: Gate | 63.00 | 7 | 63.00 | 19 |
| 13: Gate | 5.00 | 1 | 5.00 | 2 |
| 14: Gate | 20.00 | 2 | 20.00 | 7 |
| Total | 100.00 | 11 | 100.00 | 33 |

| | | | | |
|--------------|---------------|----------|---------------|-----------|
| 33: Zone | 0.00 | 0 | 0.00 | 0 |
| 7: Gate | 2.00 | 0 | 2.00 | 1 |
| 8: Gate | 3.00 | 0 | 3.00 | 1 |
| 9: Gate | 2.00 | 0 | 2.00 | 1 |
| 11: Gate | 5.00 | 0 | 5.00 | 1 |
| 12: Gate | 63.00 | 6 | 63.00 | 17 |
| 13: Gate | 5.00 | 0 | 5.00 | 1 |
| 14: Gate | 20.00 | 2 | 20.00 | 5 |
| Total | 100.00 | 8 | 100.00 | 27 |

| Zone / Gate | Zone 31: Zone | | | |
|--------------|---------------|----------|---------------|----------|
| | To Zone: | | From Zone: | |
| | Share % | Trips | Share % | Trips |
| 1: Zone | 0.00 | 0 | 0.00 | 0 |
| 2: Zone | 0.00 | 0 | 0.00 | 0 |
| 3: Zone | 0.00 | 0 | 0.00 | 0 |
| 4: Zone | 0.00 | 0 | 0.00 | 0 |
| 5: Zone | 0.00 | 0 | 0.00 | 0 |
| 6: Zone | 0.00 | 0 | 0.00 | 0 |
| 32: Zone | 0.00 | 0 | 0.00 | 0 |
| 33: Zone | 0.00 | 0 | 0.00 | 0 |
| 7: Gate | 15.00 | 0 | 5.00 | 0 |
| 8: Gate | 25.00 | 1 | 10.00 | 0 |
| 9: Gate | 30.00 | 1 | 10.00 | 0 |
| 11: Gate | 10.00 | 0 | 15.00 | 0 |
| 12: Gate | 5.00 | 0 | 50.00 | 2 |
| 13: Gate | 0.00 | 0 | 0.00 | 0 |
| 14: Gate | 15.00 | 0 | 10.00 | 0 |
| Total | 100.00 | 2 | 100.00 | 2 |

Esteban Rodriguez

Vistro File: G:\...\Esteban Rodriguez -- Vistro.vistro

Scenario 2 Short-Term PM

Report File: G:\...\PM Distribution.pdf

8/15/2023

Trip Distribution summary

| Zone / Gate | Zone 1: Zone | | | |
|--------------|---------------|-----------|---------------|-----------|
| | To Zone: | | From Zone: | |
| | Share % | Trips | Share % | Trips |
| 2: Zone | 0.00 | 0 | 0.00 | 0 |
| 3: Zone | 0.00 | 0 | 0.00 | 0 |
| 4: Zone | 0.00 | 0 | 0.00 | 0 |
| 5: Zone | 0.00 | 0 | 0.00 | 0 |
| 6: Zone | 0.00 | 0 | 0.00 | 0 |
| 31: Zone | 0.00 | 0 | 0.00 | 0 |
| 32: Zone | 0.00 | 0 | 0.00 | 0 |
| 33: Zone | 0.00 | 0 | 0.00 | 0 |
| 7: Gate | 5.00 | 1 | 5.00 | 1 |
| 8: Gate | 16.00 | 2 | 16.00 | 2 |
| 9: Gate | 12.00 | 1 | 12.00 | 1 |
| 11: Gate | 12.00 | 1 | 12.00 | 1 |
| 12: Gate | 7.00 | 1 | 7.00 | 1 |
| 13: Gate | 23.00 | 3 | 23.00 | 3 |
| 14: Gate | 25.00 | 3 | 25.00 | 2 |
| Total | 100.00 | 12 | 100.00 | 11 |

| Zone / Gate | Zone 2: Zone | | | |
|--------------|---------------|----------|---------------|-----------|
| | To Zone: | | From Zone: | |
| | Share % | Trips | Share % | Trips |
| 1: Zone | 0.00 | 0 | 0.00 | 0 |
| 3: Zone | 0.00 | 0 | 0.00 | 0 |
| 4: Zone | 0.00 | 0 | 0.00 | 0 |
| 5: Zone | 0.00 | 0 | 0.00 | 0 |
| 6: Zone | 0.00 | 0 | 0.00 | 0 |
| 31: Zone | 0.00 | 0 | 0.00 | 0 |
| 32: Zone | 0.00 | 0 | 0.00 | 0 |
| 33: Zone | 0.00 | 0 | 0.00 | 0 |
| 7: Gate | 4.00 | 0 | 4.00 | 1 |
| 8: Gate | 10.00 | 1 | 10.00 | 2 |
| 9: Gate | 7.00 | 1 | 7.00 | 2 |
| 11: Gate | 9.00 | 1 | 9.00 | 2 |
| 12: Gate | 34.00 | 3 | 34.00 | 7 |
| 13: Gate | 11.00 | 1 | 11.00 | 2 |
| 14: Gate | 25.00 | 2 | 25.00 | 6 |
| Total | 100.00 | 9 | 100.00 | 22 |

| Zone / Gate | Zone 3: Zone | | | |
|--------------|---------------|----------|---------------|-----------|
| | To Zone: | | From Zone: | |
| | Share % | Trips | Share % | Trips |
| 1: Zone | 0.00 | 0 | 0.00 | 0 |
| 2: Zone | 0.00 | 0 | 0.00 | 0 |
| 4: Zone | 0.00 | 0 | 0.00 | 0 |
| 5: Zone | 0.00 | 0 | 0.00 | 0 |
| 6: Zone | 0.00 | 0 | 0.00 | 0 |
| 31: Zone | 0.00 | 0 | 0.00 | 0 |
| 32: Zone | 0.00 | 0 | 0.00 | 0 |
| 33: Zone | 0.00 | 0 | 0.00 | 0 |
| 7: Gate | 4.00 | 0 | 4.00 | 1 |
| 8: Gate | 10.00 | 1 | 10.00 | 1 |
| 9: Gate | 7.00 | 0 | 7.00 | 1 |
| 11: Gate | 9.00 | 0 | 9.00 | 1 |
| 12: Gate | 34.00 | 2 | 34.00 | 5 |
| 13: Gate | 11.00 | 1 | 11.00 | 1 |
| 14: Gate | 25.00 | 1 | 25.00 | 3 |
| Total | 100.00 | 5 | 100.00 | 13 |

| Zone / Gate | Zone 4: Zone | | | |
|--------------|---------------|-----------|---------------|-----------|
| | To Zone: | | From Zone: | |
| | Share % | Trips | Share % | Trips |
| 1: Zone | 0.00 | 0 | 0.00 | 0 |
| 2: Zone | 0.00 | 0 | 0.00 | 0 |
| 3: Zone | 0.00 | 0 | 0.00 | 0 |
| 5: Zone | 0.00 | 0 | 0.00 | 0 |
| 6: Zone | 0.00 | 0 | 0.00 | 0 |
| 31: Zone | 0.00 | 0 | 0.00 | 0 |
| 32: Zone | 0.00 | 0 | 0.00 | 0 |
| 33: Zone | 0.00 | 0 | 0.00 | 0 |
| 7: Gate | 2.00 | 0 | 2.00 | 0 |
| 8: Gate | 3.00 | 1 | 3.00 | 0 |
| 9: Gate | 2.00 | 0 | 2.00 | 0 |
| 11: Gate | 5.00 | 1 | 5.00 | 1 |
| 12: Gate | 63.00 | 13 | 63.00 | 8 |
| 13: Gate | 5.00 | 1 | 5.00 | 1 |
| 14: Gate | 20.00 | 4 | 20.00 | 2 |
| Total | 100.00 | 20 | 100.00 | 12 |

| Zone / Gate | Zone 5: Zone | | | |
|-------------|--------------|-------|------------|-------|
| | To Zone: | | From Zone: | |
| | Share % | Trips | Share % | Trips |
| 1: Zone | 0.00 | 0 | 0.00 | 0 |
| 2: Zone | 0.00 | 0 | 0.00 | 0 |
| 3: Zone | 0.00 | 0 | 0.00 | 0 |
| 4: Zone | 0.00 | 0 | 0.00 | 0 |
| 6: Zone | 0.00 | 0 | 0.00 | 0 |
| 31: Zone | 0.00 | 0 | 0.00 | 0 |
| 32: Zone | 0.00 | 0 | 0.00 | 0 |

| Zone / Gate | Zone 6: Zone | | | |
|-------------|--------------|-------|------------|-------|
| | To Zone: | | From Zone: | |
| | Share % | Trips | Share % | Trips |
| 1: Zone | 0.00 | 0 | 0.00 | 0 |
| 2: Zone | 0.00 | 0 | 0.00 | 0 |
| 3: Zone | 0.00 | 0 | 0.00 | 0 |
| 4: Zone | 0.00 | 0 | 0.00 | 0 |
| 5: Zone | 0.00 | 0 | 0.00 | 0 |
| 31: Zone | 0.00 | 0 | 0.00 | 0 |
| 32: Zone | 0.00 | 0 | 0.00 | 0 |

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| | | | | |
|--------------|---------------|-----------|---------------|-----------|
| 33: Zone | 0.00 | 0 | 0.00 | 0 |
| 7: Gate | 2.00 | 1 | 2.00 | 0 |
| 8: Gate | 3.00 | 1 | 3.00 | 1 |
| 9: Gate | 2.00 | 1 | 2.00 | 0 |
| 11: Gate | 5.00 | 2 | 5.00 | 1 |
| 12: Gate | 63.00 | 23 | 63.00 | 15 |
| 13: Gate | 5.00 | 2 | 5.00 | 1 |
| 14: Gate | 20.00 | 7 | 20.00 | 4 |
| Total | 100.00 | 37 | 100.00 | 22 |

| | | | | |
|--------------|---------------|-----------|---------------|-----------|
| 33: Zone | 0.00 | 0 | 0.00 | 0 |
| 7: Gate | 2.00 | 1 | 2.00 | 0 |
| 8: Gate | 3.00 | 1 | 3.00 | 1 |
| 9: Gate | 2.00 | 1 | 2.00 | 0 |
| 11: Gate | 5.00 | 2 | 5.00 | 1 |
| 12: Gate | 63.00 | 20 | 63.00 | 11 |
| 13: Gate | 5.00 | 2 | 5.00 | 1 |
| 14: Gate | 20.00 | 6 | 20.00 | 4 |
| Total | 100.00 | 33 | 100.00 | 18 |

| Zone / Gate | Zone 31: Zone | | | |
|--------------|---------------|----------|---------------|----------|
| | To Zone: | | From Zone: | |
| | Share % | Trips | Share % | Trips |
| 1: Zone | 0.00 | 0 | 0.00 | 0 |
| 2: Zone | 0.00 | 0 | 0.00 | 0 |
| 3: Zone | 0.00 | 0 | 0.00 | 0 |
| 4: Zone | 0.00 | 0 | 0.00 | 0 |
| 5: Zone | 0.00 | 0 | 0.00 | 0 |
| 6: Zone | 0.00 | 0 | 0.00 | 0 |
| 32: Zone | 0.00 | 0 | 0.00 | 0 |
| 33: Zone | 0.00 | 0 | 0.00 | 0 |
| 7: Gate | 2.00 | 0 | 5.00 | 0 |
| 8: Gate | 10.00 | 1 | 25.00 | 2 |
| 9: Gate | 20.00 | 1 | 30.00 | 1 |
| 11: Gate | 0.00 | 0 | 0.00 | 0 |
| 12: Gate | 28.00 | 2 | 15.00 | 1 |
| 13: Gate | 35.00 | 2 | 15.00 | 1 |
| 14: Gate | 5.00 | 0 | 10.00 | 1 |
| Total | 100.00 | 6 | 100.00 | 6 |

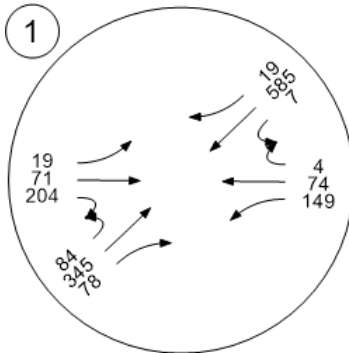
Vistro Traffic Volume Reports



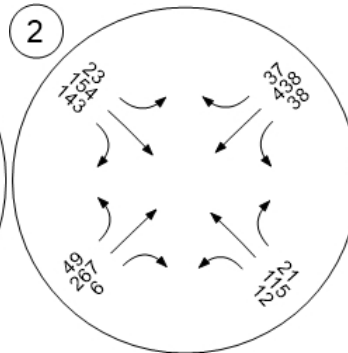
Traffic Volume - Base Volume



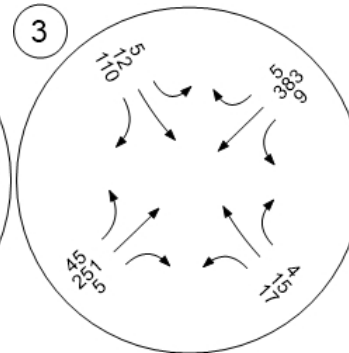
US 24 + Judge Orr



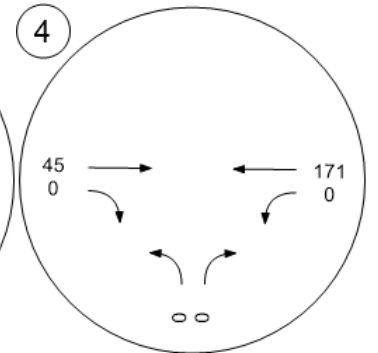
US 24 + Stapleton



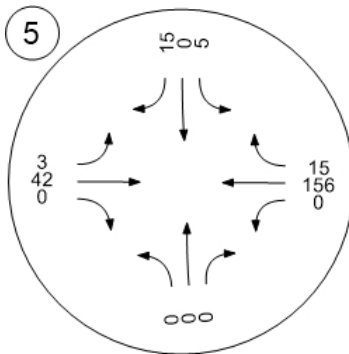
US 24 + Elbert



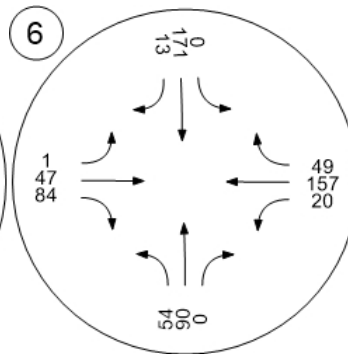
Judge Orr + E Access



Judge Orr + Elbert



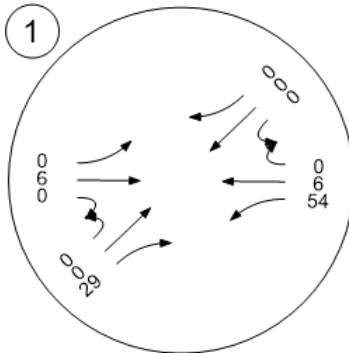
Judge Orr + Curtis



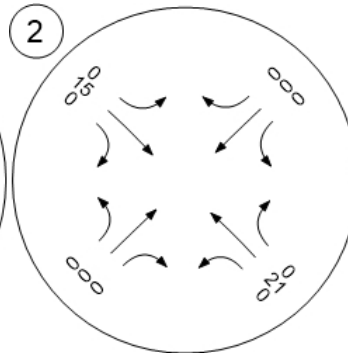
Traffic Volume - Net New Site Trips



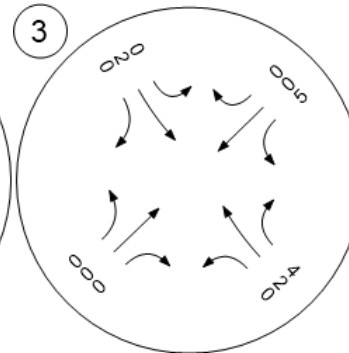
US 24 + Judge Orr



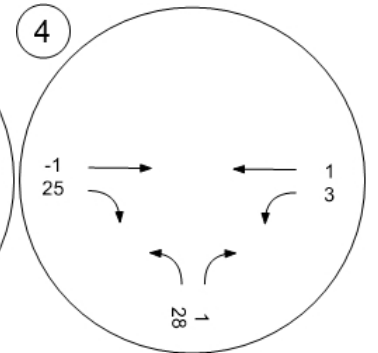
US 24 + Stapleton



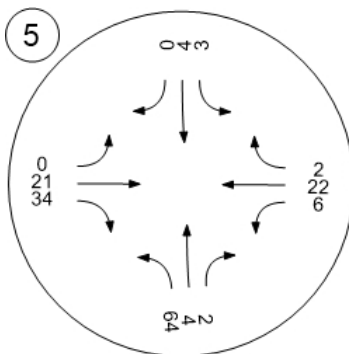
US 24 + Elbert



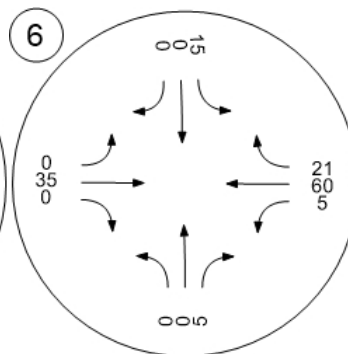
Judge Orr + E Access



Judge Orr + Elbert



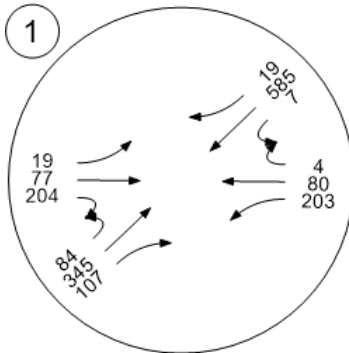
Judge Orr + Curtis



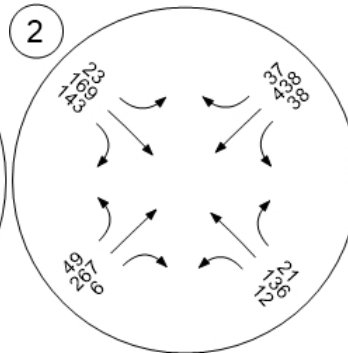
Traffic Volume - Future Total Volume



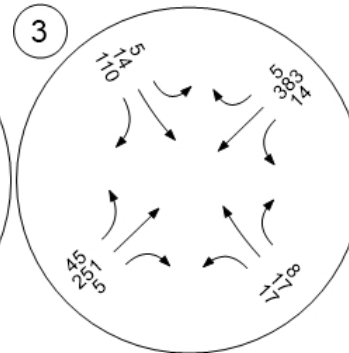
US 24 + Judge Orr



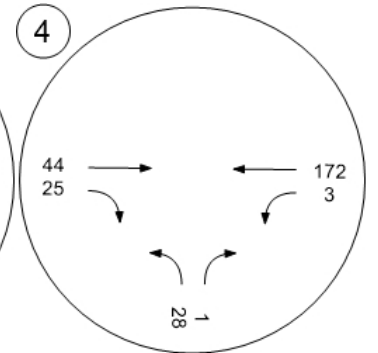
US 24 + Stapleton



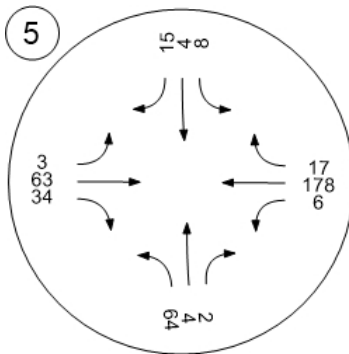
US 24 + Elbert



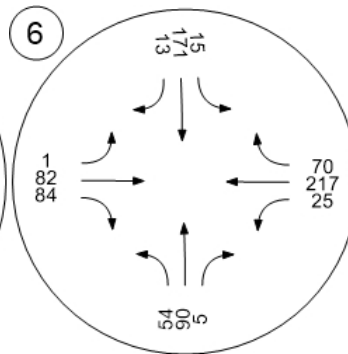
Judge Orr + E Access



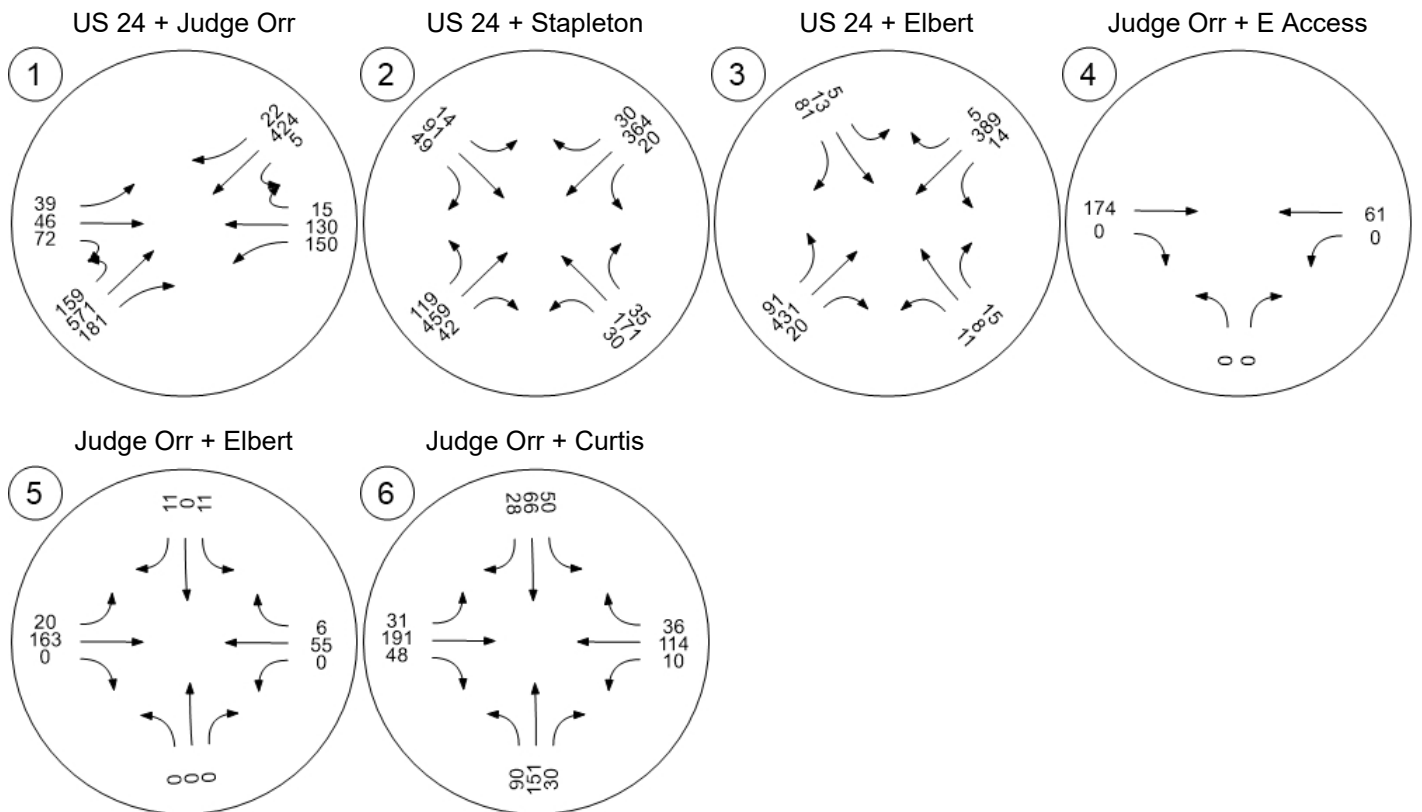
Judge Orr + Elbert



Judge Orr + Curtis



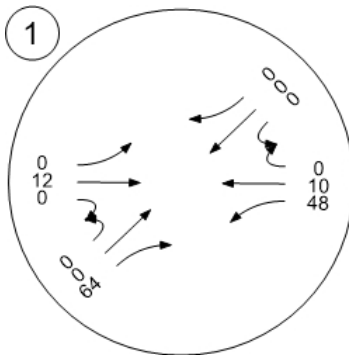
Traffic Volume - Base Volume



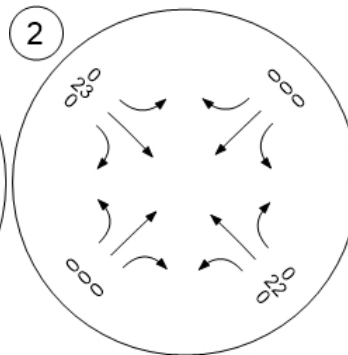
Traffic Volume - Net New Site Trips



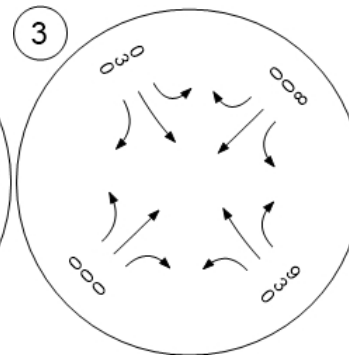
US 24 + Judge Orr



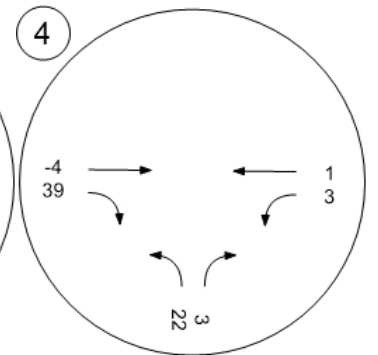
US 24 + Stapleton



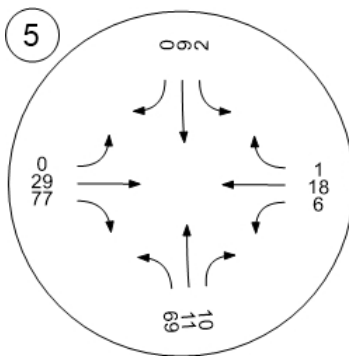
US 24 + Elbert



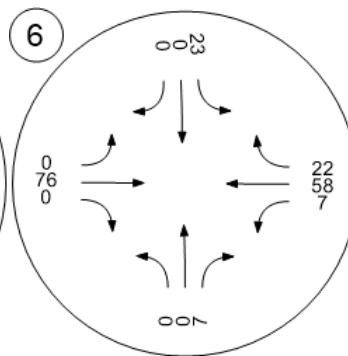
Judge Orr + E Access



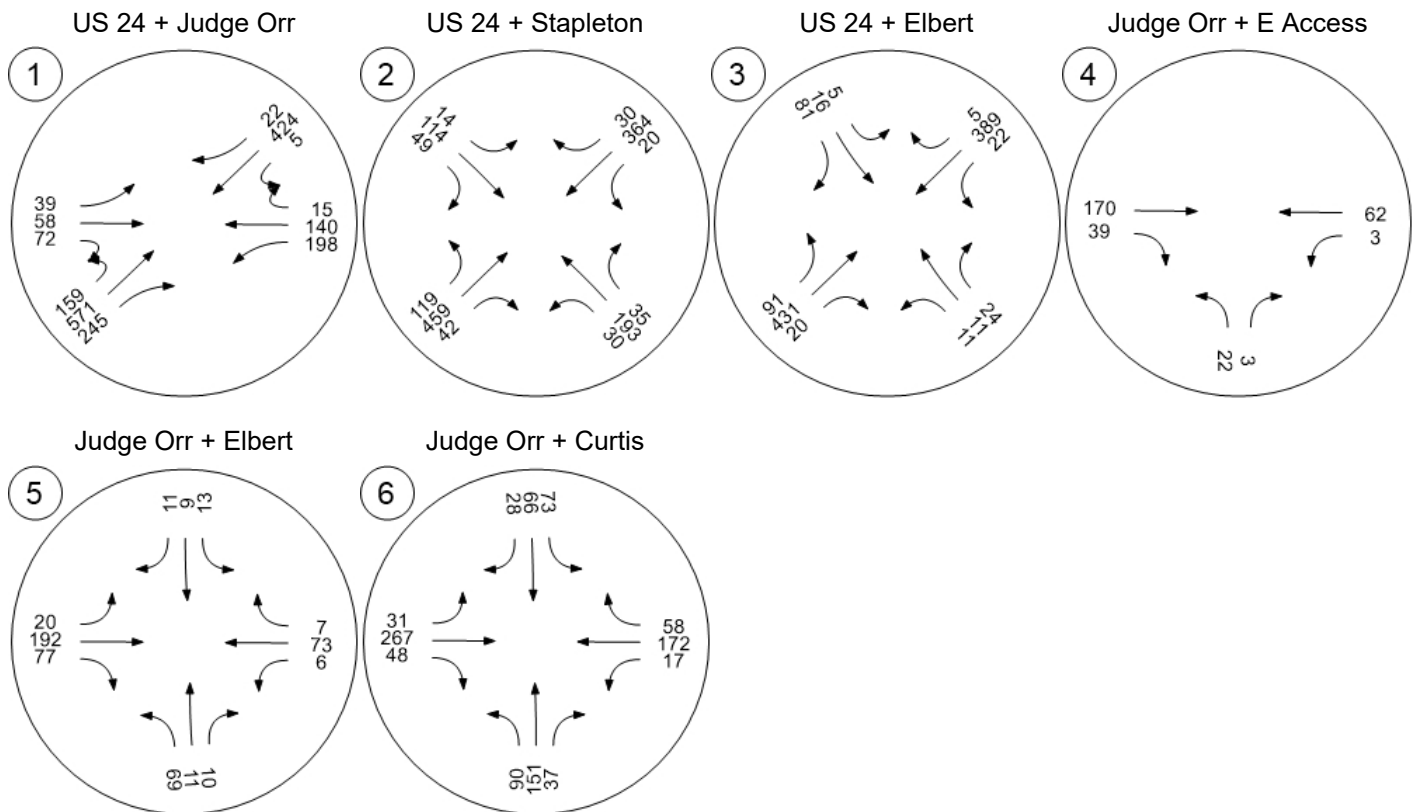
Judge Orr + Elbert



Judge Orr + Curtis



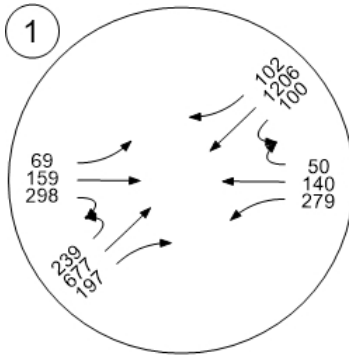
Traffic Volume - Future Total Volume



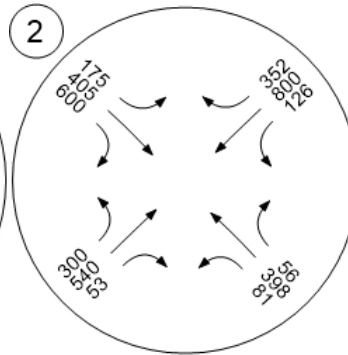
Traffic Volume - Base Volume



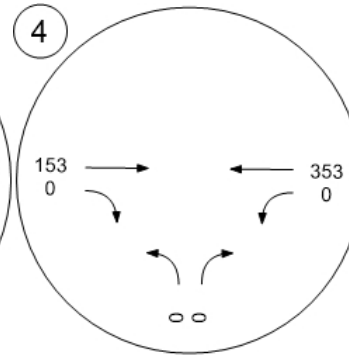
US 24 + Judge Orr



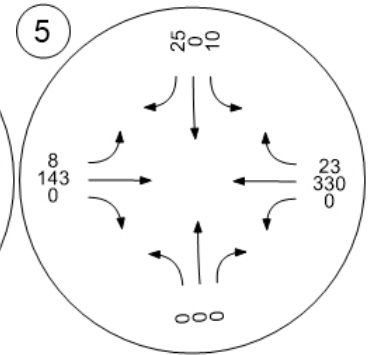
US 24 + Stapleton



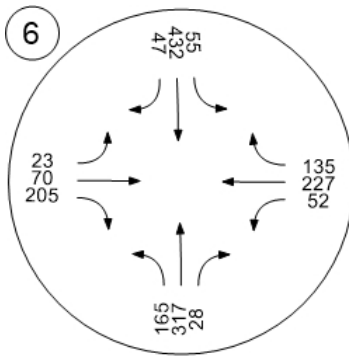
Judge Orr + E Access



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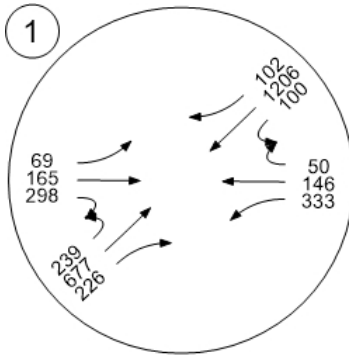
Judge Orr + Curtis



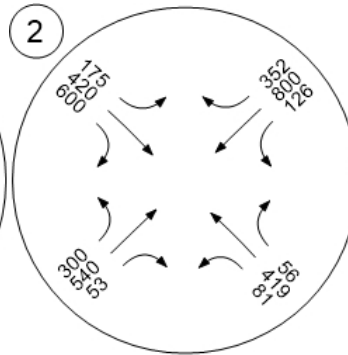
Traffic Volume - Future Total Volume



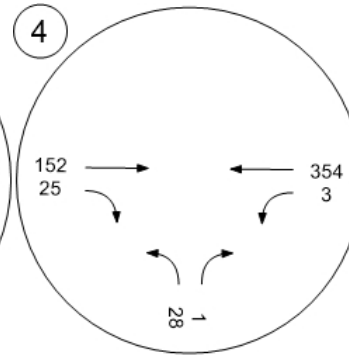
US 24 + Judge Orr



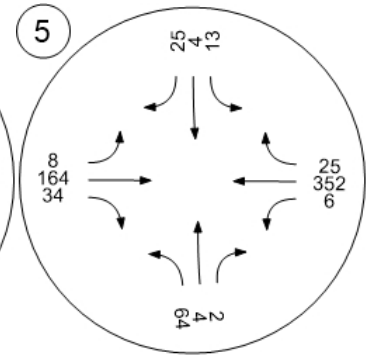
US 24 + Stapleton



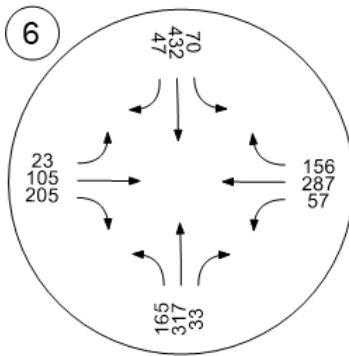
Judge Orr + E Access



Judge Orr + Elbert



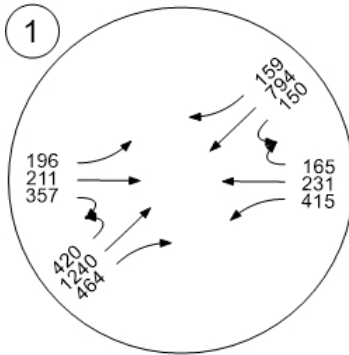
Judge Orr + Curtis



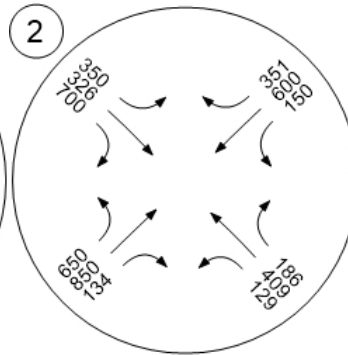
Traffic Volume - Base Volume



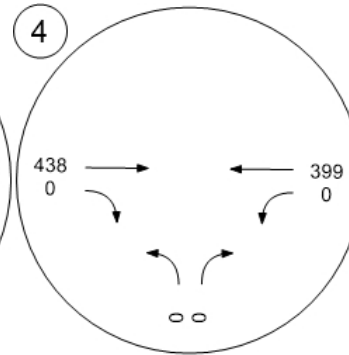
US 24 + Judge Orr



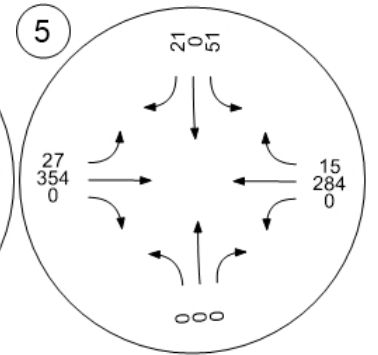
US 24 + Stapleton



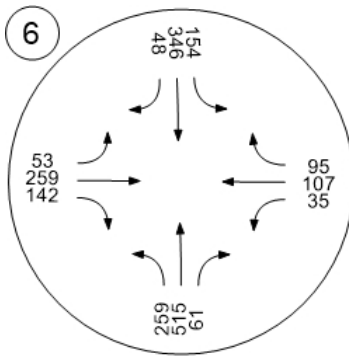
Judge Orr + E Access



Judge Orr + Elbert



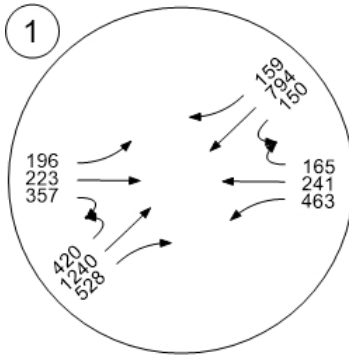
Judge Orr + Curtis



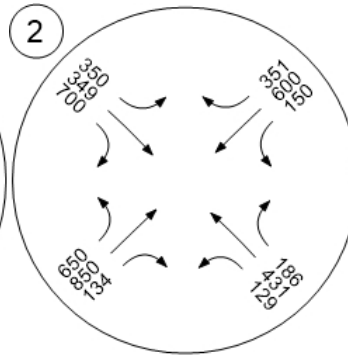
Traffic Volume - Future Total Volume



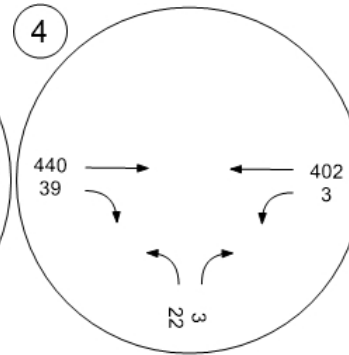
US 24 + Judge Orr



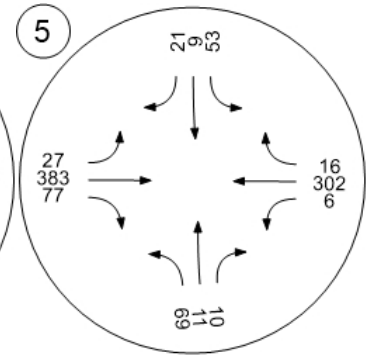
US 24 + Stapleton



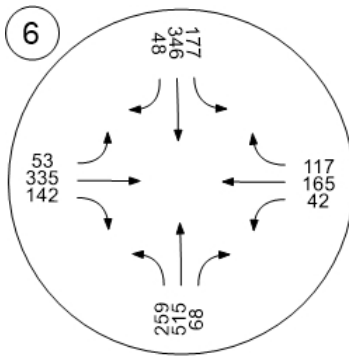
Judge Orr + E Access



Judge Orr + Elbert



Judge Orr + Curtis



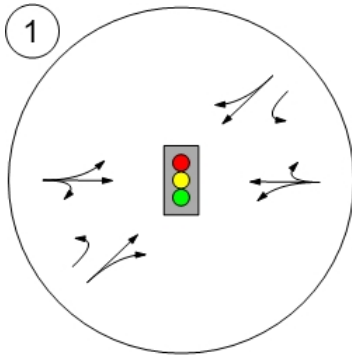
Vistro Lane Configuration and Traffic Control Reports



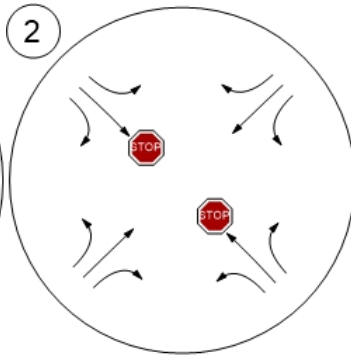
Lane Configuration and Traffic Control



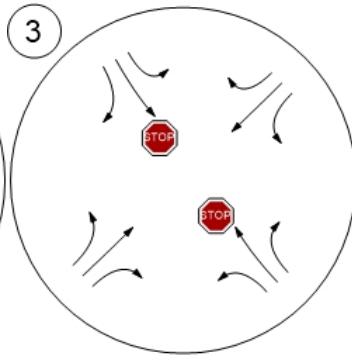
US 24 + Judge Orr



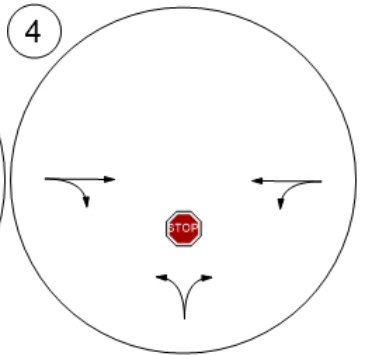
US 24 + Stapleton



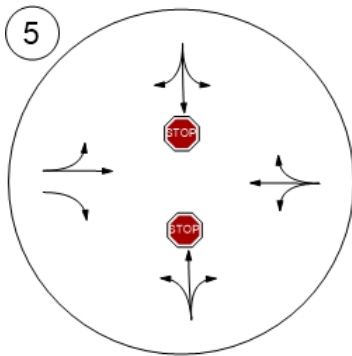
US 24 + Elbert



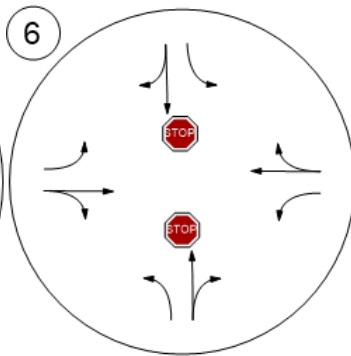
Judge Orr + E Access



Judge Orr + Elbert



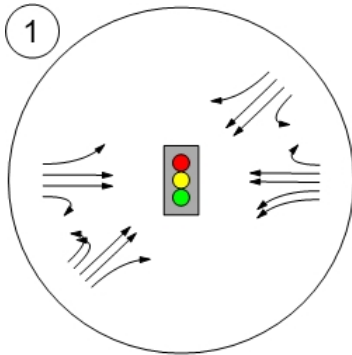
Judge Orr + Curtis



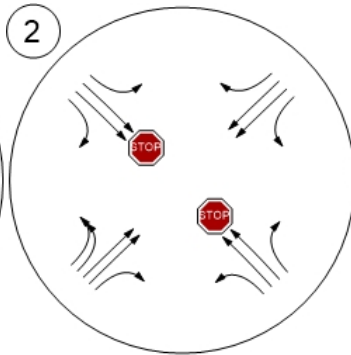
Lane Configuration and Traffic Control



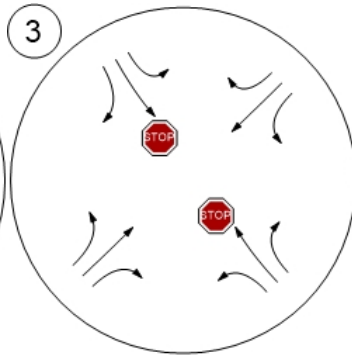
US 24 + Judge Orr



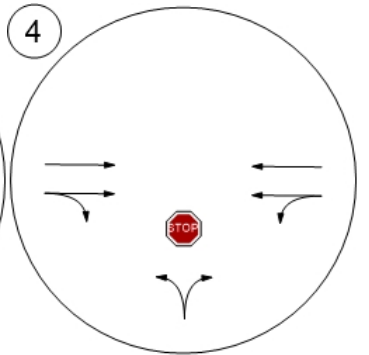
US 24 + Stapleton



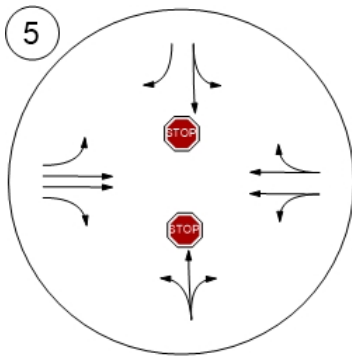
US 24 + Elbert



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Judge Orr + Curtis

