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# Esteban Rodriguez Subdivision Sketch Plan
# Master Traffic Impact Study
# PCD File No.: SKP237
## (LSC #S224630)
## July 31, 2024 **(w/Minor revision 9-13-2024)**

**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.

7-31-24
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

JULY 31, 2024 **(W/ MINOR REVISION 9/13/24)**

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

LSC #S224630

## CONTENTS

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July 31, 2024 (w/ minor revision 9/13/24)

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 #S224630
SKP237

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 142 single-family dwelling units and 19 acres of non-residential/designated commercial uses are shown on the sketch plan. 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 the adjacent and nearby roadway system, including surface conditions, functional classification, widths, pavement markings, traffic control signs, posted speed limits, intersection and access spacing, roadway and intersection alignments, roadway grades, and auxiliary turn lanes;
- Weekday peak-hour turning-movement traffic counts at the following study-area 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

- 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 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/proposed west access (full-movement)
    - 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:

- Jane Davis Sketch Plan (SKP 232)
- Saddlehorn Ranch – Filing No. 2 (SF2133)
- Saddlehorn Ranch – Filing No. 3 (SF234)
- Saddlehorn Ranch – Filing No. 4 (SF236)
- Meadowlake Industrial Park Filing No. 1 Preliminary Plan (SP236)

Excerpts of the LSC traffic reports from some of the above projects are attached for reference, as required by the review comments. Notes: The Saddlehorn Ranch Filing No. 3 excerpt accounts for Filing Nos. 2 and 4 and the Filing No. 3 TIS is the most recent; the excerpts for Jane Davis Sketch Plan include the current LSC model output for Jane Davis site-generated traffic volumes as the TIS revision/update is in-process (will be submitted soon).

## 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 142 single-family residential dwelling units and approximately 15.070 acres of commercial land uses are shown on the proposed sketch plan.

Please refer to the attached Table 1, which shows the assumed land uses for purposes of estimating vehicle trip generation and traffic impacts. The table shows the land uses by "Sketch Plan Land Use Designation." For purposes of estimating trip generation, ITE Land Use "150 – Warehousing" has been used to estimate potential trip generation for 13.5 of the 15 acres with the "commercial" designation. This report assumes an estimated building square footage of 148,000 square feet. LSC has assumed 10,000 square feet of "strip retail plaza" space for the remaining 1.5 commercial acres. The strip retail use is assumed to be located on the southeast corner of the Judge Orr/Elbert Road intersection. Please refer to Appendix Table 1, which shows the details of the land use calculations and "conversion" to ITE Land Use categories.

Note: Given the relatively remote location and limited number of residential dwelling units in the vicinity, assumption of ITE shopping plaza or shopping center land use as a "highest and best use" for all 15 acres would result in an unrealistically high trip "attractor" from the nearby area. There nearby commercial sites shown on other plans for future development at far busier intersections on Highway 24 which have still not yet developed with retail/shopping center uses. If 15 acres of shopping plaza/center uses were assumed, unrealistically high traffic impacts on roadways to the west and potentially north would be the result, along with unrealistically high level of potential roadway improvements.

More trip-intensive land uses may end up being proposed by the owner/applicant, the LSC-assumed, specific commercial land-use mix by ITE land use and acreage identified above (for purposes of this report), will be noted on the Sketch Plan. If this changes in the future, a larger retail site could be addressed with an updated TIS at the zoning or preliminary plan stage (i.e., if a more trip-generation-intensive mix of commercial uses (such as a larger strip shopping plaza and/or business or industrial park uses with higher trip-generation rates than for ITE Land Use 150 are intended at zoning, preliminary plan(s) or site-development plan(s), the applicant shall be required to provide a revised traffic impact study to be submitted and approved prior to initiation of any uses beyond those included in this traffic impact study. The rezone and/or Preliminary Plan will contain conditions limiting the commercial land-use mix to a trip-generation intensity to comparable or lower than the assumptions in this report.

Existing zoning for the site is A-35. The property will be rezoned. Anticipated zone districts will be CC-Commercial Community, RR-2.5 Residential Rural, and RR-5 Residential Rural. These will be detailed at the rezone stage of the process. Please refer to Appendix Table 1 for more details.

**Project Phasing**

Please refer to the Sketch Plan sheet SKP1.3 submitted with this application for phasing information. The specific timing of phase completion is difficult to estimate. However, for purposes of a 2030 "short-term" analysis, this Master TIS includes estimated partial buildout of site land uses for 2030. These are called out in the Land Use Table and the Trip Generation Table. Buildout has been assumed for the 2044 horizon year. Note that this phasing is an estimate only and no requirements for transportation improvements are solidified at the sketch plan stage. Subsequent traffic reports for the preliminary plan(s) will address any updates to this phasing and corresponding traffic impacts as applicable.

**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. **A detailed sight-distance analysis will be provided when access layout is finalized at the subdivision stage of the development.**

**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 intersections of Stapleton/US Hwy 24 and US Hwy 24/Judge Orr. The intersection of US Hwy 24/Stapleton is currently TWSC-controlled. CDOT has indicated that this intersection is on the list of intersections programmed for signalization. Per the *US 24 Planning and Environmental Linkages (PEL) Study*, US Hwy 24 will be expanded to four lanes in the vicinity of the site within the next 20 years. However, since the preparation of the PEL study, more detailed planning for US Highway 24 has been completed, and a design project is currently underway for expansion to four lanes between Garrett Road and Woodmen Road. This current project may have altered the timing of highway widening east of Woodmen Road. The following is posted on the US Highway 24 improvements website "*Funding was recently allocated for next steps in project development. This includes furthering design of US 24, widening to four lanes from Garrett Road to Stapleton Road* [the current CDOT project is Garrett Road to Woodmen Road] *and creating a new Access Control Plan from Elbert Road to the El Paso/Elbert County line. CDOT will continue to look for funding sources to design and construct study recommendations."*

**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 2016 *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). The 2045 Roadway Plan in the 2024 Draft MTCP currently shows Judge Orr as a 2-lane, Rural Minor Arterial. 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 2016 El Paso County *Major Transportation Corridors Plan* (*MTCP*) and El Paso County *Corridor Preservation Plan* (*CPP*).
The 2045 Draft MTCP shows the segment Stapleton as a 2-lane, Rural Principal Arterial between Judge Orr Road and US Highway 24. The 2065 Corridor Preservation Plan shows this segment as a four-lane facility.

Stapleton Road extends east from Towner Drive to US Hwy 24. Stapleton continues southeast then south to Curtis Road at which point the roadway continues 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 2016 *El Paso County 2040 Major Transportation Corridors Plan* as a two-lane Minor Arterial. The 2045 Draft MTCP shows the segment of Elbert Road between Judge Orr Road and US Highway 24 as a two-lane, Rural Minor Collector. 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. Please refer to Figure 3 for more details. 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.

**Safety and Accident Analysis – Crash History**

Three years of crash data were collected at the following intersections:

- Judge Orr Road/Curtis Road – 4 crashes (1 injury, 0 fatalities)
- Judge Orr Road/Elbert Road – 3 crashes (2 injuries, 0 fatalities)
- US Hwy 24/Elbert Road – 10 crashes (5 injuries, 0 fatalities)
- US Hwy 24/Judge Orr Road – 19 crashes (2 injuries, 0 fatalities)
- US Hwy 24/Stapleton Road – 3 crashes (1 injury, 0 fatalities)

There were 11 crashes involving injuries at the 5 study-area intersections during the study period, none of which resulted in a fatality. The majority of crashes were property damage only. No correctable crash patterns were identified in the crashes reported.

Note: CDOT has indicated that the intersection of US Hwy 24/Stapleton is on the list of intersections programmed for signalization.

**PEDESTRIAN AND BICYCLE FACILITIES**

Judge Orr Road, Stapleton Road, and Elbert Road do not currently have sidewalks as these are rural facilities. Stapleton Road between Judge Orr and US Highway 24 has paved outside shoulders, which accommodate bicycles. Judge Orr Road and Elbert Road are currently paved, unimproved county roads, and as such, generally include 24-feet of pavement surface. Volumes are currently low, which allows for shared use with cyclists. Proposed internal subdivision roads are likely to be primarily Rural Local and potentially Rural Minor Collector roadways and, per *ECM* criteria, would not require sidewalks. The 2016 *MTCP* Table 5 identifies a bicycle improvement along Judge Orr. The section of this report entitled "Multi-Modal Transportation and TDM Opportunities" provides additional information and detail regarding *MTCP* plans and future facilities.

**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 142-dwelling units. ITE Land Use categories "822 – Strip Retail Plaza (<40 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. A detailed trip-generation estimate for the site, including ITE rates land uses, is presented in Table 3 (attached). Also, please refer to Appendix Table 1, which shows the details of the land use calculations and "conversion" to ITE Land Use categories.

**Short Term**

Table 2 below presents a summary of the estimated short-term site trip generation, assuming no commercial land uses. A detailed short-term trip-generation estimate for the site, including ITE rates land uses, is presented in Table 3 (attached). Please refer to Figure 6a for more details.

The short-term sketch plan land uses are projected to generate about 1,663 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 58 entering vehicles and 85 exiting vehicles are estimated to be generated. Approximately 99 entering and 83 exiting vehicles are estimated to be generated by the site during the afternoon peak hour.

**Table 2: Short-Term Estimated Site Vehicle-Trip Generation (Total Driveway Trips)**

| Analysis Period | Total Driveway Trips | | |
|---|---|---|---|
| | In | Out | Total |
| Morning Peak Hour | 58 | 85 | 143 |
| Afternoon Peak Hour | 99 | 83 | 182 |
| Daily/24-hour | 842 | 842 | 1,663 |

**Long Term**

Table 4 below presents a summary of the estimated buildout site trip generation, which includes commercial land uses. The proposed sketch plan is attached for reference. Please refer to Figure 6b for more details.

Total Driveway Trips

The buildout sketch plan land uses are projected to generate about 2,188 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 72 entering vehicles and 94 exiting vehicles are estimated to be generated. Approximately 131 entering and 114 exiting vehicles are estimated to be generated by the site during the afternoon peak hour.

**Table 4: Long-Term Estimated Site Vehicle-Trip Generation (Total Driveway Trips)**

| Analysis Period | Total Driveway Trips | | |
|---|---|---|---|
| | In | Out | Total |
| Morning Peak Hour | 72 | 94 | 166 |
| Afternoon Peak Hour | 131 | 114 | 244 |
| Daily/24-hour | 1094 | 1094 | 2188 |

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 3 (attached) shows the percent of the trips generated by trip type.

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 3 (attached). Resulting primary and non-primary trips are shown in Table 5 below.

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

**Table 5: Estimated Buildout Site Vehicle-Trip Generation (by Trip Type)**

| Analysis Period | Primary Trips | | |
|---|---|---|---|
| | In | Out | Total |
| Morning Peak Hour | 64 | 89 | 153 |
| Afternoon Peak Hour | 112 | 96 | 208 |
| Daily/24-hour | 942 | 942 | 1884 |
| **Analysis Period** | **Pass-By Trips** | | |
| | **In** | **Out** | **Total** |
| Morning Peak Hour | 5 | 3 | 8 |
| Afternoon Peak Hour | 11 | 11 | 21 |
| Daily/24-hour | 89 | 89 | 179 |
| **Analysis Period** | **Diverted Trips** | | |
| | **In** | **Out** | **Total** |
| Morning Peak Hour | 3 | 2 | 6 |
| Afternoon Peak Hour | 8 | 8 | 15 |
| Daily/24-hour | 63 | 63 | 126 |

## 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. Figure 5 shows 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/proposed west access (full-movement)
- Judge Orr/proposed east access (full-movement)

Site-generated volumes have been calculated by applying the directional-distribution percentages estimated by LSC (from Figure 5) to the trip-generation estimates (from Table 3). Figure 6a includes the projected short-term site-generated traffic volumes ("net new site trips") for the weekday morning and afternoon peak hours. Long-term site-generated traffic volumes for the weekday morning and afternoon peak hours are shown on Figure 6b.

**2030 Baseline Traffic Volume Estimates**

Figure 4 shows the estimates of baseline/background traffic volumes for the year 2030 These volumes assume the following:

- Buildout of the entire Saddlehorn residential development to the south
- Buildout of Filing 1 only for Meadowlake Industrial Park to the south
- Buildout of only the residential lots within Jane Davis Ranch to the north
- Annual background growth rate of 3 percent for 6 years applied to existing traffic volumes.

**2030 Total (2030 Baseline Plus Site-Generated) Traffic Volumes**

Figure 7 shows the sum of the 2030 baseline traffic volumes and site-generated peak-hour traffic volumes (from Figure 6a). These volumes represent the projected 2030 total traffic following site buildout. Laneage and traffic control at the study-area intersections following site buildout are shown in Figure 7 as well.

**2044 Background Traffic Volumes**

Please refer to Figure 8 for estimated long-term background volumes and assumed laneage at the study-area intersections.

Projected long-term background traffic volume projections have been based on LSC's recent Saddlehorn and Meadowlake Industrial Park traffic studies. The resulting annual growth rates for the projected total volumes are identified in the next section.

Note: long-term background traffic volumes assume the following:

- Buildout of the entire Saddlehorn residential development to the west.
- Buildout of the entire Meadowlake Industrial Park to the southwest.
- Buildout the entire Jane Davis Ranch to the north/northwest.

**2044 Total Traffic Volumes**

Figure 9 shows the sum of 2044 background traffic volumes (from Figure 8) plus site-generated traffic volumes (from Figure 6b). Based on the projected 2044 total ADT volumes (**including the projected site-generated traffic)**, the resulting calculated **average** annual growth rates are:

- Judge Orr Road west of the site: 9.1 percent per year for 20 years.
- Elbert Road north of the site: 17.7 percent per year for 20 years.

**LEVEL OF SERVICE ANALYSIS**

**Intersection Level of Service**

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

**Table 6: Intersection Levels of Service Delay Range**

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

[1] For unsignalized intersections, if v/c ratio is greater than 1.0 the level of service is LOS F, regardless of the projected average control delay per vehicle.

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

- Figure 3: Existing Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 4: 2030 Baseline Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 7: 2030 Baseline + Site Traffic, Lane Geometry, Traffic Control, and LOS

- Figure 8: 2044 Background Traffic, Lane Geometry, Traffic Control, and LOS
- Figure 9: 2044 Background + Site Traffic, Lane Geometry, Traffic Control, and LOS

LOS calculations for long-term scenarios were based upon the recommended lane geometries and traffic controls outlined in the figures above. Regarding peak-hour factors used in the analysis, please refer to Appendix A. For specific delay values, please refer to the attached Synchro 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*

Short-term analysis assumes two-way stop-sign control (TWSC) at Judge Orr/Curtis. The northbound-left turning movement is projected to operate at LOS E during the 2030 Baseline + Site AM peak hour with the addition of site-generated traffic. However, its volume-to-capacity (v/c) ratio would be well below 1.0 despite operating at LOS E. All other individual turning movements are projected to operate at LOS D or better during both 2030 peak hours, with or without the addition of site-generated traffic.

*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 C or better during both peak hours of the long-term buildout scenario. This intersection improvement was previously recommended in the *Saddlehorn Ranch* traffic study. Additionally, 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, the intersection overall is projected to operate at and are projected to operate at LOS D or better during both short-term peak hours, with or without the addition of site-generated traffic. The southwest-left and northwest-left turning movements are projected to operate at LOS E during both peak hours in 2030, with or without the addition of site-generated traffic. CDOT has indicated that this intersection is on the list of intersections programmed for signalization.

The mitigation for side-street level of service at this intersection will be signalization. The signal is already warranted and CDOT has indicated that this intersection is on the list of intersections programmed for signalization. Area development projects are being required to escrow funds as contribution toward signalization. The more projects contributing, the more matching funds will become available, and the signalization will likely move up on the priority list. It would **not** be practical to implement an interim solution such as restricting turning movements or installing AWSC traffic control. This development will be required to contribute to the signal as development moves forward. This is only the sketch plan stage, so the escrow would not be required at this point, rather at a later stage of the County process and with the CDOT access permit process.

*Long-Term*

Based on the long-term scenario analyzed in this report, dual left-turn lanes are projected to be constructed to the northeast-left approach 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 and southwest-left turn lanes are projected to operate at LOS E during at least one long-term 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 Figure 8, Figure 9, and the attached Synchro sheets for anticipated/assumed future lane geometry and LOS at this intersection.

US Highway 24/Judge Orr Road

*Existing Conditions*

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.

*2030*

Analysis in 2030 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*.

Due to additional background growth in the vicinity of this intersection, several shared turn lanes and single-lane approaches are projected to operate at LOS E or worse during both 2030 peak hours, with or without the addition of site-generated traffic. Overall, the intersection of US Hwy 24/Judge Orr Road is projected to operate at LOS E or worse in 2030 during the PM peak hour, with or without the addition of site-generated traffic. Please refer to Figure 4 and Figure 7 for details.

*Long-Term*

By 2044, 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 2044 background and total traffic volumes and lane geometry shown in the Synchro reports, this intersection is projected to operate at an overall LOS D or better during the long-term 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," though, 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.

<u>US Highway 24/Elbert Road</u>

*Short Term*

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

*Long Term*

Assuming the intersection of US Hwy 24/Elbert Road were to remain stop sign-controlled in the long term, the following individual turning movements are projected to operate at LOS F during both 2044 peak hours, with or without the addition of site-generated traffic: northwest-through, northwest-

left, southeast-through, and southeast-left. Traffic-signal warrants should be re-evaluated as more development occurs on a lot-by-lot basis during the proposed buildout period.

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.

**Generalized Daily Traffic Volume Level of Service**

Based on the projected traffic volumes, Figure 11 shows the **generalized daily traffic volume "level of service"** (or comparison of the projected ADT to the *ECM* design ADT by classification) on the study-area roadways.

**ROADWAY IMPROVEMENTS**

**MTCP-Identified Roadway Improvements**

*State whether the MTCP or other approved corridor study calls for the construction of improvements in the immediate area.*

The following roadway improvement projects have been identified as being needed by the year 2040 per Map 13 and Table 4 of El Paso County's 2016 *MTCP*:

- 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.

**ROW Requirements and Roadway Segment Improvements**

Table 7 (attached) identifies the ROW requirements and roadway segment improvements.

**Intersection Improvements – Auxiliary Turn Lanes (El Paso County Intersections)**

Auxiliary turn lane needs evaluation for El Paso County intersections in the study area is presented below. Also, please refer to Table 7 (attached).

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 exceeds 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 *MTCP* roadway classifications:

- **Stapleton Road** – Principal Arterial (Note: Stapleton south of US Highway 24 is shown as a two-lane, Rural, Principal Arterial on the Draft 2045 Roadway Functional Classifications map in the *Draft 2024 MTCP* update).
- **Judge Orr Road** – Minor Arterial (Note: Judge Orr between Highway 24 and Calhan Highway is shown as a **two-lane**, Rural, Minor Arterial on the Draft 2045 Roadway Functional Classifications map in the *Draft 2024 MTCP* update).
- **Elbert Road** – Minor Arterial (Note: Elbert Road south of Highway 24 is shown as a two-lane, Rural, Minor Collector on the Draft 2045 Roadway Functional Classifications map in the *Draft 2024 MTCP* update. The draft plan shows Elbert Road **north** of US Highway 24 as a two-lane, Rural, Minor Arterial).

All proposed auxiliary turn lanes would be required to meet design criteria outlined in Section 2.3.7.E of the *ECM*. Details can be addressed at the Preliminary Plan stage.

Evaluation Finding & Recommendations

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/Northwest Site Access (Proposed)*

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 Judge Orr Road or Elbert Road:

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

*Judge Orr Road/Proposed East Site Access*

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

**Intersection Improvements – Auxiliary Turn Lane Needs Evaluation (CDOT Intersections)**

CDOT Auxiliary Turn-Lane Criteria

Please refer to section 3.5 of the *Colorado State Highway Access Code* for turn lane criteria at intersections under CDOT jurisdiction.

Evaluation Finding & Recommendations

*US Highway 24/Judge Orr Road*

The US Highway 24 PEL study presents recommendations for this intersection. Please refer to US Highway 24 subsection above and Table 7 Improvements Table. Auxiliary turn lanes would be added at this intersection as part of a future CDOT El Paso County intersection improvement project C14. This intersection is within the limits of the Judge Orr roadway segment improvement "project" C14, which 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*

*Note: Judge Orr between US Highway 24 and Calhan Highway is shown as a **two-lane**, Rural, Minor Arterial on the Draft 2045 Roadway Functional Classifications map in the *Draft 2024 MTCP* update).

*US Hwy 24/Stapleton*

CDOT has indicated that this intersection is on the list of intersections programmed for signalization. Area development projects are being required to escrow funds as contribution toward signalization.

*US Highway 24/Elbert Road*

Auxiliary left-turn and right-turn deceleration lanes currently exist on all four approaches at the intersection of US Hwy 24/Elbert Road. Please refer to Improvements Table 7 for details regarding the westbound left-turn deceleration lane.

**Intersection Configuration and Traffic Control**

US Highway 24/Stapleton

CDOT has indicated that this intersection is on the list of intersections programmed for signalization. Area development projects are being required to escrow funds as contribution toward signalization.

US Highway 24/Elbert Road

Several individual turning movements are projected to operate at LOS F during both 2044 peak hours, with or without the addition of site-generated traffic: northwest-through, northwest-left, southeast-through, and southeast-left. Traffic-signal warrants and this project's relative traffic impact should be evaluated at the Preliminary plan stage and/or as development proceeds. The addition of Rex Road between Eastonville and Elbert Road to the *Draft 2045 MTCP* may affect the future volume projections at the Elbert Road/US Highway 24 intersection.

Judge Orr Road/Elbert Road/Site Access Intersections

LSC recommends two-way, stop-sign control for this intersection (northbound and southbound approaches). This traffic control recommendation should be verified with the Preliminary Plan.

Judge Orr Road/East Site Access Intersection

LSC recommends stop-sign-control for this intersection (northbound approach). This traffic control recommendation should be verified with the Preliminary Plan.

**ROADWAY CLASSIFICATIONS**

Generally, roadways within the sketch plan should be classified as Rural Local or Rural Minor Collector as shown in Figure 10. The entry street segments are projected to carry about 1,686 and 394 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 10 are preliminary recommendations by LSC based on

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

Figure 11 shows the study-area roadways and classifications shown on the Draft 2045 Roadway Functional Classifications map in the *Draft 2024 El Paso County Major Transportation Corridors Plan*.

## 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).

### Potentially Reimbursable Improvements

Figure 27 of the *Draft 2024 El Paso County Major Transportation Corridors Plan* shows the following *MTCP* Projects:

- Project ID No. 159 Judge Orr Road Eastonville Road to Peyton Highway (rural county road upgrade)
- Project ID No. 401 Rex Road – Current Terminus in Meridian Ranch to Elbert Road (new road construction)

Also, participation in intersection improvements at the study-area intersections on US Hwy 24 (as may be required by CDOT) such as traffic signals and/or turn-lane improvements also have the potential for reimbursement.

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

These multimodal improvements would essentially extend to the Rock Island Trail along the north side of US Hwy 24. The Rock Island Trail provides connectivity to the park-and-ride facility near Meridian Road/US Hwy 24 and numerous commercial centers in the central Falcon area.

The project roads are anticipated to be Rural Local or Rural Minor Collector type roads, and as such, would not be required to provide sidewalks. Bicycles are accommodated on-street by the standard road cross sections of these two roadway classifications. Any anticipated changes to this would be addressed with the preliminary plan(s).

The **DRAFT 2045 MTCP** includes a Multimodal Plan.

While, currently, the proposed development is not projected to generate a significant percentage of multimodal trips, the *DRAFT 2045 MTCP* document includes an "Unincorporated El Paso County Targeted Sidewalk Gap Analysis." This project is located on the fringe of one of these target areas. Any potential future sidewalks extending west along Judge Orr or north along Elbert Road could be addressed at the preliminary plan stage – by which point the 2045 *MTCP* may be adopted.

The *DRAFT 2045 MTCP* shows the potential for "enhanced transit service" to/from and through the central area of Falcon.

**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 US 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) **[*Note: Judge Orr between US Highway 24 and Calhan Highway is shown as a two-lane, Rural, Minor Arterial on the Draft 2045 Roadway Functional Classifications map in the *Draft 2024 MTCP* update]**. 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.

***Note: Judge Orr between US Highway 24 and Calhan Highway is shown as a two-lane, Rural, Minor Arterial on the Draft 2045 Roadway Functional Classifications map in *the Draft 2024 MTCP* update.**

**CDOT PROCESS AND REQUIREMENTS**

CDOT comments have indicated *"Escrow break down will need to be provide for the Fair Share Escrow Amount of the development in an updated Traffic Impact Study for each permit required."*

The following is for information only, as this is a sketch plan application. The detailed escrow analysis will be provided will be at a later stage of the development 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 2,188 new driveway vehicle-trips on the average weekday.
- During the weekday morning peak hour of adjacent street traffic, 72 vehicles would enter the site while 94 vehicles would exit.
- During the weekday afternoon peak hour of adjacent street traffic, 131 vehicles would enter the site while 114 vehicles would exit.
- The above-referenced trip-generation estimates are for sketch plan buildout.
- 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 and Table 7, the Roadway Improvements table for evaluation of potential turn-lane needs at the study-area intersections.
- Table 7 also includes other roadway improvements related to right-of-way, roadway segments, intersection traffic control, etc.
- All internal site access roadways are proposed to be public streets with LSC-recommended classifications (preliminary) of Rural Minor Collector and Rural Local. Please refer to Figure 10 for additional details.
- Deviations are not included with this submittal.

* * * * *

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

Respectfully Submitted,

LSC TRANSPORTATION CONSULTANTS, INC. ne

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

JCH/JAB:jas

Enclosures: Table 1, Table 3, and Table 7
Figure 1 - Figure 11
Traffic Count Reports
Synchro LOS Reports
Appendix Table 1
Appendix A

# Table1, Table 3, and Table 7

TRANSPORTATION
CONSULTANTS, INC.

**Table 1: Land Use Summary**

| Parcel | ITE Land Use | | Value | Units |
|---|---|---|---|---|
| | Code | Description | | |
| A | 822 | Strip Retail Plaza (< 40 KSF) | 10.000 | KSF |
| A | 150 | Warehouse | 62.454 | KSF |
| B | 150 | Warehouse | 63.117 | KSF |
| C | 210 | Single-Family (Detached) Housing | 14.000 | DU |
| D | 210 | Single-Family (Detached) Housing | 12.000 | DU |
| E | - | Detention Pond | - | - |
| F | 210 | Single-Family (Detached) Housing | 3.000 | DU |
| G | 150 | Warehouse | 24.429 | KSF |
| H | 210 | Single-Family (Detached) Housing | 2.000 | DU |
| I | 210 | Single-Family (Detached) Housing | 18.000 | DU |
| J | - | Park | - | - |
| K | 210 | Single-Family (Detached) Housing | 7.000 | DU |
| L | 210 | Single-Family (Detached) Housing | 5.000 | DU |
| M | 210 | Single-Family (Detached) Housing | 13.000 | DU |
| N | 210 | Single-Family (Detached) Housing | 18.000 | DU |
| O | 210 | Single-Family (Detached) Housing | 18.000 | DU |
| P | 210 | Single-Family (Detached) Housing | 17.000 | DU |
| Q | 210 | Single-Family (Detached) Housing | 6.000 | DU |
| R | 210 | Single-Family (Detached) Housing | 9.000 | DU |
| S | - | Detention Pond | - | - |
| T | - | Detention Pond | - | - |

**Table 3: Detailed Trip Generation Estimate**

| ITE Code | ITE Description | Value [3] | Units [1] | Trip Generation Rates [2] Average Weekday | A.M. In | A.M. Out | P.M. In | P.M. Out | % Internal A.M. | % Internal P.M. | Driveway Trips Generated Average Weekday | A.M. In | A.M. Out | P.M. In | P.M. Out | % Primary | % Pass-By | % Diverted | External Trips Generated Average Weekday | A.M. In | A.M. Out | P.M. In | P.M. Out |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Short Term** | | | | | | | | | | | | | | | | | | | | | | | |
| 210 | Single-Family (Detached) Housing | 142 | DU | 9.81 | 0.19 | 0.53 | 0.61 | 0.36 | 0% | 0% | 1393 | 27 | 76 | 87 | 51 | 100% | 0% | 0% | 1393 | 27 | 76 | 87 | 51 |
| 150 | Warehouse | 150 | KSF | 1.84 | 0.21 | 0.06 | 0.08 | 0.21 | 2% | 2% | 270 | 31 | 9 | 12 | 31 | 100% | 0% | 0% | 270 | 31 | 9 | 12 | 31 |
| | | | | | | | | | | **Total** | **1663** | **58** | **85** | **99** | **83** | | | **Total** | **1663** | **58** | **85** | **99** | **83** |
| **Buildout** | | | | | | | | | | | | | | | | | | | | | | | |
| 210 | Single-Family (Detached) Housing | 142 | DU | 9.81 | 0.19 | 0.53 | 0.61 | 0.36 | 0% | 0% | 1393 | 27 | 76 | 87 | 51 | 100% | 0% | 0% | 1393 | 27 | 76 | 87 | 51 |
| 150 | Warehouse | 150 | KSF | 1.84 | 0.21 | 0.06 | 0.08 | 0.21 | 2% | 2% | 270 | 31 | 9 | 12 | 31 | 100% | 0% | 0% | 270 | 31 | 9 | 12 | 31 |
| 822 | Strip Retail Plaza (< 40 KSF) | 10 | KSF | 54.45 | 1.42 | 0.94 | 3.30 | 3.30 | 2% | 5% | 525 | 14 | 9 | 31 | 31 | 42% | 34% | 24% | 221 | 6 | 4 | 13 | 13 |
| | | | | | | | | | | **Total** | **2188** | **72** | **94** | **131** | **114** | | | **Total** | **1884** | **64** | **89** | **112** | **96** |

[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 7*: Roadway Improvements

Esteban Rodriguez Sketch Plan

## CDOT Intersections

| Item # | Location/Roadway Segment | Improvement | Timing | Responsibility |
|---|---|---|---|---|
| | | **US Highway 24/Judge Orr Intersection** | | |
| 1.1 | Judge Orr Road at US Highway 24 | Realignment of Judge Orr Road at US Highway 24 per CDOT Hwy 24 PEL Study | Future (the PEL study identified this as a high priority project with a time frame of less than 5 years) | CDOT |
| 1.2 | US Highway 24 at Judge Orr Road | Southwest-bound right-turn deceleration lane on US Hwy 24 approaching Judge Orr Road | As required by other development(s) or with realignment of US Hwy 24/Judge Orr | CDOT or by others |
| 1.3 | US Highway 24 at Judge Orr Road | Construct southwest-bound right-turn acceleration lane on US Hwy 24 at Judge Orr Road | As required by other development(s) or with realignment of US Hwy 24/Judge Orr | CDOT or by others |
| 1.4 | Judge Orr Road at US Highway 24 | Eastbound left-turn lane on Judge Orr Road approaching US Hwy 24 | With realignment of US Hwy 24/Judge Orr | CDOT |
| 1.5 | Judge Orr Road at US Highway 24 | Westbound dual left-turn lanes on Judge Orr Road approaching US Hwy 24 | With realignment of US Hwy 24/Judge Orr | CDOT |
| 1.6 | US Highway 24 at Judge Orr Road | Northeast-bound right-turn deceleration lane on US Hwy 24 approaching Judge Orr Road | With realignment of US Hwy 24/Judge Orr | CDOT |
| 1.7 | Judge Orr Road at US Highway 24 | Eastbound right-turn deceleration lane on Judge Orr Road approaching US Hwy 24 | As required by other development(s) or with realignment of US Hwy 24/Judge Orr | CDOT or by others |
| | | **US Highway 24/Stapleton Intersection** | | |
| **2.1a** | US Highway 24/Stapleton Intersection | **Escrow Contribution** toward traffic control upgrade - CDOT Escrow for Participation in the cost of future signalization | **To be addressed with the Preliminary Plan/Plats and Future Access Permit(s)** | **Applicant** |
| 2.1b | US Highway 24/Stapleton Intersection | **Traffic Control Upgrade -** Signalization of the intersection | CDOT - Once warrants are met | CDOT is collecting escrow from area developments impacting this intersection. |
| | | **US Highway 24/Elbert Road Intersections** | | |
| **3.1** | US Highway 24/Elbert Road Intersection (Westbound left-turn) | Lengthening of the westbound left-turn deceleration lane to CDOT standards (800-feet plus storage plus taper) - Existing deficiency. | Depending on the level of site-generated traffic added to this turning movement as development progresses, determination will be made if the project significantly impacts this intersection and this turning movement. If determined with the preliminary plan that site traffic impact is to a level that warrants the need for this project to submit an access permit and participate in some form toward this improvement, there will likely be either identification of an escrow contribution toward a future improvment or a requirement to complete this improvement (to be determined with the preliminary plan). (fee program credit per fee program provisions) | **Applicant and/or other developments that may add westbound left-turning movements to this intersection** |
| **3.1a** | US Highway 24/Elbert Road Intersection | **Potential Escrow Contribution** toward traffic control upgrade - CDOT Escrow for Participation in the cost of future signalization | **To be addressed with the Preliminary Plan/Plats and Future Access Permit(s)** | **Applicant** |
| 3.1b | US Highway 24/Elbert Road Intersection | **Traffic Control Upgrade -** Signalization of the intersection | CDOT - Once warrants are met | CDOT is collecting escrow from area developments impacting this intersection. |
| | | **US Highway 24/Rex Road (Future) Intersection** | | |
| 4.1 | **US Highway 24/Rex Road Intersection** (Future) | New Intersection Construction and Future Signalization | As Per CDOT AP No. 221088 | Permittee (Grandview Reserve Development) |
| | | **Adjacent County Arterial Roadway ROW Requirements** | | |
| 5.1 | **Judge Orr Road** Site Frontage | Right-of-Way Dedication Half of 2-Lane Rural Minor Arterial ROW (which is 100' total) Shown in 2024 DRAFT 2045 MTCP | Dedicate adjacent half ROW with plats but to be verified/detailed with the Preliminary Plan. | Applicant |
| 5.2 | **Judge Orr Road** Site Frontage | Corridor Preservation for 4-Lane Minor Arterial or updated 2065 Classification to be determined in the 2045 MTCP. | ROW preservation to be indicated with plats but to be verified/detailed with the Preliminary Plan. | Applicant |
| | | **El Paso County Roadway Segment Improvements** | | |
| **6.1** | **Judge Orr Road** (Short Term) Site Frontage | Widening of the south half to the Rural Minor Arterial cross section as parcels develop (or provide funds toward future widening) | As development occurs - details to be determined at the Preliminary Plan stage | **Applicant** Note: potential for negotiated fee program credit based on construction of the ultimate Rural Minor Arterial half section. This will be subject to submission and review and potential acceptance of a proposed fee program credit agreement by EPC and the Fee Program Committee. |
| 6.2 | **Judge Orr Road** (Long Term) Adjacent to the site frontage, but on the north side of the roadway | Future widening on the north side, to complete the full Rural Minor Arterial cross section. | Two-lane Rural Minor Arterial Shown in DRAFT 2045 MTCP (note: not yet adopted) | Most likely the property owner on the north side of Judge Orr, if/when that property develops. |
| 6.3 | **Judge Orr Road** (Long Term) US Highway 24 to Peyton Highway | **Rural county road upgrade** to Rural Minor Arterial cross section, DRAFT 2045 MTCP Project No. 159 | Two-lane Rural Minor Arterial Shown in DRAFT 2045 MTCP (note: not yet adopted) | Adjacent developments as they occur; any "gaps" may be projects completed by the county with fee program funds; applicant will pay fee program traffic impact fees. |
| 6.4 | **Curtis Road** (Long Term) Judge Orr Road to Highway 94 | **Rural county road upgrade** to Rural Minor Arterial cross section, DRAFT 2045 MTCP Project No. 512 | Two-lane Rural Minor Arterial Shown in DRAFT 2045 MTCP (note: not yet adopted) | Adjacent developments as they occur; any "gaps" may be projects completed by the county with fee program funds; applicant will pay fee program traffic impact fees. |
| 6.5 | **Rex Road** (Long Term) Elbert Road to US Highway 24 | **New county road connection** - Rural Minor Arterial DRAFT 2045 MTCP Project No. 401 | New two-lane Rural Minor Arterial Shown in DRAFT 2045 MTCP (note: not yet adopted) | Likely with development of the property through which the roadway segment is shown to connect through; any "gaps" may be projects completed by the county with fee program funds; applicant will pay fee program traffic impact fees. |
| | | **Internal Development Roadways** | | |
| **7.1** | Internal Development Roadways (shown in Figure 10) | Construct to County Standards IAW the classification map (shown in Figure 10); details to be addressed with the preliminary plan. | As development occurs; phasing/timing details to be addressed with the Preliminary Plan. | **Applicant** |

## El Paso County Intersections and Site Access Intersections

| Item # | | Improvement | Timing | Responsibility |
|---|---|---|---|---|
| | | **Judge Orr/Curtis Road Intersection** | | |
| 8.1 | **Judge Orr/Curtis Road Intersection** (westbound approach) | Westbound right-turn deceleration lane | Once peak-hour westbound right-turn volume exceeds 50 vehicles per hour. **Projections indicate this threshold would be exceeded, based on the 2030 analysis.** | Install lane if threshold exceeded due to this development's traffic (to be determined with the preliminary plan) or if already exceeded at the time of Preliminary Plan or escrow a pro-rata share for future construction (fee program credit per fee program provisions) |
| 8.2 | **Judge Orr/Curtis Road Intersection** (eastbound approach) | Eastbound right-turn deceleration lane | Currently warranted by ECM. **The Saddlehorn Filing No. 2 TIS report and MeadowLake Industrial Park Filing NO. 1 TIS reports include narrative for the provision in the "State Highway Access Code" Section 3.5 (5) for low through volumes). Please refer to those reports for details.** | This project is not projected to add eastbound right turning traffic to this intersection, so the responsibility is "by others." Note: This project will add eastbound through traffic, which has the potential to affect the timing of need for the right-turn lane (by others) because the eastbound through volume is the key factor in the determination of the timing of this turn lane as described in the "timing" column. |
| 8.3 | **Judge Orr/Curtis Road Intersection** (northbound approach) | **Northbound Left Turn Lane - potential future lengthening (restriping)** | **Proposed triggers 1) If ECM thresholds for addional stacking length are exceeded AND once (and if) the intersection is signalized or if stop signs are switched to EB and WB. OR 2) while NB stop control remains, if queue reaches lengths which result in operational or safety issues.** | This project is not projected to add northbound left turning traffic to this intersection, so the responsibility is "by others." |
| 8.4 | **Judge Orr/Curtis Road Intersection** (Southbound approach) | **Southbound Left Turn Lane = potential future lengthening for additional vehicle storage** | **Proposed triggers 1) If ECM thresholds for addional stacking length are exceeded AND once (and if) the intersection is signalized or if stop signs are switched to EB and WB. OR 2) while SB stop control remains, if the southbound queues reach lengths which result in operational or safety issues due to queuing - such as queues spilling into the adjacent through lane (this can be evaluated at Preliminary Plan);** | **Identify potentially Escrow for improvement depending on anticipated need at Preliminary Plan (or possibly construction if determined to be needed based on this development's traffic AND if conditions called out in the "Timing" column warrant the need for this lane extension. (fee program credit per fee program provisions)** |
| 8.5 | **Judge Orr/Curtis Road Intersection** (Intersection Control) | Potentially sign for all-way stop-sign control (AWSC) | Once warrants for AWSC are met (Note: The 2030 Total traffic LOS indicates an E LOS for one of the peak hours (the AM peak); however the PM peak hour shows LOS C; while the AM peak LOS may be an indicator of a possible need for traffic control change, traffic control is not typically changed based on volumes during one hour of the day. Other considerations may include the future safety record, however. This can be reevaluated with the Preliminary Plan and/or Final Plats. | El Paso County and/or other developments as there are multiple projects in the area that may trigger the change in traffic control due to development traffic |
| 8.6 | **Judge Orr/Curtis Road Intersection** (Intersection Control) | **Long Term:** Reconstruct intersection as a modern roundabout (or signalize the intersection) | Once LOS of AWSC drops below acceptable levels (roundabout); or once signal warrants are met (for conversion to a signal or roundabout) | El Paso County and/or other developments as there are multiple projects in the area that may trigger the change in traffic control due to development traffic. This intersection will be fee-program eligible for a signal/roundabout and applicant will pay fee program traffic impact fees. |
| | | **Judge Orr/Elbert Road/West Site Access** | | |
| **9.1** | **Judge Orr/Elbert Road intersection** w/ addition of south leg (west Site Access) with this development. | The northbound left-turn and the eastbound right-turn volumes are projected to meet the thresholds requiring auxiliary lanes. These will be required (to be verified with the preliminary plan); a deviation may be submitted with the preliminary plan for the northbound left-turn lane if the northbound approach is likely to be stop-sign controlled through the long term, and if no projected queuing or LOS issues absent this lane; construct this intersection to County Standards; south leg to be added IAW the classification map (shown in Figure 10); details to be addressed with the preliminary plan; construct south leg of the intersection to County Standards IAW the classification map (shown in Figure 10); details to be addressed with the preliminary plan. | As development occurs this can be confirmed with the Preliminary Plan (if this changes with the preliminary plan, requirements and associated phasing/timing details to be addressed at that time) | **Applicant and/or other developments that may add turning movements to this intersection** |
| | | **Judge Orr/East Site Access** | | |
| **10.1** | **Judge Orr/East Site Access** | No Auxiliary Turn Lanes Required (to be verified with the preliminary plan); construct this intersection to County Standards; south leg to be added IAW the classification map (shown in Figure 10); details to be addressed with the preliminary plan. | As development occurs this can be confirmed with the Preliminary Plan (if this changes with the preliminary plan, requirements and associated phasing/timing details to be addressed at that time) | **Applicant** |

**** Note: CDOT Formula taken from recent nearby projects: [sample]** *The development is required to participate in the cost of the future traffic signal at Stapleton and Hwy 24. Based on the average AM&PM site-generated passenger cars directly impacting the 4-hour warrant, the development would be responsible for ~$_____, (__ new vehicles / 60 vehicles-to-warrant x ~$700K/signal cost).*

*Source: LSC Transportation Consultants, Inc. (REV 7/31/2024)*

# Figures 1-11

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Figure 1

# Vicinity Map

Esteban Rodriguez Sketch Plan (LSC# S224630)

Approximate
Scale
1" = 1,000'

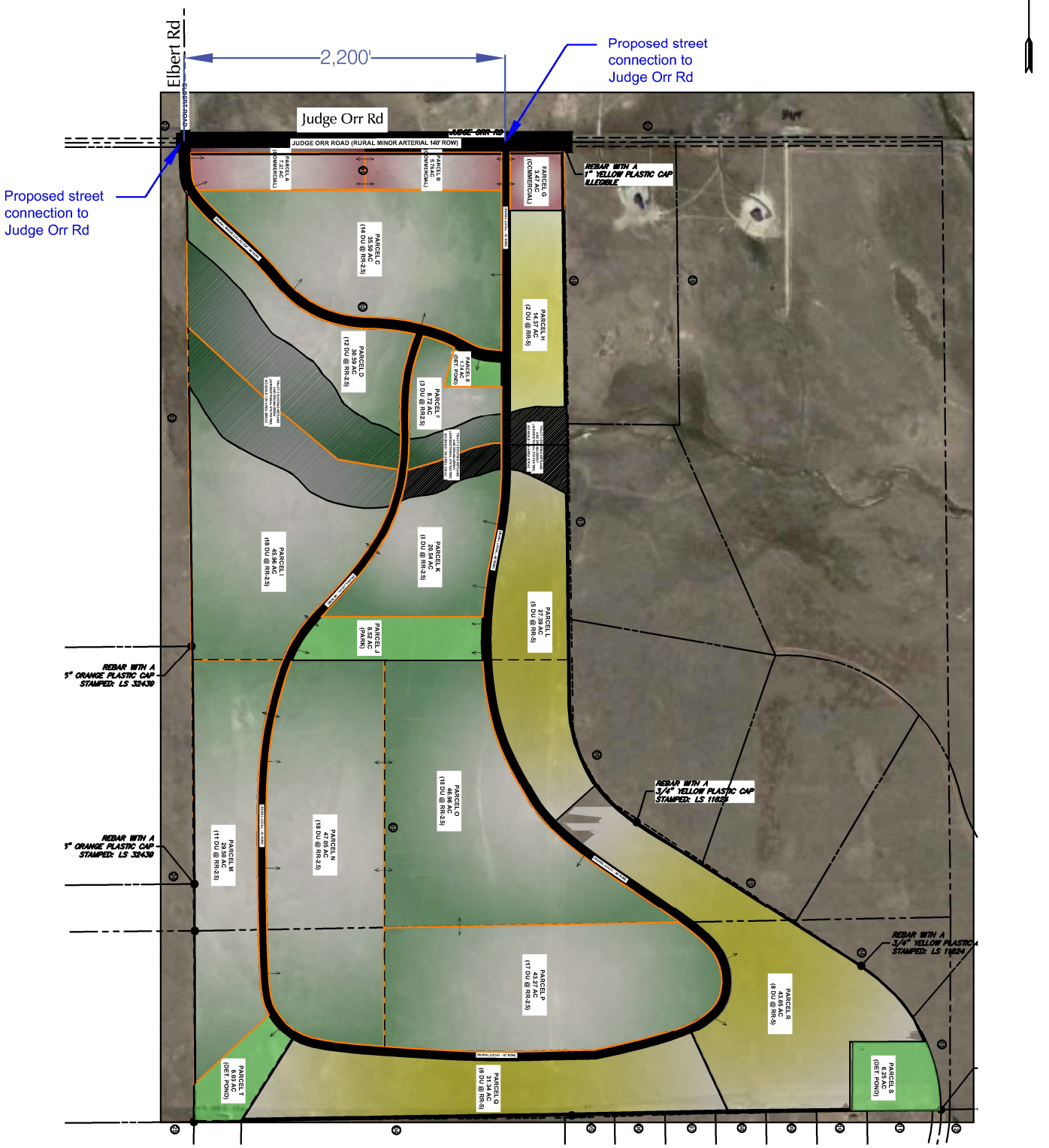
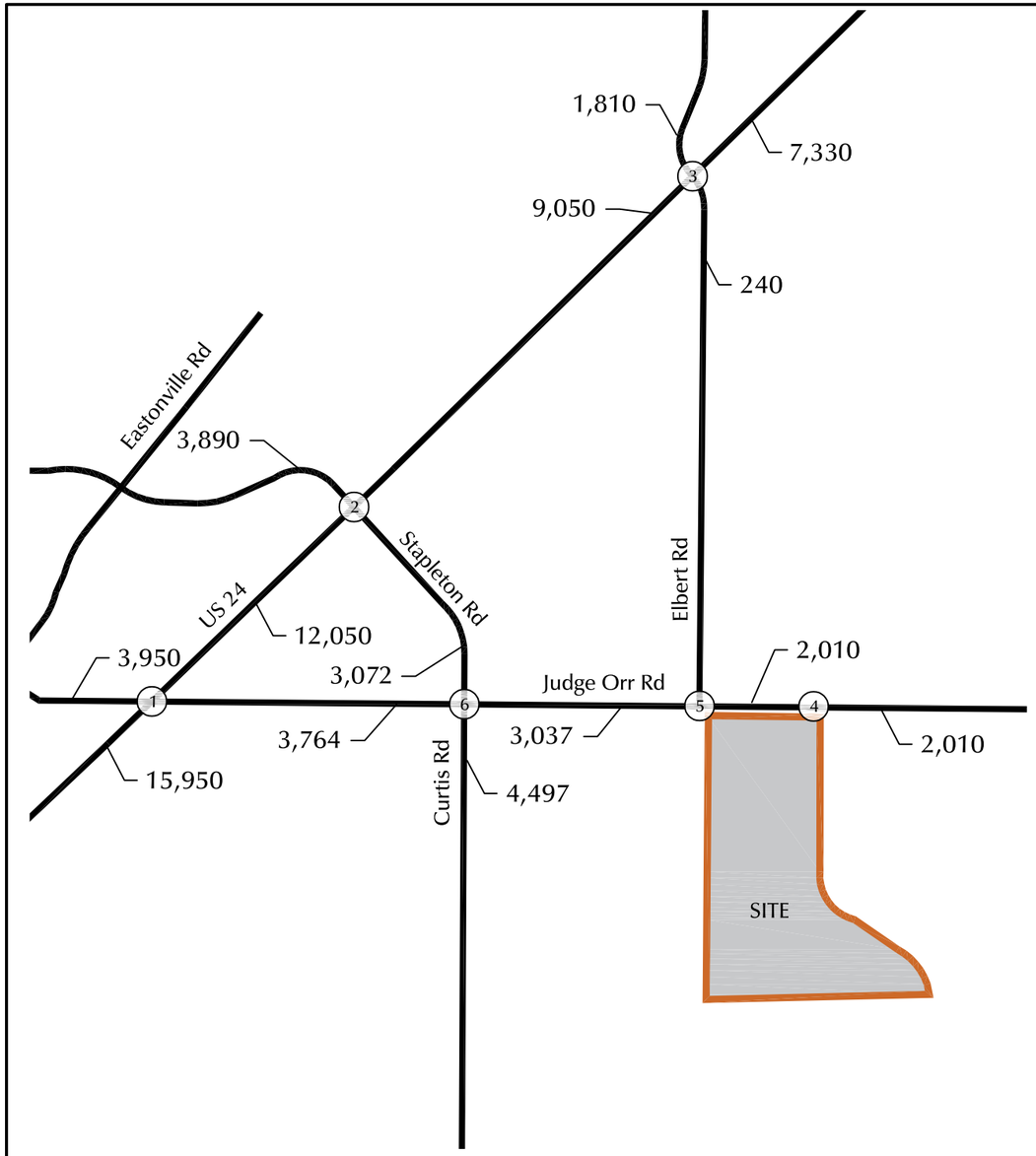



Figure 2

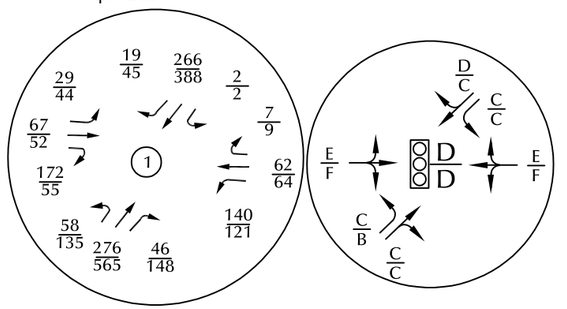
# Sketch Plan

Esteban Rodriguez Sketch Plan (LSC# S224630)

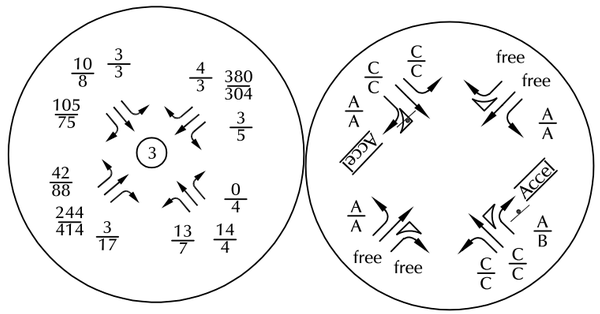
LSC TRANSPORTATION CONSULTANTS, INC.



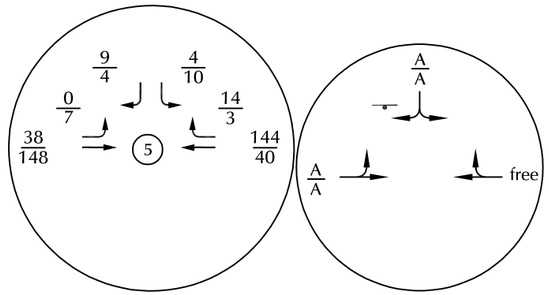

April 2024



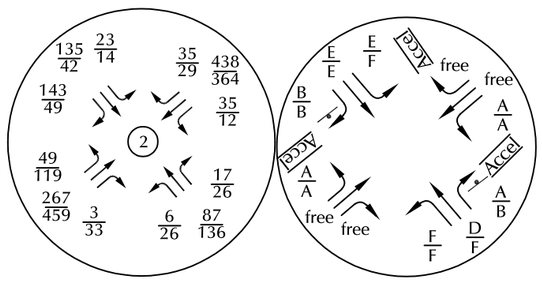

January 2023



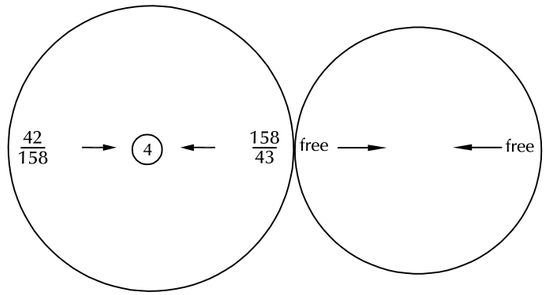

January 2023



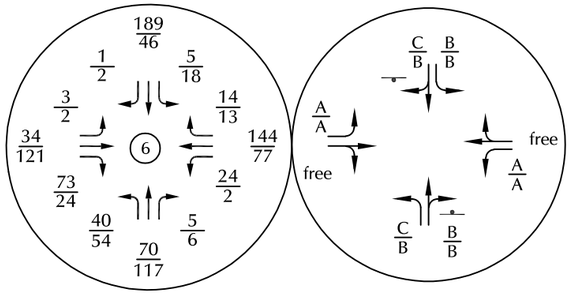

January 2023




January 2023




November 2023




Not to scale

X/X = AM Individual Movement Peak-Hour LOS / PM Individual Movement Peak-Hour LOS

XX/XX = AM Weekday Peak-Hour Traffic (Veh/Hour) / PM Weekday Peak-Hour Traffic (Veh/Hour)

X,XXX = Average Daily Traffic (Vehicles/Day)

= Stop Sign

= Traffic Signal

Counts by LSC

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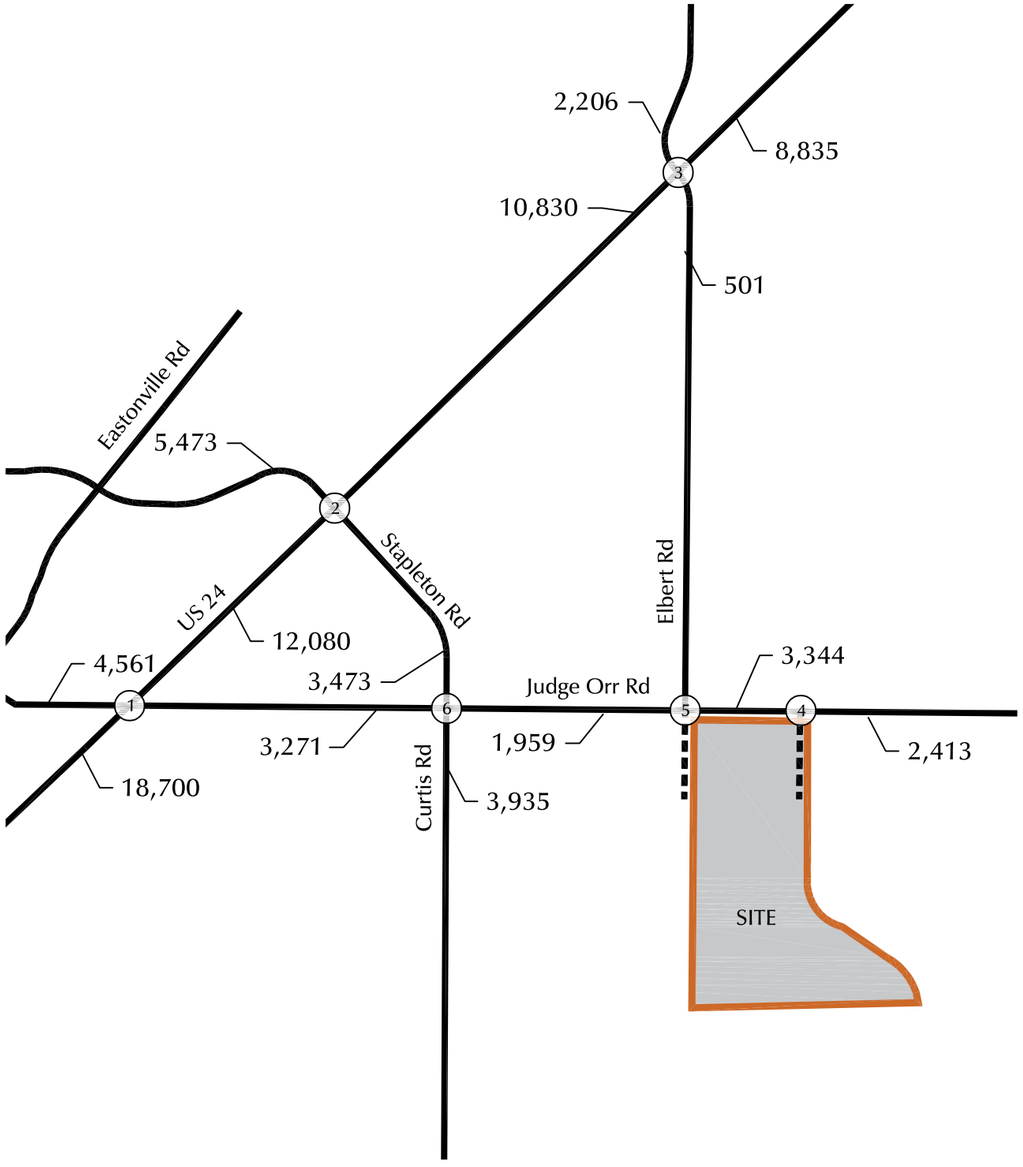
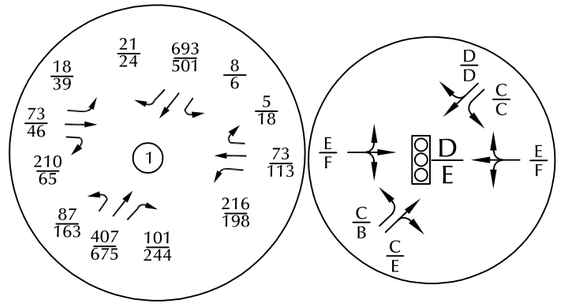
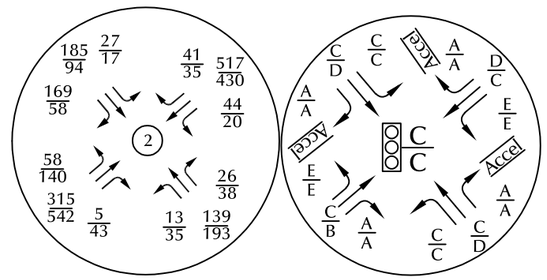
Figure 3

# Existing Traffic, Lane Geometry, Traffic Control, and LOS

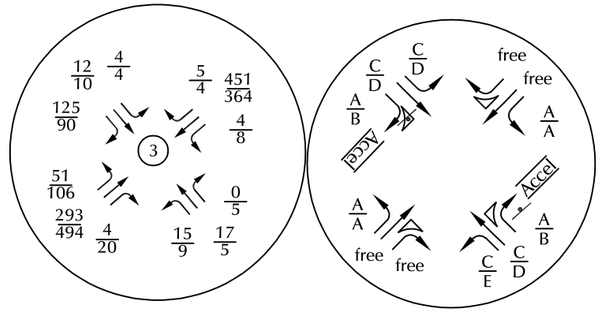
Esteban Rodriguez Sketch Plan (LSC# S224630)

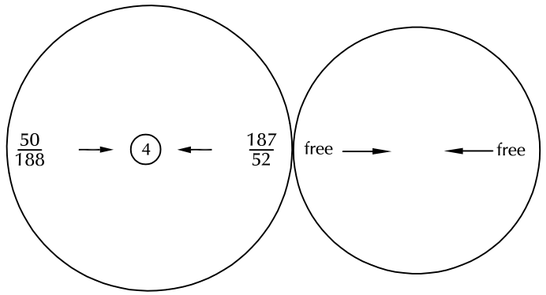


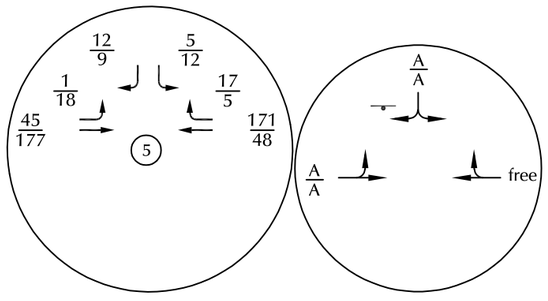



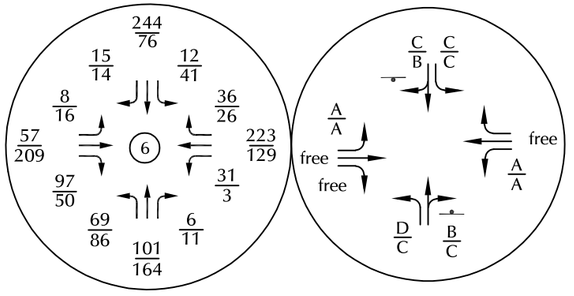




Not to scale




$\frac{X}{X}$ = AM Individual Movement Peak-Hour LOS / PM Individual Movement Peak-Hour LOS

$\frac{XX}{XX}$ = AM Weekday Peak-Hour Traffic (Veh/Hour) / PM Weekday Peak-Hour Traffic (Veh/Hour)

X,XXX = Average Daily Traffic (Vehicles/Day)

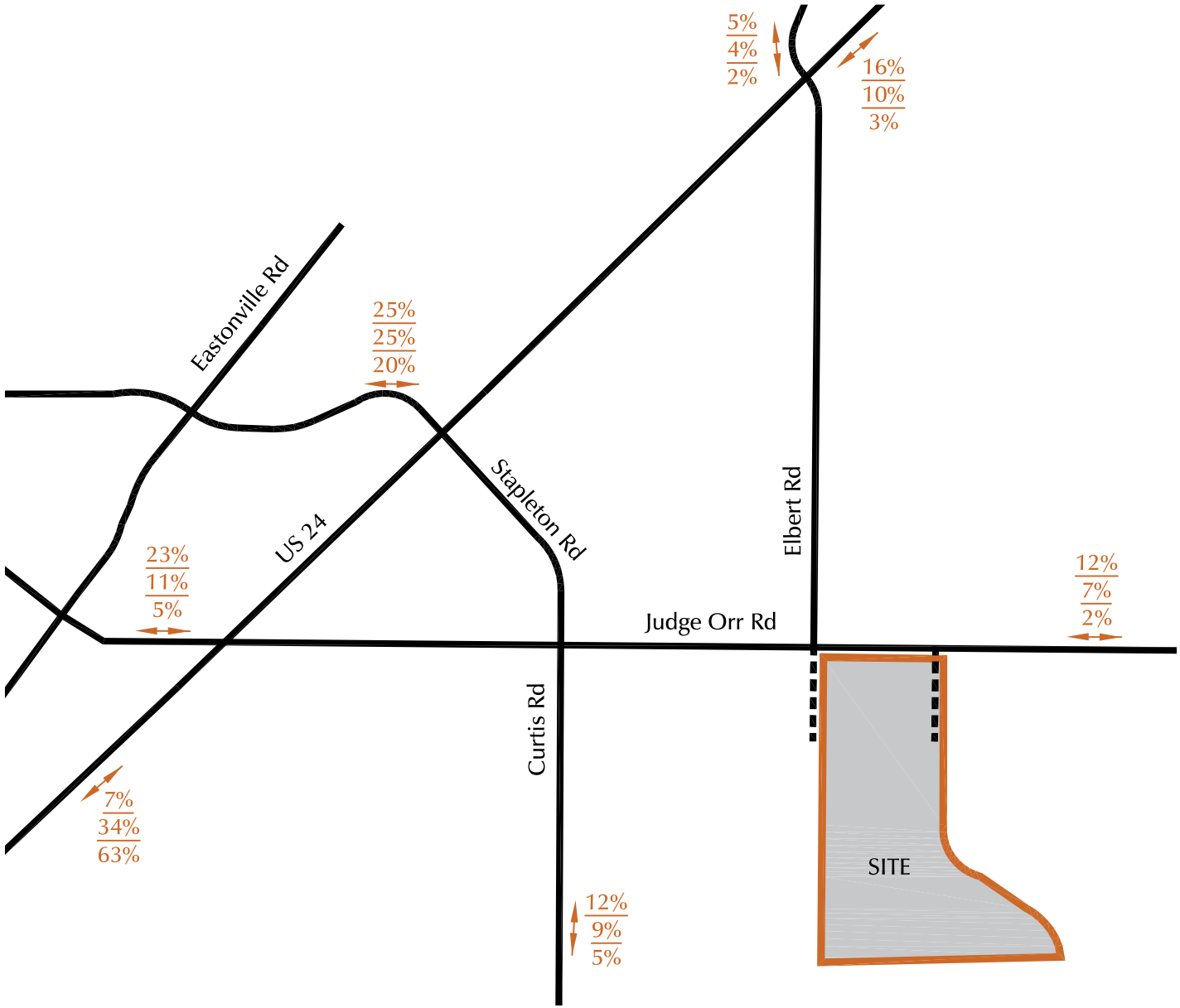
= Stop Sign

= Traffic Signal

Figure 4

# 2030 Baseline Traffic, Lane Geometry, Traffic Control, and LOS

Esteban Rodriguez Sketch Plan (LSC# S224630)




N

Not to scale

XX% / XX% / XX% = % Distribution of Retail-Generated Trips / % Distribution of Warehouse-Generated Trips / % Distribution of Residential-Generated Trips

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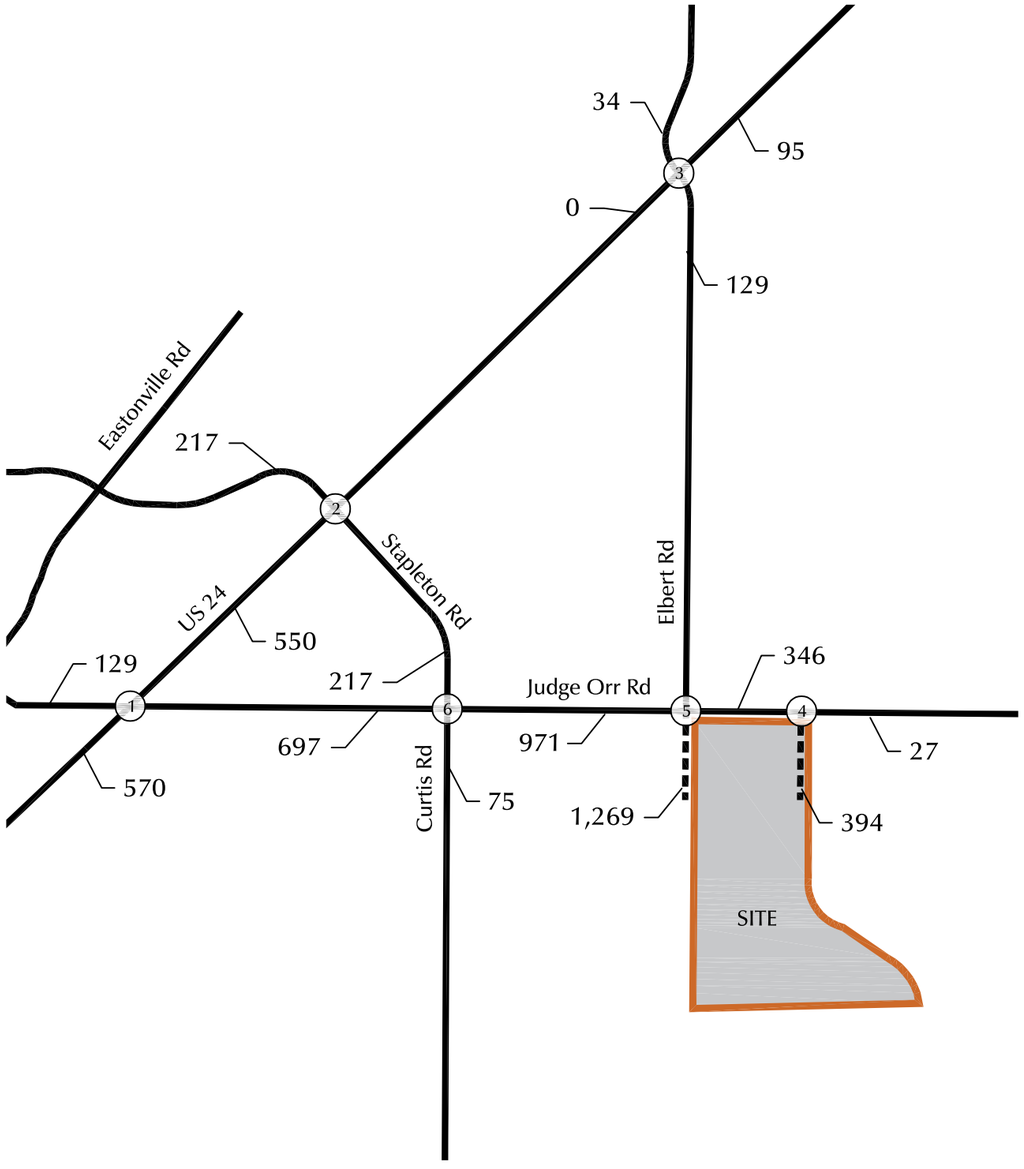
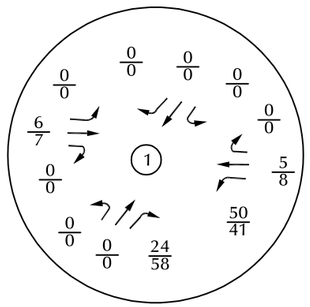
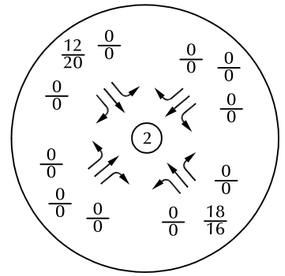
Figure 5

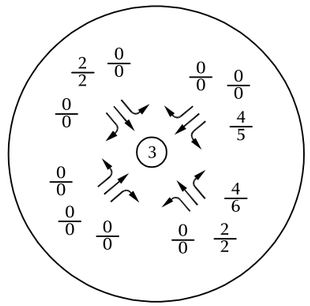
# Directional Distribution

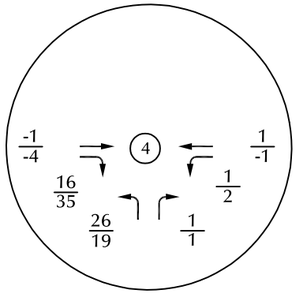
Esteban Rodriguez Sketch Plan (LSC# S224630)

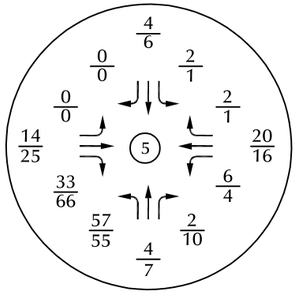


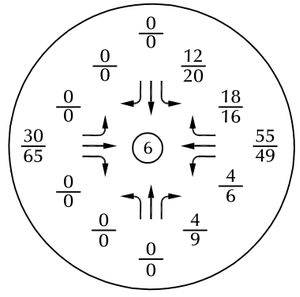




Not to scale

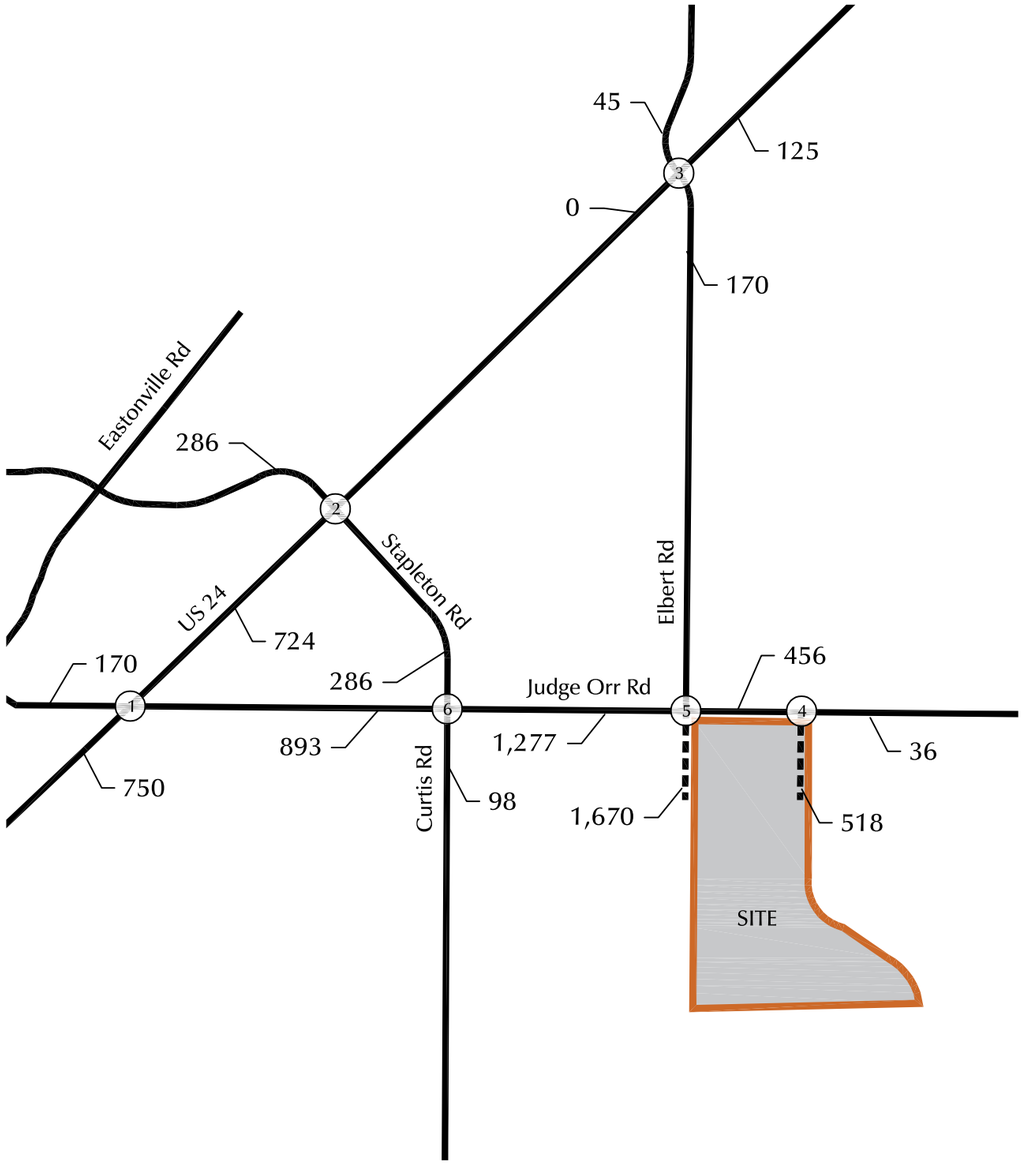
XX/XX = AM Weekday Peak-Hour Traffic (Veh/Hour) / PM Weekday Peak-Hour Traffic (Veh/Hour)

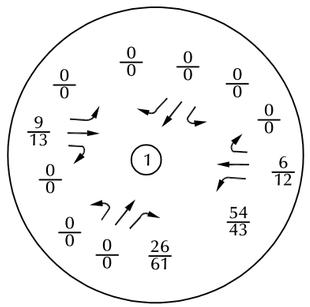
X,XXX = Average Daily Traffic (Vehicles/Day)

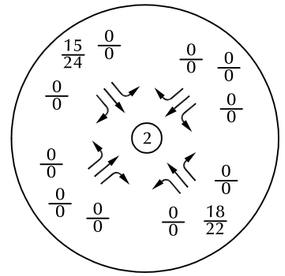
Figure 6a

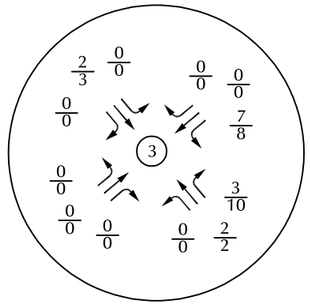
# Short-Term Site-Generated Traffic

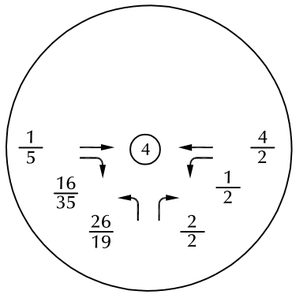
Esteban Rodriguez Sketch Plan (LSC# S224630)

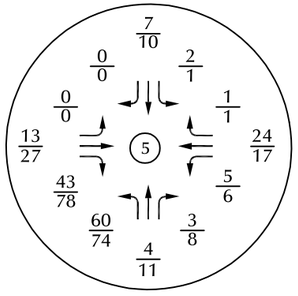


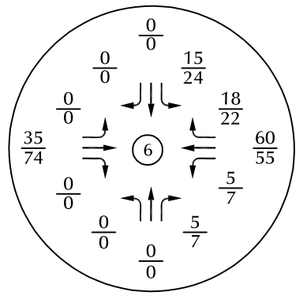




Not to scale

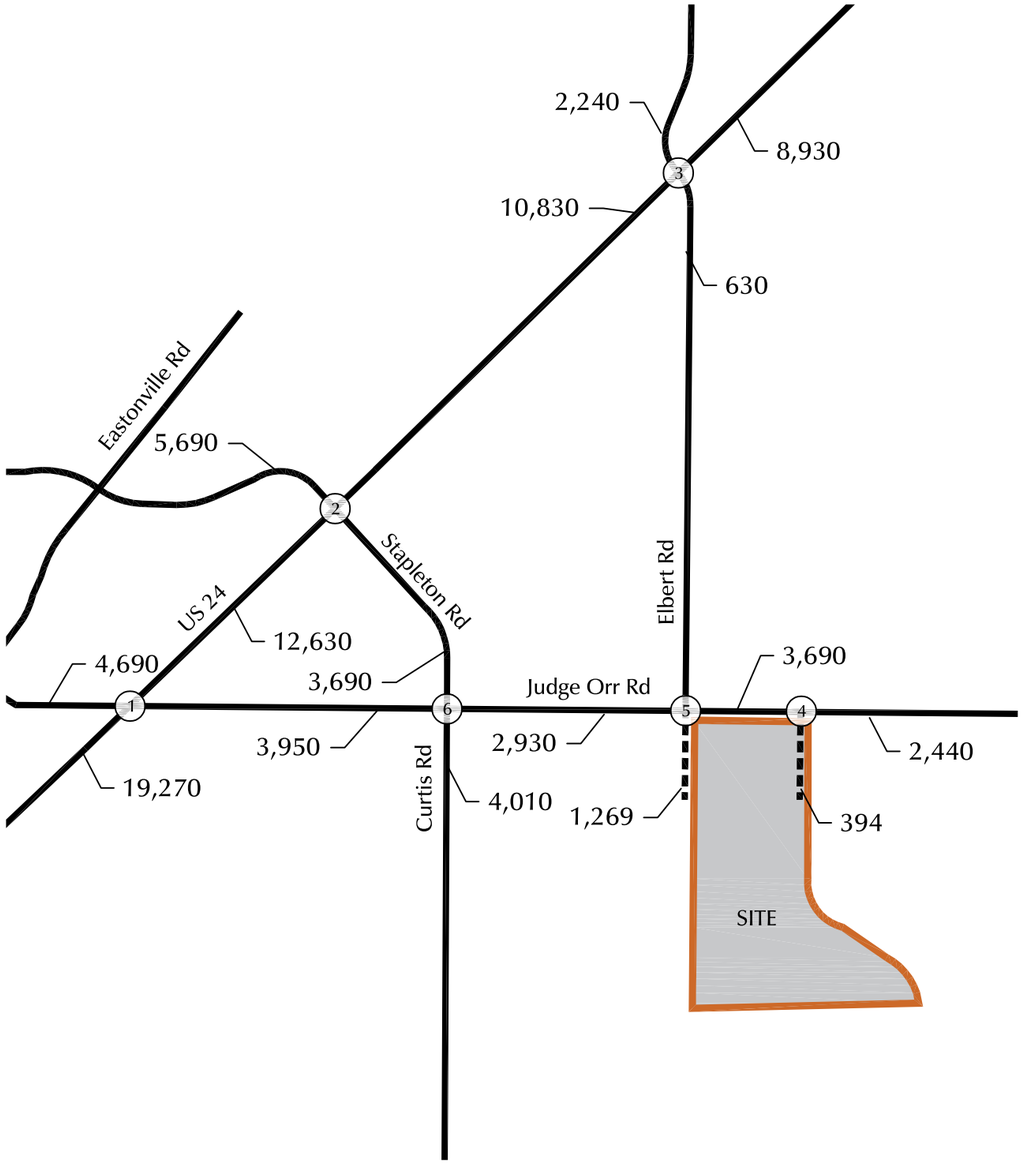
XX/XX = AM Weekday Peak-Hour Traffic (Veh/Hour) / PM Weekday Peak-Hour Traffic (Veh/Hour)

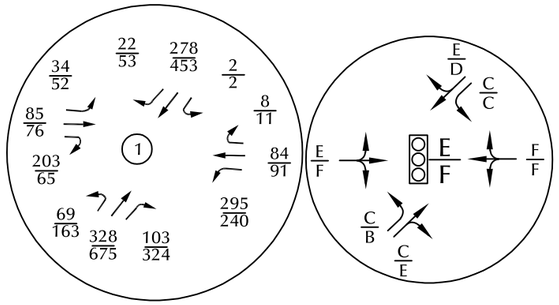
X,XXX = Average Daily Traffic (Vehicles/Day)

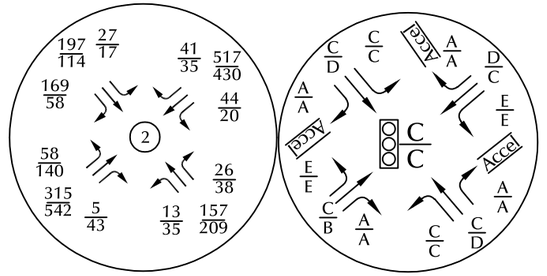
Figure 6b

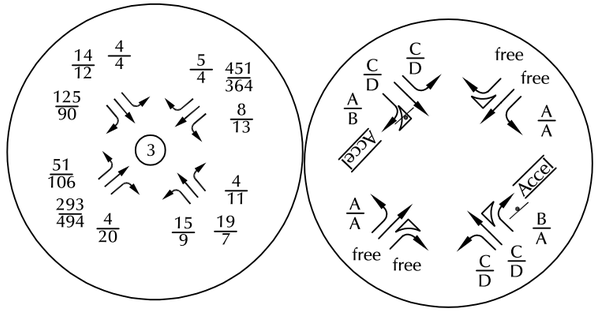
# Long-Term Site-Generated Traffic

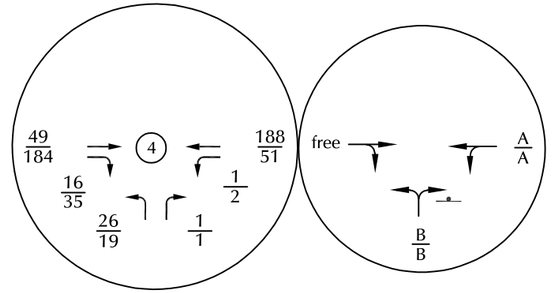
Esteban Rodriguez Sketch Plan (LSC# S224630)

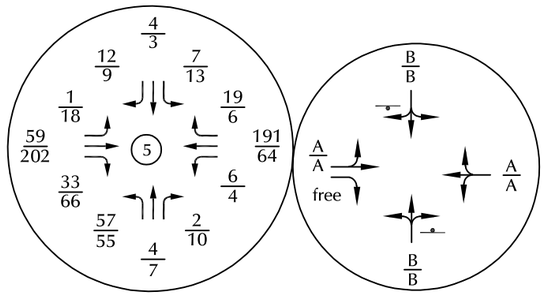


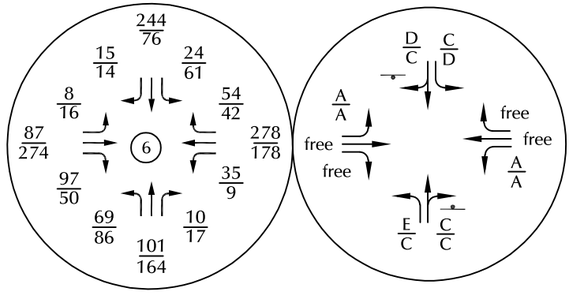




Not to scale

$\frac{X}{X}$ = AM Individual Movement Peak-Hour LOS / PM Individual Movement Peak-Hour LOS

$\frac{XX}{XX}$ = AM Weekday Peak-Hour Traffic (Veh/Hour) / PM Weekday Peak-Hour Traffic (Veh/Hour)

X,XXX = Average Daily Traffic (Vehicles/Day)

= Stop Sign

= Traffic Signal

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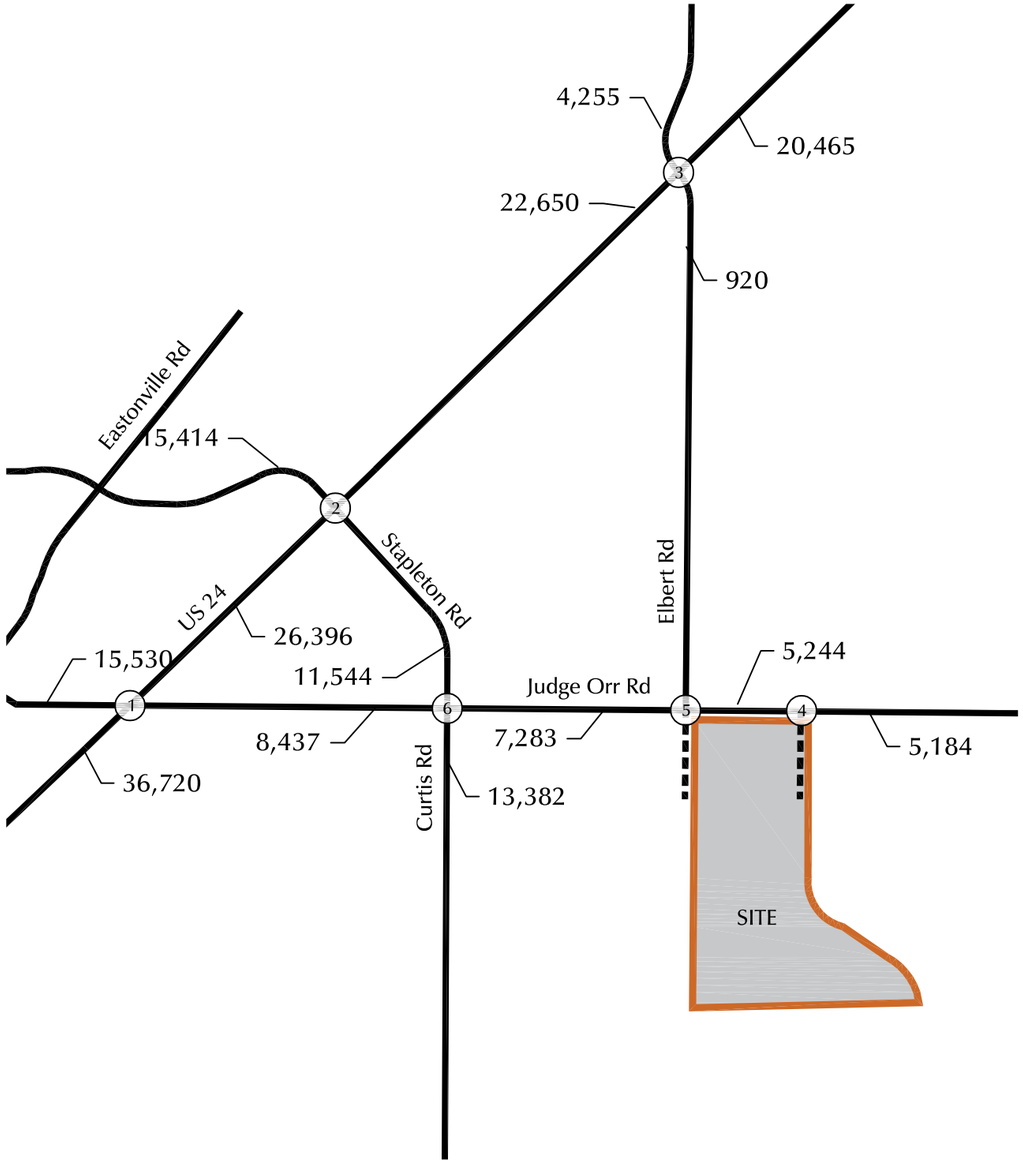
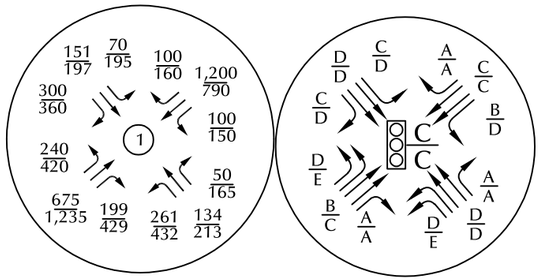
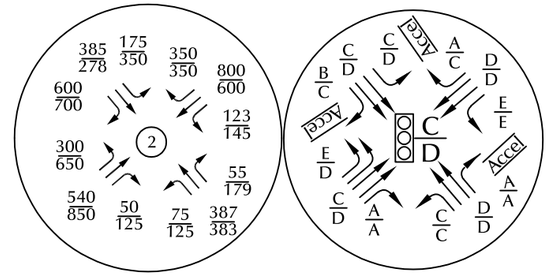
Figure 7

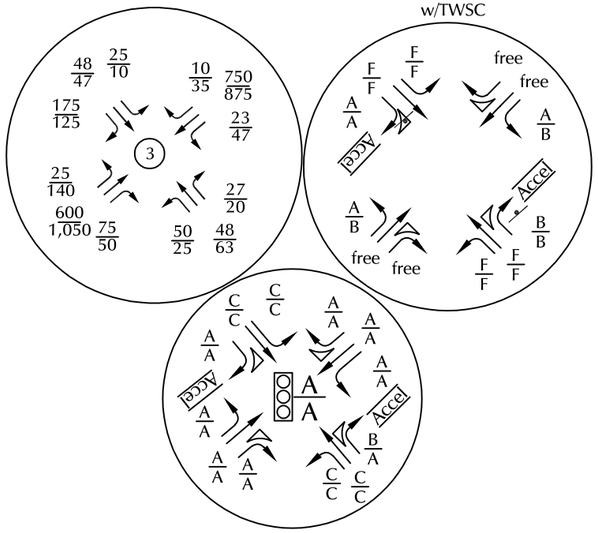
# 2030 Baseline + Site Traffic, Lane Geometry, Traffic Control, and LOS

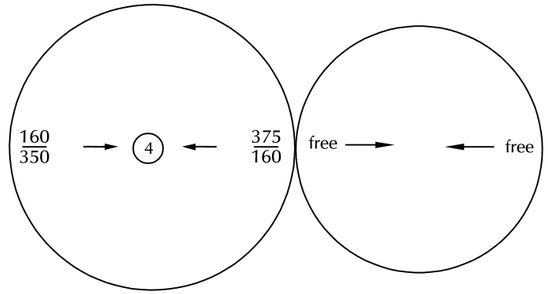
Esteban Rodriguez Sketch Plan (LSC# S224630)

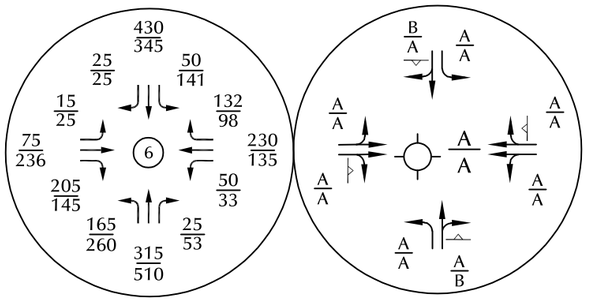


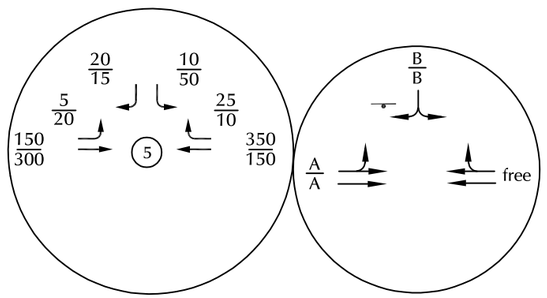




N

Not to scale

$\frac{X}{X}$ = $\frac{\text{AM Individual Movement Peak-Hour LOS}}{\text{PM Individual Movement Peak-Hour LOS}}$

$\frac{XX}{XX}$ = $\frac{\text{AM Weekday Peak-Hour Traffic (Veh/Hour)}}{\text{PM Weekday Peak-Hour Traffic (Veh/Hour)}}$

X,XXX = Average Daily Traffic (Vehicles/Day)

= Stop Sign

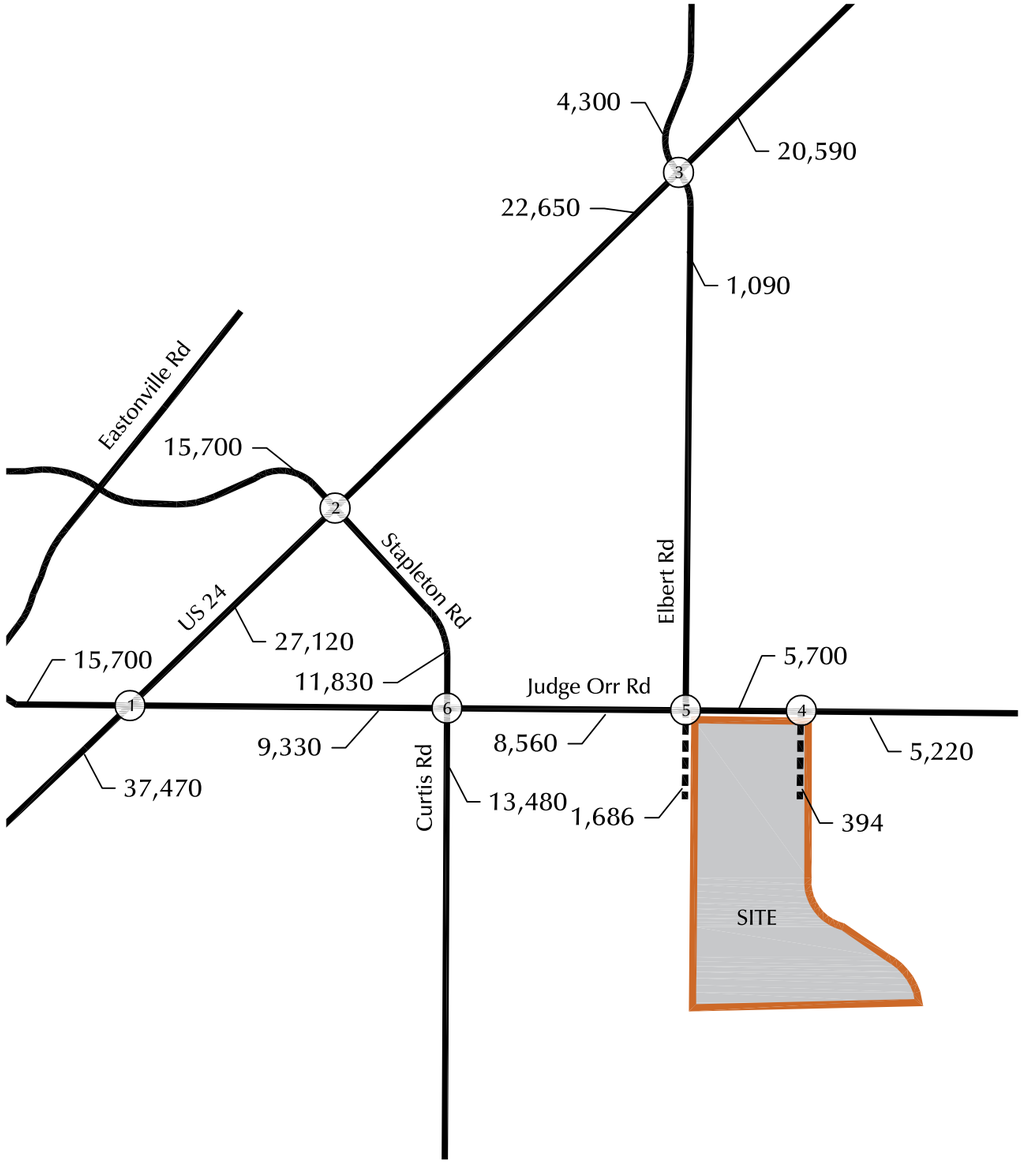
= Traffic Signal

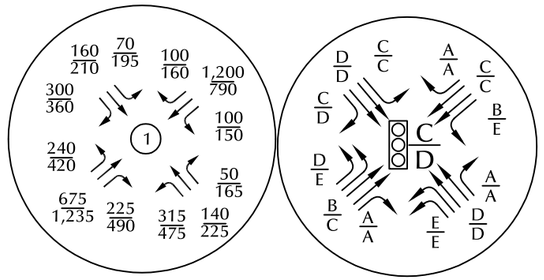
LSC TRANSPORTATION CONSULTANTS, INC.

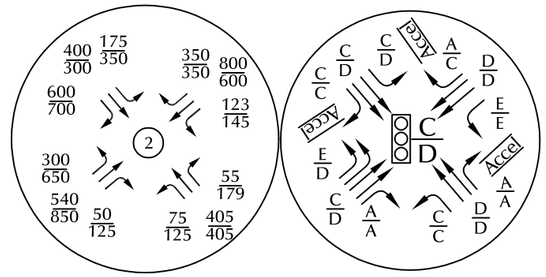
Figure 8

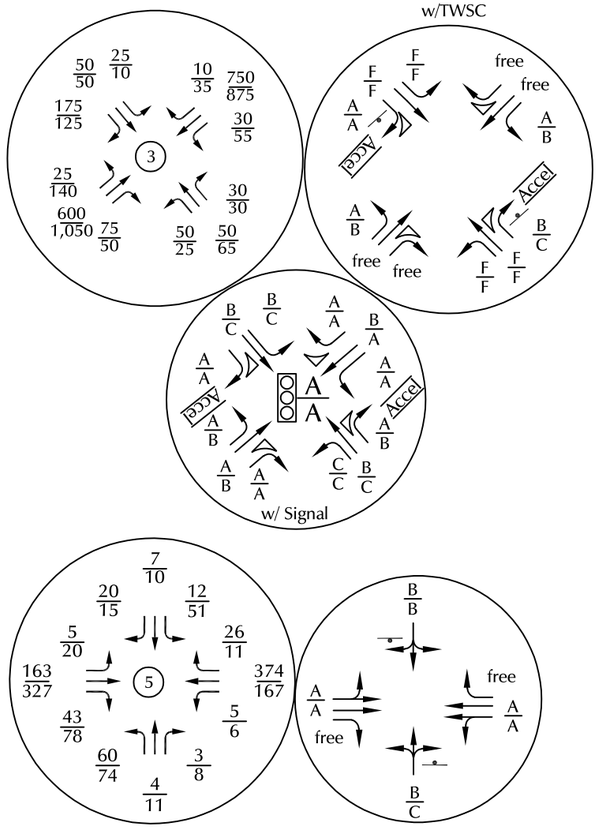
# 2044 Background Traffic, Lane Geometry, Traffic Control, and LOS

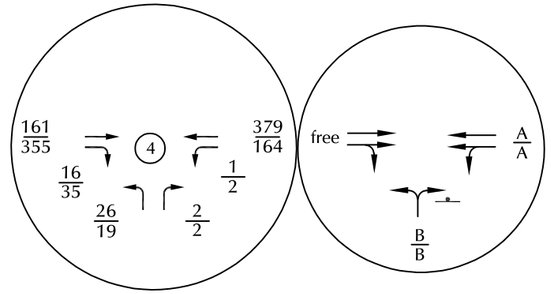
Esteban Rodriguez Sketch Plan (LSC# S224630)



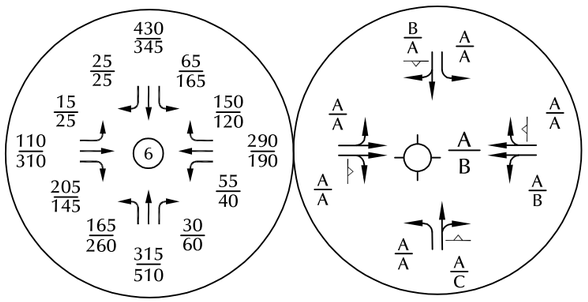











X/X = AM Individual Movement Peak-Hour LOS / PM Individual Movement Peak-Hour LOS

XX/XX = AM Weekday Peak-Hour Traffic (Veh/Hour) / PM Weekday Peak-Hour Traffic (Veh/Hour)

X,XXX = Average Daily Traffic (Vehicles/Day)

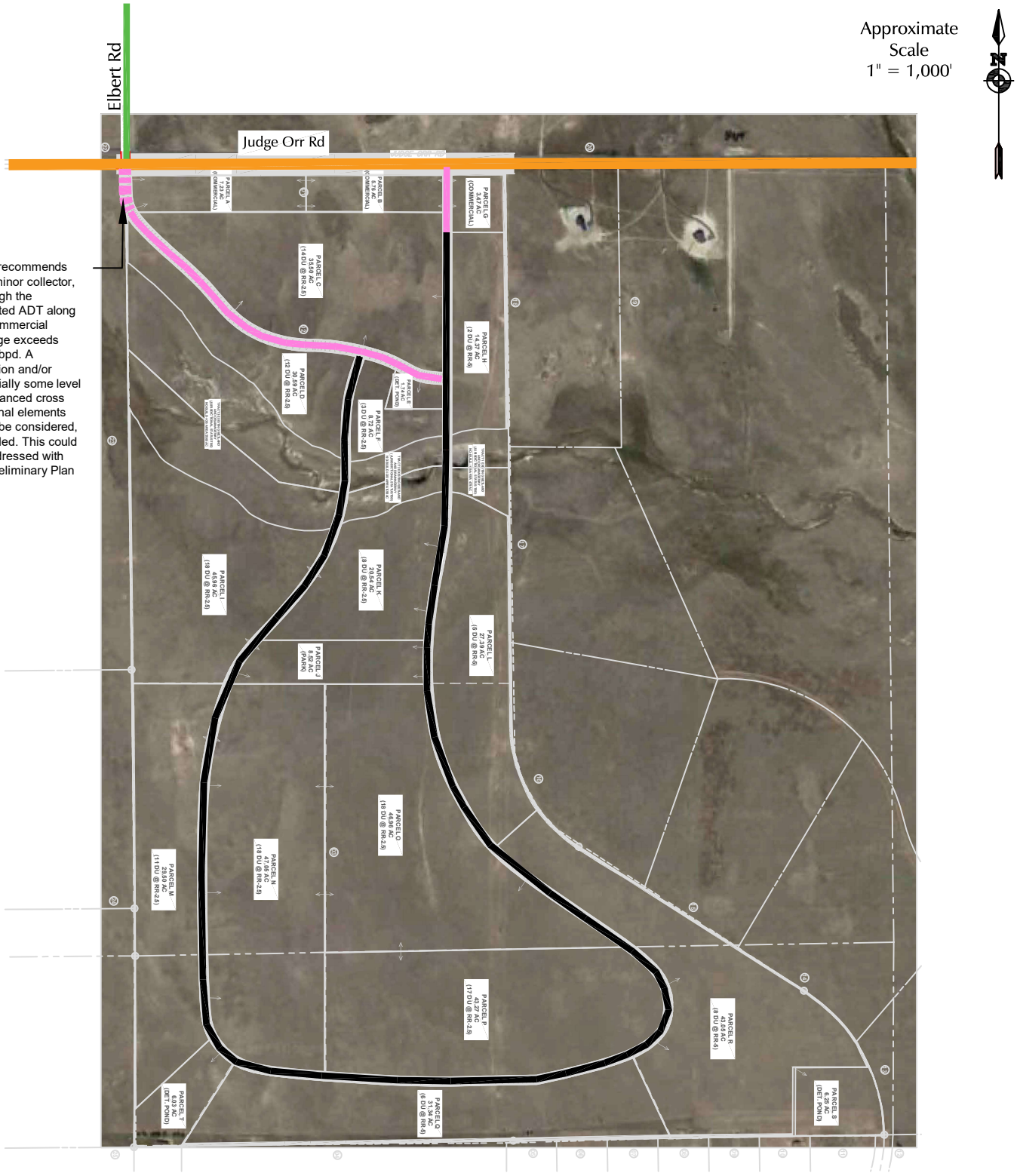
= Stop Sign

= Traffic Signal

Figure 9

# 2044 Total Traffic, Lane Geometry, Traffic Control, and LOS

Esteban Rodriguez Sketch Plan (LSC# S224630)




Note: The 2045 Draft MTCP shows Judge Orr as a 2-lane, Rural Minor Arterial. The 2045 Draft MTCP also shows this segment of Elbert Road as a 2-lane, Rural Minor Collector.

- Rural Minor Arterial (2 Lanes)
- Rural Minor Arterial (4 Lanes)
- Rural Minor Collector (2 Lanes)
- Rural Local (2 Lanes)

Figure 10

# Roadway Classifications

Esteban Rodriguez Sketch Plan (LSC# S224630)

LSC TRANSPORTATION CONSULTANTS, INC.

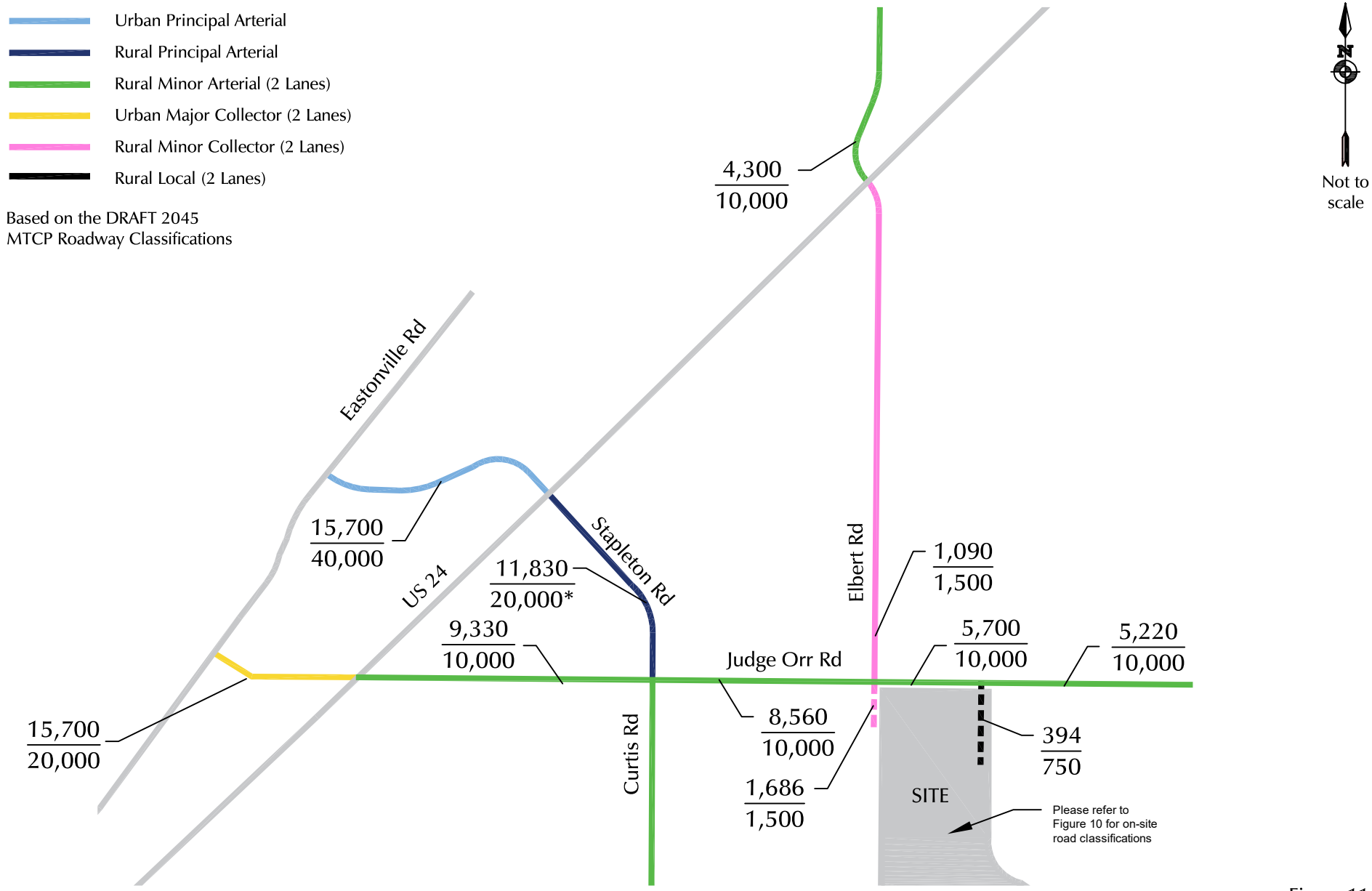



Figure 11

# ADT vs. Design ADT Comparison by Roadway Classification

* Estimated ADT, as ECM doesn't provide design ADT for 2-lane Rural Principal Arterial

$$\frac{\text{X,XXX}}{\text{X,XXX}} = \frac{\text{2044 Total ADT}}{\text{ECM's Design ADT by Roadway Classification Type}}$$

Esteban Rodriguez Sketch Plan (LSC# S224630)

# Traffic Counts

TRANSPORTATION
CONSULTANTS, INC.

# 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 11-23
Site Code : S234040
Start Date : 11/7/2023
Page No : 1

**Groups Printed- Unshifted**

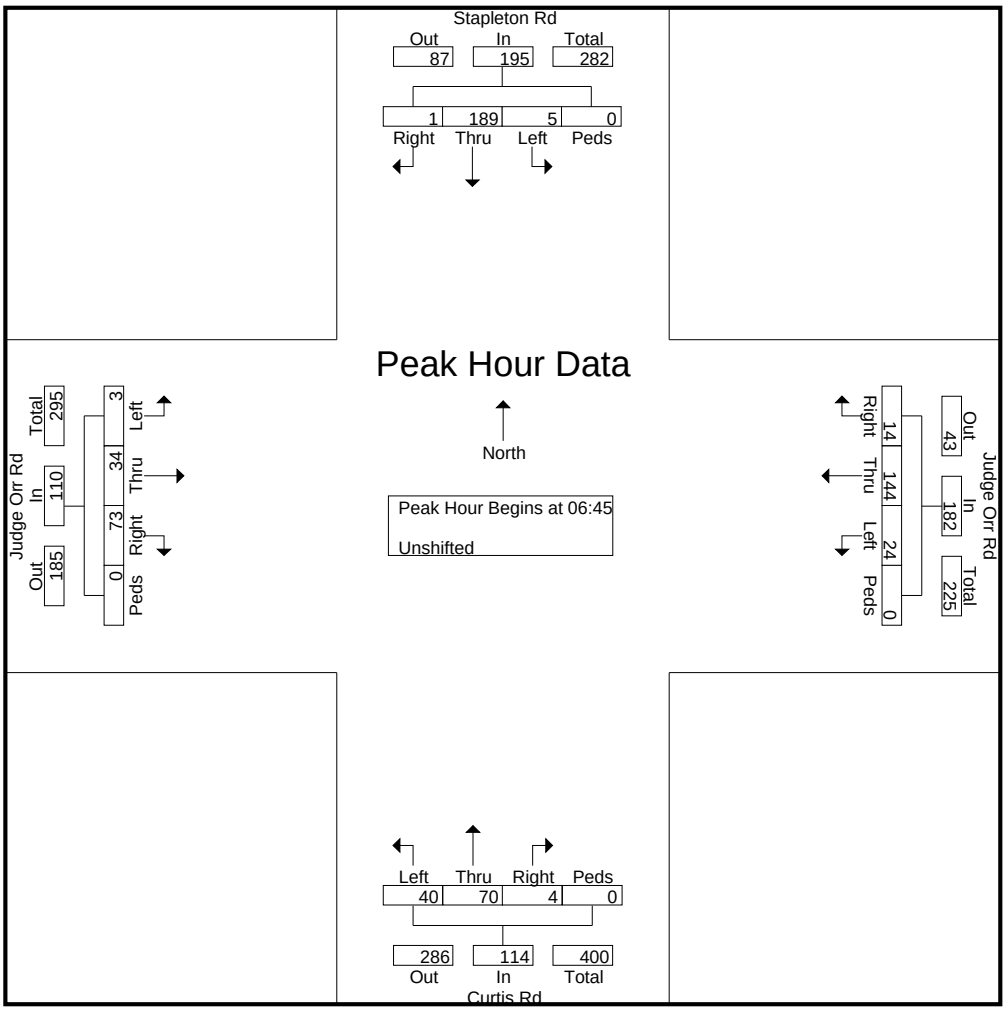
| | Stapleton Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | Curtis Rd Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 06:30 | 0 | 11 | 0 | 0 | 11 | 1 | 6 | 1 | 0 | 8 | 0 | 3 | 2 | 0 | 5 | 5 | 1 | 1 | 0 | 7 | 31 |
| 06:35 | 0 | 16 | 1 | 0 | 17 | 1 | 7 | 0 | 0 | 8 | 0 | 1 | 2 | 0 | 3 | 4 | 1 | 0 | 0 | 5 | 33 |
| 06:40 | 0 | 8 | 0 | 0 | 8 | 2 | 8 | 0 | 0 | 10 | 0 | 6 | 2 | 0 | 8 | 9 | 1 | 1 | 0 | 11 | 37 |
| 06:45 | 0 | 12 | 0 | 0 | 12 | 1 | 13 | 2 | 0 | 16 | 1 | 3 | 2 | 0 | 6 | 10 | 2 | 1 | 0 | 13 | 47 |
| 06:50 | 0 | 14 | 0 | 0 | 14 | 0 | 6 | 1 | 0 | 7 | 0 | 9 | 2 | 0 | 11 | 7 | 2 | 1 | 0 | 10 | 42 |
| 06:55 | 0 | 20 | 0 | 0 | 20 | 1 | 11 | 2 | 0 | 14 | 0 | 5 | 1 | 0 | 6 | 7 | 6 | 0 | 0 | 13 | 53 |
| Total | 0 | 81 | 1 | 0 | 82 | 6 | 51 | 6 | 0 | 63 | 1 | 27 | 11 | 0 | 39 | 42 | 13 | 4 | 0 | 59 | 243 |
| | | | | | | | | | | | | | | | | | | | | | |
| 07:00 | 0 | 10 | 0 | 0 | 10 | 1 | 7 | 1 | 0 | 9 | 0 | 7 | 3 | 0 | 10 | 5 | 1 | 1 | 0 | 7 | 36 |
| 07:05 | 0 | 25 | 0 | 0 | 25 | 1 | 18 | 2 | 0 | 21 | 0 | 9 | 4 | 0 | 13 | 7 | 4 | 0 | 0 | 11 | 70 |
| 07:10 | 0 | 19 | 1 | 0 | 20 | 2 | 11 | 4 | 0 | 17 | 0 | 7 | 4 | 0 | 11 | 7 | 3 | 0 | 0 | 10 | 58 |
| 07:15 | 0 | 15 | 2 | 0 | 17 | 2 | 10 | 5 | 0 | 17 | 1 | 8 | 3 | 0 | 12 | 5 | 4 | 0 | 0 | 9 | 55 |
| 07:20 | 0 | 14 | 0 | 0 | 14 | 0 | 18 | 2 | 0 | 20 | 1 | 3 | 8 | 0 | 12 | 3 | 4 | 0 | 0 | 7 | 53 |
| 07:25 | 1 | 15 | 0 | 0 | 16 | 4 | 11 | 1 | 0 | 16 | 0 | 3 | 2 | 0 | 5 | 2 | 3 | 0 | 0 | 5 | 42 |
| 07:30 | 0 | 15 | 1 | 0 | 16 | 0 | 20 | 2 | 0 | 22 | 1 | 3 | 2 | 0 | 6 | 10 | 1 | 0 | 0 | 11 | 55 |
| 07:35 | 0 | 17 | 1 | 0 | 18 | 1 | 5 | 2 | 0 | 8 | 0 | 7 | 5 | 0 | 12 | 5 | 1 | 0 | 0 | 6 | 44 |
| 07:40 | 0 | 13 | 0 | 0 | 13 | 1 | 14 | 0 | 0 | 15 | 0 | 6 | 4 | 0 | 10 | 5 | 3 | 0 | 0 | 8 | 46 |
| 07:45 | 2 | 11 | 0 | 0 | 13 | 1 | 6 | 0 | 0 | 7 | 0 | 4 | 1 | 0 | 5 | 3 | 4 | 0 | 0 | 7 | 32 |
| 07:50 | 0 | 10 | 1 | 0 | 11 | 2 | 10 | 0 | 0 | 12 | 1 | 2 | 2 | 0 | 5 | 4 | 5 | 0 | 0 | 9 | 37 |
| 07:55 | 2 | 5 | 0 | 0 | 7 | 0 | 11 | 0 | 0 | 11 | 1 | 3 | 3 | 0 | 7 | 2 | 1 | 1 | 0 | 4 | 29 |
| Total | 5 | 169 | 6 | 0 | 180 | 15 | 141 | 19 | 0 | 175 | 5 | 62 | 41 | 0 | 108 | 58 | 34 | 2 | 0 | 94 | 557 |
| | | | | | | | | | | | | | | | | | | | | | |
| 08:00 | 1 | 12 | 0 | 0 | 13 | 0 | 6 | 0 | 0 | 6 | 0 | 1 | 2 | 0 | 3 | 0 | 3 | 1 | 0 | 4 | 26 |
| 08:05 | 0 | 11 | 1 | 0 | 12 | 0 | 7 | 1 | 0 | 8 | 0 | 2 | 2 | 0 | 4 | 2 | 4 | 0 | 0 | 6 | 30 |
| 08:10 | 0 | 8 | 0 | 0 | 8 | 1 | 7 | 0 | 0 | 8 | 0 | 3 | 3 | 0 | 6 | 4 | 4 | 0 | 0 | 8 | 30 |
| 08:15 | 1 | 7 | 0 | 0 | 8 | 1 | 7 | 0 | 0 | 8 | 0 | 3 | 1 | 0 | 4 | 4 | 7 | 0 | 0 | 11 | 31 |
| 08:20 | 0 | 7 | 2 | 0 | 9 | 0 | 7 | 0 | 0 | 7 | 0 | 2 | 1 | 0 | 3 | 1 | 4 | 0 | 0 | 5 | 24 |
| 08:25 | 0 | 11 | 1 | 0 | 12 | 1 | 7 | 1 | 0 | 9 | 0 | 3 | 0 | 0 | 3 | 3 | 9 | 0 | 0 | 12 | 36 |
| Grand Total | 7 | 306 | 11 | 0 | 324 | 24 | 233 | 27 | 0 | 284 | 6 | 103 | 61 | 0 | 170 | 114 | 78 | 7 | 0 | 199 | 977 |
| Apprch % | 2.2 | 94.4 | 3.4 | 0 | | 8.5 | 82 | 9.5 | 0 | | 3.5 | 60.6 | 35.9 | 0 | | 57.3 | 39.2 | 3.5 | 0 | | |
| Total % | 0.7 | 31.3 | 1.1 | 0 | 33.2 | 2.5 | 23.8 | 2.8 | 0 | 29.1 | 0.6 | 10.5 | 6.2 | 0 | 17.4 | 11.7 | 8 | 0.7 | 0 | 20.4 | |

# 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 11-23
Site Code : S234040
Start Date : 11/7/2023
Page No : 2

| | Stapleton Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | Curtis Rd Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 06:30 to 08:25 - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 06:45 | | | | | | | | | | | | | | | | | | | | | |
| 06:45 | 0 | 12 | 0 | 0 | 12 | 1 | 13 | 2 | 0 | 16 | **1** | 3 | 2 | 0 | 6 | **10** | 2 | **1** | 0 | **13** | 47 |
| 06:50 | 0 | 14 | 0 | 0 | 14 | 0 | 6 | 1 | 0 | 7 | 0 | **9** | 2 | 0 | 11 | 7 | 2 | 1 | 0 | 10 | 42 |
| 06:55 | 0 | 20 | 0 | 0 | 20 | 1 | 11 | 2 | 0 | 14 | 0 | 5 | 1 | 0 | 6 | 7 | **6** | 0 | 0 | 13 | 53 |
| 07:00 | 0 | 10 | 0 | 0 | 10 | 1 | 7 | 1 | 0 | 9 | 0 | 7 | 3 | 0 | 10 | 5 | 1 | 1 | 0 | 7 | 36 |
| 07:05 | 0 | **25** | 0 | 0 | **25** | 1 | 18 | 2 | 0 | 21 | 0 | 9 | 4 | 0 | **13** | 7 | 4 | 0 | 0 | 11 | **70** |
| 07:10 | 0 | 19 | 1 | 0 | 20 | 2 | 11 | 4 | 0 | 17 | 0 | 7 | 4 | 0 | 11 | 7 | 3 | 0 | 0 | 10 | 58 |
| 07:15 | 0 | 15 | **2** | 0 | 17 | 2 | 10 | **5** | 0 | 17 | 1 | 8 | 3 | 0 | 12 | 5 | 4 | 0 | 0 | 9 | 55 |
| 07:20 | 0 | 14 | 0 | 0 | 14 | 0 | 18 | 2 | 0 | 20 | 1 | 3 | **8** | 0 | 12 | 3 | 4 | 0 | 0 | 7 | 53 |
| 07:25 | **1** | 15 | 0 | 0 | 16 | **4** | 11 | 1 | 0 | 16 | 0 | 3 | 2 | 0 | 5 | 2 | 3 | 0 | 0 | 5 | 42 |
| 07:30 | 0 | 15 | 1 | 0 | 16 | 0 | **20** | 2 | 0 | **22** | 1 | 3 | 2 | 0 | 6 | 10 | 1 | 0 | 0 | 11 | 55 |
| 07:35 | 0 | 17 | 1 | 0 | 18 | 1 | 5 | 2 | 0 | 8 | 0 | 7 | 5 | 0 | 12 | 5 | 1 | 0 | 0 | 6 | 44 |
| 07:40 | 0 | 13 | 0 | 0 | 13 | 1 | 14 | 0 | 0 | 15 | 0 | 6 | 4 | 0 | 10 | 5 | 3 | 0 | 0 | 8 | 46 |
| Total Volume | 1 | 189 | 5 | 0 | 195 | 14 | 144 | 24 | 0 | 182 | 4 | 70 | 40 | 0 | 114 | 73 | 34 | 3 | 0 | 110 | 601 |
| % App. Total | 0.5 | 96.9 | 2.6 | 0 | | 7.7 | 79.1 | 13.2 | 0 | | 3.5 | 61.4 | 35.1 | 0 | | 66.4 | 30.9 | 2.7 | 0 | | |
| PHF | .083 | .630 | .208 | .000 | .650 | .292 | .600 | .400 | .000 | .689 | .333 | .648 | .417 | .000 | .731 | .608 | .472 | .250 | .000 | .705 | .715 |

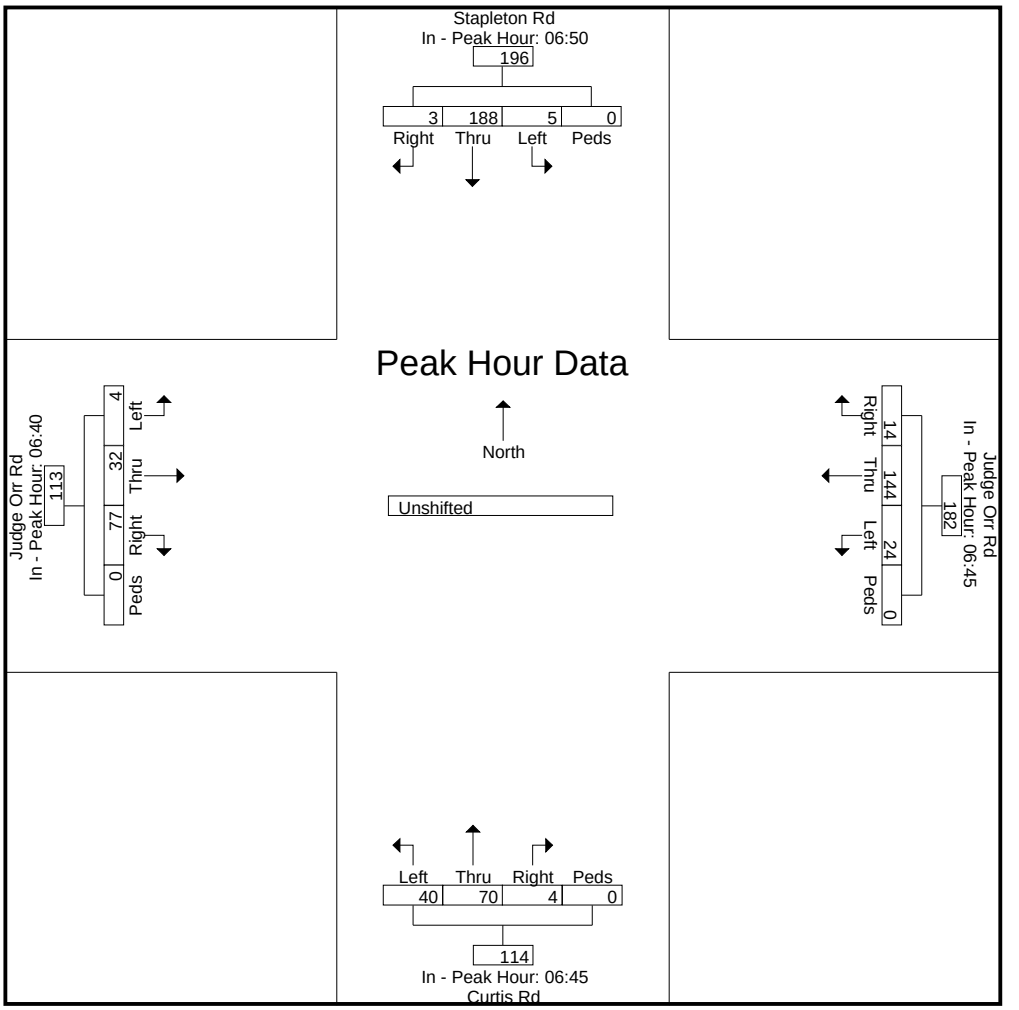


# LSC Transportation Consultants, Inc.

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

File Name : Curtis Rd - Judge Orr Rd AM 11-23
Site Code : S234040
Start Date : 11/7/2023
Page No : 3

| | Stapleton Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | Curtis Rd Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 06:30 to 08:25 - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 06:50 | | | | | 06:45 | | | | | 06:45 | | | | | 06:40 | | | | | |
| +0 mins. | 0 | 14 | 0 | 0 | 14 | 1 | 13 | 2 | 0 | 16 | **1** | 3 | 2 | 0 | 6 | 9 | 1 | **1** | 0 | 11 | |
| +5 mins. | 0 | 20 | 0 | 0 | 20 | 0 | 6 | 1 | 0 | 7 | 0 | **9** | 2 | 0 | 11 | **10** | 2 | 1 | 0 | **13** | |
| +10 mins. | 0 | 10 | 0 | 0 | 10 | 1 | 11 | 2 | 0 | 14 | 0 | 5 | 1 | 0 | 6 | 7 | 2 | 1 | 0 | 10 | |
| +15 mins. | 0 | **25** | 0 | 0 | **25** | 1 | 7 | 1 | 0 | 9 | 0 | 7 | 3 | 0 | 10 | 7 | **6** | 0 | 0 | 13 | |
| +20 mins. | 0 | 19 | 1 | 0 | 20 | 1 | 18 | 2 | 0 | 21 | 0 | 9 | 4 | 0 | **13** | 5 | 1 | 1 | 0 | 7 | |
| +25 mins. | 0 | 15 | **2** | 0 | 17 | 2 | 11 | 4 | 0 | 17 | 0 | 7 | 4 | 0 | 11 | 7 | 4 | 0 | 0 | 11 | |
| +30 mins. | 0 | 14 | 0 | 0 | 14 | 2 | 10 | **5** | 0 | 17 | 1 | 8 | 3 | 0 | 12 | 7 | 3 | 0 | 0 | 10 | |
| +35 mins. | 1 | 15 | 0 | 0 | 16 | 0 | 18 | 2 | 0 | 20 | 1 | 3 | **8** | 0 | 12 | 5 | 4 | 0 | 0 | 9 | |
| +40 mins. | 0 | 15 | 1 | 0 | 16 | **4** | 11 | 1 | 0 | 16 | 0 | 3 | 2 | 0 | 5 | 3 | 4 | 0 | 0 | 7 | |
| +45 mins. | 0 | 17 | 1 | 0 | 18 | 0 | **20** | 2 | 0 | **22** | 1 | 3 | 2 | 0 | 6 | 2 | 3 | 0 | 0 | 5 | |
| +50 mins. | 0 | 13 | 0 | 0 | 13 | 1 | 5 | 2 | 0 | 8 | 0 | 7 | 5 | 0 | 12 | 10 | 1 | 0 | 0 | 11 | |
| +55 mins. | **2** | 11 | 0 | 0 | 13 | 1 | 14 | 0 | 0 | 15 | 0 | 6 | 4 | 0 | 10 | 5 | 1 | 0 | 0 | 6 | |
| Total Volume | 3 | 188 | 5 | 0 | 196 | 14 | 144 | 24 | 0 | 182 | 4 | 70 | 40 | 0 | 114 | 77 | 32 | 4 | 0 | 113 | |
| % App. Total | 1.5 | 95.9 | 2.6 | 0 | | 7.7 | 79.1 | 13.2 | 0 | | 3.5 | 61.4 | 35.1 | 0 | | 68.1 | 28.3 | 3.5 | 0 | | |
| PHF | .125 | .627 | .208 | .000 | .653 | .292 | .600 | .400 | .000 | .689 | .333 | .648 | .417 | .000 | .731 | .642 | .444 | .333 | .000 | .724 | |



# 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 11-23
Site Code : S234040
Start Date : 11/2/2023
Page No : 1

**Groups Printed- Unshifted**

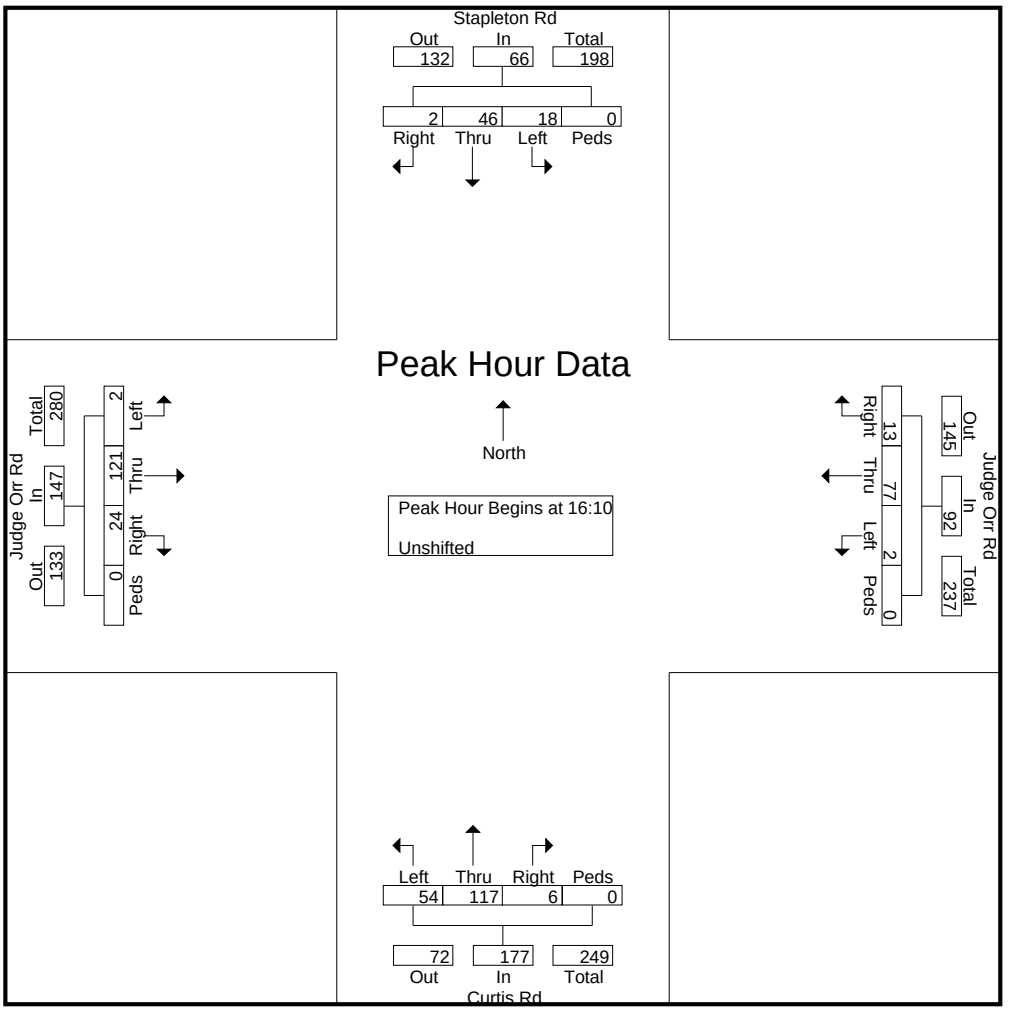
| | Stapleton Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | Curtis Rd Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 16:00 | 0 | 4 | 2 | 0 | 6 | 1 | 2 | 1 | 0 | 4 | 0 | 8 | 4 | 0 | 12 | 2 | 8 | 0 | 0 | 10 | 32 |
| 16:05 | 0 | 5 | 3 | 0 | 8 | 0 | 2 | 0 | 0 | 2 | 0 | 9 | 5 | 0 | 14 | 2 | 9 | 0 | 0 | 11 | 35 |
| 16:10 | 0 | 6 | 3 | 0 | 9 | 3 | 5 | 1 | 0 | 9 | 0 | 12 | 6 | 0 | 18 | 1 | 15 | 0 | 0 | 16 | 52 |
| 16:15 | 1 | 3 | 1 | 0 | 5 | 0 | 11 | 0 | 0 | 11 | 0 | 6 | 5 | 0 | 11 | 3 | 9 | 0 | 0 | 12 | 39 |
| 16:20 | 0 | 3 | 0 | 0 | 3 | 0 | 7 | 0 | 0 | 7 | 1 | 9 | 4 | 0 | 14 | 1 | 10 | 0 | 0 | 11 | 35 |
| 16:25 | 1 | 6 | 2 | 0 | 9 | 2 | 11 | 0 | 0 | 13 | 1 | 22 | 11 | 0 | 34 | 0 | 12 | 1 | 0 | 13 | 69 |
| 16:30 | 0 | 8 | 2 | 0 | 10 | 2 | 6 | 0 | 0 | 8 | 0 | 10 | 4 | 0 | 14 | 2 | 6 | 0 | 0 | 8 | 40 |
| 16:35 | 0 | 3 | 0 | 0 | 3 | 3 | 1 | 1 | 0 | 5 | 1 | 11 | 5 | 0 | 17 | 3 | 10 | 0 | 0 | 13 | 38 |
| 16:40 | 0 | 2 | 1 | 0 | 3 | 0 | 10 | 0 | 0 | 10 | 0 | 4 | 3 | 0 | 7 | 1 | 10 | 0 | 0 | 11 | 31 |
| 16:45 | 0 | 3 | 1 | 0 | 4 | 2 | 6 | 0 | 0 | 8 | 1 | 8 | 4 | 0 | 13 | 2 | 9 | 0 | 0 | 11 | 36 |
| 16:50 | 0 | 2 | 2 | 0 | 4 | 0 | 5 | 0 | 0 | 5 | 0 | 7 | 5 | 0 | 12 | 4 | 8 | 0 | 0 | 12 | 33 |
| 16:55 | 0 | 2 | 2 | 0 | 4 | 1 | 5 | 0 | 0 | 6 | 2 | 6 | 2 | 0 | 10 | 2 | 14 | 0 | 0 | 16 | 36 |
| Total | 2 | 47 | 19 | 0 | 68 | 14 | 71 | 3 | 0 | 88 | 6 | 112 | 58 | 0 | 176 | 23 | 120 | 1 | 0 | 144 | 476 |
| | | | | | | | | | | | | | | | | | | | | | |
| 17:00 | 0 | 2 | 1 | 0 | 3 | 0 | 5 | 0 | 0 | 5 | 0 | 10 | 4 | 0 | 14 | 3 | 5 | 1 | 0 | 9 | 31 |
| 17:05 | 0 | 6 | 3 | 0 | 9 | 0 | 5 | 0 | 0 | 5 | 0 | 12 | 1 | 0 | 13 | 2 | 13 | 0 | 0 | 15 | 42 |
| 17:10 | 1 | 2 | 3 | 0 | 6 | 0 | 2 | 0 | 0 | 2 | 0 | 11 | 3 | 0 | 14 | 1 | 9 | 0 | 0 | 10 | 32 |
| 17:15 | 0 | 5 | 4 | 0 | 9 | 0 | 7 | 0 | 0 | 7 | 2 | 6 | 6 | 0 | 14 | 6 | 15 | 0 | 0 | 21 | 51 |
| 17:20 | 0 | 5 | 4 | 0 | 9 | 1 | 5 | 0 | 0 | 6 | 0 | 10 | 2 | 0 | 12 | 1 | 9 | 0 | 0 | 10 | 37 |
| 17:25 | 0 | 1 | 1 | 0 | 2 | 0 | 5 | 0 | 0 | 5 | 0 | 14 | 8 | 0 | 22 | 2 | 13 | 1 | 0 | 16 | 45 |
| 17:30 | 0 | 2 | 2 | 0 | 4 | 1 | 5 | 1 | 0 | 7 | 0 | 7 | 5 | 0 | 12 | 2 | 12 | 0 | 0 | 14 | 37 |
| 17:35 | 0 | 2 | 1 | 0 | 3 | 0 | 3 | 0 | 0 | 3 | 1 | 11 | 3 | 0 | 15 | 1 | 9 | 0 | 0 | 10 | 31 |
| 17:40 | 0 | 4 | 2 | 0 | 6 | 0 | 3 | 0 | 0 | 3 | 0 | 3 | 1 | 0 | 4 | 1 | 10 | 0 | 0 | 11 | 24 |
| 17:45 | 1 | 6 | 4 | 0 | 11 | 0 | 12 | 0 | 0 | 12 | 0 | 9 | 0 | 0 | 9 | 2 | 11 | 0 | 0 | 13 | 45 |
| 17:50 | 0 | 3 | 0 | 0 | 3 | 2 | 5 | 0 | 0 | 7 | 1 | 12 | 2 | 0 | 15 | 1 | 10 | 0 | 0 | 11 | 36 |
| 17:55 | 1 | 4 | 2 | 0 | 7 | 2 | 6 | 0 | 0 | 8 | 0 | 6 | 5 | 0 | 11 | 1 | 7 | 0 | 0 | 8 | 34 |
| Total | 3 | 42 | 27 | 0 | 72 | 6 | 63 | 1 | 0 | 70 | 4 | 111 | 40 | 0 | 155 | 23 | 123 | 2 | 0 | 148 | 445 |
| | | | | | | | | | | | | | | | | | | | | | |
| Grand Total | 5 | 89 | 46 | 0 | 140 | 20 | 134 | 4 | 0 | 158 | 10 | 223 | 98 | 0 | 331 | 46 | 243 | 3 | 0 | 292 | 921 |
| Apprch % | 3.6 | 63.6 | 32.9 | 0 | | 12.7 | 84.8 | 2.5 | 0 | | 3 | 67.4 | 29.6 | 0 | | 15.8 | 83.2 | 1 | 0 | | |
| Total % | 0.5 | 9.7 | 5 | 0 | 15.2 | 2.2 | 14.5 | 0.4 | 0 | 17.2 | 1.1 | 24.2 | 10.6 | 0 | 35.9 | 5 | 26.4 | 0.3 | 0 | 31.7 | |

# 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 11-23
Site Code : S234040
Start Date : 11/2/2023


| | Stapleton Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | Curtis Rd Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 16:00 to 17:55 - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 16:10 | | | | | | | | | | | | | | | | | | | | | |
| 16:10 | 0 | 6 | **3** | 0 | 9 | **3** | 5 | **1** | 0 | 9 | 0 | 12 | 6 | 0 | 18 | 1 | **15** | 0 | 0 | **16** | 52 |
| 16:15 | **1** | 3 | 1 | 0 | 5 | 0 | **11** | 0 | 0 | 11 | 0 | 6 | 5 | 0 | 11 | 3 | 9 | 0 | 0 | 12 | 39 |
| 16:20 | 0 | 3 | 0 | 0 | 3 | 0 | 7 | 0 | 0 | 7 | 1 | 9 | 4 | 0 | 14 | 1 | 10 | 0 | 0 | 11 | 35 |
| 16:25 | 1 | 6 | 2 | 0 | 9 | 2 | 11 | 0 | 0 | **13** | 1 | **22** | **11** | 0 | **34** | 0 | 12 | **1** | 0 | 13 | **69** |
| 16:30 | 0 | **8** | 2 | 0 | **10** | 2 | 6 | 0 | 0 | 8 | 0 | 10 | 4 | 0 | 14 | 2 | 6 | 0 | 0 | 8 | 40 |
| 16:35 | 0 | 3 | 0 | 0 | 3 | 3 | 1 | 1 | 0 | 5 | 1 | 11 | 5 | 0 | 17 | 3 | 10 | 0 | 0 | 13 | 38 |
| 16:40 | 0 | 2 | 1 | 0 | 3 | 0 | 10 | 0 | 0 | 10 | 0 | 4 | 3 | 0 | 7 | 1 | 10 | 0 | 0 | 11 | 31 |
| 16:45 | 0 | 3 | 1 | 0 | 4 | 2 | 6 | 0 | 0 | 8 | 1 | 8 | 4 | 0 | 13 | 2 | 9 | 0 | 0 | 11 | 36 |
| 16:50 | 0 | 2 | 2 | 0 | 4 | 0 | 5 | 0 | 0 | 5 | 0 | 7 | 5 | 0 | 12 | **4** | 8 | 0 | 0 | 12 | 33 |
| 16:55 | 0 | 2 | 2 | 0 | 4 | 1 | 5 | 0 | 0 | 6 | **2** | 6 | 2 | 0 | 10 | 2 | 14 | 0 | 0 | 16 | 36 |
| 17:00 | 0 | 2 | 1 | 0 | 3 | 0 | 5 | 0 | 0 | 5 | 0 | 10 | 4 | 0 | 14 | 3 | 5 | 1 | 0 | 9 | 31 |
| 17:05 | 0 | 6 | 3 | 0 | 9 | 0 | 5 | 0 | 0 | 5 | 0 | 12 | 1 | 0 | 13 | 2 | 13 | 0 | 0 | 15 | 42 |
| Total Volume | 2 | 46 | 18 | 0 | 66 | 13 | 77 | 2 | 0 | 92 | 6 | 117 | 54 | 0 | 177 | 24 | 121 | 2 | 0 | 147 | 482 |
| % App. Total | 3 | 69.7 | 27.3 | 0 | | 14.1 | 83.7 | 2.2 | 0 | | 3.4 | 66.1 | 30.5 | 0 | | 16.3 | 82.3 | 1.4 | 0 | | |
| PHF | .167 | .479 | .500 | .000 | .550 | .361 | .583 | .167 | .000 | .590 | .250 | .443 | .409 | .000 | .434 | .500 | .672 | .167 | .000 | .766 | .582 |

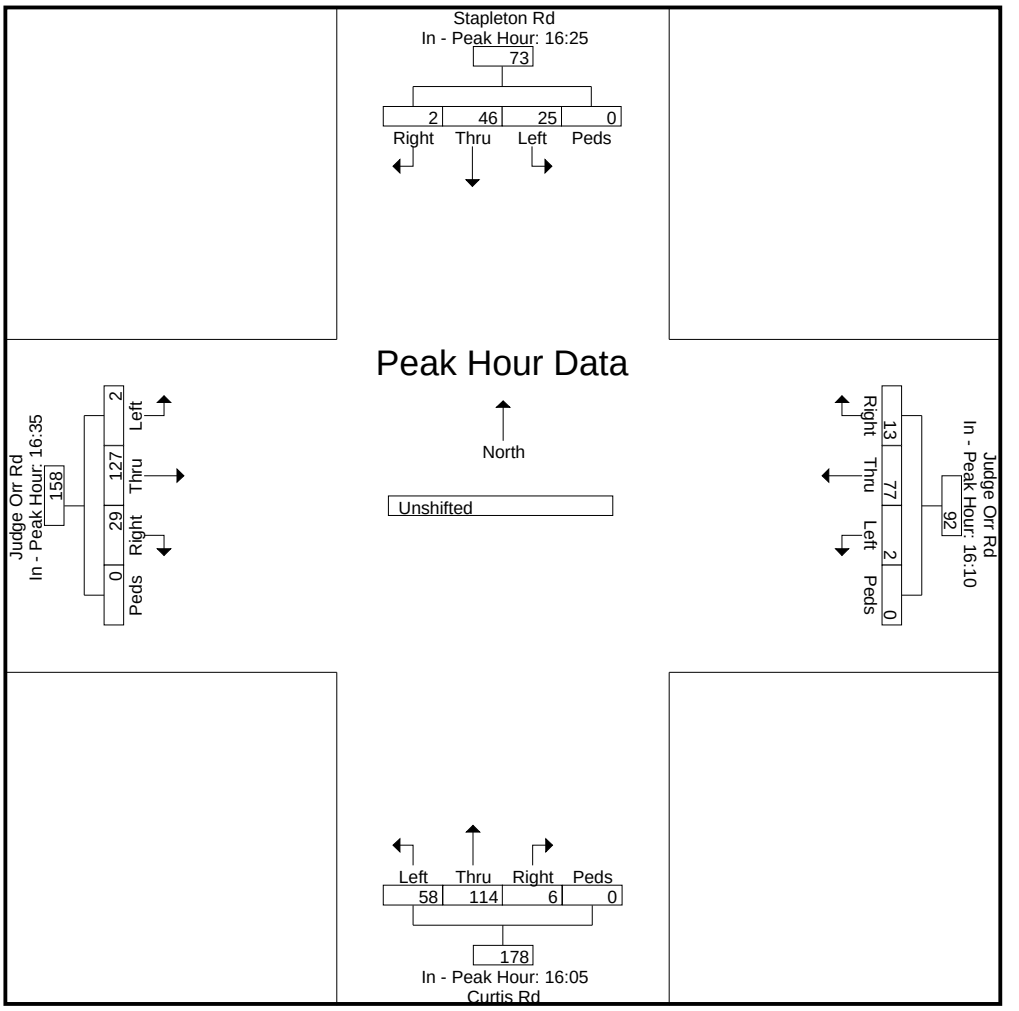


# LSC Transportation Consultants, Inc.

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

File Name : Curtis Rd - Judge Orr Rd PM 11-23
Site Code : S234040
Start Date : 11/2/2023


| | Stapleton Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | Curtis Rd Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 16:00 to 17:55 - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 16:25 | | | | | 16:10 | | | | | 16:05 | | | | | 16:35 | | | | | |
| +0 mins. | **1** | 6 | 2 | 0 | 9 | **3** | 5 | **1** | 0 | 9 | 0 | 9 | 5 | 0 | 14 | 3 | 10 | 0 | 0 | 13 | |
| +5 mins. | 0 | **8** | 2 | 0 | **10** | 0 | **11** | 0 | 0 | 11 | 0 | 12 | 6 | 0 | 18 | 1 | 10 | 0 | 0 | 11 | |
| +10 mins. | 0 | 3 | 0 | 0 | 3 | 0 | 7 | 0 | 0 | 7 | 0 | 6 | 5 | 0 | 11 | 2 | 9 | 0 | 0 | 11 | |
| +15 mins. | 0 | 2 | 1 | 0 | 3 | 2 | 11 | 0 | 0 | **13** | 1 | 9 | 4 | 0 | 14 | 4 | 8 | 0 | 0 | 12 | |
| +20 mins. | 0 | 3 | 1 | 0 | 4 | 2 | 6 | 0 | 0 | 8 | 1 | **22** | **11** | 0 | **34** | 2 | 14 | 0 | 0 | 16 | |
| +25 mins. | 0 | 2 | 2 | 0 | 4 | 3 | 1 | 1 | 0 | 5 | 0 | 10 | 4 | 0 | 14 | 3 | 5 | **1** | 0 | 9 | |
| +30 mins. | 0 | 2 | 2 | 0 | 4 | 0 | 10 | 0 | 0 | 10 | 1 | 11 | 5 | 0 | 17 | 2 | 13 | 0 | 0 | 15 | |
| +35 mins. | 0 | 2 | 1 | 0 | 3 | 2 | 6 | 0 | 0 | 8 | 0 | 4 | 3 | 0 | 7 | 1 | 9 | 0 | 0 | 10 | |
| +40 mins. | 0 | 6 | 3 | 0 | 9 | 0 | 5 | 0 | 0 | 5 | 1 | 8 | 4 | 0 | 13 | **6** | **15** | 0 | 0 | **21** | |
| +45 mins. | 1 | 2 | 3 | 0 | 6 | 1 | 5 | 0 | 0 | 6 | 0 | 7 | 5 | 0 | 12 | 1 | 9 | 0 | 0 | 10 | |
| +50 mins. | 0 | 5 | **4** | 0 | 9 | 0 | 5 | 0 | 0 | 5 | **2** | 6 | 2 | 0 | 10 | 2 | 13 | 1 | 0 | 16 | |
| +55 mins. | 0 | 5 | 4 | 0 | 9 | 0 | 5 | 0 | 0 | 5 | 0 | 10 | 4 | 0 | 14 | 2 | 12 | 0 | 0 | 14 | |
| Total Volume | 2 | 46 | 25 | 0 | 73 | 13 | 77 | 2 | 0 | 92 | 6 | 114 | 58 | 0 | 178 | 29 | 127 | 2 | 0 | 158 | |
| % App. Total | 2.7 | 63 | 34.2 | 0 | | 14.1 | 83.7 | 2.2 | 0 | | 3.4 | 64 | 32.6 | 0 | | 18.4 | 80.4 | 1.3 | 0 | | |
| PHF | .167 | .479 | .521 | .000 | .608 | .361 | .583 | .167 | .000 | .590 | .250 | .432 | .439 | .000 | .436 | .403 | .706 | .167 | .000 | .627 | |



# LSC Transportation Consultants, Inc.

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 : 1

**Groups Printed- Unshifted**

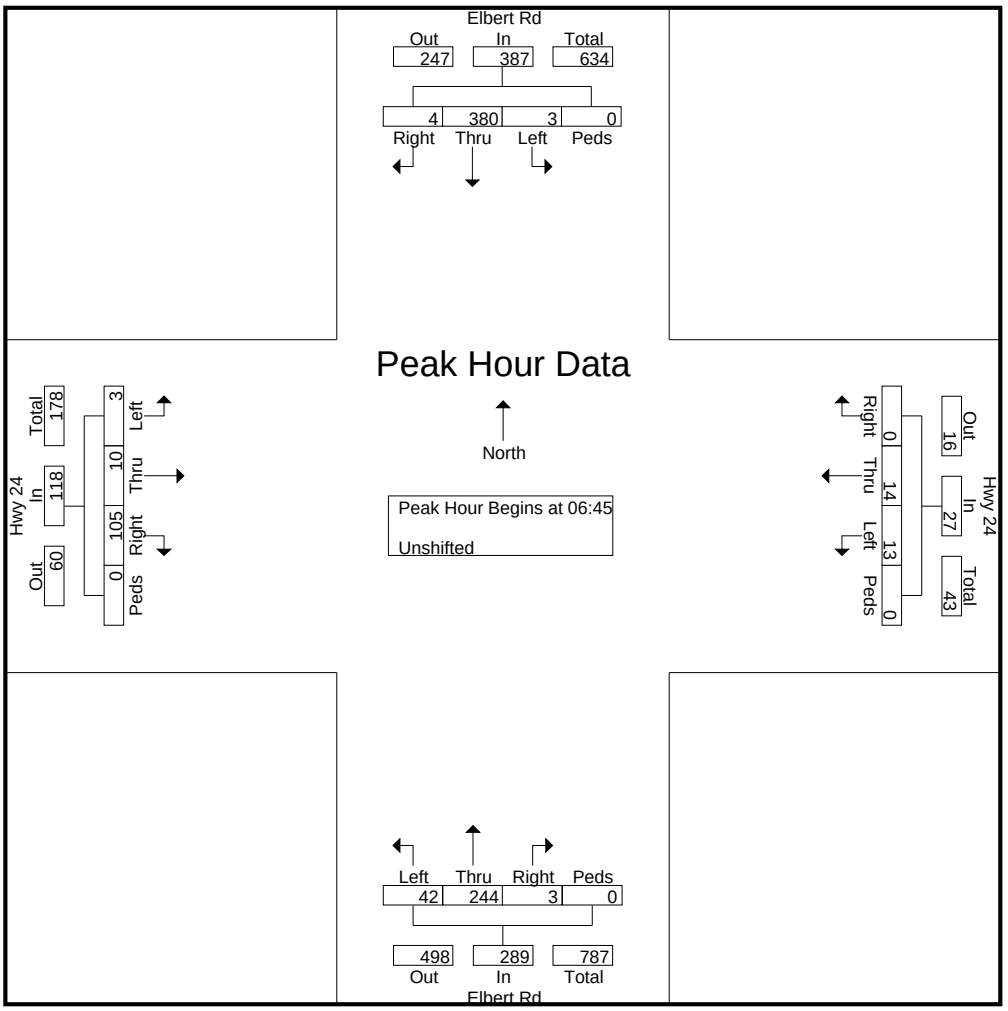
| | Elbert Rd Southbound | | | | | Hwy 24 Westbound | | | | | Elbert Rd Northbound | | | | | Hwy 24 Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App.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

# LSC Transportation Consultants, Inc.

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 : 2

| | Elbert Rd Southbound | | | | | Hwy 24 Westbound | | | | | Elbert Rd Northbound | | | | | Hwy 24 Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 06:30 to 08:25 - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 06:45 | | | | | | | | | | | | | | | | | | | | | |
| 06:45 | 0 | 25 | 0 | 0 | 25 | 0 | 2 | 1 | 0 | 3 | **1** | 11 | 4 | 0 | 16 | 6 | **2** | 0 | 0 | 8 | 52 |
| 06:50 | 0 | 21 | 0 | 0 | 21 | 0 | 0 | 3 | 0 | 3 | 1 | 23 | 1 | 0 | 25 | 12 | 2 | 0 | 0 | 14 | 63 |
| 06:55 | **2** | 26 | 0 | 0 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 19 | 7 | 1 | **1** | 0 | 9 | 56 |
| 07:00 | 1 | 31 | 0 | 0 | 32 | 0 | 0 | **4** | 0 | **4** | 1 | 23 | 6 | 0 | 30 | 12 | 1 | 1 | 0 | 14 | 80 |
| 07:05 | 0 | 31 | **1** | 0 | 32 | 0 | 1 | 1 | 0 | 2 | 0 | 25 | 4 | 0 | 29 | 6 | 1 | 0 | 0 | 7 | 70 |
| 07:10 | 0 | **40** | 0 | 0 | **40** | 0 | **3** | 0 | 0 | 3 | 0 | 25 | 2 | 0 | 27 | 5 | 0 | 0 | 0 | 5 | 75 |
| 07:15 | 0 | 32 | 0 | 0 | 32 | 0 | 2 | 1 | 0 | 3 | 0 | **28** | 4 | 0 | **32** | 16 | 0 | 1 | 0 | 17 | **84** |
| 07:20 | 1 | 28 | 0 | 0 | 29 | 0 | 2 | 0 | 0 | 2 | 0 | 26 | 6 | 0 | 32 | 8 | 0 | 0 | 0 | 8 | 71 |
| 07:25 | 0 | 40 | 0 | 0 | 40 | 0 | 2 | 0 | 0 | 2 | 0 | 19 | **9** | 0 | 28 | 7 | 0 | 0 | 0 | 7 | 77 |
| 07:30 | 0 | 35 | 1 | 0 | 36 | 0 | 1 | 1 | 0 | 2 | 0 | 19 | 5 | 0 | 24 | 4 | 2 | 0 | 0 | 6 | 68 |
| 07:35 | 0 | 36 | 1 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 1 | 0 | 16 | 3 | 1 | 0 | 0 | 4 | 57 |
| 07:40 | 0 | 35 | 0 | 0 | 35 | 0 | 1 | 2 | 0 | 3 | 0 | 11 | 0 | 0 | 11 | **19** | 0 | 0 | 0 | **19** | 68 |
| Total Volume | 4 | 380 | 3 | 0 | 387 | 0 | 14 | 13 | 0 | 27 | 3 | 244 | 42 | 0 | 289 | 105 | 10 | 3 | 0 | 118 | 821 |
| % App. Total | 1 | 98.2 | 0.8 | 0 | | 0 | 51.9 | 48.1 | 0 | | 1 | 84.4 | 14.5 | 0 | | 89 | 8.5 | 2.5 | 0 | | |
| PHF | .167 | .792 | .250 | .000 | .806 | .000 | .389 | .271 | .000 | .563 | .250 | .726 | .389 | .000 | .753 | .461 | .417 | .250 | .000 | .518 | .814 |

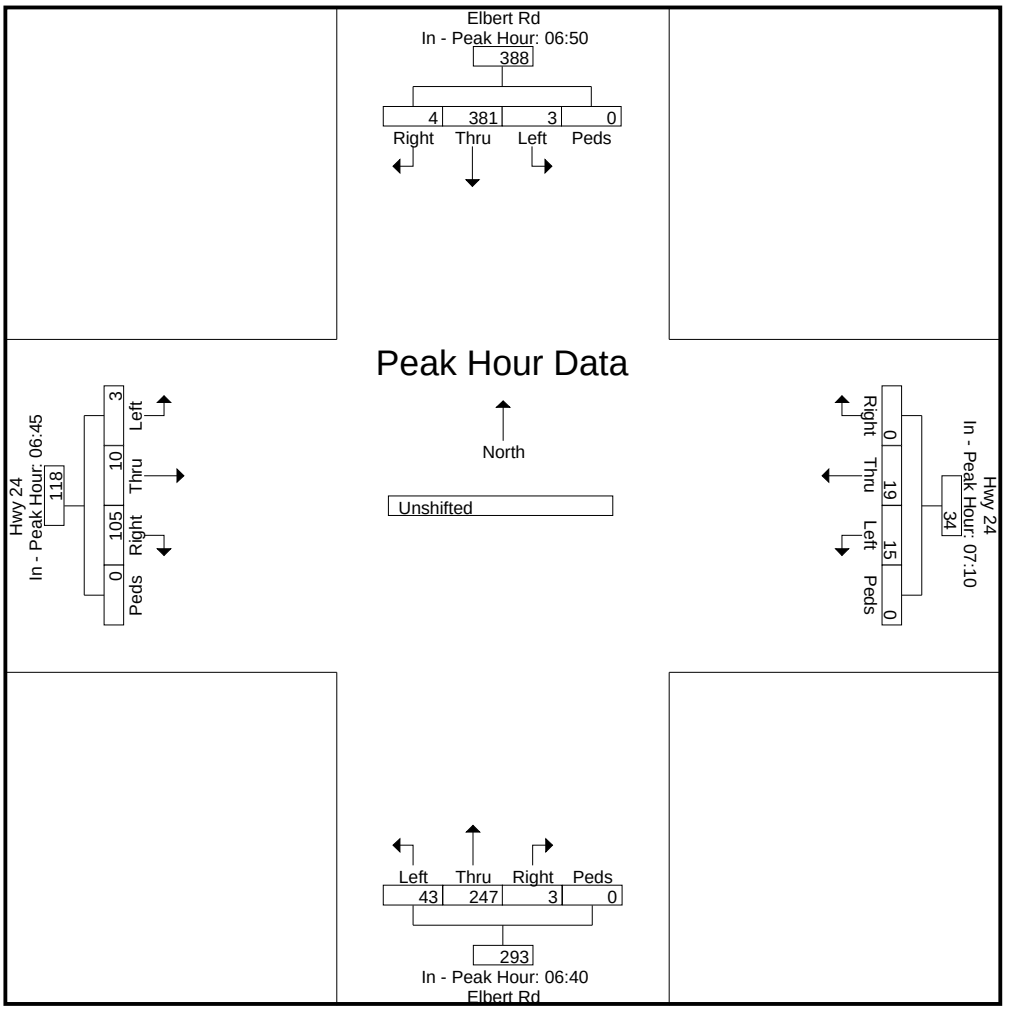


# LSC Transportation Consultants, Inc.

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

| | Elbert Rd Southbound | | | | | Hwy 24 Westbound | | | | | Elbert Rd Northbound | | | | | Hwy 24 Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 06:30 to 08:25 - Peak 1 of 1 | | | | | | | | | | | | | | | | | | | | | |
| Peak Hour for Each Approach Begins at: | | | | | | | | | | | | | | | | | | | | | |
| | 06:50 | | | | | 07:10 | | | | | 06:40 | | | | | 06:45 | | | | | |
| +0 mins. | 0 | 21 | 0 | 0 | 21 | 0 | **3** | 0 | 0 | 3 | 0 | 14 | 1 | 0 | 15 | 6 | **2** | 0 | 0 | 8 | |
| +5 mins. | **2** | 26 | 0 | 0 | 28 | 0 | 2 | 1 | 0 | 3 | **1** | 11 | 4 | 0 | 16 | 12 | 2 | 0 | 0 | 14 | |
| +10 mins. | 1 | 31 | 0 | 0 | 32 | 0 | 2 | 0 | 0 | 2 | 1 | 23 | 1 | 0 | 25 | 7 | 1 | **1** | 0 | 9 | |
| +15 mins. | 0 | 31 | **1** | 0 | 32 | 0 | 2 | 0 | 0 | 2 | 0 | 19 | 0 | 0 | 19 | 12 | 1 | 1 | 0 | 14 | |
| +20 mins. | 0 | **40** | 0 | 0 | **40** | 0 | 1 | 1 | 0 | 2 | 1 | 23 | 6 | 0 | 30 | 6 | 1 | 0 | 0 | 7 | |
| +25 mins. | 0 | 32 | 0 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 4 | 0 | 29 | 5 | 0 | 0 | 0 | 5 | |
| +30 mins. | 1 | 28 | 0 | 0 | 29 | 0 | 1 | 2 | 0 | 3 | 0 | 25 | 2 | 0 | 27 | 16 | 0 | 1 | 0 | 17 | |
| +35 mins. | 0 | 40 | 0 | 0 | 40 | 0 | 1 | 1 | 0 | 2 | 0 | **28** | 4 | 0 | **32** | 8 | 0 | 0 | 0 | 8 | |
| +40 mins. | 0 | 35 | 1 | 0 | 36 | 0 | 2 | 2 | 0 | 4 | 0 | 26 | 6 | 0 | 32 | 7 | 0 | 0 | 0 | 7 | |
| +45 mins. | 0 | 36 | 1 | 0 | 37 | 0 | 1 | **4** | 0 | **5** | 0 | 19 | **9** | 0 | 28 | 4 | 2 | 0 | 0 | 6 | |
| +50 mins. | 0 | 35 | 0 | 0 | 35 | 0 | 2 | 1 | 0 | 3 | 0 | 19 | 5 | 0 | 24 | 3 | 1 | 0 | 0 | 4 | |
| +55 mins. | 0 | 26 | 0 | 0 | 26 | 0 | 2 | 3 | 0 | 5 | 0 | 15 | 1 | 0 | 16 | **19** | 0 | 0 | 0 | **19** | |
| Total Volume | 4 | 381 | 3 | 0 | 388 | 0 | 19 | 15 | 0 | 34 | 3 | 247 | 43 | 0 | 293 | 105 | 10 | 3 | 0 | 118 | |
| % App. Total | 1 | 98.2 | 0.8 | 0 | | 0 | 55.9 | 44.1 | 0 | | 1 | 84.3 | 14.7 | 0 | | 89 | 8.5 | 2.5 | 0 | | |
| PHF | .167 | .794 | .250 | .000 | .808 | .000 | .528 | .313 | .000 | .567 | .250 | .735 | .398 | .000 | .763 | .461 | .417 | .250 | .000 | .518 | |



# LSC Transportation Consultants, Inc.

2504 E. Pikes Peak Ave, Suite 304
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**

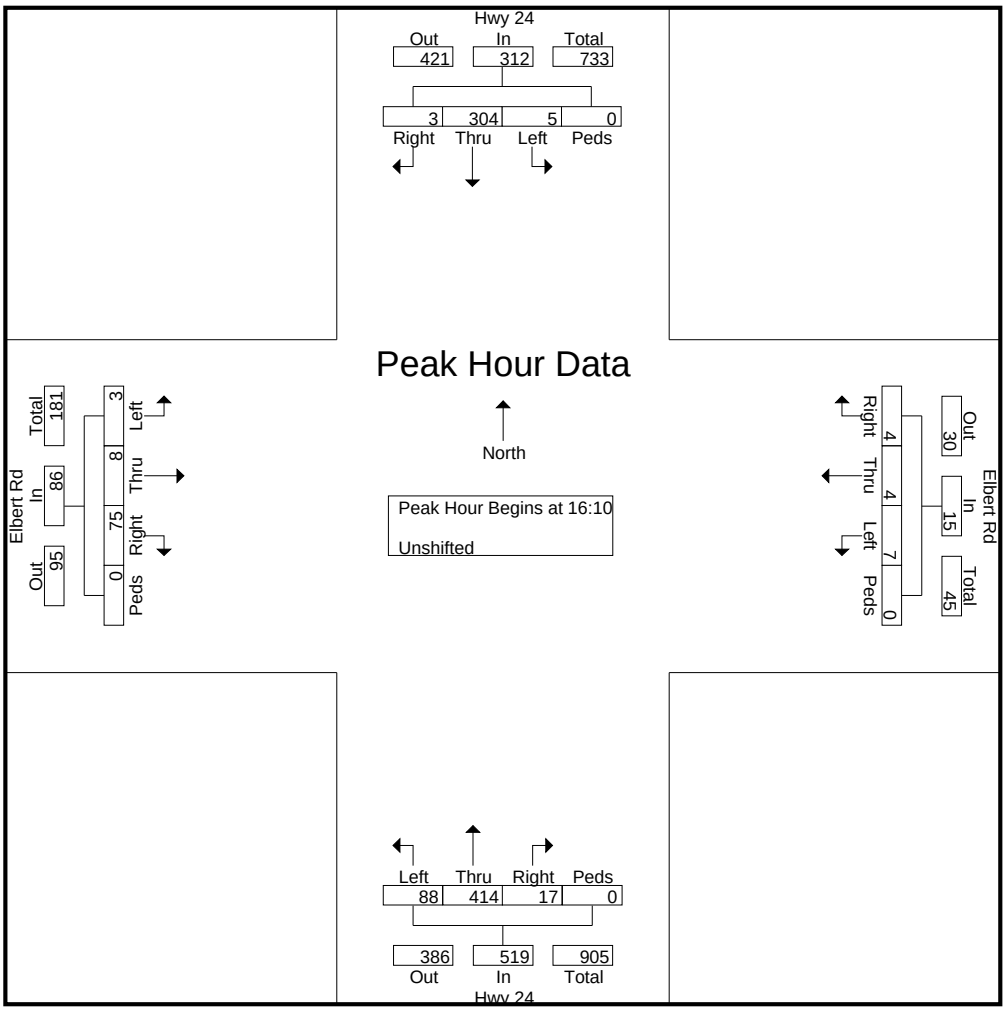
| | Hwy 24 Southbound | | | | | Elbert Rd Westbound | | | | | Hwy 24 Northbound | | | | | Elbert Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App.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

# LSC Transportation Consultants, Inc.

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


File Name : elbert rd - hwy 24 PM
Site Code : S224640
Start Date : 1/17/2023
Page No : 2

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

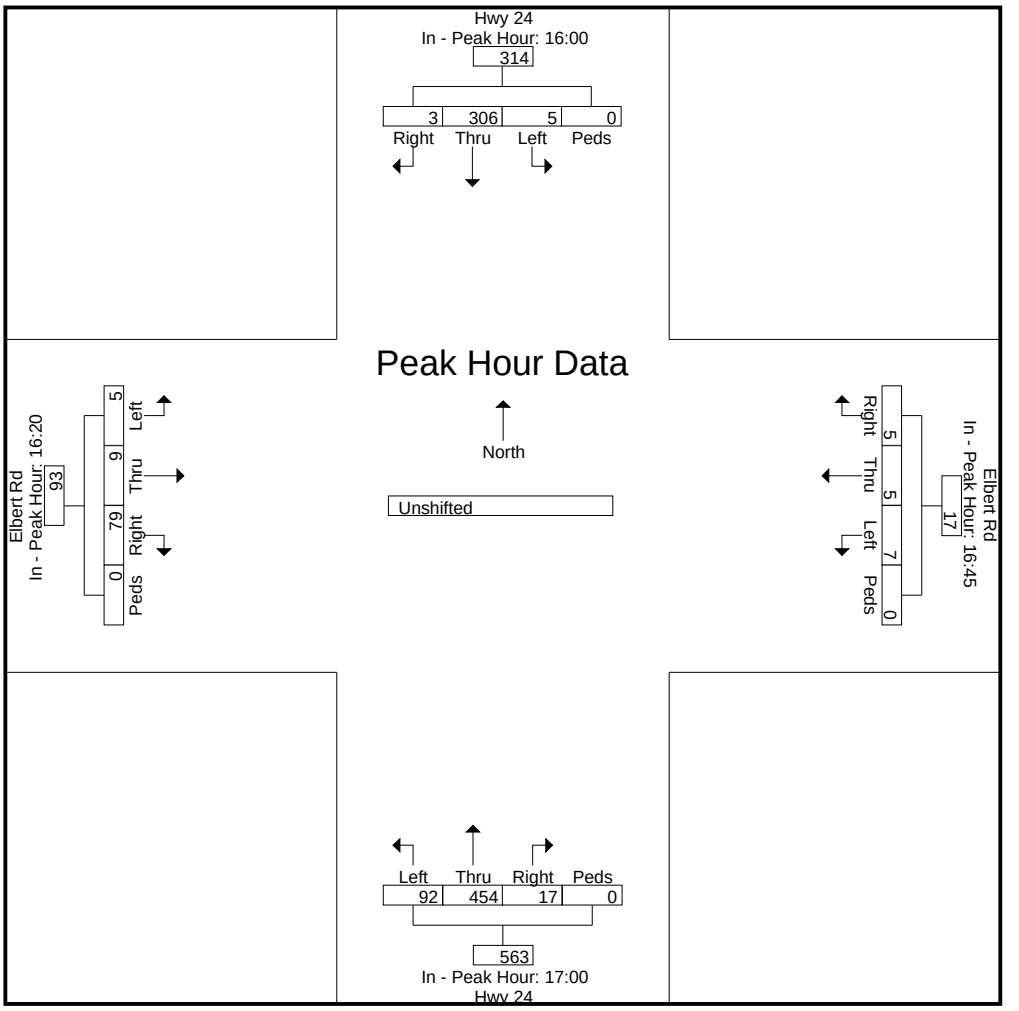


# LSC Transportation Consultants, Inc.

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

File Name : elbert rd - hwy 24 PM
Site Code : S224640
Start Date : 1/17/2023
Page No : 3

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



# 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 1-23
Site Code : S224640
Start Date : 1/11/2023
Page No : 1

**Groups Printed- Unshifted**

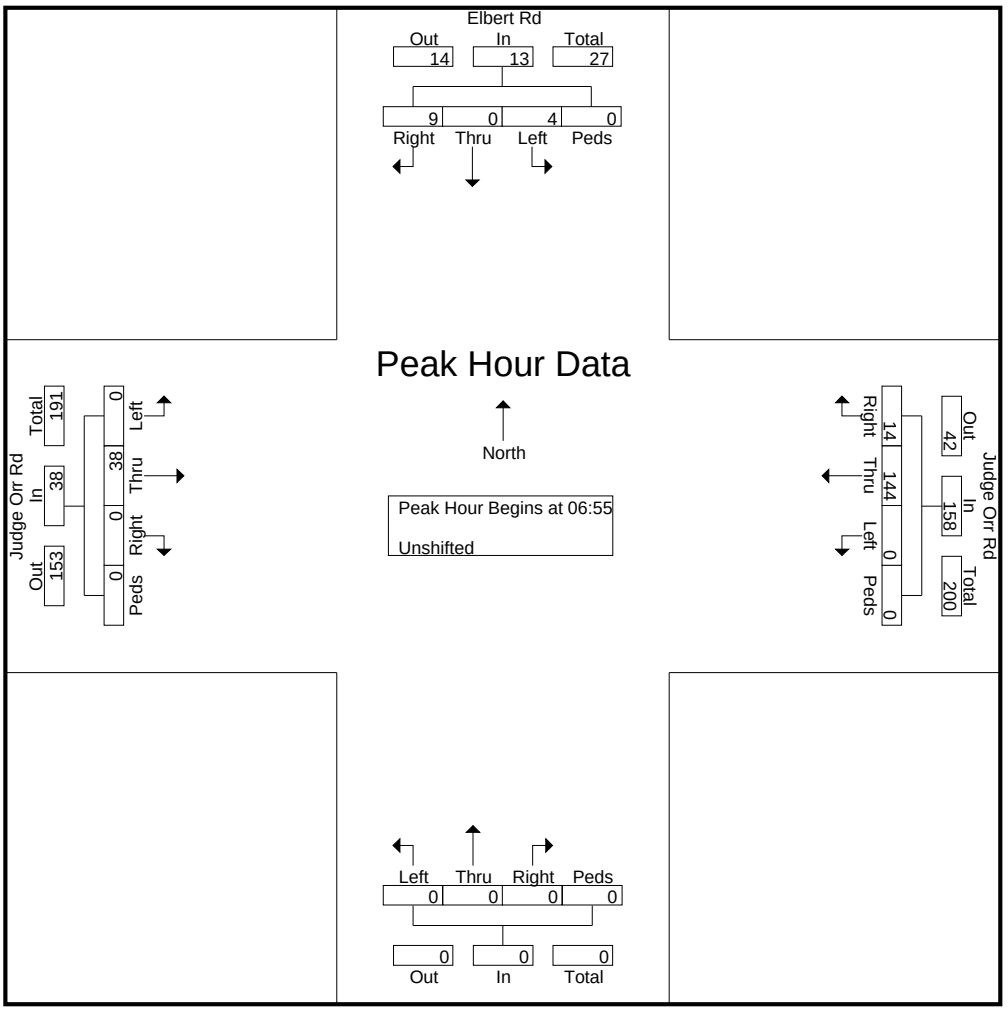
| | Elbert Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 06:30 | 1 | 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.

2504 E. Pikes Peak Ave, Suite 304
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


| | Elbert Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 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 |

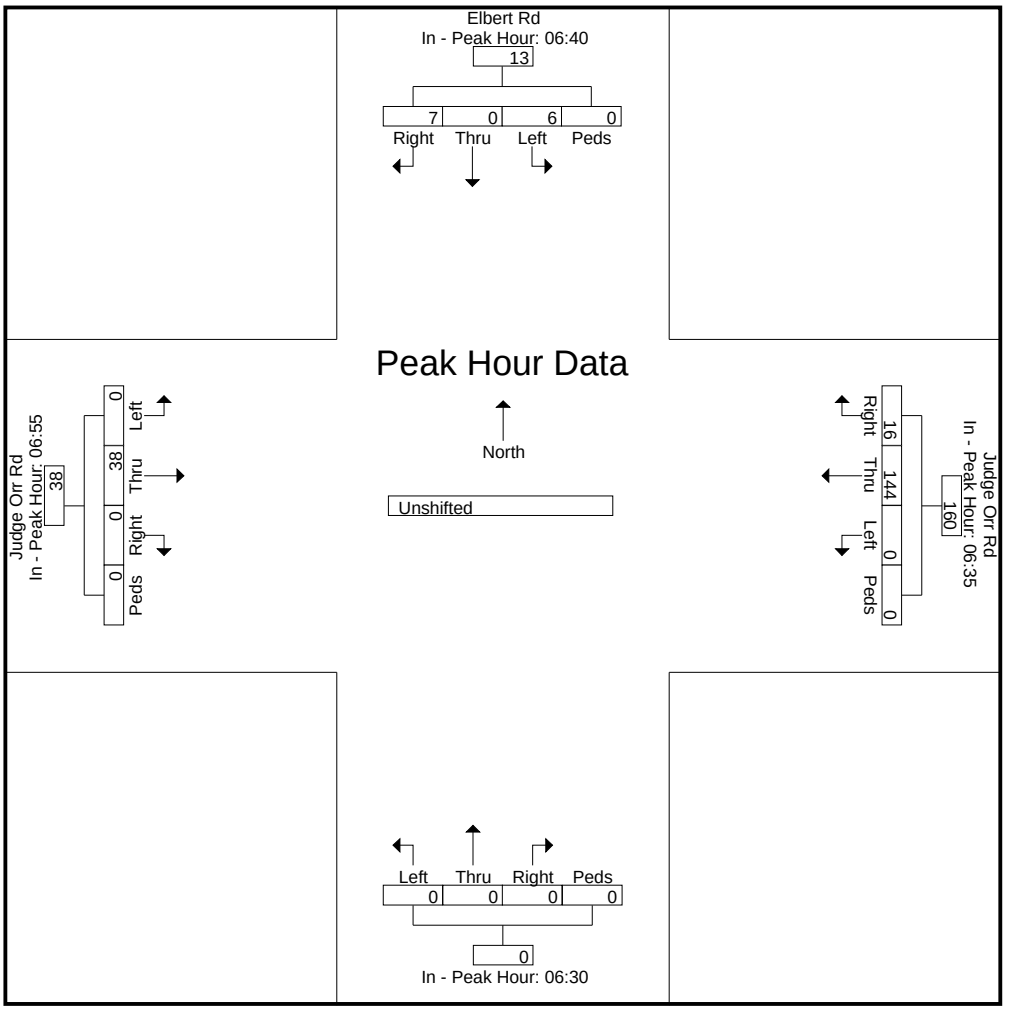


# LSC Transportation Consultants, Inc.

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


File Name : Elbert Rd - Judge Orr Rd AM 1-23
Site Code : S224640
Start Date : 1/11/2023


| | Elbert Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 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 | |



# 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 : 1

**Groups Printed- Unshifted**

| | Elbert Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 06:30 | 1 | 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 |
| | | | | | | | | | | | | | | | | | | | | | |
| *** BREAK *** | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| 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


**Groups Printed- Unshifted**

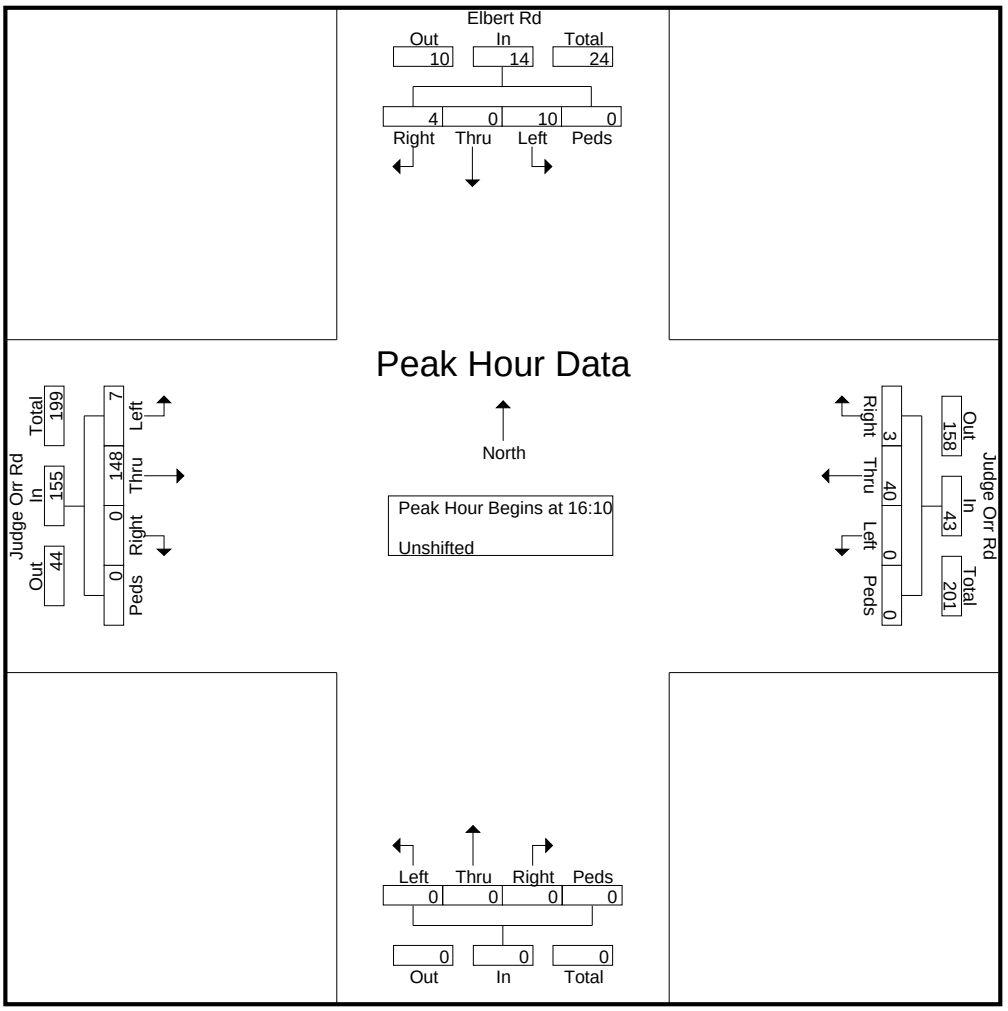
| | Elbert Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 16:55 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 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 | |

# 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 : 3

| | Elbert Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 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 |

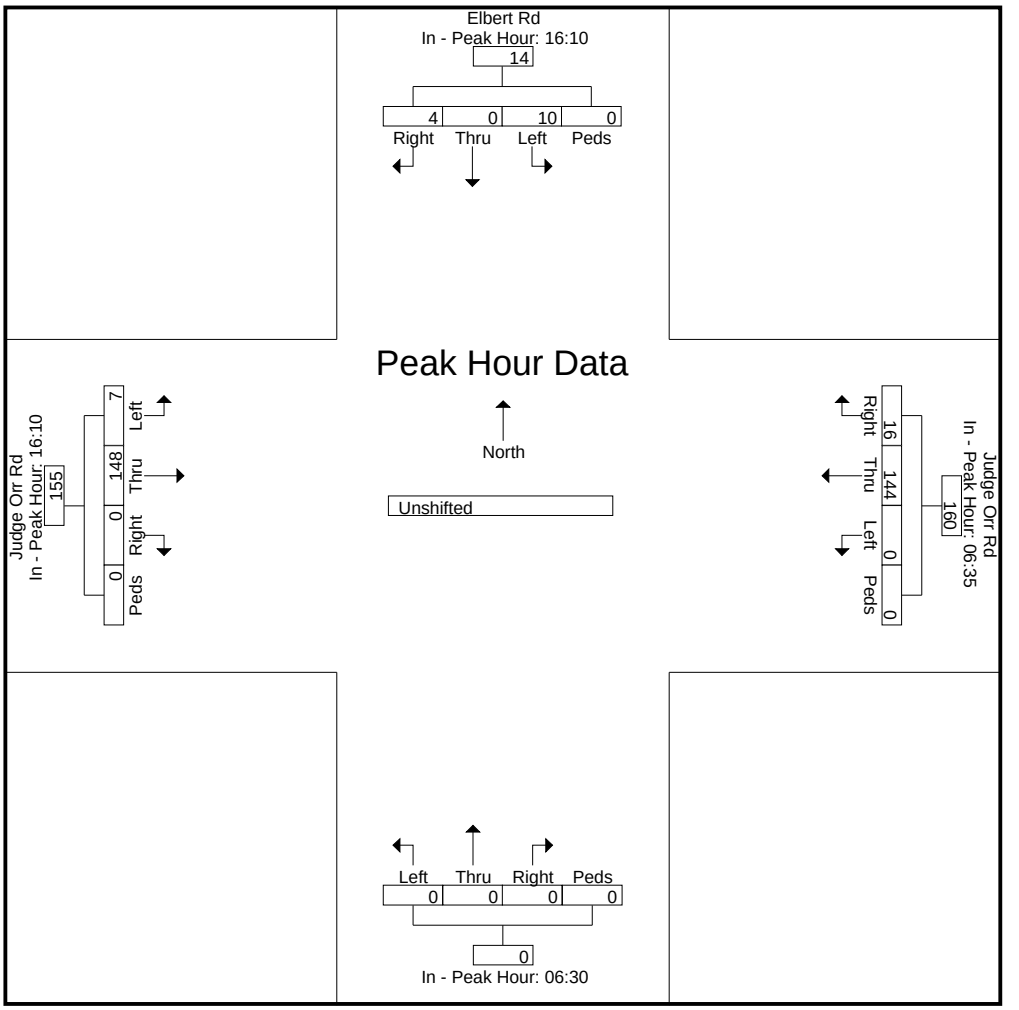


# LSC Transportation Consultants, Inc.

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 : 4

| | Elbert Rd Southbound | | | | | Judge Orr Rd Westbound | | | | | Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 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 | |



# LSC Transportation Consultants, Inc.

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

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

**Groups Printed- Unshifted**

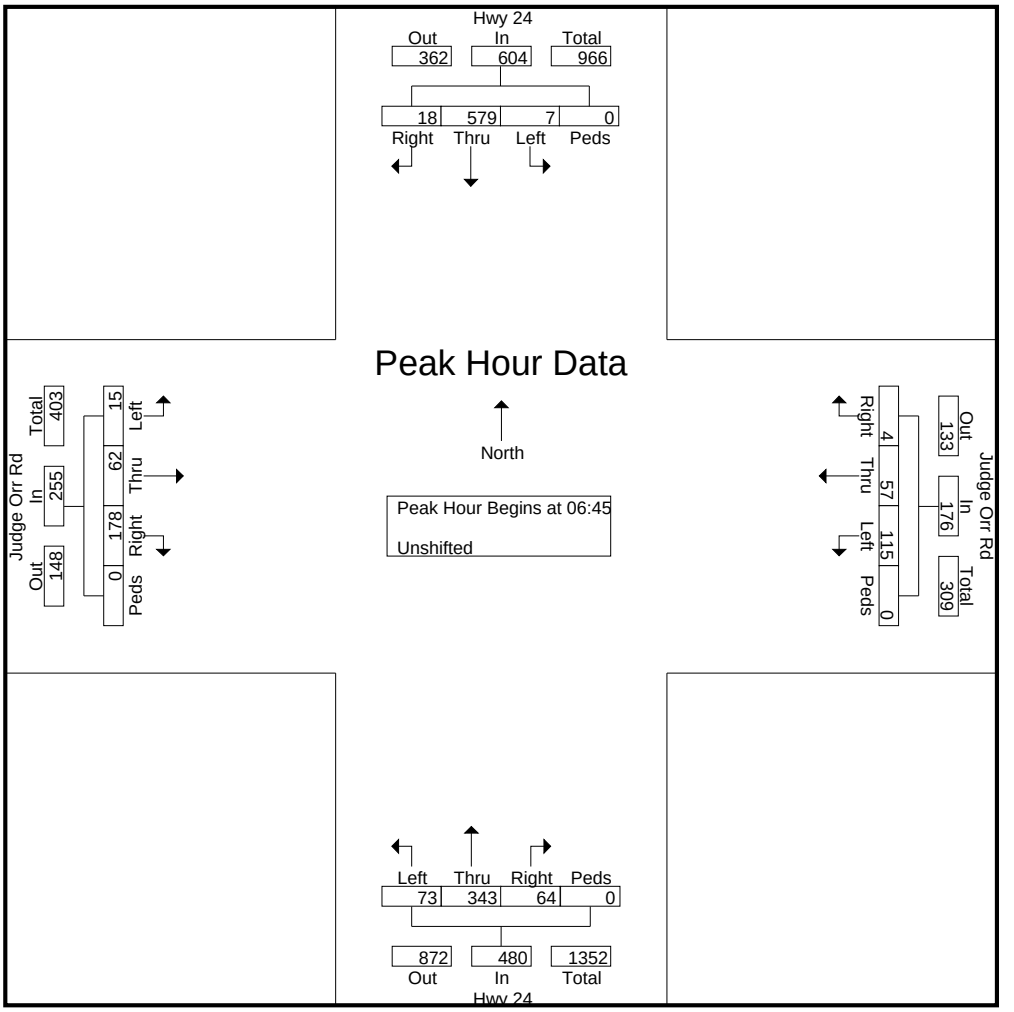
| | Hwy 24 Southbound | | | | | Judge Orr Rd Westbound | | | | | Hwy 24 Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 06:30 | 1 | 130 | 0 | 0 | 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 | |

# LSC Transportation Consultants, Inc.

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


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

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

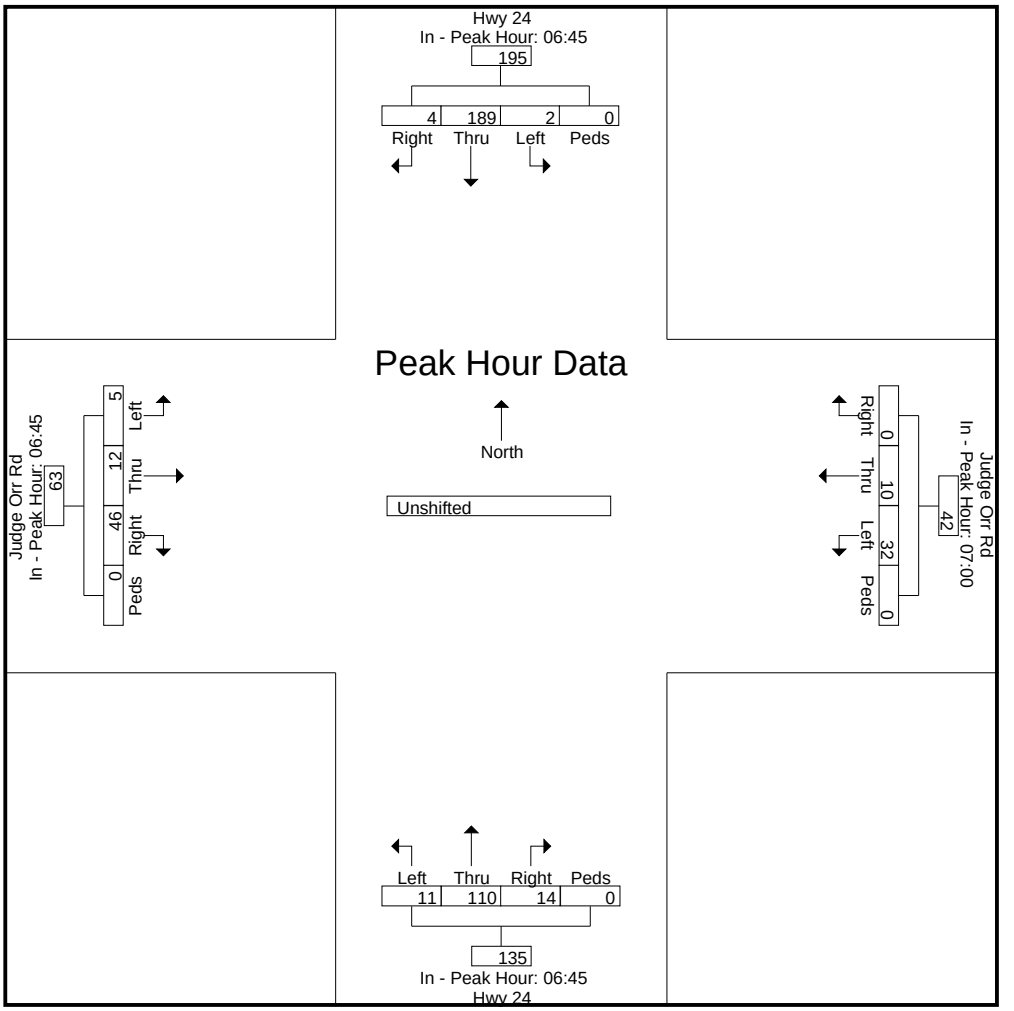


# LSC Transportation Consultants, Inc.

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


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

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

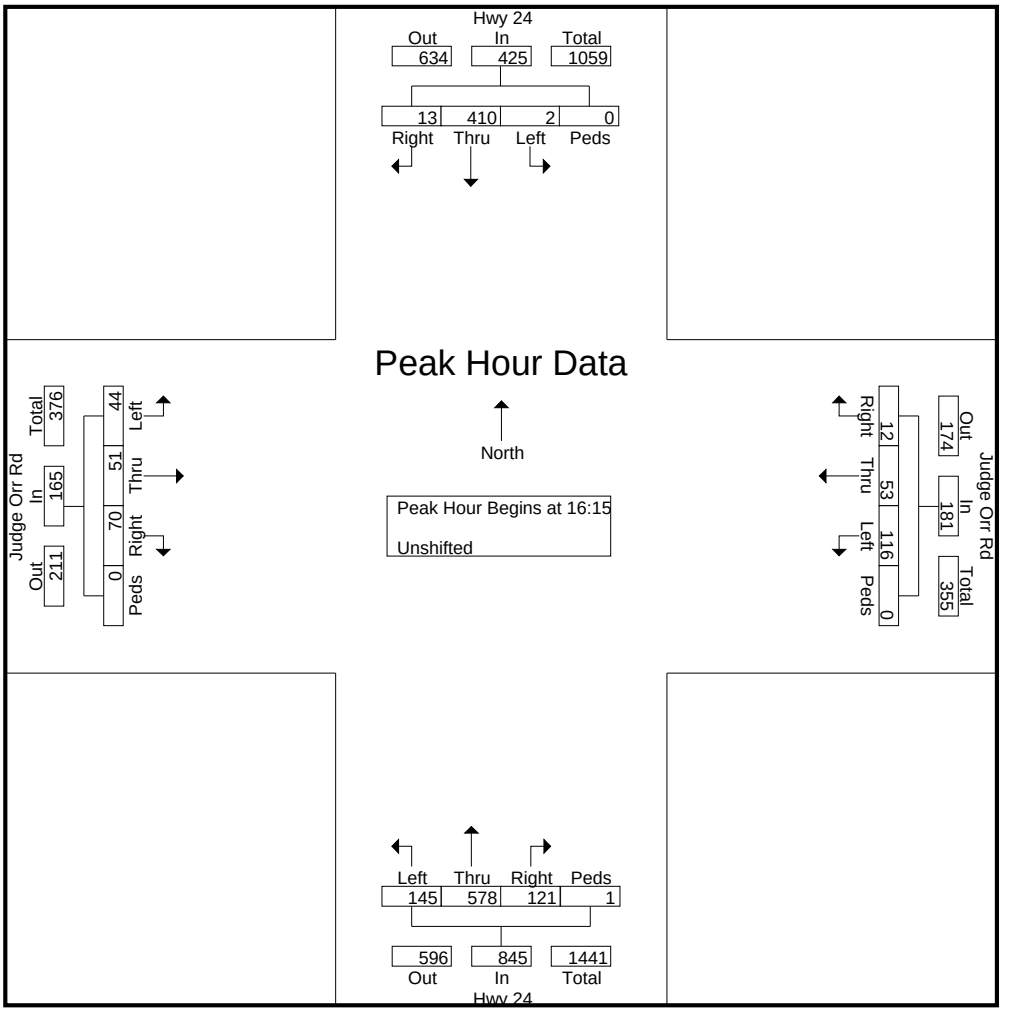
| | Hwy 24 Southbound | | | | | Judge Orr Rd Westbound | | | | | Hwy 24 Northbound | | | | | Judge Orr Rd Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 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
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 : 2

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

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

| | Hwy 24 Southbound | | | | | Stapleton Dr Westbound | | | | | Hwy 24 Northbound | | | | | Stapleton Dr Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 06:30 | 1 | 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**

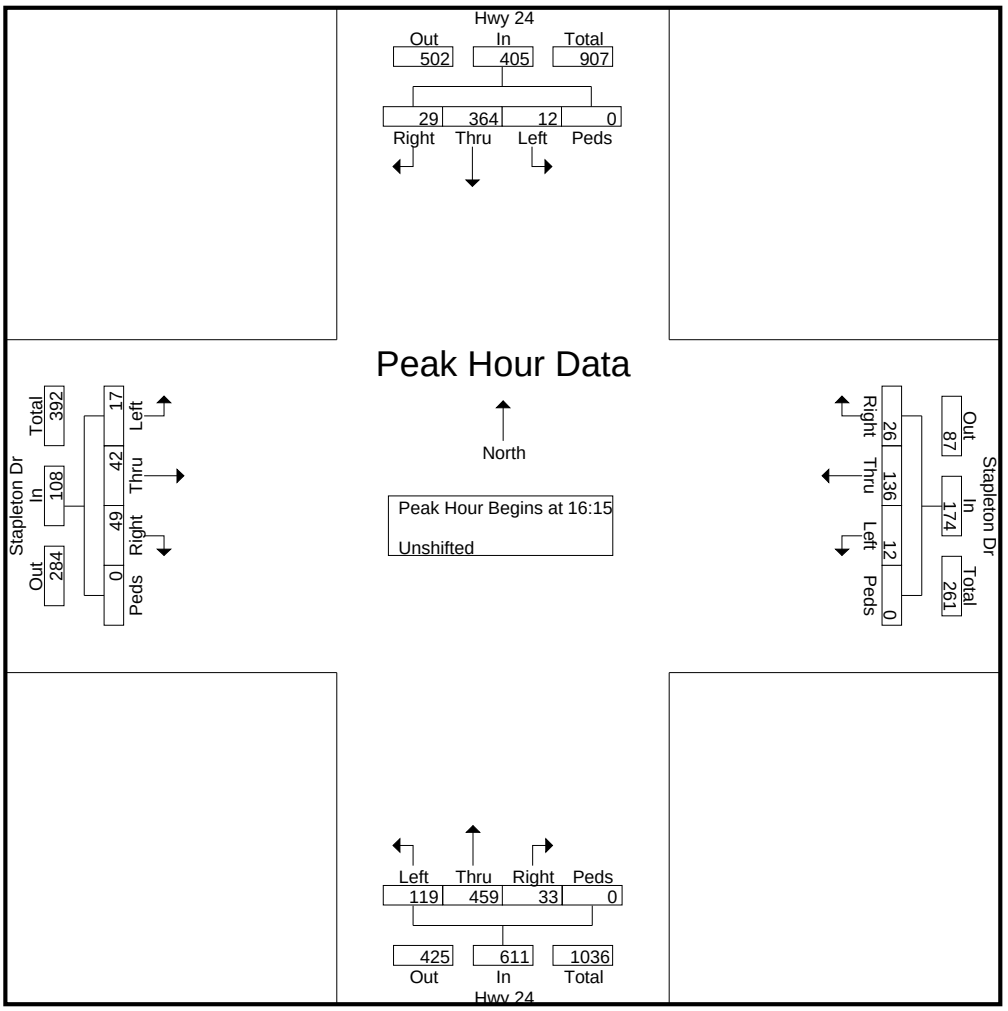
| | Hwy 24 Southbound | | | | | Stapleton Dr Westbound | | | | | Hwy 24 Northbound | | | | | Stapleton Dr Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| 16:55 | 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 | |

# 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 : 3

| | Hwy 24 Southbound | | | | | Stapleton Dr Westbound | | | | | Hwy 24 Northbound | | | | | Stapleton Dr Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 06:30 to 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 |

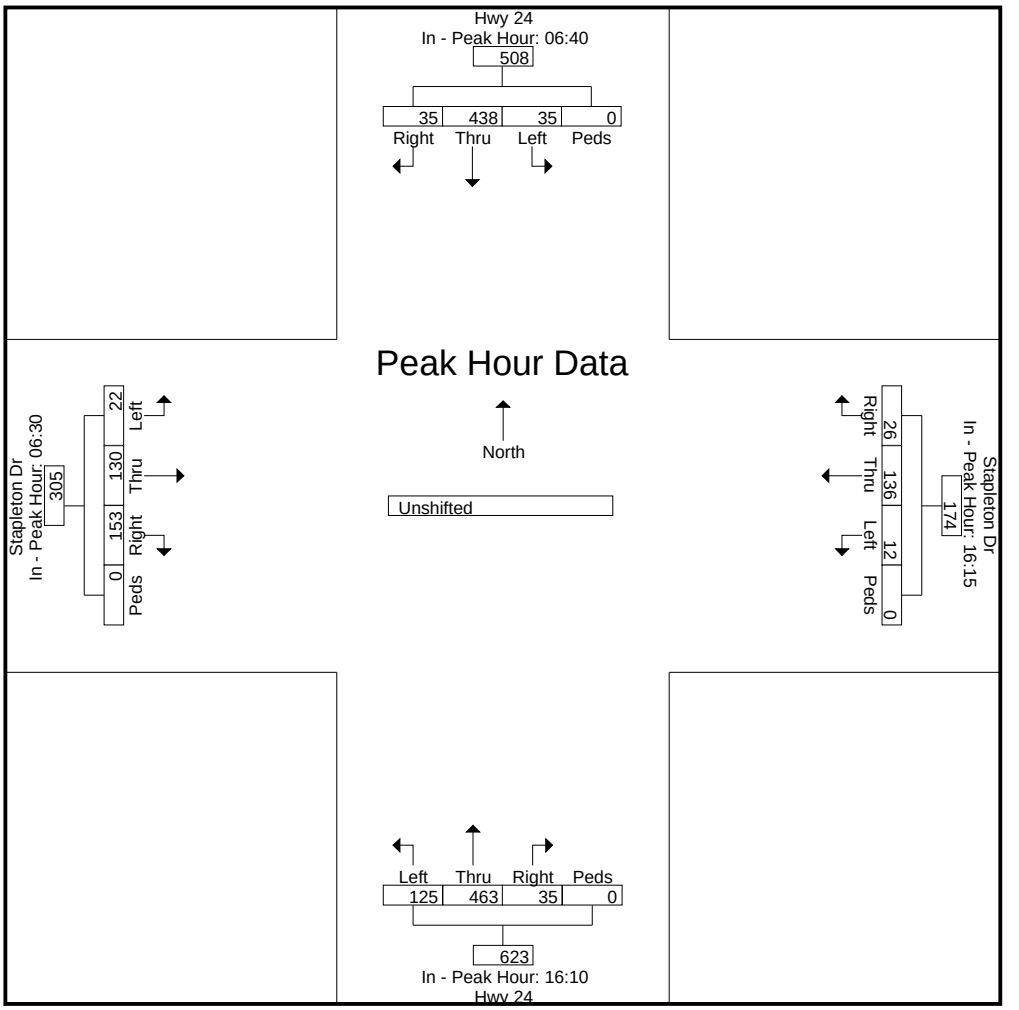


# LSC Transportation Consultants, Inc.

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

| | Hwy 24 Southbound | | | | | Stapleton Dr Westbound | | | | | Hwy 24 Northbound | | | | | Stapleton Dr Eastbound | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Int. Total |
| Peak Hour Analysis From 06:30 to 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 | |



# Level of Service Reports

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 29 | 67 | 172 | 140 | 62 | 7 | 58 | 276 | 46 | 2 | 566 | 19 |
| Future Volume (vph) | 29 | 67 | 172 | 140 | 62 | 7 | 58 | 276 | 46 | 2 | 566 | 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 | | 0.914 | | | 0.995 | | | 0.979 | | | 0.995 | |
| Flt Protected | | 0.995 | | | 0.968 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1694 | 0 | 0 | 1794 | 0 | 1770 | 1824 | 0 | 1770 | 1853 | 0 |
| Flt Permitted | | 0.995 | | | 0.968 | | 0.167 | | | 0.551 | | |
| Satd. Flow (perm) | 0 | 1694 | 0 | 0 | 1794 | 0 | 311 | 1824 | 0 | 1026 | 1853 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 57 | | | 1 | | | 8 | | | 1 | |
| 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) | 32 | 73 | 187 | 161 | 71 | 8 | 63 | 300 | 50 | 2 | 609 | 20 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 292 | 0 | 0 | 240 | 0 | 63 | 350 | 0 | 2 | 629 | 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 | | |

| 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) | 6.0 | 6.0 | | 6.0 | 6.0 | | 6.0 | 37.0 | | 22.0 | 22.0 | |
| Minimum Split (s) | 13.0 | 13.0 | | 13.0 | 13.0 | | 11.0 | 44.0 | | 29.0 | 29.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | | 12.0 | 70.0 | | 58.0 | 58.0 | |
| Total Split (%) | 25.0% | 25.0% | | 25.0% | 25.0% | | 8.6% | 50.0% | | 41.4% | 41.4% | |
| Maximum Green (s) | 28.0 | 28.0 | | 28.0 | 28.0 | | 7.0 | 63.0 | | 51.0 | 51.0 | |
| Yellow Time (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 3.0 | 5.0 | | 5.0 | 5.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 7.0 | | | 7.0 | | 5.0 | 7.0 | | 7.0 | 7.0 | |
| 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 | C-Min | | C-Min | C-Min | |
| Walk Time (s) | | | | | | | | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | | | | | | | | 11.0 | | 11.0 | 11.0 | |
| Pedestrian Calls (#/hr) | | | | | | | | 0 | | 0 | 0 | |
| Act Effct Green (s) | | 24.0 | | | 23.1 | | 73.9 | 71.9 | | 62.4 | 62.4 | |
| Actuated g/C Ratio | | 0.17 | | | 0.16 | | 0.53 | 0.51 | | 0.45 | 0.45 | |
| v/c Ratio | | 0.87 | | | 0.81 | | 0.27 | 0.37 | | 0.00 | 0.76 | |
| Control Delay | | 69.5 | | | 76.4 | | 21.7 | 23.1 | | 28.0 | 42.6 | |
| Queue Delay | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 69.5 | | | 76.4 | | 21.7 | 23.1 | | 28.0 | 42.6 | |
| LOS | | E | | | E | | C | C | | C | D | |
| Approach Delay | | 69.5 | | | 76.4 | | | 22.9 | | | 42.6 | |
| Approach LOS | | E | | | E | | | C | | | D | |
| Queue Length 50th (ft) | | 211 | | | 211 | | 28 | 189 | | 1 | 505 | |
| Queue Length 95th (ft) | | #333 | | | 287 | | 60 | 293 | | 8 | #788 | |
| Internal Link Dist (ft) | | 847 | | | 7234 | | | 1466 | | | 3526 | |
| Turn Bay Length (ft) | | | | | | | 870 | | | 695 | | |
| Base Capacity (vph) | | 384 | | | 359 | | 237 | 941 | | 456 | 825 | |
| 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 | | | 0.67 | | 0.27 | 0.37 | | 0.00 | 0.76 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 140 | | | |
| Actuated Cycle Length: 140 | | | |
| Offset: 34 (24%), Referenced to phase 2:NETL and 6:SWTL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.87 | | | |
| Intersection Signal Delay: 47.6 | | Intersection LOS: D | |
| Intersection Capacity Utilization 92.8% | | ICU Level of Service F | |
| 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 | 10.1 |

| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 23 | 135 | 143 | 6 | 87 | 17 | 49 | 267 | 3 | 35 | 438 | 35 |
| Future Vol, veh/h | 23 | 135 | 143 | 6 | 87 | 17 | 49 | 267 | 3 | 35 | 438 | 35 |
| 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 | 87 | 87 | 87 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 25 | 147 | 155 | 7 | 100 | 20 | 53 | 290 | 3 | 38 | 476 | 38 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1010 | 951 | 476 | 1118 | 986 | 290 | 514 | 0 | 0 | 293 | 0 | 0 |
| Stage 1 | 552 | 552 | - | 396 | 396 | - | - | - | - | - | - | - |
| Stage 2 | 458 | 399 | - | 722 | 590 | - | - | - | - | - | - | - |
| 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 | 218 | 260 | 589 | 184 | 248 | 749 | 1052 | - | - | 1269 | - | - |
| Stage 1 | 518 | 515 | - | 629 | 604 | - | - | - | - | - | - | - |
| Stage 2 | 583 | 602 | - | 418 | 495 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 132 | 240 | 589 | 66 | 229 | 749 | 1052 | - | - | 1269 | - | - |
| Mov Cap-2 Maneuver | 132 | 240 | - | 66 | 229 | - | - | - | - | - | - | - |
| Stage 1 | 492 | 500 | - | 598 | 574 | - | - | - | - | - | - | - |
| Stage 2 | 445 | 572 | - | 211 | 480 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | 27.7 | 30.7 | 1.3 | 0.5 |
| HCM LOS | D | D | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1052 | - | - | 66 | 229 | 749 | 132 | 240 | 589 | 1269 | - | - |
| HCM Lane V/C Ratio | 0.051 | - | - | 0.104 | 0.437 | 0.026 | 0.189 | 0.611 | 0.264 | 0.03 | - | - |
| HCM Control Delay (s) | 8.6 | - | - | 65.8 | 32.4 | 9.9 | 38.5 | 41.1 | 13.3 | 7.9 | - | - |
| HCM Lane LOS | A | - | - | F | D | A | E | E | B | A | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.3 | 2.1 | 0.1 | 0.7 | 3.6 | 1.1 | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.7 |

| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 10 | 105 | 13 | 14 | 0 | 42 | 244 | 3 | 3 | 380 | 4 |
| Future Vol, veh/h | 3 | 10 | 105 | 13 | 14 | 0 | 42 | 244 | 3 | 3 | 380 | 4 |
| 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 | - | - | Stop | - | - | Yield | - | - | Yield |
| Storage Length | 170 | - | 250 | 125 | - | 25 | 620 | - | 550 | 540 | - | 480 |
| 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 | 4 | 12 | 127 | 17 | 18 | 0 | 46 | 265 | 3 | 3 | 413 | 4 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 785 | 776 | - | 782 | 776 | 265 | 413 | 0 | 0 | 265 | 0 | 0 |
| Stage 1 | 419 | 419 | - | 357 | 357 | - | - | - | - | - | - | - |
| Stage 2 | 366 | 357 | - | 425 | 419 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | - | 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 | - | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 310 | 328 | 0 | 312 | 328 | 774 | 1146 | - | - | 1299 | - | - |
| Stage 1 | 612 | 590 | 0 | 661 | 628 | - | - | - | - | - | - | - |
| Stage 2 | 653 | 628 | 0 | 607 | 590 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 287 | 314 | - | 293 | 314 | 774 | 1146 | - | - | 1299 | - | - |
| Mov Cap-2 Maneuver | 287 | 314 | - | 293 | 314 | - | - | - | - | - | - | - |
| Stage 1 | 588 | 589 | - | 635 | 603 | - | - | - | - | - | - | - |
| Stage 2 | 608 | 603 | - | 593 | 589 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | 17.1 | 17.6 | 1.2 | 0.1 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1146 | - | - | 293 | 314 | - | 287 | 314 | - | 1299 | - | - |
| HCM Lane V/C Ratio | 0.04 | - | - | 0.057 | 0.057 | - | 0.013 | 0.038 | - | 0.003 | - | - |
| HCM Control Delay (s) | 8.3 | - | - | 18 | 17.2 | 0 | 17.7 | 16.9 | 0 | 7.8 | - | - |
| HCM Lane LOS | A | - | - | C | C | A | C | C | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.2 | 0.2 | - | 0 | 0.1 | - | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 38 | 144 | 14 | 4 | 9 |
| Future Vol, veh/h | 0 | 38 | 144 | 14 | 4 | 9 |
| 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 | 78 | 78 | 87 | 87 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 49 | 166 | 16 | 5 | 12 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 182 | 0 | - | 0 | 223 | 174 |
| Stage 1 | - | - | - | - | 174 | - |
| Stage 2 | - | - | - | - | 49 | - |
| 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 | 1393 | - | - | - | 765 | 869 |
| Stage 1 | - | - | - | - | 856 | - |
| Stage 2 | - | - | - | - | 973 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1393 | - | - | - | 765 | 869 |
| Mov Cap-2 Maneuver | - | - | - | - | 765 | - |
| Stage 1 | - | - | - | - | 856 | - |
| Stage 2 | - | - | - | - | 973 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0 | 9.4 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1393 | - | - | - | 834 |
| HCM Lane V/C Ratio | - | - | - | - | 0.02 |
| HCM Control Delay (s) | 0 | - | - | - | 9.4 |
| HCM Lane LOS | A | - | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 8 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 34 | 73 | 24 | 144 | 14 | 40 | 70 | 5 | 5 | 189 | 1 |
| Future Vol, veh/h | 3 | 34 | 73 | 24 | 144 | 14 | 40 | 70 | 5 | 5 | 189 | 1 |
| 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 | - | - | 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 | 4 | 41 | 88 | 28 | 166 | 16 | 48 | 84 | 6 | 6 | 217 | 1 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 182 | 0 | 0 | 129 | 0 | 0 | 432 | 331 | 85 | 368 | 367 | 174 |
| Stage 1 | - | - | - | - | - | - | 93 | 93 | - | 230 | 230 | - |
| Stage 2 | - | - | - | - | - | - | 339 | 238 | - | 138 | 137 | - |
| 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 | 1393 | - | - | 1457 | - | - | 534 | 588 | 974 | 588 | 562 | 869 |
| Stage 1 | - | - | - | - | - | - | 914 | 818 | - | 773 | 714 | - |
| Stage 2 | - | - | - | - | - | - | 676 | 708 | - | 865 | 783 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1393 | - | - | 1457 | - | - | 363 | 575 | 974 | 510 | 550 | 869 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 363 | 575 | - | 510 | 550 | - |
| Stage 1 | - | - | - | - | - | - | 911 | 816 | - | 771 | 700 | - |
| Stage 2 | - | - | - | - | - | - | 457 | 695 | - | 769 | 781 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.2 | 1 | 13.7 | 15.7 |
| HCM LOS | | | B | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 363 | 591 | 1393 | - | - | 1457 | - | - | 510 | 551 |
| HCM Lane V/C Ratio | 0.133 | 0.153 | 0.003 | - | - | 0.019 | - | - | 0.011 | 0.396 |
| HCM Control Delay (s) | 16.4 | 12.2 | 7.6 | - | - | 7.5 | - | - | 12.1 | 15.8 |
| HCM Lane LOS | C | B | A | - | - | A | - | - | B | C |
| HCM 95th %tile Q(veh) | 0.5 | 0.5 | 0 | - | - | 0.1 | - | - | 0 | 1.9 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 44 | 52 | 55 | 121 | 64 | 9 | 135 | 565 | 148 | 2 | 388 | 45 |
| Future Volume (vph) | 44 | 52 | 55 | 121 | 64 | 9 | 135 | 565 | 148 | 2 | 388 | 45 |
| 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 | | 0.951 | | | 0.994 | | | 0.969 | | | 0.984 | |
| Flt Protected | | 0.986 | | | 0.970 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1747 | 0 | 0 | 1796 | 0 | 1770 | 1805 | 0 | 1770 | 1833 | 0 |
| Flt Permitted | | 0.986 | | | 0.970 | | 0.326 | | | 0.259 | | |
| Satd. Flow (perm) | 0 | 1747 | 0 | 0 | 1796 | 0 | 607 | 1805 | 0 | 482 | 1833 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 17 | | | 1 | | | 15 | | | 5 | |
| 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 | 0.87 | 0.87 | 0.87 | 0.93 | 0.93 | 0.93 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 51 | 60 | 63 | 139 | 74 | 10 | 145 | 608 | 159 | 2 | 422 | 49 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 174 | 0 | 0 | 223 | 0 | 145 | 767 | 0 | 2 | 471 | 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 |
| 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 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 6 | 6 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 6.0 | 37.0 | | 22.0 | 22.0 | |
| Minimum Split (s) | 13.0 | 13.0 | | 13.0 | 13.0 | | 11.0 | 44.0 | | 29.0 | 29.0 | |
| Total Split (s) | 25.0 | 25.0 | | 30.0 | 30.0 | | 20.0 | 85.0 | | 65.0 | 65.0 | |
| Total Split (%) | 17.9% | 17.9% | | 21.4% | 21.4% | | 14.3% | 60.7% | | 46.4% | 46.4% | |
| Maximum Green (s) | 18.0 | 18.0 | | 23.0 | 23.0 | | 15.0 | 78.0 | | 58.0 | 58.0 | |
| Yellow Time (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 3.0 | 5.0 | | 5.0 | 5.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 7.0 | | | 7.0 | | 5.0 | 7.0 | | 7.0 | 7.0 | |
| 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 | C-Min | | C-Min | C-Min | |
| Walk Time (s) | | | | | | | | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | | | | | | | | 11.0 | | 11.0 | 11.0 | |
| Pedestrian Calls (#/hr) | | | | | | | | 0 | | 0 | 0 | |
| Act Effct Green (s) | | 16.2 | | | 20.9 | | 83.9 | 81.9 | | 66.2 | 66.2 | |
| Actuated g/C Ratio | | 0.12 | | | 0.15 | | 0.60 | 0.58 | | 0.47 | 0.47 | |
| v/c Ratio | | 0.80 | | | 0.83 | | 0.32 | 0.72 | | 0.01 | 0.54 | |
| Control Delay | | 80.1 | | | 82.4 | | 15.1 | 26.4 | | 23.5 | 30.3 | |
| Queue Delay | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 80.1 | | | 82.4 | | 15.1 | 26.4 | | 23.5 | 30.3 | |
| LOS | | F | | | F | | B | C | | C | C | |
| Approach Delay | | 80.1 | | | 82.4 | | | 24.6 | | | 30.3 | |
| Approach LOS | | F | | | F | | | C | | | C | |
| Queue Length 50th (ft) | | 140 | | | 196 | | 59 | 507 | | 1 | 312 | |
| Queue Length 95th (ft) | | #226 | | | #292 | | 95 | 682 | | 7 | 446 | |
| Internal Link Dist (ft) | | 847 | | | 7234 | | | 1466 | | | 3526 | |
| Turn Bay Length (ft) | | | | | | | 870 | | | 695 | | |
| Base Capacity (vph) | | 239 | | | 295 | | 488 | 1062 | | 227 | 869 | |
| 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 | | 0.73 | | | 0.76 | | 0.30 | 0.72 | | 0.01 | 0.54 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 140 | | | |
| Actuated Cycle Length: 140 | | | |
| Offset: 124 (89%), Referenced to phase 2:NETL and 6:SWTL, Start of Green | | | |
| Natural Cycle: 80 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.83 | | | |
| Intersection Signal Delay: 38.8 | | Intersection LOS: D | |
| Intersection Capacity Utilization 91.8% | | ICU Level of Service F | |
| 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 | 25.2 |

| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 14 | 42 | 49 | 26 | 136 | 26 | 119 | 459 | 33 | 12 | 364 | 29 |
| Future Vol, veh/h | 14 | 42 | 49 | 26 | 136 | 26 | 119 | 459 | 33 | 12 | 364 | 29 |
| 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 | 51 | 59 | 30 | 156 | 30 | 128 | 494 | 35 | 13 | 396 | 32 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1283 | 1207 | 396 | 1243 | 1204 | 494 | 428 | 0 | 0 | 529 | 0 | 0 |
| Stage 1 | 422 | 422 | - | 750 | 750 | - | - | - | - | - | - | - |
| Stage 2 | 861 | 785 | - | 493 | 454 | - | - | - | - | - | - | - |
| 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 | 142 | 183 | 653 | 151 | 184 | 575 | 1131 | - | - | 1038 | - | - |
| Stage 1 | 609 | 588 | - | 403 | 419 | - | - | - | - | - | - | - |
| Stage 2 | 350 | 404 | - | 558 | 569 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | ~ 14 | 160 | 653 | 94 | 161 | 575 | 1131 | - | - | 1038 | - | - |
| Mov Cap-2 Maneuver | ~ 14 | 160 | - | 94 | 161 | - | - | - | - | - | - | - |
| Stage 1 | 540 | 580 | - | 357 | 372 | - | - | - | - | - | - | - |
| Stage 2 | 171 | 358 | - | 457 | 562 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | 111.5 | 96.7 | 1.7 | 0.3 |
| HCM LOS | F | F | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1131 | - | - | 94 | 161 | 575 | 14 | 160 | 653 | 1038 | - | - |
| HCM Lane V/C Ratio | 0.113 | - | - | 0.318 | 0.971 | 0.052 | 1.205 | 0.316 | 0.09 | 0.013 | - | - |
| HCM Control Delay (s) | 8.6 | - | - | 60.2 | 119.9 | 11.6 | $ 684.4 | 37.6 | 11.1 | 8.5 | - | - |
| HCM Lane LOS | A | - | - | F | F | B | F | E | B | A | - | - |
| HCM 95th %tile Q(veh) | 0.4 | - | - | 1.2 | 7.4 | 0.2 | 2.7 | 1.3 | 0.3 | 0 | - | - |

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

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.6 |

| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 3 | 8 | 75 | 7 | 4 | 4 | 88 | 414 | 17 | 5 | 304 | 3 |
| Future Vol, veh/h | 3 | 8 | 75 | 7 | 4 | 4 | 88 | 414 | 17 | 5 | 304 | 3 |
| 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 | - | - | Stop | - | - | Yield | - | - | Yield |
| Storage Length | 170 | - | 250 | 125 | - | 25 | 620 | - | 550 | 540 | - | 480 |
| 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 | 4 | 10 | 90 | 9 | 5 | 5 | 96 | 450 | 18 | 5 | 330 | 3 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 985 | 982 | - | 987 | 982 | 450 | 330 | 0 | 0 | 450 | 0 | 0 |
| Stage 1 | 340 | 340 | - | 642 | 642 | - | - | - | - | - | - | - |
| Stage 2 | 645 | 642 | - | 345 | 340 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | - | 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 | - | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 227 | 249 | 0 | 226 | 249 | 609 | 1229 | - | - | 1110 | - | - |
| Stage 1 | 675 | 639 | 0 | 463 | 469 | - | - | - | - | - | - | - |
| Stage 2 | 461 | 469 | 0 | 671 | 639 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 207 | 228 | - | 205 | 228 | 609 | 1229 | - | - | 1110 | - | - |
| Mov Cap-2 Maneuver | 207 | 228 | - | 205 | 228 | - | - | - | - | - | - | - |
| Stage 1 | 622 | 636 | - | 427 | 432 | - | - | - | - | - | - | - |
| Stage 2 | 416 | 432 | - | 658 | 636 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | 21.8 | 19.5 | 1.4 | 0.1 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1229 | - | - | 205 | 228 | 609 | 207 | 228 | - | 1110 | - | - |
| HCM Lane V/C Ratio | 0.078 | - | - | 0.044 | 0.022 | 0.008 | 0.017 | 0.042 | - | 0.005 | - | - |
| HCM Control Delay (s) | 8.2 | - | - | 23.4 | 21.2 | 11 | 22.7 | 21.5 | 0 | 8.3 | - | - |
| HCM Lane LOS | A | - | - | C | C | B | C | C | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.3 | - | - | 0.1 | 0.1 | 0 | 0.1 | 0.1 | - | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.9 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 7 | 148 | 40 | 3 | 10 | 4 |
| Future Vol, veh/h | 7 | 148 | 40 | 3 | 10 | 4 |
| 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 | 78 | 78 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 8 | 170 | 51 | 4 | 13 | 5 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 55 | 0 | - | 0 | 239 | 53 |
| Stage 1 | - | - | - | - | 53 | - |
| Stage 2 | - | - | - | - | 186 | - |
| 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 | 1550 | - | - | - | 749 | 1014 |
| Stage 1 | - | - | - | - | 970 | - |
| Stage 2 | - | - | - | - | 846 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1550 | - | - | - | 745 | 1014 |
| Mov Cap-2 Maneuver | - | - | - | - | 745 | - |
| Stage 1 | - | - | - | - | 964 | - |
| Stage 2 | - | - | - | - | 846 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0 | 9.6 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1550 | - | - | - | 806 |
| HCM Lane V/C Ratio | 0.005 | - | - | - | 0.022 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 9.6 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 6 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 2 | 121 | 24 | 2 | 77 | 13 | 54 | 117 | 6 | 18 | 46 | 2 |
| Future Vol, veh/h | 2 | 121 | 24 | 2 | 77 | 13 | 54 | 117 | 6 | 18 | 46 | 2 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 245 | - | - | 235 | - | - | 265 | - | - | 265 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 83 | 83 | 83 | 83 | 83 | 83 | 87 | 87 | 87 | 83 | 83 | 83 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 2 | 146 | 29 | 2 | 93 | 16 | 62 | 134 | 7 | 22 | 55 | 2 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 109 | 0 | 0 | 175 | 0 | 0 | 299 | 278 | 161 | 340 | 284 | 101 |
| Stage 1 | - | - | - | - | - | - | 165 | 165 | - | 105 | 105 | - |
| Stage 2 | - | - | - | - | - | - | 134 | 113 | - | 235 | 179 | - |
| 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 | 1481 | - | - | 1401 | - | - | 653 | 630 | 884 | 614 | 625 | 954 |
| Stage 1 | - | - | - | - | - | - | 837 | 762 | - | 901 | 808 | - |
| Stage 2 | - | - | - | - | - | - | 869 | 802 | - | 768 | 751 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1481 | - | - | 1401 | - | - | 606 | 629 | 884 | 508 | 624 | 954 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 606 | 629 | - | 508 | 624 | - |
| Stage 1 | - | - | - | - | - | - | 836 | 761 | - | 900 | 807 | - |
| Stage 2 | - | - | - | - | - | - | 806 | 801 | - | 627 | 750 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0.2 | 12 | 11.6 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 606 | 638 | 1481 | - | - | 1401 | - | - | 508 | 633 |
| HCM Lane V/C Ratio | 0.102 | 0.222 | 0.002 | - | - | 0.002 | - | - | 0.043 | 0.091 |
| HCM Control Delay (s) | 11.6 | 12.2 | 7.4 | - | - | 7.6 | - | - | 12.4 | 11.3 |
| HCM Lane LOS | B | B | A | - | - | A | - | - | B | B |
| HCM 95th %tile Q(veh) | 0.3 | 0.8 | 0 | - | - | 0 | - | - | 0.1 | 0.3 |

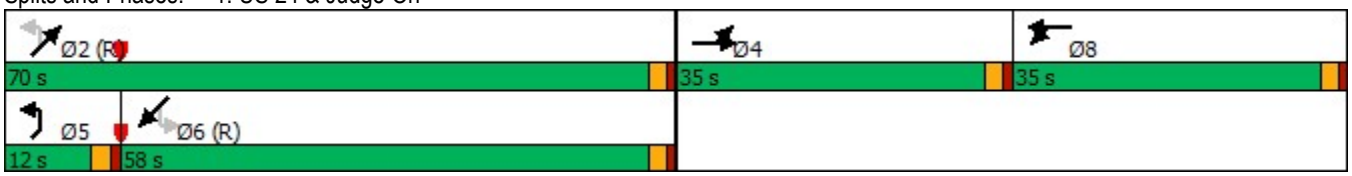
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 34 | 79 | 203 | 247 | 79 | 8 | 69 | 328 | 79 | 2 | 678 | 22 |
| Future Volume (vph) | 34 | 79 | 203 | 247 | 79 | 8 | 69 | 328 | 79 | 2 | 678 | 22 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 860 | | 0 | 695 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 200 | | | 200 | | | 300 | | | 300 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | 0.913 | | | 0.997 | | | 0.971 | | | 0.995 | |
| Flt Protected | | 0.995 | | | 0.964 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1692 | 0 | 0 | 1790 | 0 | 1770 | 1809 | 0 | 1770 | 1853 | 0 |
| Flt Permitted | | 0.995 | | | 0.964 | | 0.061 | | | 0.434 | | |
| Satd. Flow (perm) | 0 | 1692 | 0 | 0 | 1790 | 0 | 114 | 1809 | 0 | 808 | 1853 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 60 | | | 1 | | | 12 | | | 1 | |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 1112 | | | 1085 | | | 1307 | | | 1572 | |
| Travel Time (s) | | 16.8 | | | 16.4 | | | 16.2 | | | 19.5 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 37 | 86 | 221 | 268 | 86 | 9 | 74 | 353 | 85 | 2 | 729 | 24 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 344 | 0 | 0 | 363 | 0 | 74 | 438 | 0 | 2 | 753 | 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) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 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 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 6 | 6 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 6.0 | 37.0 | | 22.0 | 22.0 | |
| Minimum Split (s) | 13.0 | 13.0 | | 13.0 | 13.0 | | 11.0 | 44.0 | | 29.0 | 29.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | | 12.0 | 70.0 | | 58.0 | 58.0 | |
| Total Split (%) | 25.0% | 25.0% | | 25.0% | 25.0% | | 8.6% | 50.0% | | 41.4% | 41.4% | |
| Maximum Green (s) | 32.0 | 32.0 | | 32.0 | 32.0 | | 9.0 | 67.0 | | 55.0 | 55.0 | |
| Yellow Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| 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) | | 3.0 | | | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| 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 | C-Min | | C-Min | C-Min | |
| Walk Time (s) | | | | | | | | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | | | | | | | | 11.0 | | 11.0 | 11.0 | |
| Pedestrian Calls (#/hr) | | | | | | | | 0 | | 0 | 0 | |
| Act Effct Green (s) | | 28.0 | | | 31.1 | | 71.9 | 71.9 | | 62.7 | 62.7 | |
| Actuated g/C Ratio | | 0.20 | | | 0.22 | | 0.51 | 0.51 | | 0.45 | 0.45 | |
| v/c Ratio | | 0.89 | | | 0.91 | | 0.48 | 0.47 | | 0.01 | 0.91 | |
| Control Delay | | 69.4 | | | 80.6 | | 31.7 | 24.4 | | 26.0 | 53.7 | |
| Queue Delay | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 69.4 | | | 80.6 | | 31.7 | 24.4 | | 26.0 | 53.7 | |
| LOS | | E | | | F | | C | C | | C | D | |
| Approach Delay | | 69.4 | | | 80.6 | | | 25.5 | | | 53.6 | |
| Approach LOS | | E | | | F | | | C | | | D | |
| Queue Length 50th (ft) | | 254 | | | 316 | | 36 | 261 | | 1 | ~729 | |
| Queue Length 95th (ft) | | #395 | | | #502 | | 73 | 361 | | 7 | #986 | |
| Internal Link Dist (ft) | | 1032 | | | 1005 | | | 1227 | | | 1492 | |
| Turn Bay Length (ft) | | | | | | | 860 | | | 695 | | |
| Base Capacity (vph) | | 433 | | | 414 | | 165 | 934 | | 361 | 830 | |
| 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 | | 0.79 | | | 0.88 | | 0.45 | 0.47 | | 0.01 | 0.91 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 140 | | | |
| Actuated Cycle Length: 140 | | | |
| Offset: 12 (9%), Referenced to phase 2:NETL and 6:SWTL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.91 | | | |
| Intersection Signal Delay: 54.0 | | Intersection LOS: D | |
| Intersection Capacity Utilization 99.3% | | 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



| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 27 | 185 | 169 | 13 | 139 | 26 | 58 | 315 | 5 | 44 | 517 | 41 |
| Future Volume (vph) | 27 | 185 | 169 | 13 | 139 | 26 | 58 | 315 | 5 | 44 | 517 | 41 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 240 | | | 200 | | | 190 | | | 190 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 |
| Flt Permitted | 0.600 | | | 0.594 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 1118 | 1863 | 1583 | 1106 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 184 | | | 136 | | | 95 | | | 136 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 836 | | | 3074 | | | 1254 | | | 1435 | |
| Travel Time (s) | | 12.7 | | | 46.6 | | | 15.5 | | | 17.8 | |
| 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) | 29 | 201 | 184 | 15 | 160 | 30 | 63 | 342 | 5 | 47 | 556 | 44 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 29 | 201 | 184 | 15 | 160 | 30 | 63 | 342 | 5 | 47 | 556 | 44 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | L NA | Right | L NA | Left | Right | Left | Left | R NA |
| 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 |
| 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 |
| Detector Phase | 1 | 6 | 6 | 5 | 2 | 2 | 7 | 4 | 4 | 3 | 8 | 8 |

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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) | 56.0 | 52.9 | 52.9 | 54.3 | 50.3 | 50.3 | 9.6 | 42.5 | 42.5 | 8.6 | 41.5 | 41.5 |
| Actuated g/C Ratio | 0.47 | 0.44 | 0.44 | 0.45 | 0.42 | 0.42 | 0.08 | 0.35 | 0.35 | 0.07 | 0.35 | 0.35 |
| v/c Ratio | 0.05 | 0.24 | 0.23 | 0.03 | 0.20 | 0.04 | 0.44 | 0.52 | 0.01 | 0.37 | 0.86 | 0.07 |
| Control Delay | 21.5 | 26.8 | 5.3 | 21.6 | 28.2 | 0.1 | 61.6 | 32.9 | 0.0 | 60.6 | 50.7 | 0.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 21.5 | 26.8 | 5.3 | 21.6 | 28.2 | 0.1 | 61.6 | 32.9 | 0.0 | 60.6 | 50.7 | 0.2 |
| LOS | C | C | A | C | C | A | E | C | A | E | D | A |
| Approach Delay | | 16.9 | | | 23.6 | | | 36.9 | | | 48.0 | |
| Approach LOS | | B | | | C | | | D | | | D | |
| Queue Length 50th (ft) | 12 | 94 | 0 | 6 | 86 | 0 | 47 | 204 | 0 | 35 | 391 | 0 |
| Queue Length 95th (ft) | 35 | 196 | 54 | 22 | 154 | 0 | 92 | 273 | 0 | 74 | 507 | 0 |
| Internal Link Dist (ft) | | 756 | | | 2994 | | | 1174 | | | 1355 | |
| Turn Bay Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Base Capacity (vph) | 589 | 821 | 800 | 580 | 781 | 743 | 464 | 861 | 783 | 228 | 666 | 653 |
| 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 | 0.05 | 0.24 | 0.23 | 0.03 | 0.20 | 0.04 | 0.14 | 0.40 | 0.01 | 0.21 | 0.83 | 0.07 |

**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: 0.86
Intersection Signal Delay: 34.6 Intersection LOS: C
Intersection Capacity Utilization 60.3% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 2: US 24 & Stapleton

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 4 | 12 | 125 | 15 | 17 | 0 | 51 | 293 | 4 | 4 | 451 | 5 |
| Future Vol, veh/h | 4 | 12 | 125 | 15 | 17 | 0 | 51 | 293 | 4 | 4 | 451 | 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 | - | - | Stop | - | - | Yield | - | - | Yield |
| Storage Length | 170 | - | 250 | 125 | - | 25 | 620 | - | 550 | 540 | - | 480 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 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 | 5 | 14 | 144 | 19 | 22 | 0 | 55 | 318 | 4 | 4 | 490 | 5 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 937 | 926 | - | 933 | 926 | 318 | 490 | 0 | 0 | 318 | 0 | 0 |
| Stage 1 | 498 | 498 | - | 428 | 428 | - | - | - | - | - | - | - |
| Stage 2 | 439 | 428 | - | 505 | 498 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | - | 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 | - | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 245 | 269 | 0 | 246 | 269 | 723 | 1073 | - | - | 1242 | - | - |
| Stage 1 | 554 | 544 | 0 | 605 | 585 | - | - | - | - | - | - | - |
| Stage 2 | 597 | 585 | 0 | 549 | 544 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 220 | 254 | - | 226 | 254 | 723 | 1073 | - | - | 1242 | - | - |
| Mov Cap-2 Maneuver | 220 | 254 | - | 226 | 254 | - | - | - | - | - | - | - |
| Stage 1 | 526 | 542 | - | 574 | 555 | - | - | - | - | - | - | - |
| Stage 2 | 544 | 555 | - | 533 | 542 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | 20.4 | 21.4 | 1.3 | 0.1 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1073 | - | - | 226 | 254 | - | 220 | 254 | - | 1242 | - | - |
| HCM Lane V/C Ratio | 0.052 | - | - | 0.085 | 0.086 | - | 0.021 | 0.054 | - | 0.004 | - | - |
| HCM Control Delay (s) | 8.5 | - | - | 22.4 | 20.5 | 0 | 21.7 | 20 | 0 | 7.9 | - | - |
| HCM Lane LOS | A | - | - | C | C | A | C | C | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.3 | 0.3 | - | 0.1 | 0.2 | - | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 1 | 45 | 171 | 17 | 5 | 12 |
| Future Vol, veh/h | 1 | 45 | 171 | 17 | 5 | 12 |
| 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 | 78 | 78 | 87 | 87 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 58 | 197 | 20 | 6 | 15 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 217 | 0 | - | 0 | 267 | 207 |
| Stage 1 | - | - | - | - | 207 | - |
| Stage 2 | - | - | - | - | 60 | - |
| 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 | 1353 | - | - | - | 722 | 833 |
| Stage 1 | - | - | - | - | 828 | - |
| Stage 2 | - | - | - | - | 963 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1353 | - | - | - | 721 | 833 |
| Mov Cap-2 Maneuver | - | - | - | - | 721 | - |
| Stage 1 | - | - | - | - | 827 | - |
| Stage 2 | - | - | - | - | 963 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0 | 9.6 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1353 | - | - | - | 797 |
| HCM Lane V/C Ratio | 0.001 | - | - | - | 0.027 |
| HCM Control Delay (s) | 7.7 | 0 | - | - | 9.6 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 11.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 8 | 57 | 97 | 31 | 223 | 36 | 69 | 101 | 6 | 12 | 244 | 15 |
| Future Vol, veh/h | 8 | 57 | 97 | 31 | 223 | 36 | 69 | 101 | 6 | 12 | 244 | 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 | 245 | - | 195 | 235 | - | - | 265 | - | - | 265 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 92 | 92 | 92 | 87 | 87 | 87 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 9 | 66 | 111 | 34 | 242 | 39 | 79 | 116 | 7 | 13 | 265 | 16 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 281 | 0 | 0 | 177 | 0 | 0 | 554 | 433 | 66 | 531 | 525 | 262 |
| Stage 1 | - | - | - | - | - | - | 84 | 84 | - | 330 | 330 | - |
| Stage 2 | - | - | - | - | - | - | 470 | 349 | - | 201 | 195 | - |
| 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 | 1282 | - | - | 1399 | - | - | 443 | 516 | 998 | 459 | 458 | 777 |
| Stage 1 | - | - | - | - | - | - | 924 | 825 | - | 683 | 646 | - |
| Stage 2 | - | - | - | - | - | - | 574 | 633 | - | 801 | 739 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1282 | - | - | 1399 | - | - | 222 | 500 | 998 | 366 | 444 | 777 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 222 | 500 | - | 366 | 444 | - |
| Stage 1 | - | - | - | - | - | - | 918 | 819 | - | 678 | 630 | - |
| Stage 2 | - | - | - | - | - | - | 317 | 618 | - | 678 | 734 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0.8 | 20.4 | 24.5 |
| HCM LOS | | | C | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 222 | 514 | 1282 | - | - | 1399 | - | - | 366 | 455 |
| HCM Lane V/C Ratio | 0.357 | 0.239 | 0.007 | - | - | 0.024 | - | - | 0.036 | 0.619 |
| HCM Control Delay (s) | 30 | 14.2 | 7.8 | - | - | 7.6 | - | - | 15.2 | 24.9 |
| HCM Lane LOS | D | B | A | - | - | A | - | - | C | C |
| HCM 95th %tile Q(veh) | 1.5 | 0.9 | 0 | - | - | 0.1 | - | - | 0.1 | 4.1 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 52 | 69 | 65 | 199 | 83 | 11 | 163 | 675 | 266 | 2 | 453 | 53 |
| Future Volume (vph) | 52 | 69 | 65 | 199 | 83 | 11 | 163 | 675 | 266 | 2 | 453 | 53 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 860 | | 0 | 695 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 200 | | | 200 | | | 300 | | | 300 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | 0.953 | | | 0.995 | | | 0.958 | | | 0.984 | |
| Flt Protected | | 0.986 | | | 0.967 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1750 | 0 | 0 | 1792 | 0 | 1770 | 1785 | 0 | 1770 | 1833 | 0 |
| Flt Permitted | | 0.986 | | | 0.967 | | 0.232 | | | 0.065 | | |
| Satd. Flow (perm) | 0 | 1750 | 0 | 0 | 1792 | 0 | 432 | 1785 | 0 | 121 | 1833 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 16 | | | 1 | | | 23 | | | 5 | |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 1112 | | | 1085 | | | 1307 | | | 1572 | |
| Travel Time (s) | | 16.8 | | | 16.4 | | | 16.2 | | | 19.5 | |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.92 | 0.92 | 0.92 | 0.95 | 0.95 | 0.95 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 60 | 79 | 75 | 216 | 90 | 12 | 172 | 711 | 280 | 2 | 492 | 58 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 214 | 0 | 0 | 318 | 0 | 172 | 991 | 0 | 2 | 550 | 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) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 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 | | |

| 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) | 6.0 | 6.0 | | 6.0 | 6.0 | | 6.0 | 37.0 | | 22.0 | 22.0 | |
| Minimum Split (s) | 13.0 | 13.0 | | 13.0 | 13.0 | | 11.0 | 44.0 | | 29.0 | 29.0 | |
| Total Split (s) | 25.0 | 25.0 | | 30.0 | 30.0 | | 20.0 | 85.0 | | 65.0 | 65.0 | |
| Total Split (%) | 17.9% | 17.9% | | 21.4% | 21.4% | | 14.3% | 60.7% | | 46.4% | 46.4% | |
| Maximum Green (s) | 18.0 | 18.0 | | 23.0 | 23.0 | | 15.0 | 78.0 | | 58.0 | 58.0 | |
| Yellow Time (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 3.0 | 5.0 | | 5.0 | 5.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 7.0 | | | 7.0 | | 5.0 | 7.0 | | 7.0 | 7.0 | |
| 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 | C-Min | | C-Min | C-Min | |
| Walk Time (s) | | | | | | | | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | | | | | | | | 11.0 | | 11.0 | 11.0 | |
| Pedestrian Calls (#/hr) | | | | | | | | 0 | | 0 | 0 | |
| Act Effct Green (s) | | 17.6 | | | 23.4 | | 80.0 | 78.0 | | 61.1 | 61.1 | |
| Actuated g/C Ratio | | 0.13 | | | 0.17 | | 0.57 | 0.56 | | 0.44 | 0.44 | |
| v/c Ratio | | 0.92 | | | 1.06 | | 0.48 | 0.99 | | 0.04 | 0.69 | |
| Control Delay | | 96.3 | | | 122.7 | | 18.9 | 55.6 | | 26.5 | 37.3 | |
| Queue Delay | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 96.3 | | | 122.7 | | 18.9 | 55.6 | | 26.5 | 37.3 | |
| LOS | | F | | | F | | B | E | | C | D | |
| Approach Delay | | 96.3 | | | 122.7 | | | 50.2 | | | 37.3 | |
| Approach LOS | | F | | | F | | | D | | | D | |
| Queue Length 50th (ft) | | 181 | | | ~322 | | 72 | 845 | | 1 | 394 | |
| Queue Length 95th (ft) | | #314 | | | #517 | | 111 | #1178 | | 8 | 554 | |
| Internal Link Dist (ft) | | 1032 | | | 1005 | | | 1227 | | | 1492 | |
| Turn Bay Length (ft) | | | | | | | 860 | | | 695 | | |
| Base Capacity (vph) | | 238 | | | 300 | | 390 | 1004 | | 52 | 802 | |
| 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 | | 0.90 | | | 1.06 | | 0.44 | 0.99 | | 0.04 | 0.69 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 140 | | | |
| Actuated Cycle Length: 140 | | | |
| Offset: 20 (14%), Referenced to phase 2:NETL and 6:SWTL, Start of Green | | | |
| Natural Cycle: 130 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.06 | | | |
| Intersection Signal Delay: 61.7 | | Intersection LOS: E | |
| Intersection Capacity Utilization 119.9% | | ICU Level of Service H | |
| 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

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 17 | 94 | 58 | 35 | 193 | 38 | 140 | 542 | 43 | 20 | 430 | 35 |
| Future Volume (vph) | 17 | 94 | 58 | 35 | 193 | 38 | 140 | 542 | 43 | 20 | 430 | 35 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 240 | | | 200 | | | 190 | | | 190 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 |
| Flt Permitted | 0.430 | | | 0.569 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 801 | 1863 | 1583 | 1060 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 136 | | | 136 | | | 95 | | | 136 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 836 | | | 3074 | | | 1254 | | | 1435 | |
| Travel Time (s) | | 12.7 | | | 46.6 | | | 15.5 | | | 17.8 | |
| 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) | 20 | 108 | 67 | 38 | 210 | 41 | 151 | 583 | 46 | 22 | 467 | 38 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 20 | 108 | 67 | 38 | 210 | 41 | 151 | 583 | 46 | 22 | 467 | 38 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | L NA | Right | L NA | Left | Right | Left | Left | R NA |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 |
| Detector Template | Left | Thru | Right | 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 |

| 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) | 28.3 | 24.0 | 24.0 | 30.5 | 26.9 | 26.9 | 15.6 | 71.8 | 71.8 | 7.1 | 59.2 | 59.2 |
| Actuated g/C Ratio | 0.24 | 0.20 | 0.20 | 0.25 | 0.22 | 0.22 | 0.13 | 0.60 | 0.60 | 0.06 | 0.49 | 0.49 |
| v/c Ratio | 0.08 | 0.29 | 0.16 | 0.12 | 0.50 | 0.09 | 0.66 | 0.52 | 0.05 | 0.21 | 0.51 | 0.04 |
| Control Delay | 31.9 | 44.2 | 0.8 | 32.6 | 46.2 | 0.4 | 62.7 | 18.2 | 0.1 | 58.0 | 24.8 | 0.1 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 31.9 | 44.2 | 0.8 | 32.6 | 46.2 | 0.4 | 62.7 | 18.2 | 0.1 | 58.0 | 24.8 | 0.1 |
| LOS | C | D | A | C | D | A | E | B | A | E | C | A |
| Approach Delay | | 28.0 | | | 37.9 | | | 25.8 | | | 24.4 | |
| Approach LOS | | C | | | D | | | C | | | C | |
| Queue Length 50th (ft) | 12 | 75 | 0 | 22 | 135 | 0 | 113 | 272 | 0 | 17 | 238 | 0 |
| Queue Length 95th (ft) | 29 | 125 | 0 | 49 | 232 | 0 | 175 | 425 | 0 | 44 | 392 | 0 |
| Internal Link Dist (ft) | | 756 | | | 2994 | | | 1174 | | | 1355 | |
| Turn Bay Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Base Capacity (vph) | 287 | 374 | 427 | 337 | 418 | 460 | 464 | 1114 | 985 | 228 | 918 | 849 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.07 | 0.29 | 0.16 | 0.11 | 0.50 | 0.09 | 0.33 | 0.52 | 0.05 | 0.10 | 0.51 | 0.04 |

| 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: 0.66 | | | |
| Intersection Signal Delay: 27.6 | | Intersection LOS: C | |
| Intersection Capacity Utilization 58.1% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 2: US 24 & Stapleton

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.9 |

| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 4 | 10 | 90 | 9 | 5 | 5 | 106 | 494 | 20 | 8 | 364 | 4 |
| Future Vol, veh/h | 4 | 10 | 90 | 9 | 5 | 5 | 106 | 494 | 20 | 8 | 364 | 4 |
| 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 | - | - | Stop | - | - | Yield | - | - | Yield |
| Storage Length | 170 | - | 250 | 125 | - | 25 | 620 | - | 550 | 540 | - | 480 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 83 | 83 | 83 | 78 | 78 | 78 | 93 | 93 | 93 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 12 | 108 | 12 | 6 | 6 | 114 | 531 | 22 | 9 | 396 | 4 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1176 | 1173 | - | 1179 | 1173 | 531 | 396 | 0 | 0 | 531 | 0 | 0 |
| Stage 1 | 414 | 414 | - | 759 | 759 | - | - | - | - | - | - | - |
| Stage 2 | 762 | 759 | - | 420 | 414 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | - | 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 | - | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 168 | 192 | 0 | 167 | 192 | 548 | 1163 | - | - | 1036 | - | - |
| Stage 1 | 616 | 593 | 0 | 399 | 415 | - | - | - | - | - | - | - |
| Stage 2 | 397 | 415 | 0 | 611 | 593 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 148 | 172 | - | 145 | 172 | 548 | 1163 | - | - | 1036 | - | - |
| Mov Cap-2 Maneuver | 148 | 172 | - | 145 | 172 | - | - | - | - | - | - | - |
| Stage 1 | 556 | 588 | - | 360 | 374 | - | - | - | - | - | - | - |
| Stage 2 | 348 | 374 | - | 593 | 588 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | 28.2 | 25.2 | 1.4 | 0.2 |
| HCM LOS | D | D | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1163 | - | - | 145 | 172 | 548 | 148 | 172 | - | 1036 | - | - |
| HCM Lane V/C Ratio | 0.098 | - | - | 0.08 | 0.037 | 0.012 | 0.033 | 0.07 | - | 0.008 | - | - |
| HCM Control Delay (s) | 8.4 | - | - | 32 | 26.7 | 11.6 | 30.1 | 27.5 | 0 | 8.5 | - | - |
| HCM Lane LOS | A | - | - | D | D | B | D | D | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.3 | - | - | 0.3 | 0.1 | 0 | 0.1 | 0.2 | - | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.3 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 18 | 177 | 48 | 5 | 12 | 9 |
| Future Vol, veh/h | 18 | 177 | 48 | 5 | 12 | 9 |
| 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 | 21 | 203 | 58 | 6 | 15 | 12 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 64 | 0 | - | 0 | 306 | 61 |
| Stage 1 | - | - | - | - | 61 | - |
| Stage 2 | - | - | - | - | 245 | - |
| 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 | 1538 | - | - | - | 686 | 1004 |
| Stage 1 | - | - | - | - | 962 | - |
| Stage 2 | - | - | - | - | 796 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1538 | - | - | - | 676 | 1004 |
| Mov Cap-2 Maneuver | - | - | - | - | 676 | - |
| Stage 1 | - | - | - | - | 948 | - |
| Stage 2 | - | - | - | - | 796 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.7 | 0 | 9.7 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1538 | - | - | - | 786 |
| HCM Lane V/C Ratio | 0.013 | - | - | - | 0.034 |
| HCM Control Delay (s) | 7.4 | 0 | - | - | 9.7 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 7.7 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 16 | 209 | 50 | 3 | 129 | 26 | 86 | 164 | 11 | 41 | 76 | 14 |
| Future Vol, veh/h | 16 | 209 | 50 | 3 | 129 | 26 | 86 | 164 | 11 | 41 | 76 | 14 |
| 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 | - | 195 | 235 | - | - | 265 | - | - | 265 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 87 | 87 | 87 | 92 | 92 | 92 | 87 | 87 | 87 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 17 | 227 | 54 | 3 | 148 | 30 | 93 | 178 | 12 | 47 | 87 | 16 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 178 | 0 | 0 | 281 | 0 | 0 | 482 | 445 | 227 | 552 | 484 | 163 |
| Stage 1 | - | - | - | - | - | - | 261 | 261 | - | 169 | 169 | - |
| Stage 2 | - | - | - | - | - | - | 221 | 184 | - | 383 | 315 | - |
| 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 | 1398 | - | - | 1282 | - | - | 495 | 508 | 812 | 444 | 483 | 882 |
| Stage 1 | - | - | - | - | - | - | 744 | 692 | - | 833 | 759 | - |
| Stage 2 | - | - | - | - | - | - | 781 | 747 | - | 640 | 656 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1398 | - | - | 1282 | - | - | 413 | 501 | 812 | 313 | 476 | 882 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 413 | 501 | - | 313 | 476 | - |
| Stage 1 | - | - | - | - | - | - | 735 | 684 | - | 823 | 757 | - |
| Stage 2 | - | - | - | - | - | - | 677 | 746 | - | 461 | 648 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0.1 | 16.1 | 15.3 |
| HCM LOS | | | C | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 413 | 513 | 1398 | - | - | 1282 | - | - | 313 | 513 |
| HCM Lane V/C Ratio | 0.226 | 0.371 | 0.012 | - | - | 0.003 | - | - | 0.151 | 0.202 |
| HCM Control Delay (s) | 16.2 | 16.1 | 7.6 | - | - | 7.8 | - | - | 18.5 | 13.8 |
| HCM Lane LOS | C | C | A | - | - | A | - | - | C | B |
| HCM 95th %tile Q(veh) | 0.9 | 1.7 | 0 | - | - | 0 | - | - | 0.5 | 0.7 |

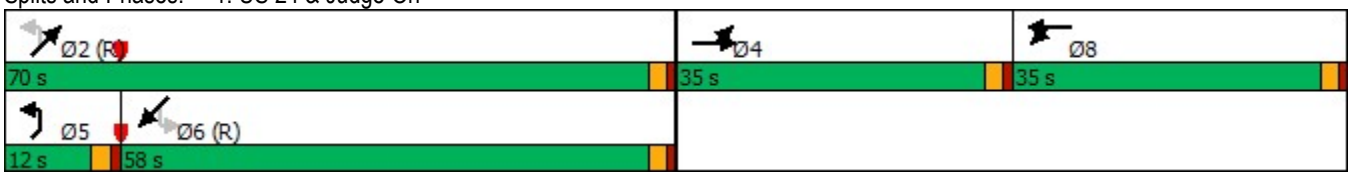
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 34 | 85 | 203 | 295 | 84 | 8 | 69 | 328 | 103 | 2 | 678 | 22 |
| Future Volume (vph) | 34 | 85 | 203 | 295 | 84 | 8 | 69 | 328 | 103 | 2 | 678 | 22 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 860 | | 0 | 695 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 200 | | | 200 | | | 300 | | | 300 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | 0.915 | | | 0.997 | | | 0.964 | | | 0.995 | |
| Flt Protected | | 0.995 | | | 0.963 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1696 | 0 | 0 | 1788 | 0 | 1770 | 1796 | 0 | 1770 | 1853 | 0 |
| Flt Permitted | | 0.995 | | | 0.963 | | 0.066 | | | 0.389 | | |
| Satd. Flow (perm) | 0 | 1696 | 0 | 0 | 1788 | 0 | 123 | 1796 | 0 | 725 | 1853 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 57 | | | 1 | | | 16 | | | 1 | |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 1112 | | | 1085 | | | 1307 | | | 1572 | |
| Travel Time (s) | | 16.8 | | | 16.4 | | | 16.2 | | | 19.5 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 37 | 92 | 221 | 321 | 91 | 9 | 74 | 353 | 111 | 2 | 729 | 24 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 350 | 0 | 0 | 421 | 0 | 74 | 464 | 0 | 2 | 753 | 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) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 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 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | | 5 | 2 | | 6 | 6 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 6.0 | 6.0 | | 6.0 | 6.0 | | 6.0 | 37.0 | | 22.0 | 22.0 | |
| Minimum Split (s) | 13.0 | 13.0 | | 13.0 | 13.0 | | 11.0 | 44.0 | | 29.0 | 29.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | | 12.0 | 70.0 | | 58.0 | 58.0 | |
| Total Split (%) | 25.0% | 25.0% | | 25.0% | 25.0% | | 8.6% | 50.0% | | 41.4% | 41.4% | |
| Maximum Green (s) | 32.0 | 32.0 | | 32.0 | 32.0 | | 9.0 | 67.0 | | 55.0 | 55.0 | |
| Yellow Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| 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) | | 3.0 | | | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | |
| 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 | C-Min | | C-Min | C-Min | |
| Walk Time (s) | | | | | | | | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | | | | | | | | 11.0 | | 11.0 | 11.0 | |
| Pedestrian Calls (#/hr) | | | | | | | | 0 | | 0 | 0 | |
| Act Effct Green (s) | | 28.5 | | | 35.1 | | 67.4 | 67.4 | | 58.1 | 58.1 | |
| Actuated g/C Ratio | | 0.20 | | | 0.25 | | 0.48 | 0.48 | | 0.42 | 0.42 | |
| v/c Ratio | | 0.90 | | | 0.94 | | 0.48 | 0.53 | | 0.01 | 0.98 | |
| Control Delay | | 70.8 | | | 81.0 | | 31.3 | 27.2 | | 26.0 | 68.4 | |
| Queue Delay | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 70.8 | | | 81.0 | | 31.3 | 27.2 | | 26.0 | 68.4 | |
| LOS | | E | | | F | | C | C | | C | E | |
| Approach Delay | | 70.8 | | | 81.0 | | | 27.8 | | | 68.3 | |
| Approach LOS | | E | | | F | | | C | | | E | |
| Queue Length 50th (ft) | | 262 | | | 385 | | 36 | 280 | | 1 | ~729 | |
| Queue Length 95th (ft) | | #410 | | | #623 | | 69 | 387 | | 7 | #986 | |
| Internal Link Dist (ft) | | 1032 | | | 1005 | | | 1227 | | | 1492 | |
| Turn Bay Length (ft) | | | | | | | 860 | | | 695 | | |
| Base Capacity (vph) | | 431 | | | 449 | | 164 | 872 | | 300 | 770 | |
| 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 | | 0.81 | | | 0.94 | | 0.45 | 0.53 | | 0.01 | 0.98 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 140 | | | |
| Actuated Cycle Length: 140 | | | |
| Offset: 12 (9%), Referenced to phase 2:NETL and 6:SWTL, Start of Green | | | |
| Natural Cycle: 100 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.98 | | | |
| Intersection Signal Delay: 60.7 | | Intersection LOS: E | |
| Intersection Capacity Utilization 102.6% | | ICU Level of Service G | |
| 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



| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 27 | 197 | 169 | 13 | 157 | 26 | 58 | 315 | 5 | 44 | 517 | 41 |
| Future Volume (vph) | 27 | 197 | 169 | 13 | 157 | 26 | 58 | 315 | 5 | 44 | 517 | 41 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 240 | | | 200 | | | 190 | | | 190 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 |
| Flt Permitted | 0.576 | | | 0.579 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 1073 | 1863 | 1583 | 1079 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 184 | | | 136 | | | 95 | | | 136 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 767 | | | 3046 | | | 1493 | | | 1435 | |
| Travel Time (s) | | 11.6 | | | 46.2 | | | 18.5 | | | 17.8 | |
| 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) | 29 | 214 | 184 | 15 | 180 | 30 | 63 | 342 | 5 | 47 | 556 | 44 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 29 | 214 | 184 | 15 | 180 | 30 | 63 | 342 | 5 | 47 | 556 | 44 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | L NA | Right | L NA | Left | Right | Left | Left | R NA |
| 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 |
| 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 |
| Detector Phase | 1 | 6 | 6 | 5 | 2 | 2 | 7 | 4 | 4 | 3 | 8 | 8 |

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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) | 56.0 | 52.9 | 52.9 | 54.3 | 50.3 | 50.3 | 9.6 | 42.5 | 42.5 | 8.6 | 41.5 | 41.5 |
| Actuated g/C Ratio | 0.47 | 0.44 | 0.44 | 0.45 | 0.42 | 0.42 | 0.08 | 0.35 | 0.35 | 0.07 | 0.35 | 0.35 |
| v/c Ratio | 0.05 | 0.26 | 0.23 | 0.03 | 0.23 | 0.04 | 0.44 | 0.52 | 0.01 | 0.37 | 0.86 | 0.07 |
| Control Delay | 21.5 | 27.0 | 5.3 | 21.6 | 28.4 | 0.1 | 61.6 | 32.9 | 0.0 | 60.6 | 50.7 | 0.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 21.5 | 27.0 | 5.3 | 21.6 | 28.4 | 0.1 | 61.6 | 32.9 | 0.0 | 60.6 | 50.7 | 0.2 |
| LOS | C | C | A | C | C | A | E | C | A | E | D | A |
| Approach Delay | | 17.3 | | | 24.2 | | | 36.9 | | | 48.0 | |
| Approach LOS | | B | | | C | | | D | | | D | |
| Queue Length 50th (ft) | 12 | 101 | 0 | 6 | 98 | 0 | 47 | 204 | 0 | 35 | 391 | 0 |
| Queue Length 95th (ft) | 35 | 208 | 54 | 22 | 172 | 0 | 92 | 273 | 0 | 74 | 507 | 0 |
| Internal Link Dist (ft) | | 687 | | | 2966 | | | 1413 | | | 1355 | |
| Turn Bay Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Base Capacity (vph) | 571 | 821 | 800 | 569 | 781 | 743 | 464 | 861 | 783 | 228 | 666 | 653 |
| 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 | 0.05 | 0.26 | 0.23 | 0.03 | 0.23 | 0.04 | 0.14 | 0.40 | 0.01 | 0.21 | 0.83 | 0.07 |

**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: 0.86
Intersection Signal Delay: 34.5 Intersection LOS: C
Intersection Capacity Utilization 60.9% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 2: US 24 & Stapleton

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.1 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 49 | 16 | 1 | 188 | 26 | 1 |
| Future Vol, veh/h | 49 | 16 | 1 | 188 | 26 | 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 | 83 | 83 | 87 | 87 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 59 | 19 | 1 | 216 | 33 | 1 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 78 | 0 | 287 | 69 |
| Stage 1 | - | - | - | - | 69 | - |
| Stage 2 | - | - | - | - | 218 | - |
| 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 | - | - | 1520 | - | 703 | 994 |
| Stage 1 | - | - | - | - | 954 | - |
| Stage 2 | - | - | - | - | 818 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1520 | - | 702 | 994 |
| Mov Cap-2 Maneuver | - | - | - | - | 702 | - |
| Stage 1 | - | - | - | - | 954 | - |
| Stage 2 | - | - | - | - | 817 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0 | 10.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 710 | - | - | 1520 | - |
| HCM Lane V/C Ratio | 0.049 | - | - | 0.001 | - |
| HCM Control Delay (s) | 10.3 | - | - | 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 | 1 | 59 | 33 | 6 | 191 | 19 | 57 | 4 | 2 | 7 | 4 | 12 |
| Future Vol, veh/h | 1 | 59 | 33 | 6 | 191 | 19 | 57 | 4 | 2 | 7 | 4 | 12 |
| 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 | 78 | 78 | 78 | 87 | 87 | 87 | 78 | 78 | 78 | 78 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 76 | 42 | 7 | 220 | 22 | 73 | 5 | 3 | 9 | 5 | 15 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 242 | 0 | 0 | 118 | 0 | 0 | 333 | 334 | 76 | 348 | 365 | 231 |
| Stage 1 | - | - | - | - | - | - | 78 | 78 | - | 245 | 245 | - |
| Stage 2 | - | - | - | - | - | - | 255 | 256 | - | 103 | 120 | - |
| 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 | 1324 | - | - | 1470 | - | - | 620 | 586 | 985 | 607 | 563 | 808 |
| Stage 1 | - | - | - | - | - | - | 931 | 830 | - | 759 | 703 | - |
| Stage 2 | - | - | - | - | - | - | 749 | 696 | - | 903 | 796 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1324 | - | - | 1470 | - | - | 601 | 582 | 985 | 598 | 559 | 808 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 601 | 582 | - | 598 | 559 | - |
| Stage 1 | - | - | - | - | - | - | 930 | 829 | - | 758 | 699 | - |
| Stage 2 | - | - | - | - | - | - | 725 | 692 | - | 894 | 795 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.1 | 0.2 | 11.8 | 10.5 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 607 | 1324 | - | - | 1470 | - | - | 682 |
| HCM Lane V/C Ratio | 0.133 | 0.001 | - | - | 0.005 | - | - | 0.043 |
| HCM Control Delay (s) | 11.8 | 7.7 | 0 | - | 7.5 | 0 | - | 10.5 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.5 | 0 | - | - | 0 | - | - | 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 | 4 | 14 | 125 | 15 | 19 | 4 | 51 | 293 | 4 | 8 | 451 | 5 |
| Future Vol, veh/h | 4 | 14 | 125 | 15 | 19 | 4 | 51 | 293 | 4 | 8 | 451 | 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 | - | - | Stop | - | - | Yield | - | - | Yield |
| Storage Length | 170 | - | 250 | 125 | - | 25 | 620 | - | 550 | 540 | - | 480 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 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 | 5 | 16 | 144 | 19 | 24 | 5 | 55 | 318 | 4 | 9 | 490 | 5 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 948 | 936 | - | 944 | 936 | 318 | 490 | 0 | 0 | 318 | 0 | 0 |
| Stage 1 | 508 | 508 | - | 428 | 428 | - | - | - | - | - | - | - |
| Stage 2 | 440 | 428 | - | 516 | 508 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | - | 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 | - | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 241 | 265 | 0 | 242 | 265 | 723 | 1073 | - | - | 1242 | - | - |
| Stage 1 | 547 | 539 | 0 | 605 | 585 | - | - | - | - | - | - | - |
| Stage 2 | 596 | 585 | 0 | 542 | 539 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 212 | 250 | - | 220 | 250 | 723 | 1073 | - | - | 1242 | - | - |
| Mov Cap-2 Maneuver | 212 | 250 | - | 220 | 250 | - | - | - | - | - | - | - |
| Stage 1 | 519 | 535 | - | 574 | 555 | - | - | - | - | - | - | - |
| Stage 2 | 537 | 555 | - | 522 | 535 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | 20.8 | 20.5 | 1.3 | 0.1 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1073 | - | - | 220 | 250 | 723 | 212 | 250 | - | 1242 | - | - |
| HCM Lane V/C Ratio | 0.052 | - | - | 0.087 | 0.097 | 0.007 | 0.022 | 0.064 | - | 0.007 | - | - |
| HCM Control Delay (s) | 8.5 | - | - | 22.9 | 20.9 | 10 | 22.4 | 20.4 | 0 | 7.9 | - | - |
| HCM Lane LOS | A | - | - | C | C | B | C | C | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.3 | 0.3 | 0 | 0.1 | 0.2 | - | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 13.6 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 8 | 87 | 97 | 35 | 278 | 54 | 69 | 101 | 10 | 24 | 244 | 15 |
| Future Vol, veh/h | 8 | 87 | 97 | 35 | 278 | 54 | 69 | 101 | 10 | 24 | 244 | 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 | 245 | - | 195 | 235 | - | 195 | 265 | - | - | 265 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 92 | 92 | 92 | 87 | 87 | 87 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 9 | 100 | 111 | 38 | 302 | 59 | 79 | 116 | 11 | 26 | 265 | 16 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 361 | 0 | 0 | 211 | 0 | 0 | 666 | 555 | 100 | 615 | 607 | 302 |
| Stage 1 | - | - | - | - | - | - | 118 | 118 | - | 378 | 378 | - |
| Stage 2 | - | - | - | - | - | - | 548 | 437 | - | 237 | 229 | - |
| 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 | 1198 | - | - | 1360 | - | - | 373 | 440 | 956 | 403 | 411 | 738 |
| Stage 1 | - | - | - | - | - | - | 887 | 798 | - | 644 | 615 | - |
| Stage 2 | - | - | - | - | - | - | 521 | 579 | - | 766 | 715 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1198 | - | - | 1360 | - | - | 164 | 424 | 956 | 306 | 396 | 738 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 164 | 424 | - | 306 | 396 | - |
| Stage 1 | - | - | - | - | - | - | 880 | 792 | - | 639 | 598 | - |
| Stage 2 | - | - | - | - | - | - | 276 | 563 | - | 641 | 709 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0.7 | 27.7 | 30.3 |
| HCM LOS | | | D | D |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 164 | 446 | 1198 | - | - | 1360 | - | - | 306 | 407 |
| HCM Lane V/C Ratio | 0.484 | 0.286 | 0.008 | - | - | 0.028 | - | - | 0.085 | 0.692 |
| HCM Control Delay (s) | 46 | 16.3 | 8 | - | - | 7.7 | - | - | 17.9 | 31.5 |
| HCM Lane LOS | E | C | A | - | - | A | - | - | C | D |
| HCM 95th %tile Q(veh) | 2.3 | 1.2 | 0 | - | - | 0.1 | - | - | 0.3 | 5.1 |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 52 | 76 | 65 | 240 | 91 | 11 | 163 | 675 | 324 | 2 | 453 | 53 |
| Future Volume (vph) | 52 | 76 | 65 | 240 | 91 | 11 | 163 | 675 | 324 | 2 | 453 | 53 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 860 | | 0 | 695 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 200 | | | 200 | | | 300 | | | 300 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | 0.954 | | | 0.996 | | | 0.951 | | | 0.984 | |
| Flt Protected | | 0.987 | | | 0.966 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1754 | 0 | 0 | 1792 | 0 | 1770 | 1771 | 0 | 1770 | 1833 | 0 |
| Flt Permitted | | 0.987 | | | 0.966 | | 0.232 | | | 0.065 | | |
| Satd. Flow (perm) | 0 | 1754 | 0 | 0 | 1792 | 0 | 432 | 1771 | 0 | 121 | 1833 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 15 | | | 1 | | | 28 | | | 5 | |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 1112 | | | 1085 | | | 1307 | | | 1572 | |
| Travel Time (s) | | 16.8 | | | 16.4 | | | 16.2 | | | 19.5 | |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.92 | 0.92 | 0.92 | 0.95 | 0.95 | 0.95 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 60 | 87 | 75 | 261 | 99 | 12 | 172 | 711 | 341 | 2 | 492 | 58 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 222 | 0 | 0 | 372 | 0 | 172 | 1052 | 0 | 2 | 550 | 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) | | 0 | | | 0 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 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 | | |

| 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) | 6.0 | 6.0 | | 6.0 | 6.0 | | 6.0 | 37.0 | | 22.0 | 22.0 | |
| Minimum Split (s) | 13.0 | 13.0 | | 13.0 | 13.0 | | 11.0 | 44.0 | | 29.0 | 29.0 | |
| Total Split (s) | 25.0 | 25.0 | | 30.0 | 30.0 | | 20.0 | 85.0 | | 65.0 | 65.0 | |
| Total Split (%) | 17.9% | 17.9% | | 21.4% | 21.4% | | 14.3% | 60.7% | | 46.4% | 46.4% | |
| Maximum Green (s) | 18.0 | 18.0 | | 23.0 | 23.0 | | 15.0 | 78.0 | | 58.0 | 58.0 | |
| Yellow Time (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 3.0 | 5.0 | | 5.0 | 5.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | | 7.0 | | | 7.0 | | 5.0 | 7.0 | | 7.0 | 7.0 | |
| 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 | C-Min | | C-Min | C-Min | |
| Walk Time (s) | | | | | | | | 7.0 | | 7.0 | 7.0 | |
| Flash Dont Walk (s) | | | | | | | | 11.0 | | 11.0 | 11.0 | |
| Pedestrian Calls (#/hr) | | | | | | | | 0 | | 0 | 0 | |
| Act Effct Green (s) | | 17.9 | | | 23.1 | | 80.0 | 78.0 | | 61.1 | 61.1 | |
| Actuated g/C Ratio | | 0.13 | | | 0.16 | | 0.57 | 0.56 | | 0.44 | 0.44 | |
| v/c Ratio | | 0.94 | | | 1.26 | | 0.48 | 1.05 | | 0.04 | 0.68 | |
| Control Delay | | 99.8 | | | 186.9 | | 18.9 | 73.5 | | 26.5 | 37.3 | |
| Queue Delay | | 0.0 | | | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | | 99.8 | | | 186.9 | | 18.9 | 73.5 | | 26.5 | 37.3 | |
| LOS | | F | | | F | | B | E | | C | D | |
| Approach Delay | | 99.8 | | | 186.9 | | | 65.9 | | | 37.3 | |
| Approach LOS | | F | | | F | | | E | | | D | |
| Queue Length 50th (ft) | | 190 | | | ~425 | | 72 | ~1033 | | 1 | 394 | |
| Queue Length 95th (ft) | | #332 | | | #632 | | 111 | #1300 | | 8 | 554 | |
| Internal Link Dist (ft) | | 1032 | | | 1005 | | | 1227 | | | 1492 | |
| Turn Bay Length (ft) | | | | | | | 860 | | | 695 | | |
| Base Capacity (vph) | | 238 | | | 296 | | 390 | 999 | | 52 | 803 | |
| 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 | | 0.93 | | | 1.26 | | 0.44 | 1.05 | | 0.04 | 0.68 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 140 | | | |
| Actuated Cycle Length: 140 | | | |
| Offset: 20 (14%), Referenced to phase 2:NETL and 6:SWTL, Start of Green | | | |
| Natural Cycle: 150 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.26 | | | |
| Intersection Signal Delay: 81.4 | | Intersection LOS: F | |
| Intersection Capacity Utilization 126.5% | | ICU Level of Service H | |
| 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

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 17 | 114 | 58 | 35 | 209 | 38 | 140 | 542 | 43 | 20 | 430 | 35 |
| Future Volume (vph) | 17 | 114 | 58 | 35 | 209 | 38 | 140 | 542 | 43 | 20 | 430 | 35 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 240 | | | 200 | | | 190 | | | 190 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 |
| Flt Permitted | 0.397 | | | 0.519 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 740 | 1863 | 1583 | 967 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 136 | | | 136 | | | 95 | | | 136 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 767 | | | 3046 | | | 1493 | | | 1435 | |
| Travel Time (s) | | 11.6 | | | 46.2 | | | 18.5 | | | 17.8 | |
| 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) | 20 | 131 | 67 | 38 | 227 | 41 | 151 | 583 | 46 | 22 | 467 | 38 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 20 | 131 | 67 | 38 | 227 | 41 | 151 | 583 | 46 | 22 | 467 | 38 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | L NA | Right | L NA | Left | Right | Left | Left | R NA |
| Median Width(ft) | | 12 | | | 12 | | | 12 | | | 12 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 |
| Detector Template | Left | Thru | Right | 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 |

| 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) | 28.9 | 24.6 | 24.6 | 31.1 | 27.5 | 27.5 | 15.6 | 71.2 | 71.2 | 7.1 | 58.6 | 58.6 |
| Actuated g/C Ratio | 0.24 | 0.20 | 0.20 | 0.26 | 0.23 | 0.23 | 0.13 | 0.59 | 0.59 | 0.06 | 0.49 | 0.49 |
| v/c Ratio | 0.09 | 0.34 | 0.15 | 0.13 | 0.53 | 0.09 | 0.66 | 0.53 | 0.05 | 0.21 | 0.51 | 0.05 |
| Control Delay | 31.8 | 44.8 | 0.8 | 32.4 | 46.6 | 0.4 | 62.7 | 18.6 | 0.1 | 58.0 | 25.2 | 0.1 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 31.8 | 44.8 | 0.8 | 32.4 | 46.6 | 0.4 | 62.7 | 18.6 | 0.1 | 58.0 | 25.2 | 0.1 |
| LOS | C | D | A | C | D | A | E | B | A | E | C | A |
| Approach Delay | | 30.1 | | | 38.7 | | | 26.0 | | | 24.8 | |
| Approach LOS | | C | | | D | | | C | | | C | |
| Queue Length 50th (ft) | 11 | 91 | 0 | 22 | 146 | 0 | 113 | 279 | 0 | 17 | 242 | 0 |
| Queue Length 95th (ft) | 29 | 147 | 0 | 49 | 251 | 0 | 175 | 425 | 0 | 44 | 392 | 0 |
| Internal Link Dist (ft) | | 687 | | | 2966 | | | 1413 | | | 1355 | |
| Turn Bay Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Base Capacity (vph) | 280 | 382 | 433 | 326 | 427 | 468 | 464 | 1105 | 977 | 228 | 909 | 842 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.07 | 0.34 | 0.15 | 0.12 | 0.53 | 0.09 | 0.33 | 0.53 | 0.05 | 0.10 | 0.51 | 0.05 |

**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: 0.66
Intersection Signal Delay: 28.3 Intersection LOS: C
Intersection Capacity Utilization 58.1% ICU Level of Service B
Analysis Period (min) 15

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 | 184 | 35 | 2 | 51 | 19 | 1 |
| Future Vol, veh/h | 184 | 35 | 2 | 51 | 19 | 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 | 83 | 83 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 211 | 40 | 2 | 61 | 24 | 1 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 251 | 0 | 296 | 231 |
| Stage 1 | - | - | - | - | 231 | - |
| Stage 2 | - | - | - | - | 65 | - |
| 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 | - | - | 1314 | - | 695 | 808 |
| Stage 1 | - | - | - | - | 807 | - |
| Stage 2 | - | - | - | - | 958 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1314 | - | 694 | 808 |
| Mov Cap-2 Maneuver | - | - | - | - | 694 | - |
| Stage 1 | - | - | - | - | 807 | - |
| Stage 2 | - | - | - | - | 956 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0.3 | 10.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 699 | - | - | 1314 | - |
| HCM Lane V/C Ratio | 0.037 | - | - | 0.002 | - |
| HCM Control Delay (s) | 10.3 | - | - | 7.7 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.1 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 18 | 202 | 66 | 4 | 64 | 6 | 55 | 7 | 10 | 13 | 6 | 9 |
| Future Vol, veh/h | 18 | 202 | 66 | 4 | 64 | 6 | 55 | 7 | 10 | 13 | 6 | 9 |
| 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 | 87 | 87 | 87 | 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 | 21 | 232 | 76 | 5 | 77 | 7 | 66 | 8 | 12 | 17 | 8 | 12 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 84 | 0 | 0 | 308 | 0 | 0 | 375 | 368 | 232 | 413 | 441 | 81 |
| Stage 1 | - | - | - | - | - | - | 274 | 274 | - | 91 | 91 | - |
| Stage 2 | - | - | - | - | - | - | 101 | 94 | - | 322 | 350 | - |
| 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 | 1513 | - | - | 1253 | - | - | 582 | 561 | 807 | 549 | 510 | 979 |
| Stage 1 | - | - | - | - | - | - | 732 | 683 | - | 916 | 820 | - |
| Stage 2 | - | - | - | - | - | - | 905 | 817 | - | 690 | 633 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1513 | - | - | 1253 | - | - | 559 | 549 | 807 | 526 | 499 | 979 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 559 | 549 | - | 526 | 499 | - |
| Stage 1 | - | - | - | - | - | - | 720 | 671 | - | 900 | 817 | - |
| Stage 2 | - | - | - | - | - | - | 882 | 814 | - | 660 | 622 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.5 | 0.4 | 12.3 | 11.3 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 583 | 1513 | - | - | 1253 | - | - | 610 |
| HCM Lane V/C Ratio | 0.149 | 0.014 | - | - | 0.004 | - | - | 0.059 |
| HCM Control Delay (s) | 12.3 | 7.4 | 0 | - | 7.9 | 0 | - | 11.3 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.5 | 0 | - | - | 0 | - | - | 0.2 |

| 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 | 4 | 12 | 90 | 9 | 7 | 11 | 106 | 494 | 20 | 13 | 364 | 4 |
| Future Vol, veh/h | 4 | 12 | 90 | 9 | 7 | 11 | 106 | 494 | 20 | 13 | 364 | 4 |
| 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 | - | - | Stop | - | - | Yield | - | - | Yield |
| Storage Length | 170 | - | 250 | 125 | - | 25 | 620 | - | 550 | 540 | - | 480 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 83 | 83 | 83 | 78 | 78 | 78 | 93 | 93 | 93 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 5 | 14 | 108 | 12 | 9 | 14 | 114 | 531 | 22 | 14 | 396 | 4 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1188 | 1183 | - | 1190 | 1183 | 531 | 396 | 0 | 0 | 531 | 0 | 0 |
| Stage 1 | 424 | 424 | - | 759 | 759 | - | - | - | - | - | - | - |
| Stage 2 | 764 | 759 | - | 431 | 424 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | - | 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 | - | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 165 | 189 | 0 | 165 | 189 | 548 | 1163 | - | - | 1036 | - | - |
| Stage 1 | 608 | 587 | 0 | 399 | 415 | - | - | - | - | - | - | - |
| Stage 2 | 396 | 415 | 0 | 603 | 587 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 141 | 168 | - | 141 | 168 | 548 | 1163 | - | - | 1036 | - | - |
| Mov Cap-2 Maneuver | 141 | 168 | - | 141 | 168 | - | - | - | - | - | - | - |
| Stage 1 | 548 | 579 | - | 360 | 374 | - | - | - | - | - | - | - |
| Stage 2 | 340 | 374 | - | 580 | 579 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | 29.1 | 22.9 | 1.4 | 0.3 |
| HCM LOS | D | C | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1163 | - | - | 141 | 168 | 548 | 141 | 168 | - | 1036 | - | - |
| HCM Lane V/C Ratio | 0.098 | - | - | 0.082 | 0.053 | 0.026 | 0.034 | 0.086 | - | 0.014 | - | - |
| HCM Control Delay (s) | 8.4 | - | - | 32.8 | 27.6 | 11.7 | 31.4 | 28.4 | 0 | 8.5 | - | - |
| HCM Lane LOS | A | - | - | D | D | B | D | D | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.3 | - | - | 0.3 | 0.2 | 0.1 | 0.1 | 0.3 | - | 0 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 9 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 16 | 274 | 50 | 9 | 178 | 42 | 86 | 164 | 17 | 61 | 76 | 14 |
| Future Vol, veh/h | 16 | 274 | 50 | 9 | 178 | 42 | 86 | 164 | 17 | 61 | 76 | 14 |
| 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 | - | 195 | 235 | - | 195 | 265 | - | - | 265 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 87 | 87 | 87 | 92 | 92 | 92 | 87 | 87 | 87 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 17 | 298 | 54 | 10 | 205 | 48 | 93 | 178 | 18 | 70 | 87 | 16 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 253 | 0 | 0 | 352 | 0 | 0 | 633 | 605 | 298 | 682 | 611 | 205 |
| Stage 1 | - | - | - | - | - | - | 332 | 332 | - | 225 | 225 | - |
| Stage 2 | - | - | - | - | - | - | 301 | 273 | - | 457 | 386 | - |
| 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 | 1312 | - | - | 1207 | - | - | 392 | 412 | 741 | 364 | 409 | 836 |
| Stage 1 | - | - | - | - | - | - | 681 | 644 | - | 778 | 718 | - |
| Stage 2 | - | - | - | - | - | - | 708 | 684 | - | 583 | 610 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1312 | - | - | 1207 | - | - | 315 | 403 | 741 | 229 | 400 | 836 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 315 | 403 | - | 229 | 400 | - |
| Stage 1 | - | - | - | - | - | - | 672 | 636 | - | 768 | 712 | - |
| Stage 2 | - | - | - | - | - | - | 604 | 679 | - | 404 | 602 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0.3 | 20.9 | 20.5 |
| HCM LOS | | | C | C |

| Minor Lane/Major Mvmt | NBLn1 | NBLn2 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 | SBLn2 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 315 | 421 | 1312 | - | - | 1207 | - | - | 229 | 435 |
| HCM Lane V/C Ratio | 0.297 | 0.467 | 0.013 | - | - | 0.009 | - | - | 0.306 | 0.238 |
| HCM Control Delay (s) | 21.2 | 20.8 | 7.8 | - | - | 8 | - | - | 27.5 | 15.8 |
| HCM Lane LOS | C | C | A | - | - | A | - | - | D | C |
| HCM 95th %tile Q(veh) | 1.2 | 2.4 | 0 | - | - | 0 | - | - | 1.2 | 0.9 |

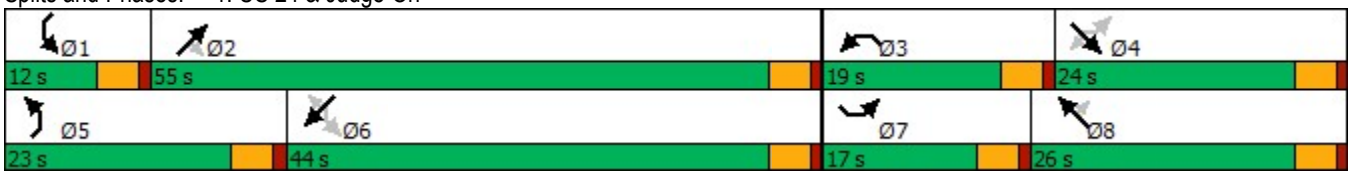
| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 70 | 151 | 300 | 261 | 134 | 50 | 240 | 675 | 199 | 100 | 1200 | 100 |
| Future Volume (vph) | 70 | 151 | 300 | 261 | 134 | 50 | 240 | 675 | 199 | 100 | 1200 | 100 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 235 | | 235 | 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 | 0.659 | | | 0.950 | | | 0.950 | | | 0.354 | | |
| Satd. Flow (perm) | 1228 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | 659 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 248 | | | 149 | | | 209 | | | 149 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 1254 | | | 1178 | | | 1307 | | | 1572 | |
| Travel Time (s) | | 19.0 | | | 17.8 | | | 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) | 76 | 164 | 326 | 284 | 146 | 54 | 253 | 711 | 209 | 105 | 1263 | 105 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 76 | 164 | 326 | 284 | 146 | 54 | 253 | 711 | 209 | 105 | 1263 | 105 |
| 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 |

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | 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 | 12.4 | 12.4 | 12.7 | 18.8 | 18.8 | 12.8 | 50.8 | 50.8 | 52.2 | 45.1 | 45.1 |
| Actuated g/C Ratio | 0.21 | 0.12 | 0.12 | 0.13 | 0.19 | 0.19 | 0.13 | 0.50 | 0.50 | 0.52 | 0.45 | 0.45 |
| v/c Ratio | 0.25 | 0.38 | 0.79 | 0.66 | 0.22 | 0.13 | 0.58 | 0.40 | 0.23 | 0.25 | 0.80 | 0.13 |
| Control Delay | 28.1 | 43.1 | 26.2 | 50.7 | 37.0 | 0.6 | 47.9 | 17.5 | 3.1 | 11.6 | 30.8 | 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 | 28.1 | 43.1 | 26.2 | 50.7 | 37.0 | 0.6 | 47.9 | 17.5 | 3.1 | 11.6 | 30.8 | 1.7 |
| LOS | C | D | C | D | D | A | D | B | A | B | C | A |
| Approach Delay | | 31.4 | | | 41.0 | | | 21.5 | | | 27.4 | |
| Approach LOS | | C | | | D | | | C | | | C | |
| Queue Length 50th (ft) | 36 | 52 | 48 | 90 | 43 | 0 | 80 | 143 | 0 | 25 | 354 | 0 |
| Queue Length 95th (ft) | 70 | 85 | 148 | 144 | 74 | 0 | 126 | 224 | 40 | 58 | #602 | 14 |
| Internal Link Dist (ft) | | 1174 | | | 1098 | | | 1227 | | | 1492 | |
| Turn Bay Length (ft) | 235 | | 235 | 235 | | 235 | 860 | | 290 | 695 | | 290 |
| Base Capacity (vph) | 370 | 686 | 506 | 494 | 762 | 457 | 631 | 1776 | 898 | 426 | 1578 | 788 |
| 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 | 0.21 | 0.24 | 0.64 | 0.57 | 0.19 | 0.12 | 0.40 | 0.40 | 0.23 | 0.25 | 0.80 | 0.13 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 101.1 | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 0.80 | | | |
| Intersection Signal Delay: 27.9 | | Intersection LOS: C | |
| Intersection Capacity Utilization 70.4% | | 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

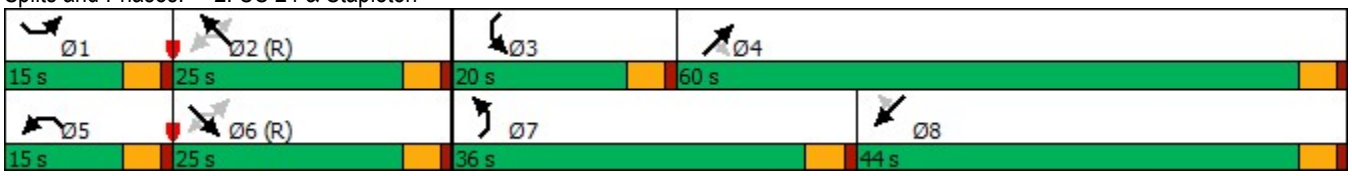


| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 175 | 385 | 600 | 75 | 387 | 55 | 300 | 540 | 50 | 123 | 800 | 350 |
| Future Volume (vph) | 175 | 385 | 600 | 75 | 387 | 55 | 300 | 540 | 50 | 123 | 800 | 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 | 1 | | 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 | 1.00 | 0.95 | 1.00 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3539 | 1583 | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 |
| Flt Permitted | 0.359 | | | 0.506 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 669 | 3539 | 1583 | 943 | 3539 | 1583 | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 483 | | | 136 | | | 95 | | | 317 |
| 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 | 414 | 645 | 81 | 416 | 59 | 316 | 568 | 53 | 129 | 842 | 368 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 188 | 414 | 645 | 81 | 416 | 59 | 316 | 568 | 53 | 129 | 842 | 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 | R NA | L NA | 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 |

| 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) | 53.6 | 42.4 | 42.4 | 44.3 | 35.4 | 35.4 | 16.4 | 39.8 | 39.8 | 13.1 | 36.5 | 36.5 |
| Actuated g/C Ratio | 0.45 | 0.35 | 0.35 | 0.37 | 0.30 | 0.30 | 0.14 | 0.33 | 0.33 | 0.11 | 0.30 | 0.30 |
| v/c Ratio | 0.44 | 0.33 | 0.74 | 0.20 | 0.40 | 0.10 | 0.68 | 0.48 | 0.09 | 0.67 | 0.78 | 0.52 |
| Control Delay | 26.5 | 32.8 | 16.1 | 24.0 | 38.1 | 0.4 | 56.4 | 32.7 | 1.0 | 68.0 | 43.4 | 8.2 |
| 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 | 26.5 | 32.8 | 16.1 | 24.0 | 38.1 | 0.4 | 56.4 | 32.7 | 1.0 | 68.0 | 43.4 | 8.2 |
| LOS | C | C | B | C | D | A | E | C | A | E | D | A |
| Approach Delay | | 23.2 | | | 32.1 | | | 38.9 | | | 36.1 | |
| Approach LOS | | C | | | C | | | D | | | D | |
| Queue Length 50th (ft) | 88 | 126 | 106 | 36 | 136 | 0 | 121 | 185 | 0 | 97 | 312 | 28 |
| Queue Length 95th (ft) | 168 | 206 | #378 | 80 | 217 | 0 | 163 | 208 | 6 | 161 | 353 | 100 |
| Internal Link Dist (ft) | | 1269 | | | 5400 | | | 1302 | | | 1355 | |
| Turn Bay Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Base Capacity (vph) | 427 | 1249 | 871 | 438 | 1043 | 562 | 901 | 1636 | 783 | 228 | 1192 | 743 |
| 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 | 0.44 | 0.33 | 0.74 | 0.18 | 0.40 | 0.10 | 0.35 | 0.35 | 0.07 | 0.57 | 0.71 | 0.50 |

| 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: 0.78 | | | |
| Intersection Signal Delay: 32.3 | | Intersection LOS: C | |
| Intersection Capacity Utilization 74.7% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |
| # 95th percentile volume exceeds capacity, queue may be longer. | | | |
| Queue shown is maximum after two cycles. | | | |

Splits and Phases: 2: US 24 & Stapleton



| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 25 | 48 | 175 | 50 | 48 | 27 | 25 | 600 | 75 | 23 | 750 | 10 |
| Future Volume (vph) | 25 | 48 | 175 | 50 | 48 | 27 | 25 | 600 | 75 | 23 | 750 | 10 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 170 | | 250 | 125 | | 25 | 620 | | 550 | 540 | | 480 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 120 | | | 85 | | | 300 | | | 255 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 3539 | 1583 | 1770 | 3539 | 1583 |
| Flt Permitted | 0.719 | | | 0.723 | | | 0.341 | | | 0.407 | | |
| Satd. Flow (perm) | 1339 | 1863 | 1583 | 1347 | 1863 | 1583 | 635 | 3539 | 1583 | 758 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 190 | | | 33 | | | 81 | | | 27 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 604 | | | 654 | | | 977 | | | 945 | |
| Travel Time (s) | | 9.2 | | | 9.9 | | | 12.1 | | | 11.7 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.83 | 0.83 | 0.83 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 27 | 52 | 190 | 60 | 58 | 33 | 27 | 645 | 81 | 25 | 806 | 11 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 27 | 52 | 190 | 60 | 58 | 33 | 27 | 645 | 81 | 25 | 806 | 11 |
| 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 | 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 | Perm | NA | Perm | Perm | NA | Perm | Perm | NA | Perm | Perm | NA | Perm |
| Protected Phases | | 6 | | | 2 | | | 4 | | | 8 | |
| Permitted Phases | 6 | | 6 | 2 | | 2 | 4 | | 4 | 8 | | 8 |

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 6 | 6 | 6 | 2 | 2 | 2 | 4 | 4 | 4 | 8 | 8 | 8 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| Total Split (%) | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 75.0% | 75.0% | 75.0% | 75.0% | 75.0% | 75.0% |
| Maximum Green (s) | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 | 40.5 | 40.5 | 40.5 | 40.5 | 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 Optimize? | | | | | | | | | | | | |
| 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 | Max | Max | Max | Max | Max | Max |
| Act Effct Green (s) | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 7.9 | 40.8 | 40.8 | 40.8 | 40.8 | 40.8 | 40.8 |
| Actuated g/C Ratio | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.14 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 | 0.71 |
| v/c Ratio | 0.15 | 0.20 | 0.50 | 0.33 | 0.23 | 0.13 | 0.06 | 0.26 | 0.07 | 0.05 | 0.32 | 0.01 |
| Control Delay | 23.4 | 23.7 | 9.2 | 27.2 | 24.0 | 10.2 | 3.5 | 3.5 | 1.1 | 3.3 | 3.8 | 0.7 |
| 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 | 23.4 | 23.7 | 9.2 | 27.2 | 24.0 | 10.2 | 3.5 | 3.5 | 1.1 | 3.3 | 3.8 | 0.7 |
| LOS | C | C | A | C | C | B | A | A | A | A | A | A |
| Approach Delay | | 13.4 | | | 22.3 | | | 3.3 | | | 3.8 | |
| Approach LOS | | B | | | C | | | A | | | A | |
| Queue Length 50th (ft) | 8 | 16 | 0 | 19 | 18 | 0 | 2 | 31 | 0 | 2 | 41 | 0 |
| Queue Length 95th (ft) | 27 | 42 | 46 | 44 | 42 | 17 | 9 | 57 | 10 | 8 | 73 | 2 |
| Internal Link Dist (ft) | | 524 | | | 574 | | | 897 | | | 865 | |
| Turn Bay Length (ft) | 170 | | 250 | 125 | | 25 | 620 | | 550 | 540 | | 480 |
| Base Capacity (vph) | 243 | 339 | 443 | 245 | 339 | 315 | 449 | 2502 | 1143 | 535 | 2502 | 1127 |
| 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 | 0.11 | 0.15 | 0.43 | 0.24 | 0.17 | 0.10 | 0.06 | 0.26 | 0.07 | 0.05 | 0.32 | 0.01 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 60 | | | |
| Actuated Cycle Length: 57.7 | | | |
| Natural Cycle: 45 | | | |
| Control Type: Semi Act-Uncoord | | | |
| Maximum v/c Ratio: 0.50 | | | |
| Intersection Signal Delay: 6.3 | | Intersection LOS: A | |
| Intersection Capacity Utilization 47.0% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 30: US 24 & Elbert

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 7.7 |
| 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 | 321 | 473 | 543 | 548 |
| Demand Flow Rate, veh/h | 327 | 482 | 555 | 559 |
| Vehicles Circulating, veh/h | 589 | 543 | 155 | 508 |
| Vehicles Exiting, veh/h | 478 | 167 | 761 | 517 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 6.8 | 7.4 | 5.3 | 10.8 |
| Approach LOS | A | A | A | B |

| Lane | Left | Right | Left | Right | Left | Right | Left | Right |
|---|---|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | L | TR | L | TR |
| Assumed Moves | LT | R | LT | TR | L | TR | L | TR |
| RT Channelized | | | | | | | | |
| Lane Util | 0.306 | 0.694 | 0.471 | 0.529 | 0.326 | 0.674 | 0.098 | 0.902 |
| Follow-Up Headway, s | 2.667 | 2.535 | 2.667 | 2.535 | 2.667 | 2.535 | 2.667 | 2.535 |
| Critical Headway, s | 4.645 | 4.328 | 4.645 | 4.328 | 4.645 | 4.328 | 4.645 | 4.328 |
| Entry Flow, veh/h | 100 | 227 | 227 | 255 | 181 | 374 | 55 | 504 |
| Cap Entry Lane, veh/h | 785 | 861 | 819 | 895 | 1170 | 1245 | 846 | 922 |
| Entry HV Adj Factor | 0.984 | 0.982 | 0.979 | 0.983 | 0.978 | 0.979 | 0.982 | 0.979 |
| Flow Entry, veh/h | 98 | 223 | 222 | 251 | 177 | 366 | 54 | 494 |
| Cap Entry, veh/h | 772 | 846 | 802 | 879 | 1145 | 1219 | 831 | 903 |
| V/C Ratio | 0.127 | 0.264 | 0.277 | 0.285 | 0.155 | 0.300 | 0.065 | 0.547 |
| Control Delay, s/veh | 6.0 | 7.1 | 7.6 | 7.1 | 4.5 | 5.7 | 5.0 | 11.4 |
| LOS | A | A | A | A | A | A | A | B |
| 95th %tile Queue, veh | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 3 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 10 |

| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 25 | 48 | 175 | 50 | 48 | 27 | 25 | 600 | 75 | 23 | 750 | 10 |
| Future Vol, veh/h | 25 | 48 | 175 | 50 | 48 | 27 | 25 | 600 | 75 | 23 | 750 | 10 |
| 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 | - | - | Stop | - | - | Yield | - | - | Yield |
| Storage Length | 170 | - | 250 | 125 | - | 25 | 620 | - | 550 | 540 | - | 480 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 83 | 83 | 83 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 27 | 52 | 190 | 60 | 58 | 33 | 27 | 645 | 81 | 25 | 806 | 11 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1262 | 1555 | - | 1178 | 1555 | 323 | 806 | 0 | 0 | 645 | 0 | 0 |
| Stage 1 | 856 | 856 | - | 699 | 699 | - | - | - | - | - | - | - |
| Stage 2 | 406 | 699 | - | 479 | 856 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.54 | 6.54 | - | 7.54 | 6.54 | 6.94 | 4.14 | - | - | 4.14 | - | - |
| 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 | 3.52 | 4.02 | - | 3.52 | 4.02 | 3.32 | 2.22 | - | - | 2.22 | - | - |
| Pot Cap-1 Maneuver | 127 | 112 | 0 | 146 | 112 | 673 | 814 | - | - | 936 | - | - |
| Stage 1 | 319 | 373 | 0 | 397 | 440 | - | - | - | - | - | - | - |
| Stage 2 | 593 | 440 | 0 | 537 | 373 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 65 | 105 | - | 85 | 105 | 673 | 814 | - | - | 936 | - | - |
| Mov Cap-2 Maneuver | 65 | 105 | - | 85 | 105 | - | - | - | - | - | - | - |
| Stage 1 | 308 | 363 | - | 384 | 425 | - | - | - | - | - | - | - |
| Stage 2 | 471 | 425 | - | 448 | 363 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | 78.2 | 77.2 | 0.3 | 0.3 |
| HCM LOS | F | F | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 814 | - | - | 85 | 105 | 673 | 65 | 105 | - | 936 | - | - |
| HCM Lane V/C Ratio | 0.033 | - | - | 0.709 | 0.551 | 0.048 | 0.418 | 0.497 | - | 0.026 | - | - |
| HCM Control Delay (s) | 9.6 | - | - | 115.2 | 75 | 10.6 | 95.5 | 69.2 | 0 | 9 | - | - |
| HCM Lane LOS | A | - | - | F | F | B | F | F | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 3.5 | 2.6 | 0.2 | 1.6 | 2.2 | - | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.7 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 5 | 150 | 350 | 25 | 10 | 20 |
| Future Vol, veh/h | 5 | 150 | 350 | 25 | 10 | 20 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 92 | 92 | 83 | 83 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 6 | 172 | 380 | 27 | 12 | 24 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 407 | 0 | - | 0 | 492 | 204 |
| Stage 1 | - | - | - | - | 394 | - |
| Stage 2 | - | - | - | - | 98 | - |
| 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 | 1148 | - | - | - | 506 | 803 |
| Stage 1 | - | - | - | - | 650 | - |
| Stage 2 | - | - | - | - | 915 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1148 | - | - | - | 503 | 803 |
| Mov Cap-2 Maneuver | - | - | - | - | 503 | - |
| Stage 1 | - | - | - | - | 646 | - |
| Stage 2 | - | - | - | - | 915 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.3 | 0 | 10.7 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1148 | - | - | - | 670 |
| HCM Lane V/C Ratio | 0.005 | - | - | - | 0.054 |
| HCM Control Delay (s) | 8.2 | 0 | - | - | 10.7 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.2 |

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 195 | 197 | 360 | 432 | 213 | 50 | 420 | 1235 | 429 | 150 | 790 | 160 |
| Future Volume (vph) | 195 | 197 | 360 | 432 | 213 | 50 | 420 | 1235 | 429 | 150 | 790 | 160 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 235 | | 235 | 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 |
| Ped Bike Factor | 0.79 | | | | | | | | | | | |
| 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 | 0.609 | | | 0.950 | | | 0.950 | | | 0.125 | | |
| Satd. Flow (perm) | 892 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | 233 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 236 | | | 149 | | | 452 | | | 168 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 1254 | | | 1178 | | | 1307 | | | 1572 | |
| Travel Time (s) | | 19.0 | | | 17.8 | | | 16.2 | | | 19.5 | |
| Confl. Peds. (#/hr) | 160 | | | | | | | | | | | |
| 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) | 210 | 212 | 387 | 465 | 229 | 54 | 442 | 1247 | 452 | 158 | 832 | 168 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 210 | 212 | 387 | 465 | 229 | 54 | 442 | 1247 | 452 | 158 | 832 | 168 |
| 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 |
| 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 | |

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Permitted Phases | 4 | | 4 | | | 8 | | | 2 | 6 | | 6 |
| 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) | 27.9 | 15.9 | 15.9 | 15.5 | 19.5 | 19.5 | 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 | 0.47 | 0.47 | 0.45 | 0.39 | 0.39 |
| v/c Ratio | 0.63 | 0.40 | 0.89 | 0.93 | 0.36 | 0.13 | 0.86 | 0.74 | 0.46 | 0.80 | 0.61 | 0.24 |
| Control Delay | 36.4 | 42.9 | 39.9 | 72.5 | 39.5 | 0.7 | 61.7 | 26.7 | 3.3 | 47.5 | 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 | 36.4 | 42.9 | 39.9 | 72.5 | 39.5 | 0.7 | 61.7 | 26.7 | 3.3 | 47.5 | 29.4 | 4.5 |
| LOS | D | D | D | E | D | A | E | C | A | D | C | A |
| Approach Delay | | 39.8 | | | 57.2 | | | 29.0 | | | 28.3 | |
| Approach LOS | | D | | | E | | | C | | | C | |
| Queue Length 50th (ft) | 107 | 69 | 104 | 170 | 73 | 0 | 158 | 376 | 0 | 51 | 252 | 0 |
| Queue Length 95th (ft) | 169 | 106 | #262 | #272 | 110 | 0 | #241 | 464 | 55 | #161 | 320 | 44 |
| Internal Link Dist (ft) | | 1174 | | | 1098 | | | 1227 | | | 1492 | |
| Turn Bay Length (ft) | 235 | | 235 | 235 | | 235 | 860 | | 290 | 695 | | 290 |
| Base Capacity (vph) | 341 | 648 | 482 | 500 | 748 | 452 | 532 | 1680 | 989 | 198 | 1363 | 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 | 0.62 | 0.33 | 0.80 | 0.93 | 0.31 | 0.12 | 0.83 | 0.74 | 0.46 | 0.80 | 0.61 | 0.24 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 106.6 | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 0.93 | | | |
| Intersection Signal Delay: 35.0 | | Intersection LOS: C | |
| Intersection Capacity Utilization 75.2% | | 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

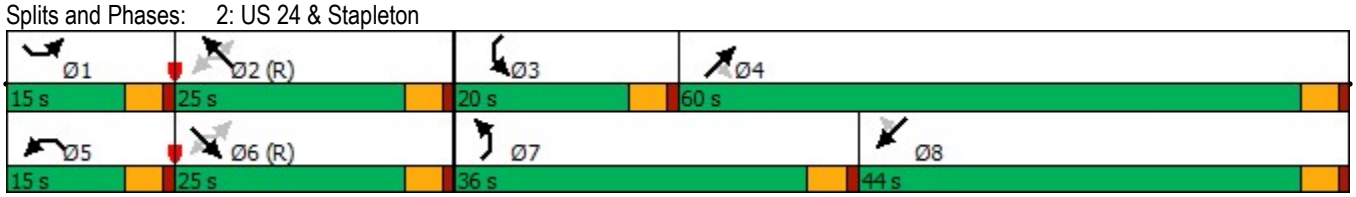
| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 350 | 276 | 700 | 125 | 383 | 179 | 650 | 850 | 125 | 145 | 600 | 350 |
| Future Volume (vph) | 350 | 276 | 700 | 125 | 383 | 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 | 1 | | 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 | 1.00 | 0.95 | 1.00 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3539 | 1583 | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 |
| Flt Permitted | 0.231 | | | 0.574 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 430 | 3539 | 1583 | 1069 | 3539 | 1583 | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 486 | | | 192 | | | 132 | | | 227 |
| 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 | 291 | 737 | 134 | 412 | 192 | 684 | 895 | 132 | 153 | 632 | 368 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 368 | 291 | 737 | 134 | 412 | 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 | R NA | L NA | 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 |
| 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 |
| Detector Phase | 1 | 6 | 6 | 5 | 2 | 2 | 7 | 4 | 4 | 3 | 8 | 8 |

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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) | 48.4 | 33.8 | 33.8 | 31.5 | 20.5 | 20.5 | 28.2 | 43.3 | 43.3 | 14.0 | 29.0 | 29.0 |
| Actuated g/C Ratio | 0.40 | 0.28 | 0.28 | 0.26 | 0.17 | 0.17 | 0.24 | 0.36 | 0.36 | 0.12 | 0.24 | 0.24 |
| v/c Ratio | 0.83 | 0.29 | 0.93 | 0.39 | 0.68 | 0.45 | 0.85 | 0.70 | 0.20 | 0.74 | 0.74 | 0.66 |
| Control Delay | 48.1 | 37.7 | 34.5 | 30.0 | 53.2 | 9.6 | 54.4 | 35.5 | 4.3 | 72.8 | 47.1 | 20.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 48.1 | 37.7 | 34.5 | 30.0 | 53.2 | 9.6 | 54.4 | 35.5 | 4.3 | 72.8 | 47.1 | 20.6 |
| LOS | D | D | C | C | D | A | D | D | A | E | D | C |
| Approach Delay | | 38.7 | | | 37.6 | | | 40.7 | | | 42.0 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Queue Length 50th (ft) | 212 | 94 | 228 | 66 | 159 | 0 | 260 | 312 | 0 | 114 | 238 | 96 |
| Queue Length 95th (ft) | #509 | 154 | #552 | 127 | 215 | 64 | 322 | 335 | 36 | #199 | 280 | 189 |
| Internal Link Dist (ft) | | 1269 | | | 5400 | | | 1302 | | | 1355 | |
| Turn Bay Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Base Capacity (vph) | 444 | 995 | 794 | 357 | 604 | 429 | 901 | 1636 | 803 | 228 | 1164 | 673 |
| 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 | 0.83 | 0.29 | 0.93 | 0.38 | 0.68 | 0.45 | 0.76 | 0.55 | 0.16 | 0.67 | 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: 40.0 Intersection LOS: D
Intersection Capacity Utilization 80.1% 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



| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 10 | 47 | 125 | 25 | 63 | 20 | 140 | 1050 | 50 | 47 | 875 | 35 |
| Future Volume (vph) | 10 | 47 | 125 | 25 | 63 | 20 | 140 | 1050 | 50 | 47 | 875 | 35 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 170 | | 250 | 125 | | 25 | 620 | | 550 | 540 | | 480 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 120 | | | 85 | | | 300 | | | 255 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 1.00 | 1.00 | 0.95 | 1.00 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 3539 | 1583 | 1770 | 3539 | 1583 |
| Flt Permitted | 0.708 | | | 0.722 | | | 0.282 | | | 0.227 | | |
| Satd. Flow (perm) | 1319 | 1863 | 1583 | 1345 | 1863 | 1583 | 525 | 3539 | 1583 | 423 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 144 | | | 27 | | | 53 | | | 38 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 604 | | | 654 | | | 977 | | | 945 | |
| Travel Time (s) | | 9.2 | | | 9.9 | | | 12.1 | | | 11.7 | |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.83 | 0.83 | 0.83 | 0.95 | 0.95 | 0.95 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 11 | 54 | 144 | 30 | 76 | 24 | 147 | 1105 | 53 | 51 | 941 | 38 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 11 | 54 | 144 | 30 | 76 | 24 | 147 | 1105 | 53 | 51 | 941 | 38 |
| 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 |
| 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 | Perm | NA | Perm | Perm | NA | Perm | Perm | NA | Perm | Perm | NA | Perm |
| Protected Phases | | 6 | | | 2 | | | 4 | | | 8 | |
| Permitted Phases | 6 | | 6 | 2 | | 2 | 4 | | 4 | 8 | | 8 |
| Detector Phase | 6 | 6 | 6 | 2 | 2 | 2 | 4 | 4 | 4 | 8 | 8 | 8 |

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| Total Split (%) | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 75.0% | 75.0% | 75.0% | 75.0% | 75.0% | 75.0% |
| Maximum Green (s) | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 | 40.5 | 40.5 | 40.5 | 40.5 | 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 Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Recall Mode | Max | Max | Max | None | None | None | None | None | None | Max | Max | Max |
| Act Effct Green (s) | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 | 40.5 | 40.5 | 40.5 | 40.5 | 40.5 | 40.5 |
| Actuated g/C Ratio | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.18 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 | 0.68 |
| v/c Ratio | 0.05 | 0.17 | 0.36 | 0.13 | 0.23 | 0.08 | 0.42 | 0.46 | 0.05 | 0.18 | 0.39 | 0.04 |
| Control Delay | 21.3 | 22.6 | 7.7 | 22.5 | 23.5 | 9.6 | 8.8 | 5.4 | 1.3 | 5.4 | 4.9 | 1.4 |
| 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 | 21.3 | 22.6 | 7.7 | 22.5 | 23.5 | 9.6 | 8.8 | 5.4 | 1.3 | 5.4 | 4.9 | 1.4 |
| LOS | C | C | A | C | C | A | A | A | A | A | A | A |
| Approach Delay | | 12.3 | | | 20.7 | | | 5.6 | | | 4.8 | |
| Approach LOS | | B | | | C | | | A | | | A | |
| Queue Length 50th (ft) | 3 | 17 | 0 | 9 | 24 | 0 | 19 | 79 | 0 | 5 | 63 | 0 |
| Queue Length 95th (ft) | 14 | 42 | 37 | 27 | 51 | 14 | 53 | 111 | 8 | 17 | 89 | 7 |
| Internal Link Dist (ft) | | 524 | | | 574 | | | 897 | | | 865 | |
| Turn Bay Length (ft) | 170 | | 250 | 125 | | 25 | 620 | | 550 | 540 | | 480 |
| Base Capacity (vph) | 230 | 326 | 395 | 235 | 326 | 299 | 354 | 2388 | 1085 | 285 | 2388 | 1080 |
| 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 | 0.05 | 0.17 | 0.36 | 0.13 | 0.23 | 0.08 | 0.42 | 0.46 | 0.05 | 0.18 | 0.39 | 0.04 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 60 | | | |
| Actuated Cycle Length: 60 | | | |
| Natural Cycle: 60 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 0.46 | | | |
| Intersection Signal Delay: 6.5 | | Intersection LOS: A | |
| Intersection Capacity Utilization 52.5% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 30: US 24 & Elbert

| Intersection | |
|---|---|
| Intersection Delay, s/veh | 9.4 |
| 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 | 442 | 290 | 885 | 550 |
| Demand Flow Rate, veh/h | 451 | 296 | 903 | 561 |
| Vehicles Circulating, veh/h | 570 | 873 | 445 | 473 |
| Vehicles Exiting, veh/h | 464 | 475 | 576 | 696 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 7.3 | 8.6 | 11.5 | 8.1 |
| Approach LOS | A | A | B | A |

| Lane | Left | Right | Left | Right | Left | Right | Left | Right |
|---|---|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | L | TR | L | TR |
| Assumed Moves | LT | TR | LT | TR | L | TR | L | TR |
| RT Channelized | | | | | | | | |
| Lane Util | 0.470 | 0.530 | 0.470 | 0.530 | 0.317 | 0.683 | 0.276 | 0.724 |
| 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 | 212 | 239 | 139 | 157 | 286 | 617 | 155 | 406 |
| Cap Entry Lane, veh/h | 799 | 875 | 605 | 676 | 896 | 973 | 874 | 950 |
| Entry HV Adj Factor | 0.980 | 0.980 | 0.981 | 0.979 | 0.979 | 0.981 | 0.981 | 0.979 |
| Flow Entry, veh/h | 208 | 234 | 136 | 154 | 280 | 605 | 152 | 398 |
| Cap Entry, veh/h | 783 | 857 | 593 | 662 | 878 | 954 | 857 | 930 |
| V/C Ratio | 0.265 | 0.273 | 0.230 | 0.232 | 0.319 | 0.634 | 0.177 | 0.427 |
| Control Delay, s/veh | 7.6 | 7.1 | 9.0 | 8.2 | 7.6 | 13.2 | 6.0 | 8.9 |
| LOS | A | A | A | A | A | B | A | A |
| 95th %tile Queue, veh | 1 | 1 | 1 | 1 | 1 | 5 | 1 | 2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.9 |

| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 10 | 47 | 125 | 25 | 63 | 20 | 140 | 1050 | 50 | 47 | 875 | 35 |
| Future Vol, veh/h | 10 | 47 | 125 | 25 | 63 | 20 | 140 | 1050 | 50 | 47 | 875 | 35 |
| 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 | - | - | Stop | - | - | Yield | - | - | Yield |
| Storage Length | 170 | - | 250 | 125 | - | 25 | 620 | - | 550 | 540 | - | 480 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 83 | 83 | 83 | 95 | 95 | 95 | 93 | 93 | 93 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 54 | 144 | 30 | 76 | 24 | 147 | 1105 | 53 | 51 | 941 | 38 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1928 | 2442 | - | 1999 | 2442 | 553 | 941 | 0 | 0 | 1105 | 0 | 0 |
| Stage 1 | 1043 | 1043 | - | 1399 | 1399 | - | - | - | - | - | - | - |
| Stage 2 | 885 | 1399 | - | 600 | 1043 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.54 | 6.54 | - | 7.54 | 6.54 | 6.94 | 4.14 | - | - | 4.14 | - | - |
| 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 | 3.52 | 4.02 | - | 3.52 | 4.02 | 3.32 | 2.22 | - | - | 2.22 | - | - |
| Pot Cap-1 Maneuver | 40 | ~ 31 | 0 | 35 | ~ 31 | 477 | 724 | - | - | 628 | - | - |
| Stage 1 | 245 | 305 | 0 | 148 | 206 | - | - | - | - | - | - | - |
| Stage 2 | 306 | 206 | 0 | 455 | 305 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | - | ~ 23 | - | - | ~ 23 | 477 | 724 | - | - | 628 | - | - |
| Mov Cap-2 Maneuver | - | ~ 23 | - | - | ~ 23 | - | - | - | - | - | - | - |
| Stage 1 | 195 | 280 | - | 118 | 164 | - | - | - | - | - | - | - |
| Stage 2 | 124 | 164 | - | 337 | 280 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | | | 1.3 | 0.6 |
| HCM LOS | - | - | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 724 | - | - | - | 23 | 477 | - | 23 | - | 628 | - | - |
| HCM Lane V/C Ratio | 0.204 | - | - | - | 3.3 | 0.051 | - | 2.349 | - | 0.08 | - | - |
| HCM Control Delay (s) | 11.2 | - | - | $ 1386.4 | 12.9 | - | $ 972.5 | 0 | 11.2 | - | - | |
| HCM Lane LOS | B | - | - | - | F | B | - | F | A | B | - | - |
| HCM 95th %tile Q(veh) | 0.8 | - | - | - | 9.6 | 0.2 | - | 6.8 | - | 0.3 | - | - |

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

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.8 |

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 20 | 300 | 150 | 10 | 50 | 15 |
| Future Vol, veh/h | 20 | 300 | 150 | 10 | 50 | 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 | 92 | 92 | 87 | 87 | 83 | 83 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 326 | 172 | 11 | 60 | 18 |

| Major/Minor | Major1 | | Major2 | | Minor2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 183 | 0 | - | 0 | 385 | 92 |
| Stage 1 | - | - | - | - | 178 | - |
| Stage 2 | - | - | - | - | 207 | - |
| 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 | 1389 | - | - | - | 591 | 947 |
| Stage 1 | - | - | - | - | 835 | - |
| Stage 2 | - | - | - | - | 807 | - |
| Platoon blocked, % | | - | - | - | | |
| Mov Cap-1 Maneuver | 1389 | - | - | - | 580 | 947 |
| Mov Cap-2 Maneuver | - | - | - | - | 580 | - |
| Stage 1 | - | - | - | - | 819 | - |
| Stage 2 | - | - | - | - | 807 | - |

| Approach | EB | WB | SB |
|---|---|---|---|
| HCM Control Delay, s | 0.6 | 0 | 11.4 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|
| Capacity (veh/h) | 1389 | - | - | - | 637 |
| HCM Lane V/C Ratio | 0.016 | - | - | - | 0.123 |
| HCM Control Delay (s) | 7.6 | 0.1 | - | - | 11.4 |
| HCM Lane LOS | A | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.4 |

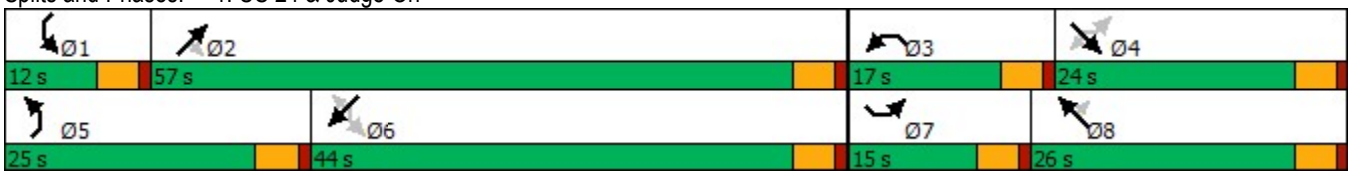
| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 70 | 160 | 300 | 315 | 140 | 50 | 240 | 675 | 225 | 100 | 1200 | 100 |
| Future Volume (vph) | 70 | 160 | 300 | 315 | 140 | 50 | 240 | 675 | 225 | 100 | 1200 | 100 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 235 | | 235 | 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 | | | 0.356 | | |
| Satd. Flow (perm) | 1222 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | 663 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 272 | | | 149 | | | 237 | | | 149 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 1254 | | | 1178 | | | 1307 | | | 1572 | |
| Travel Time (s) | | 19.0 | | | 17.8 | | | 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) | 76 | 174 | 326 | 342 | 152 | 54 | 253 | 711 | 237 | 105 | 1263 | 105 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 76 | 174 | 326 | 342 | 152 | 54 | 253 | 711 | 237 | 105 | 1263 | 105 |
| 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 |

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | 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 | 12.4 | 18.3 | 18.3 | 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 | 0.13 | 0.51 | 0.51 | 0.53 | 0.46 | 0.46 |
| v/c Ratio | 0.26 | 0.42 | 0.77 | 0.82 | 0.24 | 0.13 | 0.59 | 0.39 | 0.26 | 0.25 | 0.78 | 0.13 |
| Control Delay | 29.7 | 44.5 | 21.6 | 61.5 | 38.5 | 0.7 | 48.4 | 16.5 | 2.8 | 10.7 | 28.9 | 1.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 29.7 | 44.5 | 21.6 | 61.5 | 38.5 | 0.7 | 48.4 | 16.5 | 2.8 | 10.7 | 28.9 | 1.6 |
| LOS | C | D | C | E | D | A | D | B | A | B | C | A |
| Approach Delay | | 29.6 | | | 49.1 | | | 20.5 | | | 25.6 | |
| Approach LOS | | C | | | D | | | C | | | C | |
| Queue Length 50th (ft) | 37 | 56 | 33 | 111 | 46 | 0 | 80 | 137 | 0 | 23 | 341 | 0 |
| Queue Length 95th (ft) | 72 | 89 | 127 | #204 | 77 | 0 | 126 | 215 | 41 | 55 | #577 | 14 |
| Internal Link Dist (ft) | | 1174 | | | 1098 | | | 1227 | | | 1492 | |
| Turn Bay Length (ft) | 235 | | 235 | 235 | | 235 | 860 | | 290 | 695 | | 290 |
| Base Capacity (vph) | 326 | 676 | 522 | 420 | 764 | 458 | 689 | 1821 | 929 | 434 | 1623 | 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 | 0.26 | 0.62 | 0.81 | 0.20 | 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: 102.3 | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 0.82 | | | |
| Intersection Signal Delay: 28.0 | | Intersection LOS: C | |
| Intersection Capacity Utilization 72.0% | | 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



| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 175 | 400 | 600 | 75 | 405 | 55 | 300 | 540 | 50 | 123 | 800 | 350 |
| Future Volume (vph) | 175 | 400 | 600 | 75 | 405 | 55 | 300 | 540 | 50 | 123 | 800 | 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 | 1 | | 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 | 1.00 | 0.95 | 1.00 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3539 | 1583 | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 |
| Flt Permitted | 0.337 | | | 0.490 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 628 | 3539 | 1583 | 913 | 3539 | 1583 | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 379 | | | 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 | 0.95 | 0.95 | 0.95 | 0.92 | 0.92 | 0.92 | 0.93 | 0.93 | 0.93 | 0.95 | 0.95 | 0.95 |
| Adj. Flow (vph) | 184 | 421 | 632 | 82 | 440 | 60 | 323 | 581 | 54 | 129 | 842 | 368 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 184 | 421 | 632 | 82 | 440 | 60 | 323 | 581 | 54 | 129 | 842 | 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 | R NA | L NA | 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 |

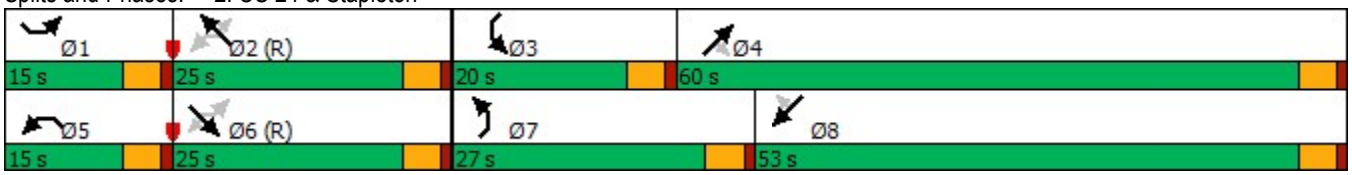
| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 1 | 6 | 6 | 5 | 2 | 2 | 7 | 4 | 4 | 3 | 8 | 8 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 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) | 52.1 | 41.2 | 41.2 | 43.7 | 34.7 | 34.7 | 16.5 | 40.8 | 40.8 | 13.1 | 37.4 | 37.4 |
| Actuated g/C Ratio | 0.43 | 0.34 | 0.34 | 0.36 | 0.29 | 0.29 | 0.14 | 0.34 | 0.34 | 0.11 | 0.31 | 0.31 |
| v/c Ratio | 0.46 | 0.35 | 0.80 | 0.21 | 0.43 | 0.11 | 0.68 | 0.48 | 0.09 | 0.67 | 0.76 | 0.53 |
| Control Delay | 27.7 | 34.0 | 24.7 | 24.9 | 39.1 | 0.4 | 56.7 | 31.9 | 1.1 | 68.0 | 41.8 | 10.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 27.7 | 34.0 | 24.7 | 24.9 | 39.1 | 0.4 | 56.7 | 31.9 | 1.1 | 68.0 | 41.8 | 10.0 |
| LOS | C | C | C | C | D | A | E | C | A | E | D | A |
| Approach Delay | | 28.3 | | | 33.1 | | | 38.6 | | | 35.5 | |
| Approach LOS | | C | | | C | | | D | | | D | |
| Queue Length 50th (ft) | 88 | 130 | 193 | 37 | 147 | 0 | 124 | 187 | 0 | 97 | 308 | 44 |
| Queue Length 95th (ft) | 167 | 214 | #504 | 83 | 230 | 0 | 167 | 207 | 6 | 161 | 345 | 119 |
| Internal Link Dist (ft) | | 1269 | | | 5400 | | | 1302 | | | 1355 | |
| Turn Bay Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Base Capacity (vph) | 402 | 1213 | 792 | 424 | 1021 | 553 | 643 | 1636 | 783 | 228 | 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 | 0.46 | 0.35 | 0.80 | 0.19 | 0.43 | 0.11 | 0.50 | 0.36 | 0.07 | 0.57 | 0.59 | 0.45 |

| 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: 0.80 | | | |
| Intersection Signal Delay: 33.7 | | Intersection LOS: C | |
| Intersection Capacity Utilization 74.7% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

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

Queue shown is maximum after two cycles.

Splits and Phases: 2: US 24 & Stapleton

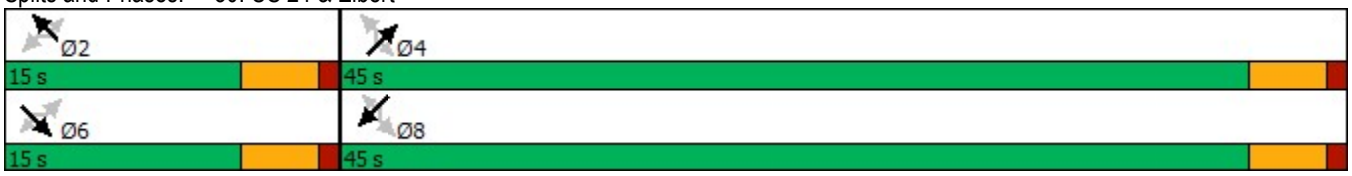


| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 25 | 50 | 175 | 50 | 50 | 30 | 25 | 600 | 25 | 29 | 750 | 10 |
| Future Volume (vph) | 25 | 50 | 175 | 50 | 50 | 30 | 25 | 600 | 25 | 29 | 750 | 10 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 170 | | 250 | 125 | | 25 | 620 | | 550 | 540 | | 480 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 120 | | | 85 | | | 300 | | | 255 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 |
| Flt Permitted | 0.720 | | | 0.722 | | | 0.222 | | | 0.334 | | |
| Satd. Flow (perm) | 1341 | 1863 | 1583 | 1345 | 1863 | 1583 | 414 | 1863 | 1583 | 622 | 1863 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 190 | | | 34 | | | 27 | | | 27 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 604 | | | 654 | | | 977 | | | 945 | |
| Travel Time (s) | | 9.2 | | | 9.9 | | | 12.1 | | | 11.7 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.87 | 0.87 | 0.87 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 27 | 54 | 190 | 57 | 57 | 34 | 27 | 645 | 27 | 31 | 806 | 11 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 27 | 54 | 190 | 57 | 57 | 34 | 27 | 645 | 27 | 31 | 806 | 11 |
| 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) | 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 | Perm | NA | Perm | Perm | NA | Perm | Perm | NA | Perm | Perm | NA | Perm |
| Protected Phases | | 6 | | | 2 | | | 4 | | | 8 | |
| Permitted Phases | 6 | | 6 | 2 | | 2 | 4 | | 4 | 8 | | 8 |

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 6 | 6 | 6 | 2 | 2 | 2 | 4 | 4 | 4 | 8 | 8 | 8 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| Total Split (%) | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 75.0% | 75.0% | 75.0% | 75.0% | 75.0% | 75.0% |
| Maximum Green (s) | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 | 40.5 | 40.5 | 40.5 | 40.5 | 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 Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Recall Mode | Min | Min | Min | Min | Min | Min | None | None | None | None | None | None |
| Walk Time (s) | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 |
| Flash Dont Walk (s) | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Act Effct Green (s) | 7.6 | 7.6 | 7.6 | 7.6 | 7.6 | 7.6 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 | 23.2 |
| Actuated g/C Ratio | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.57 | 0.57 | 0.57 | 0.57 | 0.57 | 0.57 |
| v/c Ratio | 0.11 | 0.15 | 0.42 | 0.23 | 0.16 | 0.10 | 0.11 | 0.61 | 0.03 | 0.09 | 0.76 | 0.01 |
| Control Delay | 19.1 | 18.7 | 7.4 | 20.2 | 18.7 | 9.2 | 4.8 | 8.0 | 1.6 | 4.1 | 11.4 | 0.7 |
| 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 | 19.1 | 18.7 | 7.4 | 20.2 | 18.7 | 9.2 | 4.8 | 8.0 | 1.6 | 4.1 | 11.4 | 0.7 |
| LOS | B | B | A | C | B | A | A | A | A | A | B | A |
| Approach Delay | | 10.8 | | | 17.1 | | | 7.6 | | | 11.0 | |
| Approach LOS | | B | | | B | | | A | | | B | |
| Queue Length 50th (ft) | 5 | 10 | 0 | 10 | 10 | 0 | 2 | 69 | 0 | 2 | 99 | 0 |
| Queue Length 95th (ft) | 27 | 43 | 46 | 44 | 43 | 19 | 10 | 154 | 6 | 10 | 227 | 2 |
| Internal Link Dist (ft) | | 524 | | | 574 | | | 897 | | | 865 | |
| Turn Bay Length (ft) | 170 | | 250 | 125 | | 25 | 620 | | 550 | 540 | | 480 |
| Base Capacity (vph) | 375 | 521 | 579 | 376 | 521 | 467 | 377 | 1698 | 1445 | 567 | 1698 | 1445 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.07 | 0.10 | 0.33 | 0.15 | 0.11 | 0.07 | 0.07 | 0.38 | 0.02 | 0.05 | 0.47 | 0.01 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 60 | | | |
| Actuated Cycle Length: 40.6 | | | |
| Natural Cycle: 60 | | | |
| Control Type: Actuated-Uncoordinated | | | |
| Maximum v/c Ratio: 0.76 | | | |
| Intersection Signal Delay: 10.2 | | Intersection LOS: B | |
| Intersection Capacity Utilization 65.7% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 30: US 24 & Elbert



| Intersection | |
|---|---|
| Intersection Delay, s/veh | 8.2 |
| 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 | 359 | 538 | 554 | 565 |
| Demand Flow Rate, veh/h | 365 | 548 | 566 | 576 |
| Vehicles Circulating, veh/h | 609 | 548 | 210 | 565 |
| Vehicles Exiting, veh/h | 532 | 228 | 764 | 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 | 7.0 | 7.9 | 5.7 | 11.6 |
| Approach LOS | A | A | A | B |

| Lane | Left | Right | Left | Right | Left | Right | Left | Right |
|---|---|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | L | TR | L | TR |
| Assumed Moves | LT | R | LT | TR | L | TR | L | TR |
| RT Channelized | | | | | | | | |
| Lane Util | 0.378 | 0.622 | 0.471 | 0.529 | 0.323 | 0.677 | 0.125 | 0.875 |
| 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 | 138 | 227 | 258 | 290 | 183 | 383 | 72 | 504 |
| Cap Entry Lane, veh/h | 771 | 846 | 815 | 891 | 1113 | 1188 | 803 | 878 |
| Entry HV Adj Factor | 0.983 | 0.982 | 0.980 | 0.983 | 0.978 | 0.980 | 0.986 | 0.979 |
| Flow Entry, veh/h | 136 | 223 | 253 | 285 | 179 | 375 | 71 | 494 |
| Cap Entry, veh/h | 758 | 831 | 799 | 876 | 1088 | 1164 | 792 | 860 |
| V/C Ratio | 0.179 | 0.268 | 0.316 | 0.325 | 0.164 | 0.322 | 0.090 | 0.574 |
| Control Delay, s/veh | 6.7 | 7.3 | 8.2 | 7.7 | 4.8 | 6.2 | 5.4 | 12.5 |
| LOS | A | A | A | A | A | A | A | B |
| 95th %tile Queue, veh | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 4 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 161 | 16 | 1 | 379 | 26 | 2 |
| Future Vol, veh/h | 161 | 16 | 1 | 379 | 26 | 2 |
| 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 | 185 | 18 | 1 | 412 | 33 | 3 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 203 | 0 | 402 | 102 |
| Stage 1 | - | - | - | - | 194 | - |
| Stage 2 | - | - | - | - | 208 | - |
| 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 | - | - | 1366 | - | 576 | 933 |
| Stage 1 | - | - | - | - | 820 | - |
| Stage 2 | - | - | - | - | 807 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1366 | - | 575 | 933 |
| Mov Cap-2 Maneuver | - | - | - | - | 575 | - |
| Stage 1 | - | - | - | - | 820 | - |
| Stage 2 | - | - | - | - | 806 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0 | 11.5 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 591 | - | - | 1366 | - |
| HCM Lane V/C Ratio | 0.061 | - | - | 0.001 | - |
| HCM Control Delay (s) | 11.5 | - | - | 7.6 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.2 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 5 | 163 | 43 | 5 | 374 | 26 | 60 | 4 | 3 | 12 | 7 | 20 |
| Future Vol, veh/h | 5 | 163 | 43 | 5 | 374 | 26 | 60 | 4 | 3 | 12 | 7 | 20 |
| 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 | 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 | 6 | 187 | 49 | 5 | 407 | 28 | 72 | 5 | 4 | 15 | 9 | 26 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 435 | 0 | 0 | 236 | 0 | 0 | 417 | 644 | 94 | 539 | 679 | 218 |
| Stage 1 | - | - | - | - | - | - | 199 | 199 | - | 431 | 431 | - |
| Stage 2 | - | - | - | - | - | - | 218 | 445 | - | 108 | 248 | - |
| 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 | 1121 | - | - | 1328 | - | - | 520 | 390 | 944 | 426 | 372 | 786 |
| Stage 1 | - | - | - | - | - | - | 784 | 735 | - | 573 | 581 | - |
| Stage 2 | - | - | - | - | - | - | 764 | 573 | - | 886 | 700 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1121 | - | - | 1328 | - | - | 489 | 386 | 944 | 417 | 368 | 786 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 489 | 386 | - | 417 | 368 | - |
| Stage 1 | - | - | - | - | - | - | 779 | 731 | - | 570 | 578 | - |
| Stage 2 | - | - | - | - | - | - | 724 | 570 | - | 872 | 696 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.2 | 0.1 | 13.7 | 12.5 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 492 | 1121 | - | - | 1328 | - | - | 532 |
| HCM Lane V/C Ratio | 0.164 | 0.005 | - | - | 0.004 | - | - | 0.094 |
| HCM Control Delay (s) | 13.7 | 8.2 | 0 | - | 7.7 | 0 | - | 12.5 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.6 | 0 | - | - | 0 | - | - | 0.3 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 19.6 |

| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 25 | 50 | 175 | 50 | 50 | 30 | 25 | 600 | 75 | 30 | 750 | 10 |
| Future Vol, veh/h | 25 | 50 | 175 | 50 | 50 | 30 | 25 | 600 | 75 | 30 | 750 | 10 |
| 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 | - | - | Stop | - | - | Yield | - | - | Yield |
| Storage Length | 170 | - | 250 | 125 | - | 25 | 620 | - | 550 | 540 | - | 480 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 83 | 83 | 83 | 93 | 93 | 93 | 93 | 93 | 93 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 27 | 54 | 190 | 60 | 60 | 36 | 27 | 645 | 81 | 32 | 806 | 11 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1599 | 1569 | - | 1596 | 1569 | 645 | 806 | 0 | 0 | 645 | 0 | 0 |
| Stage 1 | 870 | 870 | - | 699 | 699 | - | - | - | - | - | - | - |
| Stage 2 | 729 | 699 | - | 897 | 870 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | - | 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 | - | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 86 | 111 | 0 | 86 | 111 | 472 | 819 | - | - | 940 | - | - |
| Stage 1 | 346 | 369 | 0 | 430 | 442 | - | - | - | - | - | - | - |
| Stage 2 | 414 | 442 | 0 | 334 | 369 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 41 | 104 | - | ~ 48 | 104 | 472 | 819 | - | - | 940 | - | - |
| Mov Cap-2 Maneuver | 41 | 104 | - | ~ 48 | 104 | - | - | - | - | - | - | - |
| Stage 1 | 335 | 356 | - | 416 | 427 | - | - | - | - | - | - | - |
| Stage 2 | 318 | 427 | - | 273 | 356 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | 113.6 | 168.5 | 0.3 | 0.3 |
| HCM LOS | F | F | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 819 | - | - | 48 | 104 | 472 | 41 | 104 | - | 940 | - | - |
| HCM Lane V/C Ratio | 0.033 | - | - | 1.255 | 0.579 | 0.077 | 0.663 | 0.523 | - | 0.034 | - | - |
| HCM Control Delay (s) | 9.5 | - | - | $ 351 | 79.1 | 13.3 | 195.7 | 72.5 | 0 | 9 | - | - |
| HCM Lane LOS | A | - | - | F | F | B | F | F | A | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 5.6 | 2.7 | 0.2 | 2.4 | 2.4 | - | 0.1 | - | - |

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

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 195 | 210 | 360 | 475 | 225 | 165 | 420 | 1235 | 490 | 150 | 790 | 160 |
| Future Volume (vph) | 195 | 210 | 360 | 475 | 225 | 165 | 420 | 1235 | 490 | 150 | 790 | 160 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 235 | | 235 | 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 | 0.601 | | | 0.950 | | | 0.950 | | | 0.117 | | |
| Satd. Flow (perm) | 1120 | 3539 | 1583 | 3433 | 3539 | 1583 | 3433 | 3539 | 1583 | 218 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 250 | | | 171 | | | 486 | | | 168 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 1254 | | | 1178 | | | 1307 | | | 1572 | |
| Travel Time (s) | | 19.0 | | | 17.8 | | | 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) | 210 | 226 | 387 | 511 | 242 | 177 | 442 | 1300 | 516 | 158 | 832 | 168 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 210 | 226 | 387 | 511 | 242 | 177 | 442 | 1300 | 516 | 158 | 832 | 168 |
| 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 |

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | 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 | 16.6 | 51.6 | 51.6 | 46.0 | 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 | 0.59 | 0.45 | 0.88 | 0.96 | 0.37 | 0.41 | 0.83 | 0.76 | 0.51 | 0.91 | 0.62 | 0.24 |
| Control Delay | 34.4 | 44.6 | 38.0 | 77.1 | 39.7 | 9.4 | 58.1 | 26.8 | 4.1 | 71.1 | 30.2 | 4.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 34.4 | 44.6 | 38.0 | 77.1 | 39.7 | 9.4 | 58.1 | 26.8 | 4.1 | 71.1 | 30.2 | 4.6 |
| LOS | C | D | D | E | D | A | E | C | A | E | C | A |
| Approach Delay | | 38.9 | | | 54.5 | | | 27.7 | | | 32.1 | |
| Approach LOS | | D | | | D | | | C | | | C | |
| Queue Length 50th (ft) | 107 | 75 | 94 | 188 | 77 | 3 | 157 | 394 | 11 | 53 | 256 | 0 |
| Queue Length 95th (ft) | 169 | 113 | #252 | #299 | 115 | 61 | #229 | 485 | 72 | #185 | 325 | 44 |
| Internal Link Dist (ft) | | 1174 | | | 1098 | | | 1227 | | | 1492 | |
| Turn Bay Length (ft) | 235 | | 235 | 235 | | 235 | 860 | | 290 | 695 | | 290 |
| Base Capacity (vph) | 366 | 614 | 481 | 530 | 746 | 468 | 563 | 1708 | 1015 | 173 | 1339 | 704 |
| 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 | 0.37 | 0.80 | 0.96 | 0.32 | 0.38 | 0.79 | 0.76 | 0.51 | 0.91 | 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: 0.96 | | | |
| Intersection Signal Delay: 35.3 | | Intersection LOS: D | |
| Intersection Capacity Utilization 76.8% | | 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

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 350 | 300 | 700 | 125 | 405 | 179 | 650 | 850 | 125 | 145 | 600 | 350 |
| Future Volume (vph) | 350 | 300 | 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 | 1 | | 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 | 1.00 | 0.95 | 1.00 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 3539 | 1583 | 1770 | 3539 | 1583 | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 |
| Flt Permitted | 0.208 | | | 0.560 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (perm) | 387 | 3539 | 1583 | 1043 | 3539 | 1583 | 3433 | 3539 | 1583 | 1770 | 3539 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 485 | | | 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 | 316 | 737 | 134 | 435 | 192 | 684 | 895 | 132 | 153 | 632 | 368 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 368 | 316 | 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 | R NA | L NA | 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 |

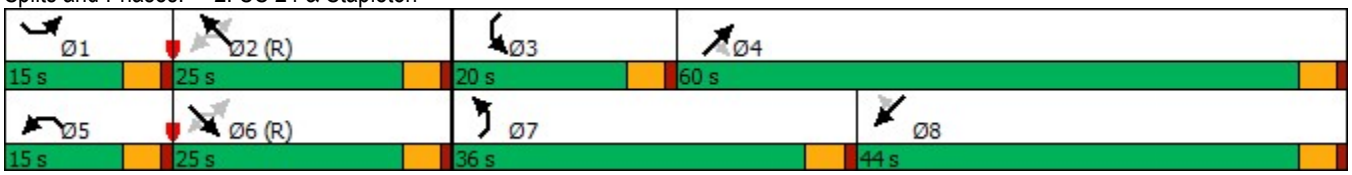
| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 1 | 6 | 6 | 5 | 2 | 2 | 7 | 4 | 4 | 3 | 8 | 8 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 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 | 33.8 | 33.8 | 31.5 | 20.5 | 20.5 | 28.2 | 43.3 | 43.3 | 14.0 | 29.0 | 29.0 |
| Actuated g/C Ratio | 0.40 | 0.28 | 0.28 | 0.26 | 0.17 | 0.17 | 0.24 | 0.36 | 0.36 | 0.12 | 0.24 | 0.24 |
| v/c Ratio | 0.85 | 0.32 | 0.93 | 0.39 | 0.72 | 0.45 | 0.85 | 0.70 | 0.20 | 0.74 | 0.74 | 0.67 |
| Control Delay | 50.0 | 38.0 | 34.6 | 30.1 | 54.7 | 9.6 | 54.4 | 35.5 | 4.3 | 72.8 | 47.1 | 20.9 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 50.0 | 38.0 | 34.6 | 30.1 | 54.7 | 9.6 | 54.4 | 35.5 | 4.3 | 72.8 | 47.1 | 20.9 |
| LOS | D | D | C | C | D | A | D | D | A | E | D | C |
| Approach Delay | | 39.3 | | | 39.0 | | | 40.7 | | | 42.1 | |
| Approach LOS | | D | | | D | | | D | | | D | |
| Queue Length 50th (ft) | 212 | 103 | 229 | 66 | 169 | 0 | 260 | 312 | 0 | 114 | 238 | 97 |
| Queue Length 95th (ft) | #521 | 166 | #553 | 127 | 227 | 64 | 322 | 335 | 36 | #199 | 280 | 191 |
| Internal Link Dist (ft) | | 1269 | | | 5400 | | | 1302 | | | 1355 | |
| Turn Bay Length (ft) | 190 | | 325 | 215 | | 215 | 890 | | 1000 | 790 | | 790 |
| Base Capacity (vph) | 435 | 995 | 794 | 353 | 604 | 429 | 901 | 1636 | 803 | 228 | 1164 | 672 |
| 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 | 0.85 | 0.32 | 0.93 | 0.38 | 0.72 | 0.45 | 0.76 | 0.55 | 0.16 | 0.67 | 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: 40.4 Intersection LOS: D
Intersection Capacity Utilization 80.7% ICU Level of Service D
Analysis Period (min) 15
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: US 24 & Stapleton



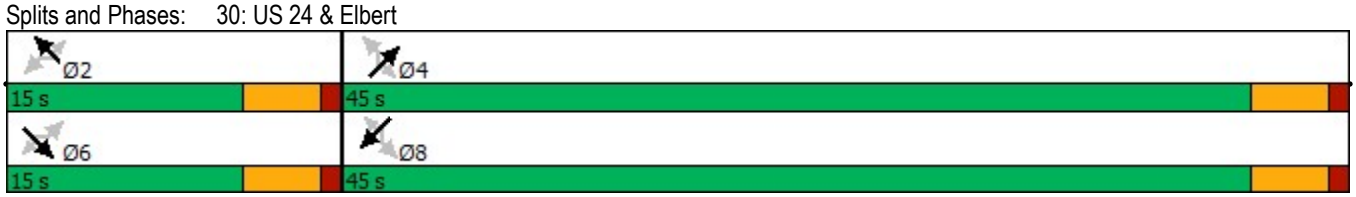
| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 10 | 50 | 125 | 25 | 65 | 30 | 140 | 1050 | 50 | 55 | 875 | 35 |
| Future Volume (vph) | 10 | 50 | 125 | 25 | 65 | 30 | 140 | 1050 | 50 | 55 | 875 | 35 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 170 | | 250 | 125 | | 25 | 620 | | 550 | 540 | | 480 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 |
| Taper Length (ft) | 120 | | | 85 | | | 300 | | | 255 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 |
| Flt Permitted | 0.706 | | | 0.720 | | | 0.225 | | | 0.144 | | |
| Satd. Flow (perm) | 1315 | 1863 | 1583 | 1341 | 1863 | 1583 | 419 | 1863 | 1583 | 268 | 1863 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 144 | | | 36 | | | 53 | | | 38 |
| Link Speed (mph) | | 45 | | | 45 | | | 55 | | | 55 | |
| Link Distance (ft) | | 604 | | | 654 | | | 977 | | | 945 | |
| Travel Time (s) | | 9.2 | | | 9.9 | | | 12.1 | | | 11.7 | |
| Peak Hour Factor | 0.87 | 0.87 | 0.87 | 0.83 | 0.83 | 0.83 | 0.95 | 0.95 | 0.95 | 0.93 | 0.93 | 0.93 |
| Adj. Flow (vph) | 11 | 57 | 144 | 30 | 78 | 36 | 147 | 1105 | 53 | 59 | 941 | 38 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 11 | 57 | 144 | 30 | 78 | 36 | 147 | 1105 | 53 | 59 | 941 | 38 |
| 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 | 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 | Perm | NA | Perm | Perm | NA | Perm | Perm | NA | Perm | Perm | NA | Perm |
| Protected Phases | | 6 | | | 2 | | | 4 | | | 8 | |
| Permitted Phases | 6 | | 6 | 2 | | 2 | 4 | | 4 | 8 | | 8 |

| Lane Group | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector Phase | 6 | 6 | 6 | 2 | 2 | 2 | 4 | 4 | 4 | 8 | 8 | 8 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 | 22.5 |
| Total Split (s) | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 |
| Total Split (%) | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 25.0% | 75.0% | 75.0% | 75.0% | 75.0% | 75.0% | 75.0% |
| Maximum Green (s) | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 | 10.5 | 40.5 | 40.5 | 40.5 | 40.5 | 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 Optimize? | | | | | | | | | | | | |
| 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 | Max | Max | Max | Max | Max | Max |
| Act Effct Green (s) | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 |
| Actuated g/C Ratio | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.13 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 |
| v/c Ratio | 0.06 | 0.23 | 0.43 | 0.17 | 0.31 | 0.15 | 0.46 | 0.78 | 0.04 | 0.29 | 0.67 | 0.03 |
| Control Delay | 22.0 | 24.1 | 9.1 | 23.8 | 25.6 | 10.1 | 10.4 | 12.3 | 1.2 | 8.3 | 8.1 | 1.3 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 22.0 | 24.1 | 9.1 | 23.8 | 25.6 | 10.1 | 10.4 | 12.3 | 1.2 | 8.3 | 8.1 | 1.3 |
| LOS | C | C | A | C | C | B | B | B | A | A | A | A |
| Approach Delay | | 13.8 | | | 21.4 | | | 11.6 | | | 7.9 | |
| Approach LOS | | B | | | C | | | B | | | A | |
| Queue Length 50th (ft) | 3 | 18 | 0 | 9 | 25 | 0 | 17 | 203 | 0 | 6 | 142 | 0 |
| Queue Length 95th (ft) | 14 | 43 | 37 | 27 | 53 | 18 | 72 | #582 | 8 | 28 | 317 | 7 |
| Internal Link Dist (ft) | | 524 | | | 574 | | | 897 | | | 865 | |
| Turn Bay Length (ft) | 170 | | 250 | 125 | | 25 | 620 | | 550 | 540 | | 480 |
| Base Capacity (vph) | 237 | 335 | 403 | 241 | 335 | 314 | 318 | 1415 | 1215 | 203 | 1415 | 1212 |
| 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 | 0.05 | 0.17 | 0.36 | 0.12 | 0.23 | 0.11 | 0.46 | 0.78 | 0.04 | 0.29 | 0.67 | 0.03 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 60 | | | |
| Actuated Cycle Length: 58.3 | | | |
| Natural Cycle: 80 | | | |
| Control Type: Semi Act-Uncoord | | | |
| Maximum v/c Ratio: 0.78 | | | |
| Intersection Signal Delay: 10.9 | | Intersection LOS: B | |
| Intersection Capacity Utilization 78.7% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 30: US 24 & Elbert



| Intersection | |
|---|---|
| Intersection Delay, s/veh | 11.0 |
| 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 | 522 | 380 | 893 | 581 |
| Demand Flow Rate, veh/h | 533 | 388 | 911 | 593 |
| Vehicles Circulating, veh/h | 609 | 873 | 555 | 541 |
| Vehicles Exiting, veh/h | 525 | 593 | 587 | 720 |
| Ped Vol Crossing Leg, #/h | 0 | 0 | 0 | 0 |
| Ped Cap Adj | 1.000 | 1.000 | 1.000 | 1.000 |
| Approach Delay, s/veh | 8.4 | 9.7 | 14.4 | 8.9 |
| Approach LOS | A | A | B | A |

| Lane | Left | Right | Left | Right | Left | Right | Left | Right |
|---|---|---|---|---|---|---|---|---|
| Designated Moves | LT | TR | LT | TR | L | TR | L | TR |
| Assumed Moves | LT | TR | LT | TR | L | TR | L | TR |
| RT Channelized | | | | | | | | |
| Lane Util | 0.471 | 0.529 | 0.469 | 0.531 | 0.314 | 0.686 | 0.309 | 0.691 |
| 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 | 251 | 282 | 182 | 206 | 286 | 625 | 183 | 410 |
| Cap Entry Lane, veh/h | 771 | 846 | 605 | 676 | 810 | 886 | 821 | 897 |
| Entry HV Adj Factor | 0.978 | 0.982 | 0.981 | 0.977 | 0.979 | 0.981 | 0.978 | 0.979 |
| Flow Entry, veh/h | 245 | 277 | 179 | 201 | 280 | 613 | 179 | 402 |
| Cap Entry, veh/h | 754 | 831 | 593 | 661 | 793 | 869 | 803 | 878 |
| V/C Ratio | 0.326 | 0.333 | 0.301 | 0.305 | 0.353 | 0.705 | 0.223 | 0.457 |
| Control Delay, s/veh | 8.7 | 8.2 | 10.2 | 9.3 | 8.8 | 16.9 | 6.9 | 9.8 |
| LOS | A | A | B | A | A | C | A | A |
| 95th %tile Queue, veh | 1 | 1 | 1 | 1 | 2 | 6 | 1 | 2 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.6 |

| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 355 | 35 | 2 | 164 | 19 | 2 |
| Future Vol, veh/h | 355 | 35 | 2 | 164 | 19 | 2 |
| 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 | 87 | 87 | 78 | 78 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 386 | 38 | 2 | 189 | 24 | 3 |

| Major/Minor | Major1 | | Major2 | | Minor1 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 0 | 0 | 424 | 0 | 504 | 212 |
| Stage 1 | - | - | - | - | 405 | - |
| Stage 2 | - | - | - | - | 99 | - |
| 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 | - | - | 1132 | - | 497 | 793 |
| Stage 1 | - | - | - | - | 642 | - |
| Stage 2 | - | - | - | - | 914 | - |
| Platoon blocked, % | - | - | | - | | |
| Mov Cap-1 Maneuver | - | - | 1132 | - | 496 | 793 |
| Mov Cap-2 Maneuver | - | - | - | - | 496 | - |
| Stage 1 | - | - | - | - | 642 | - |
| Stage 2 | - | - | - | - | 912 | - |

| Approach | EB | WB | NB |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0.1 | 12.4 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|---|---|---|---|---|---|
| Capacity (veh/h) | 514 | - | - | 1132 | - |
| HCM Lane V/C Ratio | 0.052 | - | - | 0.002 | - |
| HCM Control Delay (s) | 12.4 | - | - | 8.2 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.8 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 20 | 327 | 78 | 6 | 167 | 11 | 74 | 11 | 8 | 51 | 10 | 15 |
| Future Vol, veh/h | 20 | 327 | 78 | 6 | 167 | 11 | 74 | 11 | 8 | 51 | 10 | 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 | 87 | 87 | 87 | 83 | 83 | 83 | 83 | 83 | 83 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 22 | 355 | 85 | 7 | 192 | 13 | 89 | 13 | 10 | 61 | 12 | 18 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 205 | 0 | 0 | 440 | 0 | 0 | 515 | 618 | 178 | 441 | 697 | 103 |
| Stage 1 | - | - | - | - | - | - | 399 | 399 | - | 213 | 213 | - |
| Stage 2 | - | - | - | - | - | - | 116 | 219 | - | 228 | 484 | - |
| 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 | 1364 | - | - | 1116 | - | - | 443 | 403 | 834 | 500 | 363 | 932 |
| Stage 1 | - | - | - | - | - | - | 598 | 601 | - | 769 | 725 | - |
| Stage 2 | - | - | - | - | - | - | 876 | 721 | - | 754 | 550 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1364 | - | - | 1116 | - | - | 414 | 391 | 834 | 471 | 352 | 932 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 414 | 391 | - | 471 | 352 | - |
| Stage 1 | - | - | - | - | - | - | 585 | 588 | - | 752 | 720 | - |
| Stage 2 | - | - | - | - | - | - | 839 | 716 | - | 712 | 538 | - |

| Approach | EB | WB | NB | SB |
|---|---|---|---|---|
| HCM Control Delay, s | 0.4 | 0.3 | 16.3 | 13.9 |
| HCM LOS | | | C | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 430 | 1364 | - | - | 1116 | - | - | 497 |
| HCM Lane V/C Ratio | 0.261 | 0.016 | - | - | 0.006 | - | - | 0.184 |
| HCM Control Delay (s) | 16.3 | 7.7 | 0.1 | - | 8.2 | 0 | - | 13.9 |
| HCM Lane LOS | C | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 1 | 0 | - | - | 0 | - | - | 0.7 |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0.9 |

| Movement | SEL | SET | SER | NWL | NWT | NWR | NEL | NET | NER | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 10 | 50 | 125 | 25 | 65 | 30 | 140 | 1050 | 50 | 55 | 875 | 35 |
| Future Vol, veh/h | 10 | 50 | 125 | 25 | 65 | 30 | 140 | 1050 | 50 | 55 | 875 | 35 |
| 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 | - | - | Stop | - | - | Yield | - | - | Yield |
| Storage Length | 170 | - | 250 | 125 | - | 25 | 620 | - | 550 | 540 | - | 480 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 83 | 83 | 83 | 95 | 95 | 95 | 93 | 93 | 93 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 57 | 144 | 30 | 78 | 36 | 147 | 1105 | 53 | 59 | 941 | 38 |

| Major/Minor | Minor2 | | | Minor1 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 2497 | 2458 | - | 2487 | 2458 | 1105 | 941 | 0 | 0 | 1105 | 0 | 0 |
| Stage 1 | 1059 | 1059 | - | 1399 | 1399 | - | - | - | - | - | - | - |
| Stage 2 | 1438 | 1399 | - | 1088 | 1059 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | - | 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 | - | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 20 | ~ 31 | 0 | ~ 20 | ~ 31 | 256 | 729 | - | - | 632 | - | - |
| Stage 1 | 271 | 301 | 0 | 174 | 207 | - | - | - | - | - | - | - |
| Stage 2 | 165 | 207 | 0 | 261 | 301 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | - | ~ 22 | - | - | ~ 22 | 256 | 729 | - | - | 632 | - | - |
| Mov Cap-2 Maneuver | - | ~ 22 | - | - | ~ 22 | - | - | - | - | - | - | - |
| Stage 1 | 216 | 273 | - | 139 | 165 | - | - | - | - | - | - | - |
| Stage 2 | 59 | 165 | - | 187 | 273 | - | - | - | - | - | - | - |

| Approach | SE | NW | NE | SW |
|---|---|---|---|---|
| HCM Control Delay, s | | | 1.3 | 0.6 |
| HCM LOS | - | - | | |

| Minor Lane/Major Mvmt | NEL | NET | NER | NWLn1 | NWLn2 | NWLn3 | SELn1 | SELn2 | SELn3 | SWL | SWT | SWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 729 | - | - | - | 22 | 256 | - | 22 | - | 632 | - | - |
| HCM Lane V/C Ratio | 0.202 | - | - | - | 3.56 | 0.141 | - | 2.612 | - | 0.094 | - | - |
| HCM Control Delay (s) | 11.2 | - | - | - | $ 1515.2 | 21.4 | - | $ 1100.6 | 0 | 11.3 | - | - |
| HCM Lane LOS | B | - | - | - | F | C | - | F | A | B | - | - |
| HCM 95th %tile Q(veh) | 0.8 | - | - | - | 10 | 0.5 | - | 7.4 | - | 0.3 | - | - |

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

# Appendix Table 1

TRANSPORTATION
CONSULTANTS, INC.

# Appendix Table 1: Land Use

## Esteban Rodriguez Sketch Plan

| Land Use Information | | | Corresponding ITE Land Uses and Quantities (for use in the Trip Generation Estimate) | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Sketch Plan Land Use Designation** | **Parcel** | **Acreage** | **ITE Land Use** | **Acreage** | **ITE Land Use Category** | **F.A.R.** | **Land Use Quantities (KSF)** | |
| Commercial | Parcel A | 7.15 | Strip Retail Plaza (<40k) | 1.50 | 822 | 0.15 | 10 | KSF (Thousand square feet of building floor area) |
| | | | Warehousing | 5.65 | 150 | 0.25 | 62 | KSF |
| | Parcel B | 5.71 | Warehousing | 5.71 | 150 | 0.25 | 62 | KSF |
| | Parcel G | 2.21 | Warehousing | 2.21 | 150 | 0.25 | 24 | KSF |
| | Commercial Total | **15.07** | Warehousing Total | 13.57 | | | 148 | KSF |
| Residential | | | SF Detatched | | 210 | | 142 | DU |

*Source: LSC Transportation Consultants, Inc* *4/21/2024*

# Appendix A

TRANSPORTATION
CONSULTANTS, INC.

**Appendix A –Peak Hour Values**

The peak-hour factors used for each approach are based on the traffic volumes for the peak 15 minutes of the entire intersection. If the peak 15 minutes for an approach occurs during an interval other than the peak 15 minutes of the entire intersection, the suggested peak-hour value based on the total approach volume from Table 10-1 of the *Synchro Studio User Guide* was used instead. Please refer to the *Synchro Studio User Guide*'s "Suggested Peak Hour Values" documentation below for more details:

The HCM 6th Edition Chapter 19 provides suggested default values, that may be used in the absence of field measurements of peak-hour factor (PHF). For intersections with a total entering volume ≥ 1,000 veh/h, 0.92 is a reasonable approximation for PHF. For conditions with a total entering volume < 1,000 veh/h, 0.90 is a reasonable estimate for PHF.

If the Analysis Period is set to a value of greater than 15 minutes, the PHF will be set to 1.0 and cannot be changed. The Analysis Period can be modified using the **Network-Settings** command, located in the Options tab.

The default PHF is 0.92 following the guidelines of the HCM 6th Edition. The user may change the default or reset existing Peak Hour Factors in the current data set in the **Network-Settings**. The range of PHF in Synchro is 0.25 to 1.00.

Note that 15-minute traffic volumes read from a UTDF Volume file automatically recalculate PHF for each volume period.

If traffic arrivals fit a Poisson distribution, probability suggests using the values in **Table** 10-1 for the PHF. This assumes the highest 15-minute period is the 87.5 percentile based on average 15-minute periods of the hour.

**Table 10-1 Suggested Peak Hour Values**

| Total Approach Volume (vph) | PHF |
|---|---|
| 2000 | 0.95 |
| 1000 | 0.93 |
| 500 | 0.92 |
| 200 | 0.87 |
| 100 | 0.83 |
| 50 | 0.78 |

If the upstream intersection is at capacity for the entire peak hour, use a PHF of 1.0.

It is important to understand that the variance of traffic increases as the volume decreases. Therefore, lower traffic volumes create greater fluctuations in 15-minute volume levels which tends to increase PHF.

# Additional Attachments

Signal Timing Judge Orr & 24G

TRANSPORTATION
CONSULTANTS, INC.

CDOT

# MaxTime Timing Sheet

2.0.16 Update

***Administration***

Cross Black_White.jpg

Unit Information

| | |
|---|---|
| Controller ID | 0 |
| Main St. | 24G |
| Side St. | Judge Orr |

| Adapter | IP Address | Subnet Mask | Default Gateway | ARP | Mode |
|---|---|---|---|---|---|
| 1 | | | | Disable | Static |
| 2 | | | | Disable | Static |

**Serial Ports:**

| Port | Description | Function | Address | Baud | Bits | Stop | Parity | Flow | CTS | RTS |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Port 2/C21S | None | 1 | 9600 | 8 | 1 | None | None | 0 | 0 |
| 2 | Aux_P3/C22S | None | 1 | 9600 | 8 | 1 | None | None | 0 | 0 |
| 3 | SDLC Port 1 | None | 1 | 9600 | 8 | 1 | None | None | 0 | 0 |
| 4 | Com A/C50S | None | 1 | 9600 | 8 | 1 | None | None | 0 | 0 |
| 5 | FIO | None | 1 | 9600 | 8 | 1 | None | None | 0 | 0 |
| 6 | DISPLAY/C60M | None | 1 | 9600 | 8 | 1 | None | None | 0 | 0 |
| 7 | SP7 | None | 1 | 9600 | 8 | 1 | None | None | 0 | 0 |
| 8 | SP8/Com B | None | 1 | 9600 | 8 | 1 | None | None | 0 | 0 |

**Unit Parameters**

| | |
|---|---|
| Startup Flash | 1 |
| All Red Exit | 0 |
| MCE Seq. | 1 |
| Master By TOD | Disable |

| | |
|---|---|
| Auto Ped Clr | Enable |
| Grn Flash Freq. | 60 |
| Start Yellow | 0.0 |
| Flash CVM | Disable |

| | |
|---|---|
| Red Revert | 4.0 |
| Yel Flash Freq. | 60 |
| Start Red | 0.0 |
| All Red Flash | Disable |
| Auto Ped Clear | Enable |

| | |
|---|---|
| Backup Time | 600 |
| MCE Enable | Enable |
| Start Clear Hold | 6 |
| 3 Phs Dia Seq | |
| 4 Phs Dia Seq | |

| | |
|---|---|
| Ext Mode | Disable |
| Free Seq. | 1 |

**Phase Parameters**

| Phases | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Walk Time | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Clear Time | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Don't Walk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Min Green | 0 | 37 | 0 | 6 | 6 | 22 | 0 | 6 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Min Green 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Passage | 0.0 | 0.0 | 0.0 | 4.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Max-1 | 0 | 60 | 0 | 20 | 20 | 60 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max-2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max-3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Conditional Max | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Yel Change | 3.0 | 5.0 | 3.0 | 5.0 | 3.0 | 5.0 | 3.0 | 5.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Red Clear | 0.0 | 2.0 | 0.0 | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Add Red Clear | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Red Revert | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Added Initial | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Max Initial | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Time B4 Reduce | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cars B4 Reduce | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Time To Reduce | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduce By | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Min Gap | 0.0 | 3.0 | 0.0 | 4.0 | 3.0 | 3.0 | 0.0 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dyn Max Limit | 0 | 0 | 0 | 35 | 35 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dyn Max Step | 0.0 | 0.0 | 0.0 | 3.0 | 3.0 | 0.0 | 0.0 | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Advance Walk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Delay Ped | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alt Walk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alt Ped Clr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ped Service Limit | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pre Green | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Pre Clearance | 0.0 | 6.0 | 0.0 | 0.0 | 0.0 | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

| Phases | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Pre Clearance 2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Red Clear Ext Max | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Red Clear Ext Pass | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Queue Jump | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Adv Warning Ext | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

## Phase Options

| Phases | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Enable | | X | | X | X | X | | X | | | | | | | | | | | | |
| Auto Flash Ent. | | X | | | | X | | | | | | | | | | | | | | |
| Auto Flash Exit | | X | | | | X | | | | | | | | | | | | | | |
| Non Actuated I | | | | | | | | | | | | | | | | | | | | |
| Non Actuated II | | | | | | | | | | | | | | | | | | | | |
| Non Lock Mem | | X | | X | X | X | | X | | | | | | | | | | | | |
| Min Veh Recall | | | | | | | | | | | | | | | | | | | | |
| Max Veh Recall | | | | | | | | | | | | | | | | | | | | |
| Ped Recall | | | | | | | | | | | | | | | | | | | | |
| Soft Veh Recall | | | | | | | | | | | | | | | | | | | | |
| Dual Entry | | | | | | | | | | | | | | | | | | | | |
| Sim Gap Dis | | | | | | | | | | | | | | | | | | | | |
| Guaranteed Pass | | | | | | | | | | | | | | | | | | | | |
| Act Rest Walk | | | | | | | | | | | | | | | | | | | | |
| Cond Service | | | | | | | | | | | | | | | | | | | | |
| Add Initial | | | | | | | | | | | | | | | | | | | | |
| Ped Clr During Yel | | | | | | | | | | | | | | | | | | | | |
| Ped Clr During Red | | | | | | | | | | | | | | | | | | | | |
| Cond Reservice | | | | | | | | | | | | | | | | | | | | |
| Yel Min Override | | | | | | | | | | | | | | | | | | | | |
| No Startup Call | | | | | | | | | | | | | | | | | | | | |
| Adv. Warn Flasher | | X | | | | X | | | | | | | | | | | | | | |
| No Ped Str Up Call | | | | | | | | | | | | | | | | | | | | |
| Ped Clr OVTG | | | | | | | | | | | | | | | | | | | | |
| Flash Exit Call | | | | | | | | | | | | | | | | | | | | |
| Flash Exit Ped Call | | | | | | | | | | | | | | | | | | | | |
| MinGreen2 | | | | | | | | | | | | | | | | | | | | |
| MaxGreen2 | | | | | | | | | | | | | | | | | | | | |
| MaxGreen3 | | | | | | | | | | | | | | | | | | | | |
| Ped2 | | | | | | | | | | | | | | | | | | | | |
| Ped Clear Pre Clear | | | | | | | | | | | | | | | | | | | | |
| Ped NA+ Mode | | | | | | | | | | | | | | | | | | | | |
| Red Rest | | | | | | | | | | | | | | | | | | | | |
| Serve Evy Oth Even | | | | | | | | | | | | | | | | | | | | |
| Serve Evy Oth Odd | | | | | | | | | | | | | | | | | | | | |
| Coord Ped Yield | | | | | | | | | | | | | | | | | | | | |
| Ped Recycle | | | | | | | | | | | | | | | | | | | | |
| Coutdown | | | | | | | | | | | | | | | | | | | | |

## No Serve Phases

| Sequence 1 | |
|---|---|
| Ph. | No Serve Phases |
| 1 | |
| 2 | |

| Sequence 2 | |
|---|---|
| Ph. | No Serve Phases |
| 1 | |
| 2 | |

| Sequence 3 | |
|---|---|
| Ph. | No Serve Phases |
| 1 | |
| 2 | |

| Sequence 4 | |
|---|---|
| Ph. | No Serve Phases |
| 1 | |
| 2 | |

| | |
|---|---|
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |

| | |
|---|---|
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |

| | |
|---|---|
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |

| | |
|---|---|
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |

| Sequence 1 | |
|---|---|
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

| Sequence 2 | |
|---|---|
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

| Sequence 3 | |
|---|---|
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

| Sequence 4 | |
|---|---|
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

## Phase Configuration

| Ph. | Startup | Ring | Concurrent | Startup Min | Description |
|---|---|---|---|---|---|
| 1 | Phase Not On | 0 | | 0 | |
| 2 | Green No Walk | 1 | 5,6 | 0 | |
| 3 | Phase Not On | 0 | | 0 | |
| 4 | Phase Not On | 1 | | 0 | |
| 5 | Phase Not On | 2 | 2 | 0 | |
| 6 | Green No Walk | 2 | 2 | 0 | |
| 7 | Phase Not On | 0 | | 0 | |
| 8 | Phase Not On | 1 | | 0 | |
| 9 | None | 0 | | 0 | |
| 10 | None | 0 | | 0 | |
| 11 | None | 0 | | 0 | |
| 12 | None | 0 | | 0 | |
| 13 | None | 0 | | 0 | |
| 14 | None | 0 | | 0 | |
| 15 | None | 0 | | 0 | |
| 16 | None | 0 | | 0 | |
| 17 | None | 0 | | 0 | |
| 18 | None | 0 | | 0 | |
| 19 | None | 0 | | 0 | |
| 20 | None | 0 | | 0 | |

## Sequence Configuration

**Sequence 1**

| Ring | Phases |
|---|---|
| 1 | 2,a,4,8,b |
| 2 | 5,6,a,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |

**Sequence 2**

| Ring | Phases |
|---|---|
| 1 | 2,1,a,3,4,b |
| 2 | 5,6,a,7,8,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |

**Sequence 3**

| Ring | Phases |
|---|---|
| 1 | 1,2,a,4,3,b |
| 2 | 5,6,a,7,8,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |

**Sequence 4**

| Ring | Phases |
|---|---|
| 1 | 2,1,a,4,3,b |
| 2 | 5,6,a,7,8,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |

| | |
|---|---|
| 15 | |
| 16 | |

| | |
|---|---|
| 15 | |
| 16 | |

| | |
|---|---|
| 15 | |
| 16 | |

| | |
|---|---|
| 15 | |
| 16 | |

**Sequence 5**

| Ring | Phases |
|---|---|
| 1 | 1,2,a,3,4,b |
| 2 | 6,5,a,7,8,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |

**Sequence 6**

| Ring | Phases |
|---|---|
| 1 | 2,1,a,3,4,b |
| 2 | 6,5,a,7,8,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |

**Sequence 7**

| Ring | Phases |
|---|---|
| 1 | 1,2,a,4,3,b |
| 2 | 6,5,a,7,8,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |

**Sequence 8**

| Ring | Phases |
|---|---|
| 1 | 2,1,a,4,3,b |
| 2 | 6,5,a,7,8,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |

**Sequence 5**

| | |
|---|---|
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

**Sequence 6**

| | |
|---|---|
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

**Sequence 7**

| | |
|---|---|
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

**Sequence 8**

| | |
|---|---|
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

**Sequence 9**

| Ring | Phases |
|---|---|
| 1 | 1,2,a,3,4,b |
| 2 | 5,6,a,8,7,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

**Sequence 10**

| Ring | Phases |
|---|---|
| 1 | 2,1,a,3,4,b |
| 2 | 5,6,a,8,7,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

**Sequence 11**

| Ring | Phases |
|---|---|
| 1 | 1,2,a,4,3,b |
| 2 | 5,6,a,8,7,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

**Sequence 12**

| Ring | Phases |
|---|---|
| 1 | 2,1,a,4,3,b |
| 2 | 5,6,a,8,7,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

**Sequence 13**

| Ring | Phases |
|---|---|
| 1 | 1,2,a,3,4,b |
| 2 | 6,5,a,8,7,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |

**Sequence 14**

| Ring | Phases |
|---|---|
| 1 | 2,1,a,3,4,b |
| 2 | 6,5,a,8,7,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |

**Sequence 15**

| Ring | Phases |
|---|---|
| 1 | 1,2,a,4,3,b |
| 2 | 6,5,a,8,7,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |

**Sequence 16**

| Ring | Phases |
|---|---|
| 1 | 2,1,a,4,3,b |
| 2 | 6,5,a,8,7,b |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 13 | | 13 | | 13 | | 13 | |
| 14 | | 14 | | 14 | | 14 | |
| 15 | | 15 | | 15 | | 15 | |
| 16 | | 16 | | 16 | | 16 | |

**Sequence 17**

| Ring | Phases |
|---|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |

**Sequence 18**

| Ring | Phases |
|---|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |

**Sequence 19**

| Ring | Phases |
|---|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |

**Sequence 20**

| Ring | Phases |
|---|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |

**Sequence 17**

| | |
|---|---|
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

**Sequence 18**

| | |
|---|---|
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

**Sequence 19**

| | |
|---|---|
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

**Sequence 20**

| | |
|---|---|
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

## Global Phase Recalls

| Phase | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Min | | X | | | | X | | | | | | | | | | | | | | |
| Max | | | | | | | | | | | | | | | | | | | | |
| Ped | | | | | | | | | | | | | | | | | | | | |
| Act Walk Rest | | | | | | | | | | | | | | | | | | | | |

## Global Veh Det Diagnostics

| | |
|---|---|
| Global No Activity | 0 |
| Global Max Presence | 0 |
| Global Erractic Count | 0 |
| Global Failed Recall | None |
| Detector Reset Enable | Enabled |

## Global Ped Det Diagnostics

| | |
|---|---|
| Global No Activity | 0 |
| Global Max Presence | 0 |
| Global Erractic Count | 0 |

## Global Pri/Pre Det Diag

| | |
|---|---|
| Global No Activity | 0 |
| Global Max Presence | 0 |
| Global Erractic Count | 0 |

## Vehicle Detection Parameters

| Det. | Call Phs | Call Ped | Call Ovl | Add Call Phases | Sw Phs | Delay | Extend | Queue Limit | Ext Hold | No Activity | Max Pres | Erratic Counts | Failed Time | Failed Recall | Fail Link | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 2 | 2 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 3 | 2 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 4 | 2 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 5 | 2 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 6 | 2 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 7 | 3 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 8 | 4 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 9 | 4 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 10 | 4 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 11 | 4 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 12 | 4 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 13 | 1 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 14 | 3 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 15 | 5 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | 6 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 17 | 6 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 18 | 6 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 19 | 6 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 20 | 6 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 21 | 7 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 22 | 8 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 23 | 8 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 24 | 8 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 25 | 8 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 26 | 8 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 27 | 5 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 28 | 7 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 29 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 30 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 31 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 32 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |

| Det. | Call Phs | Call Ped | Call Ovl | Add Call Phases | Sw Phs | Delay | Extend | Queue Limit | Ext Hold | No Activity | Max Pres | Erratic Counts | Failed Time | Failed Recall | Fail Link | Description |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 34 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 35 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 36 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 37 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 38 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 39 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 40 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 41 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 42 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 43 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 44 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 45 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 46 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 47 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 48 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 49 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 50 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 51 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 52 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 53 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 54 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 55 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 56 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 57 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 58 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 59 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 60 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 61 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 62 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 63 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 64 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 65 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 66 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 67 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 68 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 69 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 70 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 71 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |
| 72 | 0 | 0 | 0 | | 0 | 0.0 | 0.0 | 0 | 0.0 | 0 | 0 | 0 | 0 | None | 0 | |

**Vehicle Detection Options**

| Detector | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volume Detector | | | | | | | | | | | | | | | | | | | | |
| Occupancy | | | | | | | | | | | | | | | | | | | | |
| Yellow Lock Call | | | | | | | | | | | | | | | | | | | | |
| Red Lock call | | | | | | | | | | | | | | | | | | | | |
| Extend | X | X | X | X | X | | X | X | X | X | X | | X | X | X | X | X | X | X | |
| Added Initial | | | | | | | | | | | | | | | | | | | | |
| Queue | | | | | | | | | | | | | | | | | | | | |
| Call | X | X | X | X | | X | X | X | X | X | | X | X | X | X | X | X | X | | X |
| Terminate | | | | | | | | | | | | | | | | | | | | |
| Min Green 2 | | | | | | | | | | | | | | | | | | | | |
| Protected Perm | | | | | | | | | | | | | | | | | | | | |
| Disable Dly Lead | | | | | | | | | | | | | | | | | | | | |
| Disable TS2 Diag | | | | | | | | | | | | | | | | | | | | |

| Detector | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volume Detector | | | | | | | | | | | | | | | | | | | | |
| Occupancy | | | | | | | | | | | | | | | | | | | | |
| Yellow Lock Call | | | | | | | | | | | | | | | | | | | | |
| Red Lock call | | | | | | | | | | | | | | | | | | | | |
| Extend | X | X | X | X | X | | X | X | | | | | | | | | | | | |
| Added Initial | | | | | | | | | | | | | | | | | | | | |
| Queue | | | | | | | | | | | | | | | | | | | | |
| Call | X | X | X | X | | X | X | X | | | | | | | | | | | | |
| Terminate | | | | | | | | | | | | | | | | | | | | |
| Min Green 2 | | | | | | | | | | | | | | | | | | | | |
| Protected Perm | | | | | | | | | | | | | | | | | | | | |
| Disable Dly Lead | | | | | | | | | | | | | | | | | | | | |
| Disable TS2 Diag | | | | | | | | | | | | | | | | | | | | |

| Detector | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volume Detector | | | | | | | | | | | | | | | | | | | | |
| Occupancy | | | | | | | | | | | | | | | | | | | | |
| Yellow Lock Call | | | | | | | | | | | | | | | | | | | | |
| Red Lock call | | | | | | | | | | | | | | | | | | | | |
| Extend | | | | | | | | | | | | | | | | | | | | |
| Added Initial | | | | | | | | | | | | | | | | | | | | |
| Queue | | | | | | | | | | | | | | | | | | | | |
| Call | | | | | | | | | | | | | | | | | | | | |
| Terminate | | | | | | | | | | | | | | | | | | | | |
| Min Green 2 | | | | | | | | | | | | | | | | | | | | |
| Protected Perm | | | | | | | | | | | | | | | | | | | | |
| Disable Dly Lead | | | | | | | | | | | | | | | | | | | | |
| Disable TS2 Diag | | | | | | | | | | | | | | | | | | | | |

| Detector | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Volume Detector | | | | | | | | | | | | |
| Occupancy | | | | | | | | | | | | |
| Yellow Lock Call | | | | | | | | | | | | |
| Red Lock call | | | | | | | | | | | | |
| Extend | | | | | | | | | | | | |
| Added Initial | | | | | | | | | | | | |
| Queue | | | | | | | | | | | | |

| | |
|---|---|
| Data Collection Period | 0 |
| Number of Periods | 1 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Call | | | | | | | | | | | | |
| Terminate | | | | | | | | | | | | |
| Min Green 2 | | | | | | | | | | | | |
| Protected Perm | | | | | | | | | | | | |
| Disable Dly Lead | | | | | | | | | | | | |
| Disable TS2 Diag | | | | | | | | | | | | |

## Speed Detectors

| Det | Enable | Type | Units | Min Log | Max Log | Car Length | Det Length | Trail Det | Trap Length |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | Single | Inches | 5 | 80 | 0 | 0 | 0 | 0 |
| 2 | | Single | Inches | 5 | 80 | 0 | 0 | 0 | 0 |
| 3 | | Single | Inches | 5 | 80 | 0 | 0 | 0 | 0 |
| 4 | | Single | Inches | 5 | 80 | 0 | 0 | 0 | 0 |
| 5 | | Single | Inches | 5 | 80 | 0 | 0 | 0 | 0 |
| 6 | | Single | Inches | 5 | 80 | 0 | 0 | 0 | 0 |
| 7 | | Single | Inches | 5 | 80 | 0 | 0 | 0 | 0 |
| 8 | | Single | Inches | 5 | 80 | 0 | 0 | 0 | 0 |

## Pedestrian Detectors

| Det | Call Phs | Call Ovlp | Add Call Phs | Walk 2 | Clear 2 | No Act | Max Pres | Erratic Count |
|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 2 | 2 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 3 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 4 | 4 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 5 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 6 | 6 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 7 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 8 | 8 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 9 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 10 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 11 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 12 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 13 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 14 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 15 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 16 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 17 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 18 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 19 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 20 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |

| Det | Call Phs | Call Ovlp | Add Call Phs | Walk 2 | Clear 2 | No Act | Max Pres | Erratic Count |
|---|---|---|---|---|---|---|---|---|
| 21 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 22 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 23 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 24 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 25 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 26 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 27 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 28 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 29 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 30 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 31 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 32 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 33 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 34 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 35 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 36 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 37 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 38 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 39 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |
| 40 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 |

## Pri/Pre Detectors

| Det | Description | Low Call | High Call | Low Num | high Num | Lead/Trail | Arrival Time | Pri Dlay | Dlay | Ext | Min On | Pri Olvp | No Act | Max Pres | Erratic Count |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | None | None | 0 | 0 | None | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| 2 | | None | None | 0 | 0 | None | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| 3 | | None | None | 0 | 0 | None | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| 4 | | None | None | 0 | 0 | None | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| 5 | | None | None | 0 | 0 | None | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| 6 | | None | None | 0 | 0 | None | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| 7 | | None | None | 0 | 0 | None | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| 8 | | None | None | 0 | 0 | None | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |

## Overlaps

| OLP | Enabled | Type | Included Phs | Modifier Phs | Modifier Ovlps | Neg Phases | Inhibit Neg Phs | Neg Ovlps |
|---|---|---|---|---|---|---|---|---|
| 1 | Enabled | Off | 2 | 1 | | | | |
| 2 | Enabled | Off | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 3 | Enabled | Off | 4 | 3 | | | | |
| 4 | Enabled | Off | | | | | | |
| 5 | Enabled | Off | 6 | 5 | | | | |
| 6 | Enabled | Off | | | | | | |
| 7 | Enabled | Off | 8 | 7 | | | | |
| 8 | Enabled | Off | | | | | | |
| 9 | Enabled | Off | | | | | | |
| 10 | Enabled | Off | | | | | | |
| 11 | Enabled | Off | | | | | | |
| 12 | Enabled | Off | | | | | | |
| 13 | Enabled | Off | | | | | | |
| 14 | Enabled | Off | | | | | | |
| 15 | Enabled | Off | | | | | | |
| 16 | Enabled | Off | | | | | | |

| OLP | TrG Omit Phs | Negative Peds | Neg Ped Ovlps | Grn Sup Phs | N Ped Phs Calls | Description |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |

| OLP | TrG Omit Phs | Negative Peds | Neg Ped Ovlps | Grn Sup Phs | N Ped Phs Calls | Description |
|---|---|---|---|---|---|---|
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |

| OLP | Trail GRN | Trail YEL | Trail RED | Walk 1 | Ped Clr 1 | Walk 2 | Ped Clr 2 | Delay | Flash | Min Green | Mx Grn Ext | Red Revert | Flash Inactive | Flash Alt | Walk Rest |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 2 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 3 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 4 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 5 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 6 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 7 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 8 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 9 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 10 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 11 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 12 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 13 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 14 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 15 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |
| 16 | 0 | 0.0 | 0.0 | 0 | 0 | 0 | 0 | 0.0 | Off | 0 | 0 | 0.0 | Off | Off | Off |

**Overlap Options**

| Overlap | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Startup Call | | | | | | | | | | | | | | | | |
| Recall | | | | | | | | | | | | | | | | |

| Overlap | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Call for Service | | | | | | | | | | | | | | | | |
| Trail Grn Bridge | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No Veh Reserv | | | | | | | | | | | | | | |
| No Hold Trail Exit | | | | | | | | | | | | | | |
| Ped Recycle | | | | | | | | | | | | | | |
| No Yellow Protect | | | | | | | | | | | | | | |
| No Bridging | | | | | | | | | | | | | | |
| LRT Prepare Go | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FYA Prot. Red Cl | | | | | | | | | | | | | | |
| Phs Intvl Override | | | | | | | | | | | | | | |
| Queue Jump | | | | | | | | | | | | | | |
| No FYA Ped Wlk | | | | | | | | | | | | | | |
| Term After Call | | | | | | | | | | | | | | |

## Custom Overlap Rules

| Rule | Custom Ovlp | Incl. State | Mod. State | Neg. State | Output | Flash |
|---|---|---|---|---|---|---|
| 1 | Disable | Any | Any | Any | Not Set | Not Set |
| 2 | Disable | Any | Any | Any | Not Set | Not Set |
| 3 | Disable | Any | Any | Any | Not Set | Not Set |
| 4 | Disable | Any | Any | Any | Not Set | Not Set |
| 5 | Disable | Any | Any | Any | Not Set | Not Set |
| 6 | Disable | Any | Any | Any | Not Set | Not Set |
| 7 | Disable | Any | Any | Any | Not Set | Not Set |
| 8 | Disable | Any | Any | Any | Not Set | Not Set |
| 9 | Disable | Any | Any | Any | Not Set | Not Set |
| 10 | Disable | Any | Any | Any | Not Set | Not Set |

## Coordination Parameters

| | |
|---|---|
| Operational Mode | Automatic |
| Coordination Mode | Pattern |
| Correction Mode | Shortway (Auto) |

| | |
|---|---|
| Maximum Mode | Per Pattern |
| Force Mode | Per Pattern |
| Transition Cover Ped | Pattern |

| | |
|---|---|
| Max Cyc Limit % | 15 |
| Min Cyc Limit % | 15 |
| Max Dwell | 0 |

## Patterns

| | | Offset | | | | | Ref | Coord | Force | Max | Trans | Min | Phs | Det | Ped | Ovlp | Pri | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Patt. | Cycle | 1 | 2 | 3 | Split | Seq | Col | Mode | Mode | Mode | Ped | Perm | Pln | Pln | Pln | Pln | Pln | Description |
| 1 | 140 | 124 | 0 | 0 | 1 | 1 | Yel | Auto | Phase | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 2 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 3 | 140 | 38 | 0 | 0 | 3 | 1 | Yel | Auto | Phase | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 4 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 6 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 7 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 8 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 9 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 12 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 13 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 14 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 15 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 17 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 18 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 19 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |
| 20 | 0 | 0 | 0 | 0 | 0 | 0 | Yel | Auto | Fixed | Inh | Phase | Phs Only | 1 | 1 | 1 | 1 | 1 | |

## Split Parameters

| Split 1 | | | | Coord | Ref | Cover | Force Off | | Pri | Pri | Pri |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PH. | Time | Min | Max | PH | PH | Ped | Mode | Mode | Min | Max | F. Off |
| 1 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 2 | 70 | 0 | 0 | X | X | | Fix | Max Rcl | 0 | 0 | Float |
| 3 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 4 | 35 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 5 | 12 | 0 | 0 | | | | Flt | None | 0 | 0 | Float |
| 6 | 58 | 0 | 0 | X | X | | Fix | Max Rcl | 0 | 0 | Float |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 8 | 35 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 9 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 10 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 11 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 12 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 13 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 14 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 15 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 16 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

| Split 2 | | | | Coord | Ref | Cover | Force Off | | Pri | Pri | Pri |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PH. | Time | Min | Max | PH | PH | Ped | Mode | Mode | Min | Max | F. Off |
| 1 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 2 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 3 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 4 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 5 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 6 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 7 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 8 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 9 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 10 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 11 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 12 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 13 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 14 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 15 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 16 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

| Split 3 | | | | Coord | Ref | Cover | Force Off | | Pri | Pri | Pri |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PH. | Time | Min | Max | PH | PH | Ped | Mode | Mode | Min | Max | F. Off |
| 1 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 2 | 85 | 0 | 0 | X | X | | Fix | Max Rcl | 0 | 0 | Float |
| 3 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 4 | 25 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 5 | 20 | 0 | 0 | | | | Flt | None | 0 | 0 | Float |
| 6 | 65 | 0 | 0 | X | X | | Fix | Max Rcl | 0 | 0 | Float |
| 7 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 8 | 30 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 9 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 10 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 11 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 12 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 13 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 14 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 15 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 16 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

| Split 4 | | | | Coord | Ref | Cover | Force Off | | Pri | Pri | Pri |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PH. | Time | Min | Max | PH | PH | Ped | Mode | Mode | Min | Max | F. Off |
| 1 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 2 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 3 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 4 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 5 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 6 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 7 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 9 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 10 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 11 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 12 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 13 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 14 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 15 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 16 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

| Split 5 | | | | Coord | Ref | Cover | Force Off | | Pri | Pri | Pri |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PH. | Time | Min | Max | PH | PH | Ped | Mode | Mode | Min | Max | F. Off |
| 1 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 2 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 3 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 4 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 5 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 6 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 7 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 8 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 9 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 10 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 11 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 12 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 13 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 14 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 15 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 16 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

| Split 6 | | | | Coord | Ref | Cover | Force Off | | Pri | Pri | Pri |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PH. | Time | Min | Max | PH | PH | Ped | Mode | Mode | Min | Max | F. Off |
| 1 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 2 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

| Split 6 | | | | Coord | Ref | Cover | Force Off | | Pri | Pri | Pri |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PH. | Time | Min | Max | PH | PH | Ped | Mode | Mode | Min | Max | F. Off |
| 3 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 4 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 5 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 6 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 7 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 8 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 9 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 10 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 11 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 12 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 13 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 14 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 15 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 16 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

| Split 7 | | | | Coord | Ref | Cover | Force Off | | Pri | Pri | Pri |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PH. | Time | Min | Max | PH | PH | Ped | Mode | Mode | Min | Max | F. Off |
| 1 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 2 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 3 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 4 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 6 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 7 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 8 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 9 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 10 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 11 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 12 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 13 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 14 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 15 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 16 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

| Split 8 | | | | Coord | Ref | Cover | Force Off | | Pri | Pri | Pri |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PH. | Time | Min | Max | PH | PH | Ped | Mode | Mode | Min | Max | F. Off |
| 1 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 2 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 3 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 4 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 5 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 6 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 7 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 8 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 9 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 10 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 11 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 12 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 13 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 14 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 15 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 16 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

| Split 9 | | | | Coord | Ref | Cover | Force Off | | Pri | Pri | Pri |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PH. | Time | Min | Max | PH | PH | Ped | Mode | Mode | Min | Max | F. Off |
| 1 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 2 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 3 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 4 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

| Split 9 | | | | Coord | Ref | Cover | Force Off | | Pri | Pri | Pri |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PH. | Time | Min | Max | PH | PH | Ped | Mode | Mode | Min | Max | F. Off |
| 5 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 6 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 7 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 8 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 9 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 10 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 11 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 12 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 13 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 14 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 15 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 16 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

| Split 10 | | | | Coord | Ref | Cover | Force Off | | Pri | Pri | Pri |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PH. | Time | Min | Max | PH | PH | Ped | Mode | Mode | Min | Max | F. Off |
| 1 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 2 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 4 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 5 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 6 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 7 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 8 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 9 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 10 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 11 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 12 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 13 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 14 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 15 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |
| 16 | 0 | 0 | 0 | | | | Fix | None | 0 | 0 | Float |

Ring Plan 1

| Ring | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offset | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Early Coord Gap Out | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Day Plan 1 On

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| X | X | X | X | X | X | | X | X | X | X | X | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| J | A | S | O | N | D | | | | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| X | X | X | X | X | X | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |

Day Plan 2 On

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| X | X | X | X | X | X | X | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| J | A | S | O | N | D | | | | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| X | X | X | X | X | X | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |

Day Plan 3 Off

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| J | A | S | O | N | D | | | | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| X | X | X | X | X | X | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |

Day Plan 4 Off

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| J | A | S | O | N | D | | | | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| X | X | X | X | X | X | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |

Day Plan 5 Off

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| J | A | S | O | N | D | | | | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| X | X | X | X | X | X | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |

Day Plan 6 Off

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| J | A | S | O | N | D | | | | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| X | X | X | X | X | X | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |

Day Plan 7 Off

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| J | A | S | O | N | D | | | | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| X | X | X | X | X | X | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |

Day Plan 8 Off

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| J | A | S | O | N | D | | | | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| X | X | X | X | X | X | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |

Day Plan 9 Off

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| J | A | S | O | N | D | | | | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| X | X | X | X | X | X | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |

Day Plan 10 Off

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| J | A | S | O | N | D | | | | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| X | X | X | X | X | X | | | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | |

Day Plan 0 On

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| J | A | S | O | N | D | | | | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Day Plan 0 On

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| J | A | S | O | N | D | | | | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Day Plan 0 On

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| J | A | S | O | N | D | | | | | | | | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Day Plan 0 On

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| J | A | S | O | N | D |
|---|---|---|---|---|---|
| | | | | | |

| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | |

Day Plan 0 On

| Month of Year | | | | | | Days of Week | | | | | | | Days of Month | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| J | F | M | A | M | J | S | M | T | W | T | F | S | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| J | A | S | O | N | D |
|---|---|---|---|---|---|
| | | | | | |

| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | |

Day Plan 1

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 5 | 30 | 1 |
| 2 | 9 | 0 | 10 |
| 3 | 14 | 0 | 3 |
| 4 | 18 | 0 | 10 |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 2

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 1 | 10 |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 3

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 4

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 5

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 6

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 7

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 8

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 9

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 10

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 11

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 12

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 13

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |

Day Plan 14

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |

Day Plan 15

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |

Day Plan 16

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |

| | | | |
|---|---|---|---|
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

| | | | |
|---|---|---|---|
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

| | | | |
|---|---|---|---|
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

| | | | |
|---|---|---|---|
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 17

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 18

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 19

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

Day Plan 20

| Event | Hour | Min. | Act |
|---|---|---|---|
| 1 | 0 | 0 | |
| 2 | 0 | 0 | |
| 3 | 0 | 0 | |
| 4 | 0 | 0 | |
| 5 | 0 | 0 | |
| 6 | 0 | 0 | |
| 7 | 0 | 0 | |
| 8 | 0 | 0 | |
| 9 | 0 | 0 | |
| 10 | 0 | 0 | |

**Actions**

| | | Aux. | | | Special Functions | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Act | Pattern | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Pattern 1 | | | | | | | | | | | |
| 2 | Pattern 2 | | | | | | | | | | | |
| 3 | Pattern 3 | | | | | | | | | | | |
| 4 | Pattern 4 | | | | | | | | | | | |
| 5 | Pattern 5 | | | | | | | | | | | |
| 6 | Pattern 6 | | | | | | | | | | | |
| 7 | Pattern 7 | | | | | | | | | | | |
| 8 | Pattern 8 | | | | | | | | | | | |
| 9 | Pattern 9 | | | | | | | | | | | |
| 10 | Free | | | | | | | | | | | |
| 11 | None | | | | | | | | | | | |
| 12 | None | | | | | | | | | | | |
| 13 | None | | | | | | | | | | | |
| 14 | None | | | | | | | | | | | |
| 15 | None | | | | | | | | | | | |
| 16 | None | | | | | | | | | | | |
| 17 | None | | | | | | | | | | | |
| 18 | None | | | | | | | | | | | |
| 19 | None | | | | | | | | | | | |
| 20 | None | | | | | | | | | | | |
| 21 | None | | | | | | | | | | | |
| 22 | None | | | | | | | | | | | |
| 23 | None | | | | | | | | | | | |
| 24 | None | | | | | | | | | | | |
| 25 | None | | | | | | | | | | | |
| 26 | None | | | | | | | | | | | |
| 27 | None | | | | | | | | | | | |
| 28 | None | | | | | | | | | | | |
| 29 | None | | | | | | | | | | | |
| 30 | None | | | | | | | | | | | |
| 31 | None | | | | | | | | | | | |
| 32 | None | | | | | | | | | | | |

**Actions**

| | | Aux. | | | Special Functions | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Act | Pattern | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 33 | None | | | | | | | | | | | |
| 34 | None | | | | | | | | | | | |
| 35 | None | | | | | | | | | | | |
| 36 | None | | | | | | | | | | | |
| 37 | None | | | | | | | | | | | |
| 38 | None | | | | | | | | | | | |
| 39 | None | | | | | | | | | | | |
| 40 | None | | | | | | | | | | | |
| 41 | None | | | | | | | | | | | |
| 42 | None | | | | | | | | | | | |
| 43 | None | | | | | | | | | | | |
| 44 | None | | | | | | | | | | | |
| 45 | None | | | | | | | | | | | |
| 46 | None | | | | | | | | | | | |
| 47 | None | | | | | | | | | | | |
| 48 | None | | | | | | | | | | | |
| 49 | None | | | | | | | | | | | |
| 50 | None | | | | | | | | | | | |
| 51 | None | | | | | | | | | | | |
| 52 | None | | | | | | | | | | | |
| 53 | None | | | | | | | | | | | |
| 54 | None | | | | | | | | | | | |
| 55 | None | | | | | | | | | | | |
| 56 | None | | | | | | | | | | | |
| 57 | None | | | | | | | | | | | |
| 58 | None | | | | | | | | | | | |
| 59 | None | | | | | | | | | | | |
| 60 | None | | | | | | | | | | | |
| 61 | None | | | | | | | | | | | |
| 62 | None | | | | | | | | | | | |
| 63 | None | | | | | | | | | | | |
| 64 | None | | | | | | | | | | | |

**Action Commands**

Action 1

| Cmd | Command | Indexes |
|---|---|---|
| 1 | None | |
| 2 | None | |

Action 2

| Cmd | Command | Indexes |
|---|---|---|
| 1 | None | |
| 2 | None | |

| | | |
|---|---|---|
| 3 | None | |
| 4 | None | |
| 5 | None | |
| 6 | None | |
| 7 | None | |
| 8 | None | |
| 9 | None | |
| 10 | None | |

| | | |
|---|---|---|
| 3 | None | |
| 4 | None | |
| 5 | None | |
| 6 | None | |
| 7 | None | |
| 8 | None | |
| 9 | None | |
| 10 | None | |

**Master Sections By TOD**

| Action | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Master Section 1 | | | | | | | | | | |
| Master Section 2 | | | | | | | | | | |
| Master Section 3 | | | | | | | | | | |
| Master Section 4 | | | | | | | | | | |
| Master Section 5 | | | | | | | | | | |
| Master Section 6 | | | | | | | | | | |
| Master Section 7 | | | | | | | | | | |
| Master Section 8 | | | | | | | | | | |
| Master Section 9 | | | | | | | | | | |
| Master Section 10 | | | | | | | | | | |
| Master Section 11 | | | | | | | | | | |
| Master Section 12 | | | | | | | | | | |
| Master Section 13 | | | | | | | | | | |
| Master Section 14 | | | | | | | | | | |
| Master Section 15 | | | | | | | | | | |
| Master Section 16 | | | | | | | | | | |

**Queue Responsive By TOD**

| Action | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Queue Resp Plan 1 | | | | | | | | | | |
| Queue Resp Plan 2 | | | | | | | | | | |
| Queue Resp Plan 3 | | | | | | | | | | |
| Queue Resp Plan 4 | | | | | | | | | | |
| Queue Resp Plan 5 | | | | | | | | | | |
| Queue Resp Plan 6 | | | | | | | | | | |
| Queue Resp Plan 7 | | | | | | | | | | |
| Queue Resp Plan 8 | | | | | | | | | | |
| Queue Resp Plan 9 | | | | | | | | | | |
| Queue Resp Plan 10 | | | | | | | | | | |
| Queue Resp Plan 11 | | | | | | | | | | |
| Queue Resp Plan 12 | | | | | | | | | | |
| Queue Resp Plan 13 | | | | | | | | | | |
| Queue Resp Plan 14 | | | | | | | | | | |
| Queue Resp Plan 15 | | | | | | | | | | |
| Queue Resp Plan 16 | | | | | | | | | | |

**Preemption Parameters**

| Preempt | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Link | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Delay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Min Duration | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Min Presence | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Max Presence | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enter Min Green | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Enter Yellow | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 |
| Ent. Red Clear | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 |
| Min Walk | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ent. Ped Clear | 255 | 255 | 255 | 255 | 255 | 255 | 255 | 255 |
| Track Green | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Max Track Grn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Track Yellow | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 |
| Track Red Clear | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 |
| Track 2 Green | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Track 2 Yellow | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 |
| Track 2 Red | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 |
| Track Ext Gate Dn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Dwell Green | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Exit Ped Clear | 255 | 255 | 255 | 255 | 255 | 255 | 255 | 255 |
| Exit Yellow | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 |
| Exit Red | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 | 25.5 |
| Dwell Ext Time | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Max Exit Green | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Exit Max Time | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Preempt | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Non Lock Mem | | | | | | | | |
| Not Overide Flash | | | | | | | | |
| NotOverideNextPre | | | | | | | | |
| Flash Dwell | | | | | | | | |
| Ped Recycle | | | | | | | | |
| Imm Ped Clear | | | | | | | | |
| Dwell Only Status | | | | | | | | |
| All Red Flash Dwell | | | | | | | | |
| Allow All Overlaps | | | | | | | | |
| Req All Red Entry | | | | | | | | |
| Req Gate Dwn Trck Exit | | | | | | | | |
| Req Gate Up Dwl Exit | | | | | | | | |
| Normal On/Off Input | | | | | | | | |
| Track Clear Override | | | | | | | | |
| Aux Function 1 | | | | | | | | |
| Aux Function 2 | | | | | | | | |
| Aux Function 3 | | | | | | | | |
| Special Function 1 | | | | | | | | |
| Special Function 2 | | | | | | | | |
| Special Function 3 | | | | | | | | |
| Special Function 4 | | | | | | | | |
| Special Function 5 | | | | | | | | |
| Special Function 6 | | | | | | | | |
| Special Function 7 | | | | | | | | |
| Special Function 8 | | | | | | | | |

| Require CRC |
|---|
| Disabled |

| Pre | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| Pre | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| Pre | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| Pre | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |

| | | | |
|---|---|---|---|
| Sp F9 | Sp F11 | Sp F13 | Sp F15 |
| Sp F10 | Sp F12 | Sp F14 | Sp F16 |

## Preemption Configuration

| Preempt | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Enabled | Disabled | Disabled | Disabled | Disabled | Disabled | Disabled | Disabled | Disabled |
| Type | Emerg Veh | Emerg Veh | Emerg Veh | Emerg Veh | Emerg Veh | Emerg Veh | Emerg Veh | Emerg Veh |
| Description | | | | | | | | |
| Track Phases | | | | | | | | |
| Track 2 Phases | | | | | | | | |
| Track Overlaps | | | | | | | | |
| Track 2 Overlaps | | | | | | | | |
| Dwell Phase | | | | | | | | |
| Dwell Ped | | | | | | | | |
| Dwell Overlaps | | | | | | | | |
| Cycling Phases | | | | | | | | |
| Cycling Peds | | | | | | | | |
| Cycling Overlaps | | | | | | | | |
| Exit Phases | | | | | | | | |
| Exit Overlaps | | | | | | | | |
| Exit Veh Calls | | | | | | | | |
| Exit Ped Calls | | | | | | | | |
| Recovery Omit Phs | | | | | | | | |
| Max Pres Action | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Exit Type | Exit Phases | Exit Phases | Exit Phases | Exit Phases | Exit Phases | Exit Phases | Exit Phases | Exit Phases |
| Exit Max Mode | Disabled | Disabled | Disabled | Disabled | Disabled | Disabled | Disabled | Disabled |

## Cabinet Config

| | | | | | |
|---|---|---|---|---|---|
| Run ITS on NEMA port 1 | No | Enable TS2/ATC Stop Time | | Disable TS2 Fault Flash | |
| Run ITS on 2070-1C C13S | No | Disable TS2 Startup Call | | Disable TS2 Cab. Alarms | |

## IO Modules

| IO Mod | TYPE |
|---|---|
| 1 | Caltrans 332 |
| 2 | None |
| 3 | None |
| 4 | None |
| 5 | None |
| 6 | None |
| 7 | None |
| 8 | None |
| 9 | None |
| 10 | None |

## Channel Configuration

| Chan | Ctrl Type | Source | MMU Channel |
|---|---|---|---|
| 1 | None | 1 | 1 |
| 2 | Phs Veh | 2 | 2 |
| 3 | None | 3 | 3 |
| 4 | Phs Veh | 4 | 4 |
| 5 | Phs Veh | 5 | 5 |
| 6 | Phs Veh | 6 | 6 |
| 7 | None | 7 | 7 |
| 8 | Phs Veh | 8 | 8 |
| 9 | Phs Veh | 1 | 9 |
| 10 | Wrn Flash | 2 | 10 |

| Chan | Ctrl Type | Source | MMU Channel |
|---|---|---|---|
| 11 | None | 5 | 11 |
| 12 | Wrn Flash | 6 | 12 |
| 13 | Phs Ped | 2 | 13 |
| 14 | Phs Ped | 4 | 14 |
| 15 | Phs Ped | 6 | 15 |
| 16 | Phs Ped | 8 | 16 |
| 17 | None | 0 | 17 |
| 18 | None | 0 | 18 |
| 19 | None | 0 | 19 |
| 20 | None | 0 | 20 |

## Channel Options

| Channel | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flash Yellow | | | | | | | | | | | | | | | | |
| Flash Red | X | X | X | X | X | X | X | X | | | | | | | | |
| Alt Flash | X | | | X | X | | | X | | | | | | | | |
| Channel | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |
| Flash Yellow | | | | | | | | | | | | | | | | |
| Flash Red | | | | | | | | | | | | | | | | |
| Alt Flash | | | | | | | | | | | | | | | | |

## Phase Intervals

| Interval | Description | Red | Yel | Grn | Type |
|---|---|---|---|---|---|
| 1 | Not Act | On | Off | Off | Red |

| Interval | Description | Red | Yel | Grn | Type |
|---|---|---|---|---|---|
| 7 | Pre Clr | Off | Off | On | Green |

| | | | | | |
|---|---|---|---|---|---|
| 2 | Dly Grn | On | Off | Off | Red |
| 3 | Pre Grn | Off | Off | On | Green |
| 4 | Min Grn | Off | Off | On | Green |
| 5 | Grn Ext | Off | Off | On | Green |
| 6 | Grn Dwell | Off | Off | On | Green |

| | | | | | |
|---|---|---|---|---|---|
| 8 | Yel Change | Off | On | Off | Yellow |
| 9 | Red Clr | On | Off | Off | Red |
| 10 | Red Dwell | On | Off | Off | Red |
| 11 | Barrier | On | Off | Off | Red |
| 12 | Pre Clr 2 | Off | Off | Off | Not Def |

## Pedestrian Intervals

| Interval | Description | DWK | CLR | Wlk | Type |
|---|---|---|---|---|---|
| 1 | Not Active | On | Off | Off | Dont Walk |
| 2 | Dly Ped | On | Off | Off | Dont Walk |
| 3 | Walk | Off | Off | On | Walk |
| 4 | Walk Dwell | Off | Off | On | Walk |
| 5 | Flsh DWalk | Flash | Off | Off | Ped Clear |
| 6 | DWalk | On | Off | Off | Dont Walk |

## Alarm Config

| Alarm | Name |
|---|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |

| Alarm | Name |
|---|---|
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |

## Manual Control Phase Groups

| Grp 1 | | Grp 2 | | Grp 3 | | Grp 4 | | Grp 5 | | Grp 6 | | Grp 7 | | Grp 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ring | Ph | Ring | Ph | Ring | Ph | Ring | Ph | Ring | Ph | Ring | Ph | Ring | Ph | Ring | Ph |
| 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 |
| 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 | 3 | 0 |
| 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 0 |
| 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 | 5 | 0 |
| 6 | 0 | 6 | 0 | 6 | 0 | 6 | 0 | 6 | 0 | 6 | 0 | 6 | 0 | 6 | 0 |
| 7 | 0 | 7 | 0 | 7 | 0 | 7 | 0 | 7 | 0 | 7 | 0 | 7 | 0 | 7 | 0 |
| 8 | 0 | 8 | 0 | 8 | 0 | 8 | 0 | 8 | 0 | 8 | 0 | 8 | 0 | 8 | 0 |
| 9 | 0 | 9 | 0 | 9 | 0 | 9 | 0 | 9 | 0 | 9 | 0 | 9 | 0 | 9 | 0 |
| 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 | 10 | 0 |
| 11 | 0 | 11 | 0 | 11 | 0 | 11 | 0 | 11 | 0 | 11 | 0 | 11 | 0 | 11 | 0 |
| 12 | 0 | 12 | 0 | 12 | 0 | 12 | 0 | 12 | 0 | 12 | 0 | 12 | 0 | 12 | 0 |
| 13 | 0 | 13 | 0 | 13 | 0 | 13 | 0 | 13 | 0 | 13 | 0 | 13 | 0 | 13 | 0 |
| 14 | 0 | 14 | 0 | 14 | 0 | 14 | 0 | 14 | 0 | 14 | 0 | 14 | 0 | 14 | 0 |
| 15 | 0 | 15 | 0 | 15 | 0 | 15 | 0 | 15 | 0 | 15 | 0 | 15 | 0 | 15 | 0 |
| 16 | 0 | 16 | 0 | 16 | 0 | 16 | 0 | 16 | 0 | 16 | 0 | 16 | 0 | 16 | 0 |

## Prioritor Settings

| Enabled | Lock Out Time | PRS Time to Live |
|---|---|---|
| No | 0 | 300 |

| Prioritor | Enabled | Priority | Priority Phs | Skipped Phs | Skip Peds | Delay Time | Est Travel | Mx Presence | Output Dly |
|---|---|---|---|---|---|---|---|---|---|
| 1 | On | 0 | | | | 0 | 0 | 0 | 0 |
| 2 | On | 0 | | | | 0 | 0 | 0 | 0 |
| 3 | On | 0 | | | | 0 | 0 | 0 | 0 |
| 4 | On | 0 | | | | 0 | 0 | 0 | 0 |
| 5 | On | 0 | | | | 0 | 0 | 0 | 0 |
| 6 | On | 0 | | | | 0 | 0 | 0 | 0 |
| 7 | On | 0 | | | | 0 | 0 | 0 | 0 |
| 8 | On | 0 | | | | 0 | 0 | 0 | 0 |

| Prioritor | Res. Lockout | Free Pri Min | Free Pri Max | Description |
|---|---|---|---|---|
| 1 | 0 | Min Green | Max Green | |
| 2 | 0 | Min Green | Max Green | |
| 3 | 0 | Min Green | Max Green | |
| 4 | 0 | Min Green | Max Green | |
| 5 | 0 | Min Green | Max Green | |
| 6 | 0 | Min Green | Max Green | |
| 7 | 0 | Min Green | Max Green | |
| 8 | 0 | Min Green | Max Green | |

| Prioritor | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Lock After First Serve | | | | | | | | |
| Pres. Only Check-in | | | | | | | | |
| Extend Walk Rest | | | | | | | | |

PRS Reservice Times

| Class | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Time | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Peer Configuration

| Ctrl | Peer ID | Device Type | IP address | IP Port | Http Port | Serial Port | Serial Addr. | Master Sect. | P2P TO | Description |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | Peer MaxTime | | 161 | 80 | 0 | 0 | 0 | 15 | |
| 2 | 0 | Peer MaxTime | | 161 | 80 | 0 | 0 | 0 | 15 | |
| 3 | 0 | Peer MaxTime | | 161 | 80 | 0 | 0 | 0 | 15 | |
| 4 | 0 | Peer MaxTime | | 161 | 80 | 0 | 0 | 0 | 15 | |
| 5 | 0 | Peer MaxTime | | 161 | 80 | 0 | 0 | 0 | 15 | |
| 6 | 0 | Peer MaxTime | | 161 | 80 | 0 | 0 | 0 | 15 | |
| 7 | 0 | Peer MaxTime | | 161 | 80 | 0 | 0 | 0 | 15 | |
| 8 | 0 | Peer MaxTime | | 161 | 80 | 0 | 0 | 0 | 15 | |
| 9 | 0 | Peer MaxTime | | 161 | 80 | 0 | 0 | 0 | 15 | |
| 10 | 0 | Peer MaxTime | | 161 | 80 | 0 | 0 | 0 | 15 | |

## Master Section Configuration

| Section | Control | Poll | Req # | Fail Time | Algorithm Period | Description |
|---|---|---|---|---|---|---|
| 1 | None | 60 | 1 | 300 | 240 | |
| 2 | None | 60 | 1 | 300 | 240 | |
| 3 | None | 60 | 1 | 300 | 240 | |
| 4 | None | 60 | 1 | 300 | 240 | |
| 5 | None | 60 | 1 | 300 | 240 | |
| 6 | None | 60 | 1 | 300 | 240 | |
| 7 | None | 60 | 1 | 300 | 240 | |
| 8 | None | 60 | 1 | 300 | 240 | |
| 9 | None | 60 | 1 | 300 | 240 | |
| 10 | None | 60 | 1 | 300 | 240 | |
| 11 | None | 60 | 1 | 300 | 240 | |
| 12 | None | 60 | 1 | 300 | 240 | |
| 13 | None | 60 | 1 | 300 | 240 | |
| 14 | None | 60 | 1 | 300 | 240 | |
| 15 | None | 60 | 1 | 300 | 240 | |
| 16 | None | 60 | 1 | 300 | 240 | |

## User Program Info

| Pgrm | Description |
|---|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

| Pgrm | Description |
|---|---|
| 17 | |
| 18 | |
| 19 | |
| 20 | |
| 21 | |
| 22 | |
| 23 | |
| 24 | |
| 25 | |
| 26 | |
| 27 | |
| 28 | |
| 29 | |
| 30 | |
| 31 | |
| 32 | |

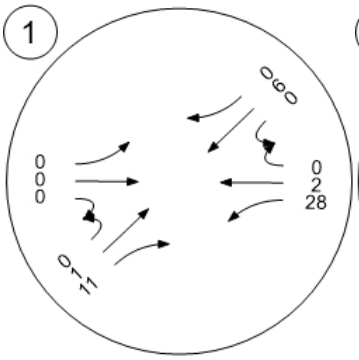
# Additional Attachments

VISTRO JANE DAVIS AM ST - SITE

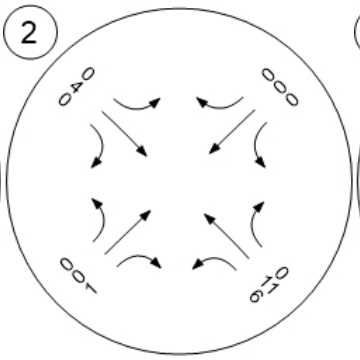
TRANSPORTATION
CONSULTANTS, INC.

## Traffic Volume - Net New Site Trips

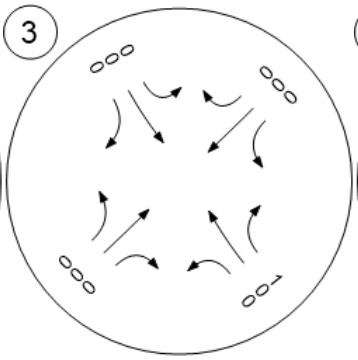

US 24 + Judge Orr



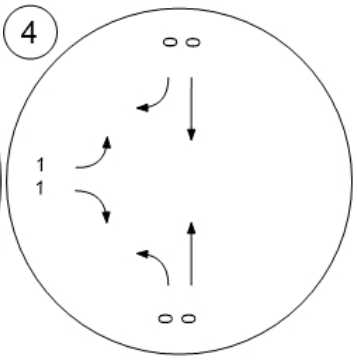

US 24 + Stapleton



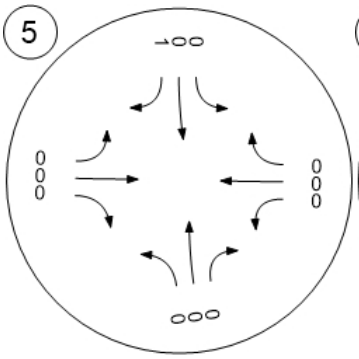

US 24 + Elbert



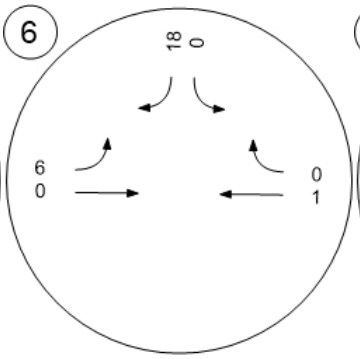

Elbert + E Access



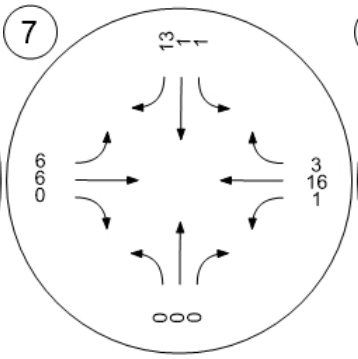

Judge Orr + Elbert



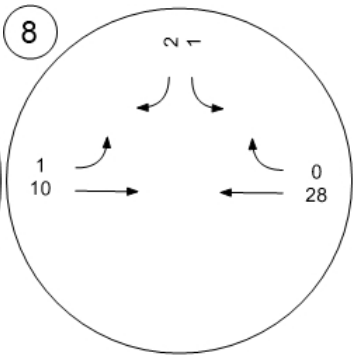

Judge Orr + SE Access




Judge Orr + Curtis

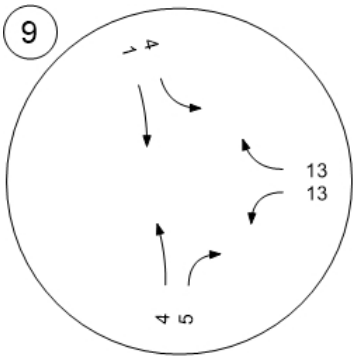



Judge Orr + SW Access



## Traffic Volume - Net New Site Trips


Stapleton + W Access



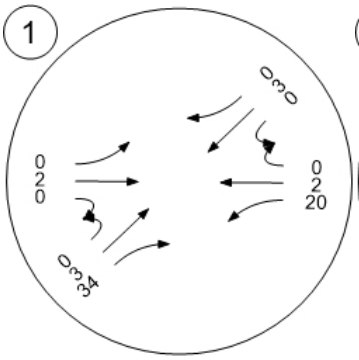
# Additional Attachments

VISTRO JANE DAVIS PM ST - SITE

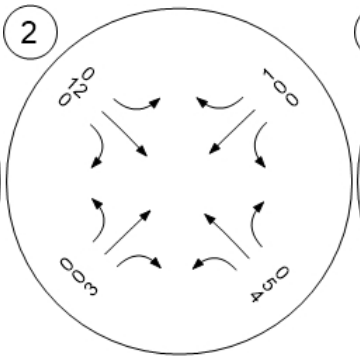
TRANSPORTATION
CONSULTANTS, INC.

## Traffic Volume - Net New Site Trips

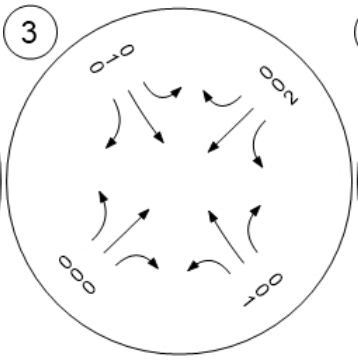

US 24 + Judge Orr



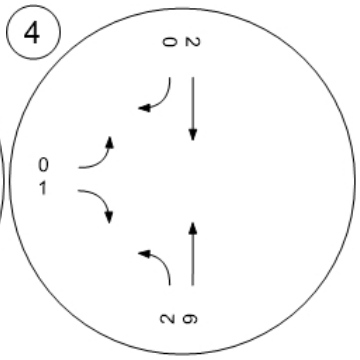

US 24 + Stapleton



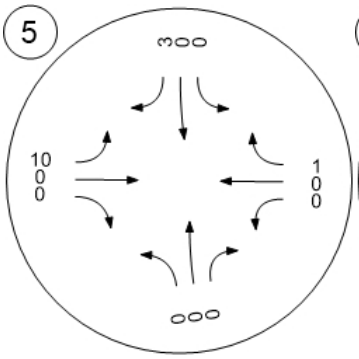

US 24 + Elbert



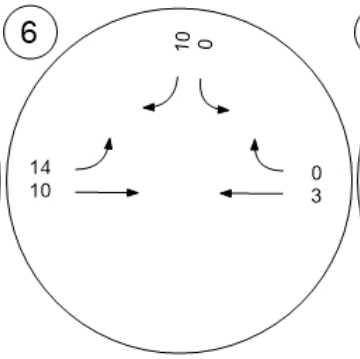

Elbert + E Access



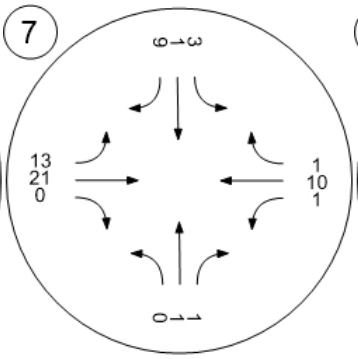

Judge Orr + Elbert



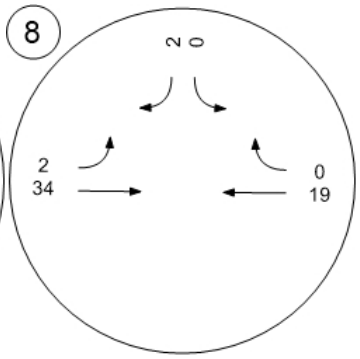

Judge Orr + SE Access




Judge Orr + Curtis

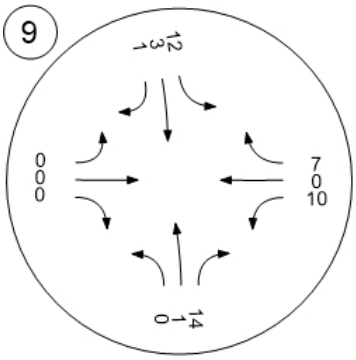



Judge Orr + SW Access



## Traffic Volume - Net New Site Trips


Stapleton + W Access



# Additional Attachments

Excerpt of Pages from *Meadowlake Industrial Park Fil 1 Prelim Plan*

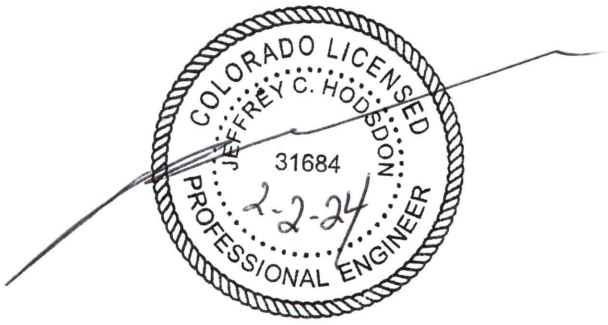
TRANSPORTATION
CONSULTANTS, INC.

LSC TRANSPORTATION CONSULTANTS, INC.
2504 East Pikes Peak Avenue, Suite 304
Colorado Springs, CO 80909
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: http://www.lsctrans.com

# Meadowlake Industrial Park
# Filing No. 1 Preliminary Plan
# Traffic Impact Study
## EPC PCD File No. SP236
## (LSC #S234040)
## February 2, 2024

**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

**Table 2: Trip-Generation Estimate**

| TAZ | ITE Land Use | | Land Use Details | | | | | Trip Generation Rates [2] | | | | | Trips Generated | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Code | Description | Value | Units | % Floor Area | Value | Units [1] | Average Weekday | A.M. Peak In | A.M. Peak Out | P.M. Peak In | P.M. Peak Out | Average Weekday | A.M. Peak In | A.M. Peak Out | P.M. Peak In | P.M. Peak Out |
| 1 | 150 | Warehousing | 36.560 | Acres | 29% | 462 | KSF | 1.71 | 0.13 | 0.04 | 0.05 | 0.13 | 790 | 60 | 18 | 23 | 60 |

[1] KSF = 1,000 square feet of building floor area

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

9/22/2023

# Table 3

(page 1 of 3)

## Auxiliary Turn Lane Analysis

### Meadowlake Industrial Park

### Filing No. 1 Preliminary Plan

| Judge Orr Rd + Curtis Rd/Stapleton Rd | | | | | | |
|---|---|---|---|---|---|---|
| **Criteria** | **SBL** | **WBL** | **NBL** | **EBL** | **EBR** | **WBR** |
| Existing Traffic Control | Stop | | Stop | | | |
| Assumed Short-Term Traffic Control | Stop | | Stop | | | |
| Existing Volume (vph) | 5 / 18 | 24 / 2 | 40 / 54 | 3 / 2 | 73 / 24 | 14 / 13 |
| 2025 Total Volume (vph) | 5 / 34 | 28 / 3 | 61 / 77 | 7 / 7 | 87 / 45 | 25 / 13 |
| Turn Lane Threshold Warrant (vph) | - | - | - | - | 50 | 50 |
| Volume Exceeds Threshold? | Existing | Existing | Existing | Existing | **No**** | **No** |
| Design Speed (mph) | 50 | 60 | 50 | 50 | 50 | 60 |
| **Existing Turn Lane Lengths** | | | | | | |
| Total Length (ft) | 535 | 495 | 520 | 522 | - | - |
| Deceleration Length (ft) | 265 | 240 | 265 | 250 | - | - |
| Storage Length (ft) | | | | | | |
| Taper Length (ft) | 270 | 255 | 255 | 272 | - | - |
| **ECM-Prescribed Turn Lane Lengths** | | | | | | |
| Total Length (ft) | 485 | 580 | 535 | 435 | 435 | 530 |
| Deceleration Length (ft) | **235** | **290** | **235** | **235** | 235 | 290 |
| Storage Length (ft) | 50 | 50 | 100 | 0 | 0 | 0 |
| Taper Length (ft) | 200 | 240 | 200 | 200 | 200 | 240 |
| **Recommended Turn Lane Lengths** | | | | | | |
| Total Length (ft) | - | - | Escrow for | - | Escrow for | - |
| Deceleration Length (ft) | - | - | Future | - | Future | - |
| Storage Length (ft) | - | - | Improvement | - | Improvement | - |
| Taper Length (ft) | - | - | - | - | - | - |
| **Notes about ECM Criteria** | | | | | | |
| Improvements Table Reference # | - | - | 7.4 | - | 7.1 | - |
| Meets ECM Criteria? | No* | No | No | Yes | | - |
| Additional Notes | However, total length exceeds ECM; Currently a stop-controlled approach | Saddlehorn Filing 3 CD plans call for upgrade | Currently a stop-controlled approach | Storage length not required, as EBL lane not required | ** Assuming CDOT Access Code provision as outlined in the report page 13. | |

Date: 2/1/2024

## Table 4

(page 1 of 3)

## Meadowlake Industrial Park

## Filing No. 1 Preliminary Plan

## Roadway Improvements

### Roadway Segment Improvements

| Item # | Improvement | Timing | Responsibility |
|---|---|---|---|
| 1.1 | Curtis Road (Short-Term) -- South property line of Filing No. 1 to south end of planned Saddlehorn improvements<br>Upgrade to 2-lane Principal Arterial. | Filing No. 1 Preliminary Plan: Upgrade Curtis Road from the south property boundary north to the south end of the Saddlehorn Ranch improvements. Incorporate paved and gravel shoulders comparable to the Saddlehorn Ranch Filing No. 1 approved CDs. The left-turn lane may need to be positioned off-center to the west given ROW constraints on the east side. Standard redirect taper ratios should be used to shift through lanes. If the southbound right-turn lane is not constructed with this first preliminary plan, install the paved and gravel shoulders.<br><br>For the first 100+/- feet north and south of the access, install the radii in the anticipated ultimate location (to accommodate the width for a future SB RT decel and accel lanes plus shoulders) and pave a short temporary tapered pavement area to tie in with the the interim improvements. Also see turn lane improvements section of this table. | Applicant |

### Adjacent County Arterial Roadway ROW Requirements

| Item # | Improvement | Timing | Responsibility |
|---|---|---|---|
| 2.1 | Curtis Road<br>2-Lane Rural Principal Arterial<br>144' total future ROW<br>(Note: 4-lane Rural Principal is 180') | With the Filing No. 1 Plat: Show dedication of 72' of 1/2 ROW on the west side along the site frontage (including the existing 30'). | Applicant (west side - half ROW) |
| 2.2 | Curtis Road<br>4-Lane Rural Principal Arterial<br>180' right-of-way preservation | Filing No. 1 Preliminary Plan: Show 90' of 1/2 ROW preservation on the west side along the site frontage. | Applicant (west side - half ROW) |

### Internal Subdivision Roadways

| Item # | Improvement | Timing | Responsibility |
|---|---|---|---|
| 3.1 | Construct major internal streets to County Urban Non-Residential Collector Standards. | With Filing No. 1 | Applicant |
| 3.2 | Construct minor internal streets as private local streets build to Urban, Local (private) standards with 30' of asphalt plus Typc C curb (optional) as shown on the Preliminary Plan. | With Filing No. 1, as development occurs | Applicant |

## CDOT Off-Site Intersections

### US Highway 24/Stapleton Intersection (CDOT)

| Item # | Improvement | Timing | Responsibility |
|---|---|---|---|
| 4.1 | Submit Access Permit Application to CDOT | Submit access permit application with the /plat stage of the development process. | Applicant |
| 4.2 | Escrow towards cost of signalization.<br>CDOT Escrow for Participation in the cost of future signalization - $92,000** (Note: Opportunity for County fee Program credit/reimbursement for a portion; also opportunity for cost recovery as other area project are required to escrow funds and if/when this development's overall fair share percentage is reduced accordingly in the future. | Escrow required w/the access permit process at the site development plan/Plat. | Applicant to escrow funds (as part of the CDOT access permit process) toward the future signal per the CDOT comment letter. |

### US Highway 24/Falcon Highway and US Highway 24/Judge Orr Intersections (CDOT)

| Item # | Improvement | Timing | Responsibility |
|---|---|---|---|
| 5.1 | **Falcon Highway with connection to SH 24G:**<br>Submittal Access Permit Applications to CDOT will be required for the:<br>- Falcon Highway with connection to SH24G<br>A State Highway Access Permit(s) are required by El Paso County or the Development for escrows for the equal fair share amount of the intersection signal at these intersections. (Per CDOT review letter dated October 31, 2023). | Submit access permit application(s) at the platting/site development plan stage.<br>A requirement for escrow as part of the required CDOT access permit process has been identified; however, no amount was specified in the comment letter and these intersections are already signalized. | Applicant (El Paso County will likely be the Permittee) |
| 5.2 | **Judge Orr Road connection to SH 24G**<br>'Submittal Access Permit Applications to CDOT will be required for the:<br>- - Judge Orr Road with connection to SH24G<br>A State Highway Access Permit(s) are required by El Paso County or the Development for escrows for the equal fair share amount of the intersection signal at these intersections. (Per CDOT review letter dated October 31, 2023). | Submit access permit application(s) at the Preliminary Plan or platting/site development plan stage.<br><br>A requirement for escrow as part of the required CDOT access permit process has been identified, however no amount was specified in the comment letter and these intersections are already signalized. | Applicant (El Paso County will likely be the Permittee) |

**Table 4**

(page 2 of 3)

**Meadowlake Industrial Park**

**Filing No. 1 Preliminary Plan**

**Roadway Improvements**

## El Paso County Off-Site Intersections

### Falcon Highway/Meridian Road Intersection

| | | | |
|---|---|---|---|
| 6.1 | Short Term<br>Westbound right-turn deceleration lane | Currently warranted by ECM | Escrow portion toward improvement with Filing No. 1 final plat (fee program credit per fee |

### Judge Orr/Curtis Road Intersection

| Item # | Improvement | Timing | Responsibility |
|---|---|---|---|
| 7.1 | Short Term<br>**Eastbound right-turn deceleration lane**<br>- Escrow funds toward this future improvement. | Financial assurances to be provided as part of the final plat. | Applicant |
| 7.2 | **Short Term - Traffic Control**<br>This TIS indicates the intersection would continue to operate at an acceptable LOS with the current TWSC in the 2025/Short Term based on the Background + Filing No. 1 Site Traffic Scenario. | This TIS indicates the intersection would continue to operate at an acceptable LOS with the current TWSC in the 2025/Short Term based on the Background + Filing No. 1 Site Traffic Scenario. | N/A |
| 7.3 | **Long Term (or Prior to 2040) - Traffic Control**<br>This intersection is likley an eligible intersection for future signalization within the fee program. This TIS indicates the intersection would continue to operate at an acceptable LOS with the current TWSC in the 2025/Short Term.<br><br>Master Study: Participate on a pro-rata basis with a fair share contribution or upgrade the intersection, potentially including new traffic control, to mitigate anticipated substandard level of service, as necessary. | Once LOS of AWSC drops below acceptable levels; and/or once signal warrants are met. Depends on the pace and intensity of development of this site and the rate of other area development and associated background traffic growth. This TIS indicates the intersection would continue to operate at an acceptable LOS with the current TWSC in the 2025/Short Term based on the Background + Filing No. 1 Site Traffic Scenario. | The applicant will pay fee program traffic impact fees. This intersection is likley an eligible intersection for future signalization within the fee program. |
| 7.4 | Long Term (if signalized in the future)<br>Lengthen northbound left-turn deceleration lane. | As needed based on future speed limit and turning volume/stacking length criteria. | Escrow for improvement or construction if warranted at the time of development (fee program credit per fee program provisions). |

### Adjacent & Access Intersections

### Curtis Road/Falcon Highway

| Item # | Improvement | Timing | Responsibility |
|---|---|---|---|
| 8.1 | **From Master Study (for Reference)**<br>**Short Term/Long Term**<br>*Change to AWSC traffic control as necessary. Participate on a pro-rata basis with a fair share contribution toward upgrade the intersection, potentially including new traffic control, to mitigate substandard level of service, as necessary. Significant improvements may be needed in the short term if rapid site buildout and area growth occurs. Otherwise, intermediate term.* | **From Master Study (for Reference)**<br>*Once LOS of AWSC drops below acceptable levels; and/or once signal warrants are met. Depends on the pace and intensity of development of this site and the rate of other area development and associated background traffic growth.* | **From Master Study (for Reference)**<br>*The applicant will pay fee program traffic impact fees and any required intersection improvements (or participation) may be fee-program eligible for credit based on the program guidelines.* |
| 8.1a | **Short Term:**<br>This TIS indicates the intersection would operate at LOS F/E (AM/PM) on the northbound approch with the current TWSC based on the in the 2025/Short Term based on the Background + Filing No. 1 Site Traffic Scenario. Consideration for interim conversion to AWSC. | Consider traffic-control change to interim AWSC once warrants for AWSC control are met. | |
| 8.1b | **Long Term (or Prior to 2040)**<br>This intersection is likely an eligible intersection for future signalization within the fee program. See above item 8.1a relative to the Short Term. A roundabout may also be considered.<br><br>*Master Study (for reference:) Participate on a pro-rata basis with a fair share contribution or upgrade the intersection, potentially including new traffic control, to mitigate anticipated substandard level of service, as necessary.* | Once LOS of AWSC control (interim change to AWSC in the short term) drops below acceptable levels and/or once signal warrants are met. Depends on the pace and intensity of development of this site and the rate of other area development and associated background traffic growth. | |
| 8.2 | Short Term (if planned to be signalized in the future)<br>Construct SB right-turn deceleration lane on Curtis Road approaching Falcon Highway.<br><br>ONLY In the case of a future signalized intersection or reverse of the TWSC stop-sign traffic control orientation, or as needed in the future for acceptable operations. See footnote below. | Only required upon Signalization or reversal of the stop-sign traffic control orientation, or as needed in the future for acceptable operations. See footnote below.<br><br>Escrow funds toward this future improvement with the site development plan /plat. | Applicant - Escrow for pro-rata share of improvement. Responsibility will likely be shared between this project and Saddlehorn Ranch, with the cost shared. |
| 8.3 | **Short Term**<br>Escrow toward the cost of future **lengthening of the existing EB left-turn deceleration lane** on Falcon Highway approaching Curtis Road. | Note: EPC comments on Saddlehorn Filing No. 4 indicate *"construct with Filing 4 if warranted based on 50' queuing length, per conditions of approval."* A similar condition likely applies to this development.<br><br>Previously recommended "trigger" from Saddlehorn Ranch: once projected queue (95th percentile) exceeds 50 feet. LSC suggests the same trigger for this project. When warrants require improvements, a deviation would be submitted. A deviation request, if approved, would allow interim use of the existing lane and taper (based on short term total turning volumes /associated queue length). Deviation not required at this time. | Escrow for pro-rata share of future improvement. Responsibility will likely be shared between this project and Saddlehorn Ranch, with the cost shared. |
| 8.4 | Short Term<br>**WB right-turn deceleration lane on Falcon Highway approaching Curtis Road.**<br><br>**From Master Study (for Reference)**<br>*Construct WB right-turn deceleration lane on Falcon Highway approaching Curtis Road.*<br><br>**This turn lane is not projected to be warranted based on Filing No. 1 Preliminary Plan projected volume.**<br><br>**Escrow toward the cost of future WB right-turn deceleration lane on Falcon Highway approaching Curtis Road.** | This turn lane is not projected to be warranted based on Filing No. 1 Preliminary Plan projected volume. | Escrow for pro-rata share of improvement |
| 8.5 | **From Master TIS:**<br>*Long Term (if planned to be signalized in the future)*<br>*Lengthen northbound left-turn deceleration lane*<br>This Preliminary Plan is not projected to add to this northbound left turn lane in the short term as no access is planned for Falcon Highway with the Filing No. 1 Preliminary Plan. | **N/A with this Preliminary Plan**<br>As needed based on future speed limit and turning volume/stacking length criteria | **N/A with this Preliminary Plan**<br>Escrow for improvement or construction if warranted at the time of development (fee program credit per fee program provisions) |

**Table 4**

(page 3 of 3)

**Meadowlake Industrial Park**

**Filing No. 1 Preliminary Plan**

**Roadway Improvements**

**Curtis Road/Sagebrush Street (Full-Movement Access)**

| Item # | Improvement | Timing | Responsibility |
|---|---|---|---|
| | **Short Term** | | |
| 10a.1 | Short Term & Long Term<br>Master Study: w/ Roundabout Option - Construct one-lane modern roundabout, expandable to a two-lane roundabout.<br>Roundabout not proposed with the Preliminary Plan. | Roundabout not proposed with the Preliminary Plan. | N/A |
| **OR** | | | |
| 10b.1 | Short Term<br>Southbound right-turn deceleration lane on Curtis Rd approaching the site access. | This turn lane is not projected to be warranted based on Filing No. 1 Preliminary Plan projected right turn volume.<br><br>The applicant may elect (volunteer) to install this turn lane as part of the access construction and required left turn lane improvement.<br><br>See design notes under item 1. | Applicant |
| 10b.2 | Short Term<br>Northbound left-turn deceleration lane on Curtis Rd approaching the site access.<br><br>See Design notes under item 1.1 | With site development plan/plat. This turn lane is projected to be warranted based on Filing No. 1 Preliminary Plan projected volumes. | Applicant |
| 10b.3 | Short Term<br>Southbound right-turn acceleration lane on Curtis Rd for right-turning traffic exiting the site access. | This auxiliary lane is not projected to be warranted based on Filing No. 1 Preliminary Plan projected volume. | Applicant |
| 10b.4a | Short Term<br>Construct intersection w/Stop-sign control for the eastbound approach. See design notes under item 1.1. | With site development plan/plat. | Applicant |
| 10b.4b | Long Term<br>*From Master TIS: Install traffic signal*<br>A signal warrant would not be met based on Filing No. 1 Preliminary Plan projected volume. | Once warranted - with future MLIP development, as necessary to maintain acceptable intersection operations. | Applicant |

Item 4.2 Note: CDOT Formula taken from CDOT review letter:*US24 & Stapleton: Based on the average AM & PM site-generated passenger cars directly impacting the 4-hour signal warrant, the Meadowlake Industrial Park Filing No. 1 development is required to escrow $92,000 (8.5 new vehicles / 60 vehicles-to-warrant x $650K/signal cost) to CDOT for the construction of the traffic signal.*

Item 8.2 Note: The default ECM trigger for this potential right turn lane is 25 vph, and the threshold would be met with 2025 background or site-generated (and total) traffic. However, since the southbound approach is currently Stop-sign controlled, the turn lane is not currently needed due to mitigate speed differential between through traffic and right turning traffic. LSC recommends the following triggers:

o Once the intersection is signalized (if as signal is the selected future traffic control instead of a modern roundabout) or

o If El Paso County switches the orientation of the stop signs such that Curtis is changed to the “major street” and Falcon Highway is changed to the “minor street”
(the intersection remains two-way, stop-sign control).

o If or needed for operations – i.e., to maintain an acceptable level of service as an intersection with TWSC or AWSC

As none of these triggers are met based on short term total traffic volumes, escrow for pro-rata share of this potential improvement with the plat submittal. LSC suggests escrow in leu of lane construction as the above triggers are not met and the lane could potentially be "throw away" if a roundabout is selected as the future traffic control. The escrow for the southbound right turn lane could potentially be returned to the applicant, as it would not be necessary with a roundabout.

*LSC Transportation Consultants, Inc.* ***(2/1/2024)***

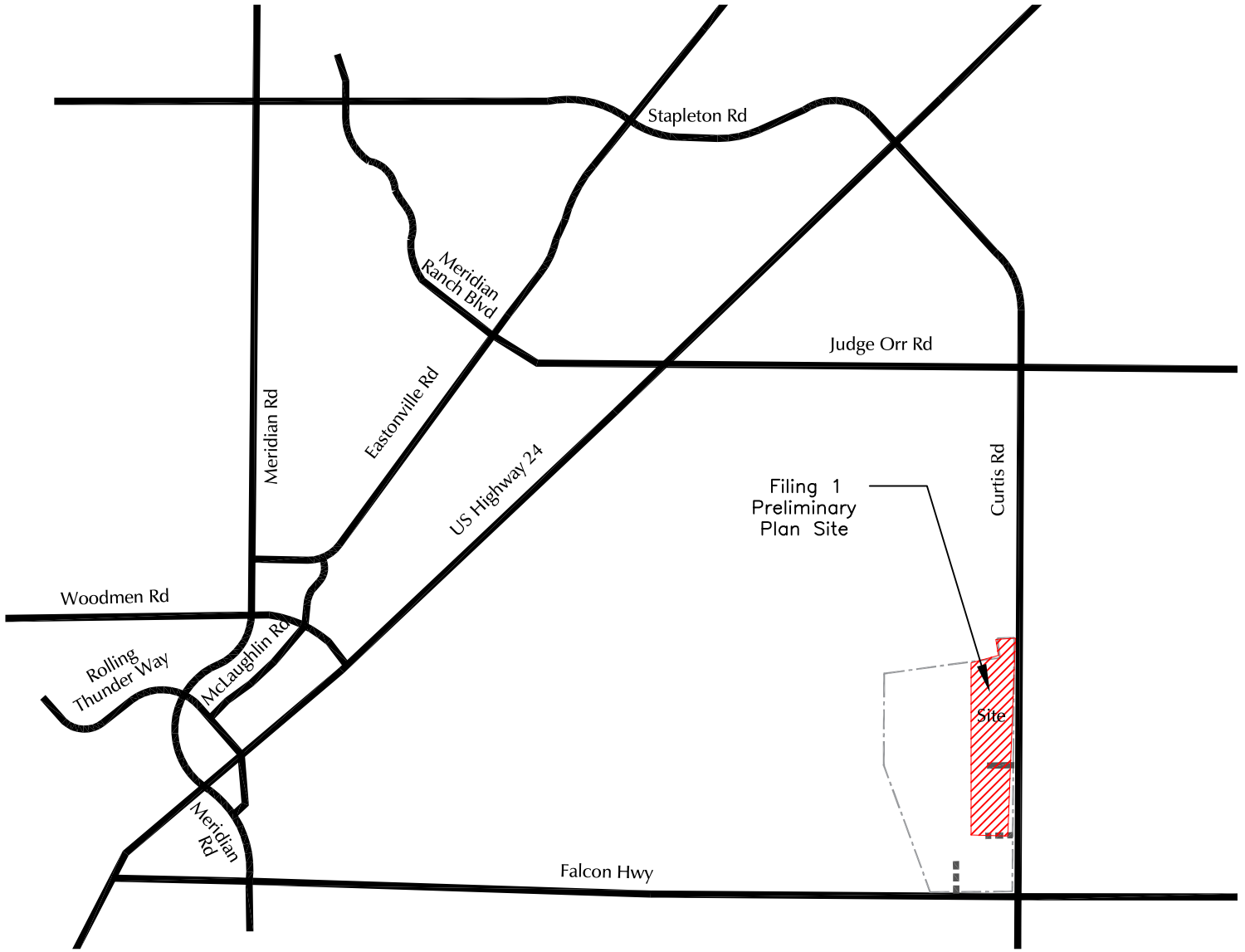



Figure 1

# Vicinity Map

Meadowlake Industrial Park Filing No. 1 Preliminary Plan (LSC #S234040)

LSC TRANSPORTATION CONSULTANTS, INC.

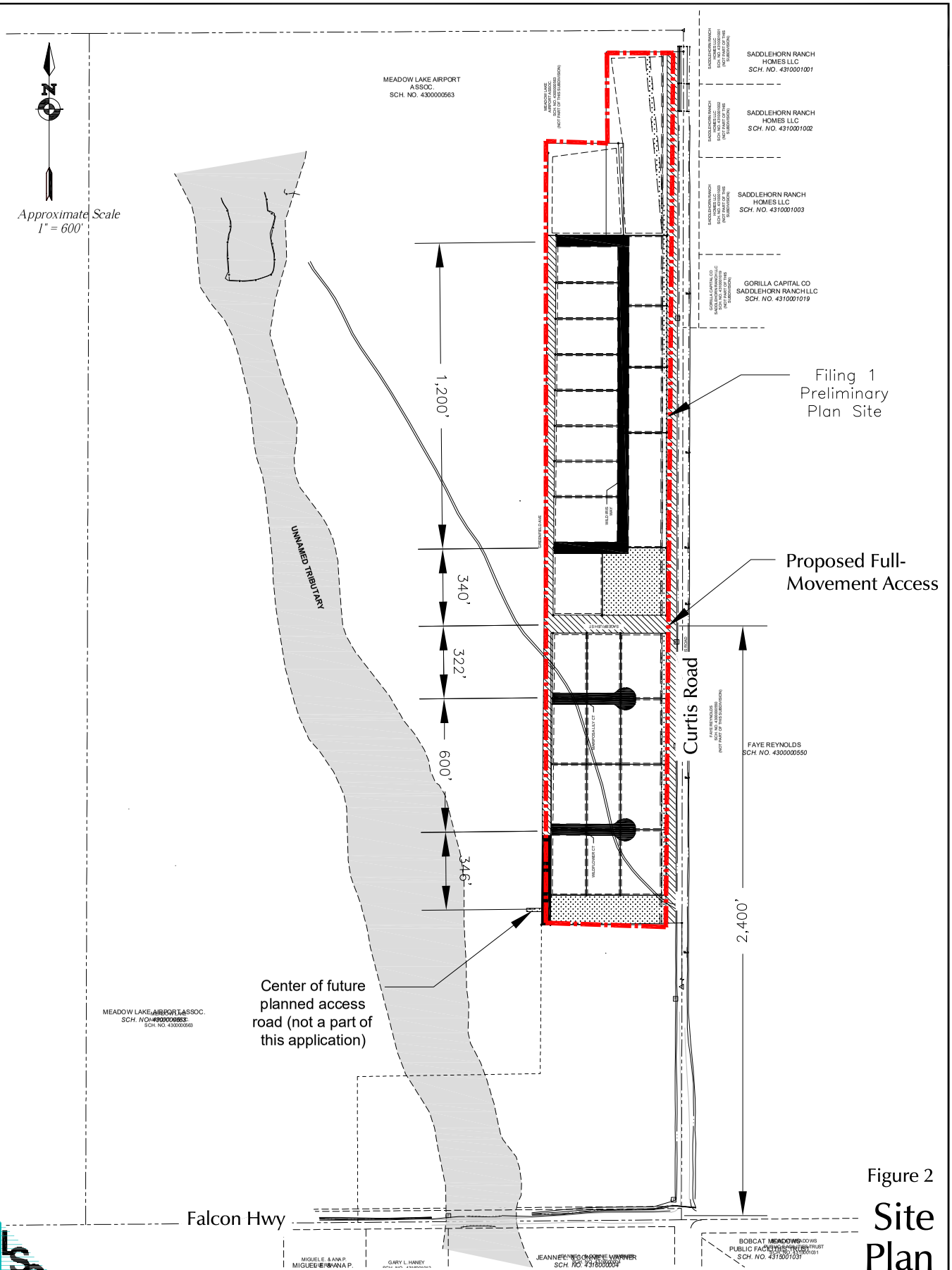
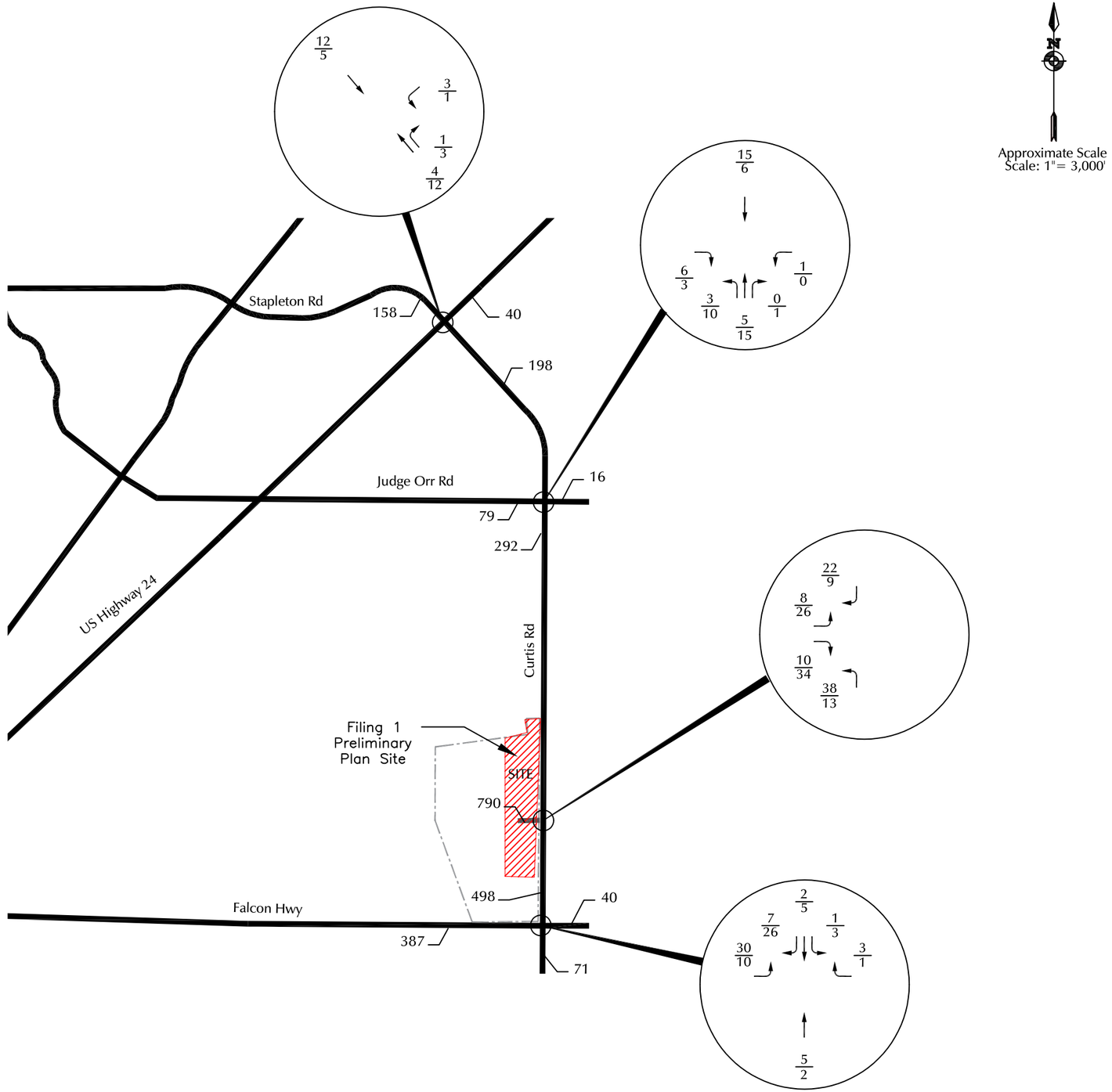



Figure 2

# Site Plan

TRANSPORTATION CONSULTANTS, INC.




Approximate Scale
Scale: 1" = 3,000'

XX/XX = AM Weekday Peak-Hour Traffic (vehicles per hour) / PM Weekday Peak-Hour Traffic (vehicles per hour)

X,XXX = Average Daily Traffic (vehicles per day)

LSC TRANSPORTATION CONSULTANTS, INC.

Figure 5

# Short-Term Site-Generated Traffic

Meadowlake Industrial Park Filing No. 1 Preliminary Plan (LSC #S234040)

# Additional Attachments

Excerpt of Pages from *Saddlehorn Ranch (Filing 3) TIS* -- 2-01-2024

TRANSPORTATION
CONSULTANTS, INC.

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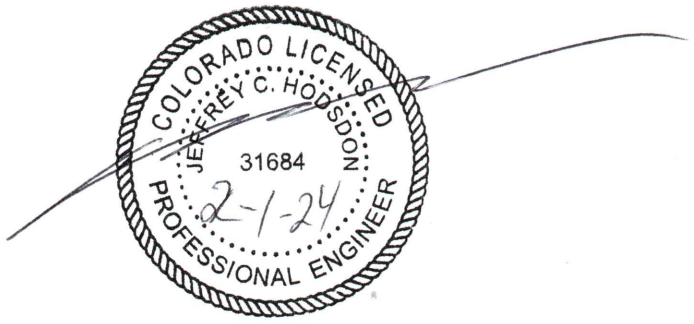
# Saddlehorn Ranch Filing No. 3
# Traffic Impact Study
# EPC PCD File No. SF-23-004
## (LSC #S224541)
## February 1, 2024

**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.

_____ _____

# Table 4*: Roadway Improvements

## Saddlehorn Ranch Filing No. 3

| Item # | Improvement | Timing | Responsibility |
|---|---|---|---|
| | **Offsite Intersections** | | |
| | **US Highway 24/Judge Orr Intersection** | | |
| 1.1 | Realignment of Judge Orr Road at US Highway 24 per CDOT Hwy 24 PEL Study | Future (the PEL study identified this as a high priority project with a time frame of less than 5 years) | CDOT |
| 1.2 | Southwest-bound right-turn deceleration lane on US Hwy 24 approaching Judge Orr Road | As required by other development(s) or with realignment of US Hwy 24/Judge Orr | CDOT or by others |
| 1.3 | Construct southwest-bound right-turn acceleration lane on US Hwy 24 at Judge Orr Road | As required by other development(s) or with realignment of US Hwy 24/Judge Orr | CDOT or by others |
| 1.4 | Eastbound left-turn lane on Judge Orr Road approaching US Hwy 24 | With realignment of US Hwy 24/Judge Orr | CDOT |
| 1.5 | Westbound dual left-turn lanes on Judge Orr Road approaching US Hwy 24 | With realignment of US Hwy 24/Judge Orr | CDOT |
| 1.6 | Northeast-bound right-turn deceleration lane on US 24 approaching Judge Orr Road | With realignment of US Hwy 24/Judge Orr | CDOT |
| 1.7 | Eastbound right-turn deceleration lane on Judge Orr Road approaching US Hwy 24 | As required by other development(s) or with realignment of US Hwy 24/Judge Orr | CDOT or by others |
| | **US Highway 24/Stapleton Intersection** | | |
| **2.1a** | **CDOT Escrow for Participation in the cost of future signalization - $79,500** (Note: Opportunity for County fee Program credit/reimbursement for a portion; also opportunity for cost recovery as other area project are required to escrow funds and if/when this development's overall fair share percentage is reduced accordingly in the future.** | **With the Filing No. 3 Plat** | **Applicant** |
| 2.1b | Signalize the intersection | Once warrants are met | CDOT is collecting escrow from area developments impacting this intersection. |
| | **Curtis Road/Falcon Highway** | | |
| 3.1 | **Filing No. 3 Escrow toward the cost of future** lengthening of the eastbound left-turn lane to ECM standards on Falcon Highway approaching Curtis Road | **When warrants require improvements, a deviation will be submitted. Deviation not required at this time. For Existing plus Fil. 1-5, recommended "trigger:" once projected queue (95th percentile) exceeds 50'** | Escrow for pro-rata share of improvement or construction at the time of **Filing No. 3** development (fee program credit per fee program provisions) |
| 3.2 | **Long Term: ONLY** In the case of a future signalized intersection **or reverse of the TWSC Stop-sign traffic control orientation-** Construct southbound right-turn deceleration lane on Curtis Road approaching Falcon Highway | Upon Signalization **or reversal of the Stop-sign traffic control orientation. See footnote below.** | **Check for either trigger with future subdivision filings and a determination could be made at that time if this project should install the turn lane (with fee program credit per fee program provisions). Otherwise, with each filing, escrow for pro-rata share of improvement or construction if warranted at the time of development (fee program credit per fee program provisions)** |
| 3.2 | **Long Term:** Reconstruct intersection as a modern roundabout (or signalize the intersection) | Once LOS of AWSC drops below acceptable levels (roundabout); or once signal warrants are met (for conversion to a signal or roundabout) | El Paso County -- This intersection will be fee-program eligible for a signal/roundabout and applicant will pay fee program traffic impact fees. |
| | **Adjacent County Arterial Roadway ROW Requirements** | | |
| 4.1 | Judge Orr Right-of-Way Dedication - 4 Lane Minor Arterial, Rural 130' to 150 estimated right-of-way dedication' (Note: 4-lane Rural **Principal** is 180') | **Shown in 2040 MTCP; Dedicate adjacent ROW with the Filing No. 3 Plat** | Applicant |
| 4.2 | Judge Orr - 4 Lane Minor Arterial - Beyond above dedication, no additional right-of-way preservation needed. | Shown in 2060 Corridor Pres Plan | Applicant |
| 4.3 | Curtis Road - 2 Lane Rural Principal Arterial **72' from existing centerline/section line to proposed ROW lind. This translates to 42 feet of ROW dedication.** (Note: 4-lane Rural Principal is 180') | **Dedicate adjacent ROW with the Filing No. 3 Plat** | Applicant |
| 4.4 | Curtis Road - 4 Lane Rural Principal Arterial 180' right-of-way **preservation (90 feet east of the existing centerline/section line).** | **Shown in 2060 Corridor Pres Plan; Reserve up to 90 feet as required with the Filing No. 3 plat.** | Applicant |
| | **Roadway Segment Improvements** | | |
| 5.1 | Falcon Highway - Upgrade to Two-Lane Rural Minor Arterial | Shown in 2040 MTCP | MTCP Project No. U5; Details TBD; applicant will pay fee program traffic impact fees. |
| 5.2a | Judge Orr Road **(Short Term ) - Filing No. 3 construction plans show widening of the south side along the site frontage to include an additional 24' of asphalt pavement, plus a two-foot gravel shoulder. Please see Filing No. 3 CDs.** | **With development of Filing No. 3** | **Applicant with potential for negotiated fee program credit based on construction of the ultimate four-lane, Rural Minor Arterial half section. This will be subject to submission and review and potential acceptance of a proposed fee program credit agreement by EPC and the Fee Program Committee.** |
| 5.2b | Judge Orr Road **(Long Term) - Future widening on the north side to completed the ultimate Four Lane Rural Minor Arterial** | **Four-lane Rural Minor Arterial Shown in 2040 MTCP** | MTCP Project No. C15; Details TBD; - applicant will pay fee program traffic impact fees. |
| **5.3a** | **Short Term: Curtis Road Adjacent to Filing No. 1 - Interim upgrades to Curtis Road - to be constructed with Filing No. 1- Please refer approved Filing No. 1 CDs.** | **To be constructed with Filing No. 2** | **Applicant with potential for negotiated fee program credit based on constructed half-section. This will be subject to submission and review and potential acceptance of a proposed fee program credit agreement by EPC and the Fee Program Committee.** |
| **5.3b** | **Short Term: Curtis Road Adjacent to Filing No. 2 - Interim upgrades to Curtis Road - to be constructed with Filing No. 2 - Please refer to Filing No. 2 CDs.** | **To be constructed with Filing No. 2** | **Applicant with potential for negotiated fee program credit based on constructed half-section. This will be subject to submission and review and potential acceptance of a proposed fee program credit agreement by EPC and the Fee Program Committee.** |
| **5.3c** | **Short Term: Curtis Road Adjacent to Filing No. 3 - Interim upgrades to Curtis Road - to be constructed with Filing No. 3 - Please refer to Filing No. 3 CDs.** | **To be constructed with Filing No. 3** | **Applicant with potential for negotiated fee program credit based on constructed half-section. This will be subject to submission and review and potential acceptance of a proposed fee program credit agreement by EPC and the Fee Program Committee.** |
| 5.3d | **Long Term:** Curtis Road - Upgrade to Two-Lane Rural Principal Arterial | Shown in 2040 MTCP; **(Future - TBD - Limited ROW available on the west side. Please refer to approved Curtis Road Deviation). The segment from the south border of Saddlehorn and Falcon Highway is adjacent to the Meadowlake Industrial Park development. Please refer to the most recent TIS for that project for additional information.** | MTCP Project No. U1; Applicant per rezone condition of approval, potentially subject to fee program credit. |
| | **Internal Subdivision Roadways** | | |
| 6.1 | Construct internal **Filing No. 3** streets to County Rural Local Standards | **Per the Filing 3 Construction Plans** | Applicant |
| | **Adjacent Intersection and Access Intersections** | | |
| **Item #** | **Improvement** | **Timing** | **Responsibility** |
| | **Judge Orr/Curtis Road Intersection** | | |
| 7.1 | Westbound right-turn deceleration lane | Once peak-hour westbound right-turn volume exceeds 50 vehicles per hour. | **Escrow a pro-rata share for future construction with Filing No. 3** (fee program credit per fee program provisions) |
| 7.2 | Eastbound right-turn deceleration lane | Currently warranted by ECM. **However, please refer to the Filing No. 2 TIS report narrative for the provision in the "State Highway Access Code" Section 3.5 (5) for low through volumes). Evaluate with future Final Plats. By Filing 5 (the last filing) a determination would be made if Saddlehorn Ranch should construct the turn lane or provide escrow toward future construction by others.** | **Check for eastbound through and right turning thresholds (as described in the report narrative) with future subdivision filings and a determination could be made at that time if this project should install the turn lane (with fee program credit per fee program provisions). Otherwise escrow a pro-rata share for future construction with Filing No. 3 (fee program credit per fee program provisions).** |
| 7.3 | Potentially sign for all-way stop-sign control (AWSC) | Once warrants for AWSC are met | El Paso County |
| 7.4 | **Long Term:** Reconstruct intersection as a modern roundabout (or signalize the intersection) | Once LOS of AWSC drops below acceptable levels (roundabout); or once signal warrants are met (for conversion to a signal or roundabout) | El Paso County. This intersection will be fee-program eligible for a signal/roundabout and applicant will pay fee program traffic impact fees. |
| 7.5 | **Long Term:** In the case of a future signalized intersection - lengthening of northbound and southbound left-turn deceleration lanes. | As needed based on future speed limit and turning volume/stacking length criteria. | **Escrow for improvement** or construction if warranted at the time of development (fee program credit per fee program provisions) |
| 7.6 | **Northbound Left Turn Lane - potential future lengthening (restriping)** | **Proposed trigger - once intersection is signalized Or if Stop signs are switched to EB and WB or while NB stop control remains, if queue reaches lengths** | **Escrow for improvement or construction if warranted at the time of development (fee program credit per fee program provisions)** |
| | **Judge Orr/Barrosito Trail** | | |
| 8.1 | No Auxiliary Turn Lanes Required **Construction Plans show an eastbound right-turn deceleration lane to be constructed with Filing 3** | **To be constructed with Filing No. 3** | **Applicant** |
| | **Judge Orr/Del Cambre Trail** | | |
| 9.1 | No Auxiliary Turn Lanes Required **Construction Plans show an eastbound right-turn deceleration lane to be constructed with Filing 3** | **To be constructed with Filing No. 3** | **Applicant** |
| | **Curtis Road/Oscuro Trail** | | |
| **10.1** | **Short Term Please Refer to Filing No. 2 TIS. Filing 3 is not projected to generate any left- or right-turning movements at this intersection. NOTE: The northbound right turn deceleration lane (Filing No. 1 improvement) has not yet been constructed.** | | |
| **10.2** | **Long Term Please Refer to Filing No. 2 TIS. Filing 3 is not projected to generate any left- or right-turning movements at this intersection** | | |
| | **Curtis Road/Benito Wells Trail** | | |
| 11.1 | Short Term **Construction Plans show Auxiliary Turn Lanes to be constructed with Filing 2** | **Construction Plans show Auxiliary Turn Lanes to be constructed with Filing 2** | Applicant |
| 11.2 | Long Term Construct southbound left-turn deceleration lane on Curtis Rd approaching the site access | **To be constructed with Filing No. 2** | Applicant |
| 11.3 | Long Term Construct northbound right-turn deceleration lane on Curtis Rd approaching the site access | **To be constructed with Filing No. 2** | Applicant |

*** Modified version of Table 10 From the Saddlehorn Ranch Preliminary Plan TIS dated March 11, 2020.**

Note: **Items with red borders - Filing No. 3 related; items in blue border - modifications associated with Filings 1 or 2.**

**** Note: CDOT Formula taken from Filing No. 2 review letter: [for Filing 2]** *The development is required to participate in the cost of the future traffic signal at Stapleton and Hwy 24. Based on the average AM&PM site-generated passenger cars directly impacting the 4-hour warrant, the development would be responsible for ~$75,000* **[Filing 2 amount],** *(6.5 new vehicles / 60 vehicles-to-warrant x ~$700K/signal cost).* **Filing 3 amount calculated using 44 lots/42 lots x Filing 2 amount**

Item 3.2 Note: The default ECM trigger for this potential right turn lane is 25 vph. However, since the southbound approach is currently Stop-sign controlled, the turn lane is not currently needed due to speed differential between through traffic and right turning traffic. LSC recommends the following triggers:
- Once the intersection is signalized (if as signal is the selected future traffic control instead of a modern roundabout) or
- If El Paso County switches the orientation of the stop signs such that Curtis is changed to the "major street" and Falcon Highway is changed to the "minor street" (the intersection remains two-way, stop-sign control).

The check for either trigger could occur with future subdivision filings and a determination could be made at that time if this project should install the turn lane (with fee-program credit per fee program provisions). If neither trigger is met, escrow for pro-rata share of this potential improvement with each Filing. Per EPC, Saddlehorn values alone would exceed 25 vph, which could trigger the improvement LSC would suggest escrow in leu of lane construction if the above two triggers are not met as the lane could potentially be "throw away" if a roundabout is selected as the future traffic control. The escrow for the southbound right turn lane could potentially be returned to the applicant, as it would not be necessary with a roundabout.

*Source: LSC Transportation Consultants, Inc.* **REVISIONS: 1/31/2024 -see note below. Prior revisions:** 2/8/2022, 11/18/2022 for Filing No. 2, 1/20/2023 and 4/30/2023 & **12/22/23 for Filing No. 3**

*Note: The minor change on 1/31/2024 was to 3.1 (Timing column)*

**Table 5: Detailed Trip Generation Estimate**

| Filing Number | Status | ITE Code | ITE Description | Inputs Values | Inputs Units [1] | Trip Generation Rates [2] Average Weekday | Trip Generation Rates [2] A.M. In | Trip Generation Rates [2] A.M. Out | Trip Generation Rates [2] P.M. In | Trip Generation Rates [2] P.M. Out | Driveway Trips Generated Average Weekday | Driveway Trips Generated A.M. In | Driveway Trips Generated A.M. Out | Driveway Trips Generated P.M. In | Driveway Trips Generated P.M. Out |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **By Filing Number** | | | | | | | | | | | | | | | |
| Filing 1 | Approved | 210 | Single-Family (Detached) Housing | 49 | DU | 10.09 | 0.19 | 0.55 | 0.63 | 0.37 | 494 | 9 | 27 | 31 | 18 |
| Filing 2 | Under Review | 210 | Single-Family (Detached) Housing | 42 | DU | 10.09 | 0.19 | 0.55 | 0.63 | 0.37 | 424 | 8 | 23 | 26 | 15 |
| **Filing 3** | **This Report** | **210** | **Single-Family (Detached) Housing** | **44** | **DU** | **10.09** | **0.19** | **0.55** | **0.63** | **0.37** | **444** | **9** | **24** | **28** | **16** |
| Filing 4 | Future | 210 | Single-Family (Detached) Housing | 42 | DU | 10.09 | 0.19 | 0.55 | 0.63 | 0.37 | 424 | 8 | 23 | 26 | 15 |
| Filing 5 | Future | 210 | Single-Family (Detached) Housing | 41 | DU | 10.09 | 0.19 | 0.55 | 0.63 | 0.37 | 414 | 8 | 23 | 26 | 15 |
| | | | **Total** | **218** | **DU** | | | | | **Total** | **2200** | **42** | **120** | **136** | **80** |
| **Cumulative by Filing Number** | | | | | | | | | | | | | | | |
| Filing 1 | | 210 | Single-Family (Detached) Housing | 49 | DU | - | - | - | - | - | 494 | 9 | 27 | 31 | 18 |
| Filings 1-2 | | 210 | Single-Family (Detached) Housing | 91 | DU | - | - | - | - | - | 918 | 18 | 50 | 57 | 33 |
| Filings 1-3 | | 210 | Single-Family (Detached) Housing | 135 | DU | - | - | - | - | - | 1362 | 26 | 74 | 85 | 50 |
| Filings 1-4 | | 210 | Single-Family (Detached) Housing | 177 | DU | - | - | - | - | - | 1786 | 34 | 98 | 111 | 65 |
| Filings 1-5 | | 210 | Single-Family (Detached) Housing | 218 | DU | - | - | - | - | - | 2200 | 42 | 120 | 136 | 80 |

[1] DU = Dwelling Units

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

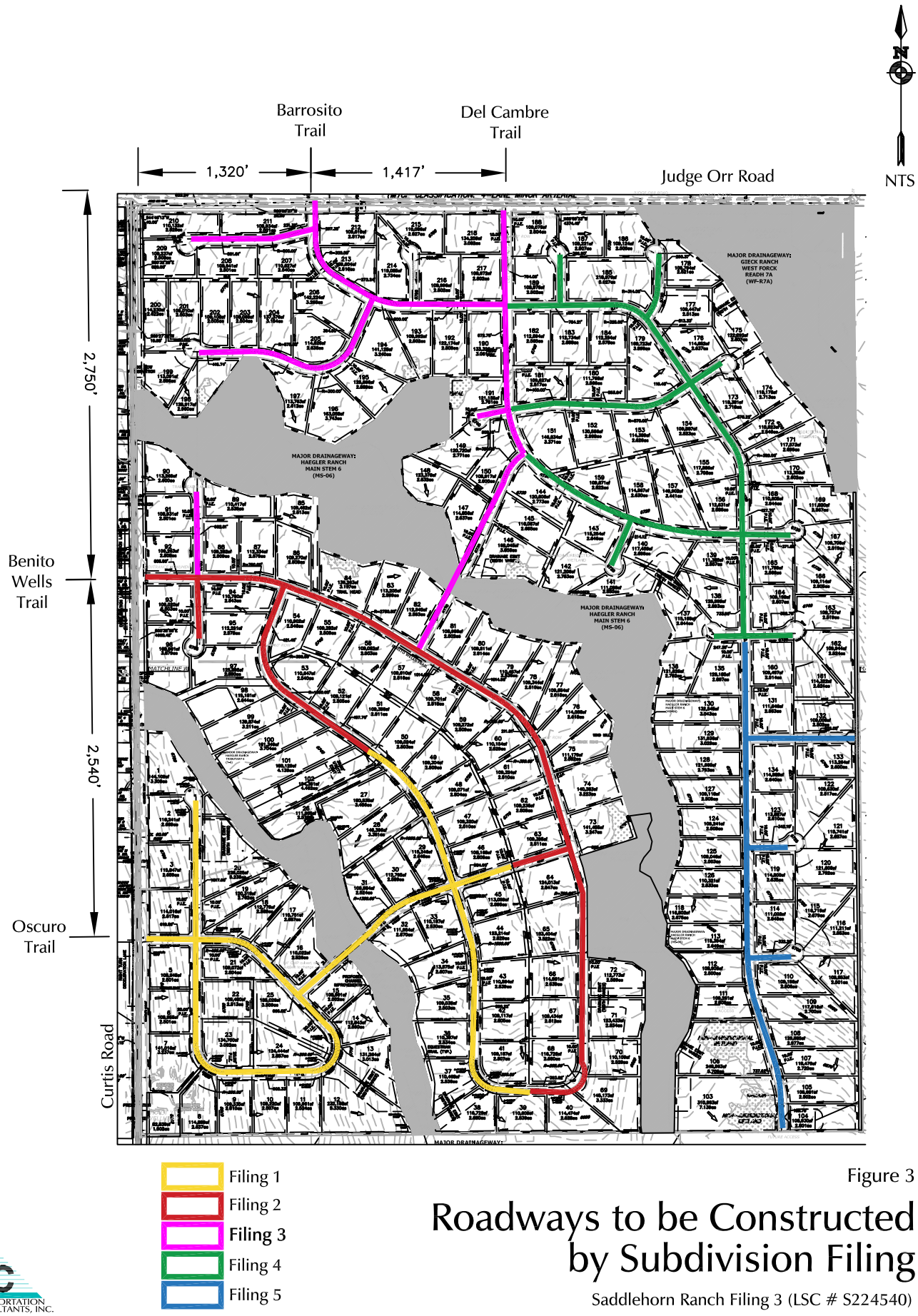
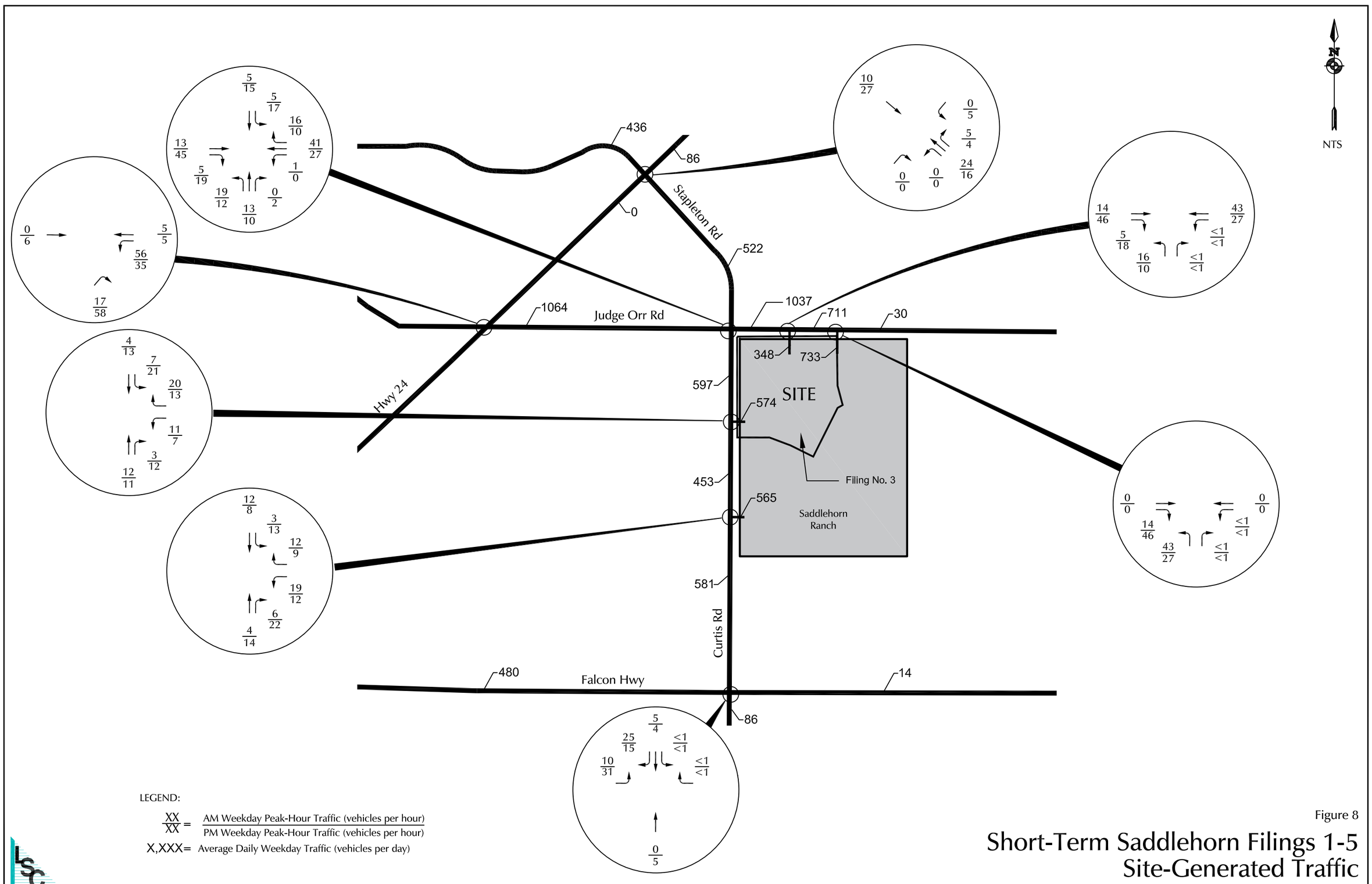



Figure 3

# Roadways to be Constructed by Subdivision Filing

Saddlehorn Ranch Filing 3 (LSC # S224540)

LSC TRANSPORTATION CONSULTANTS, INC.

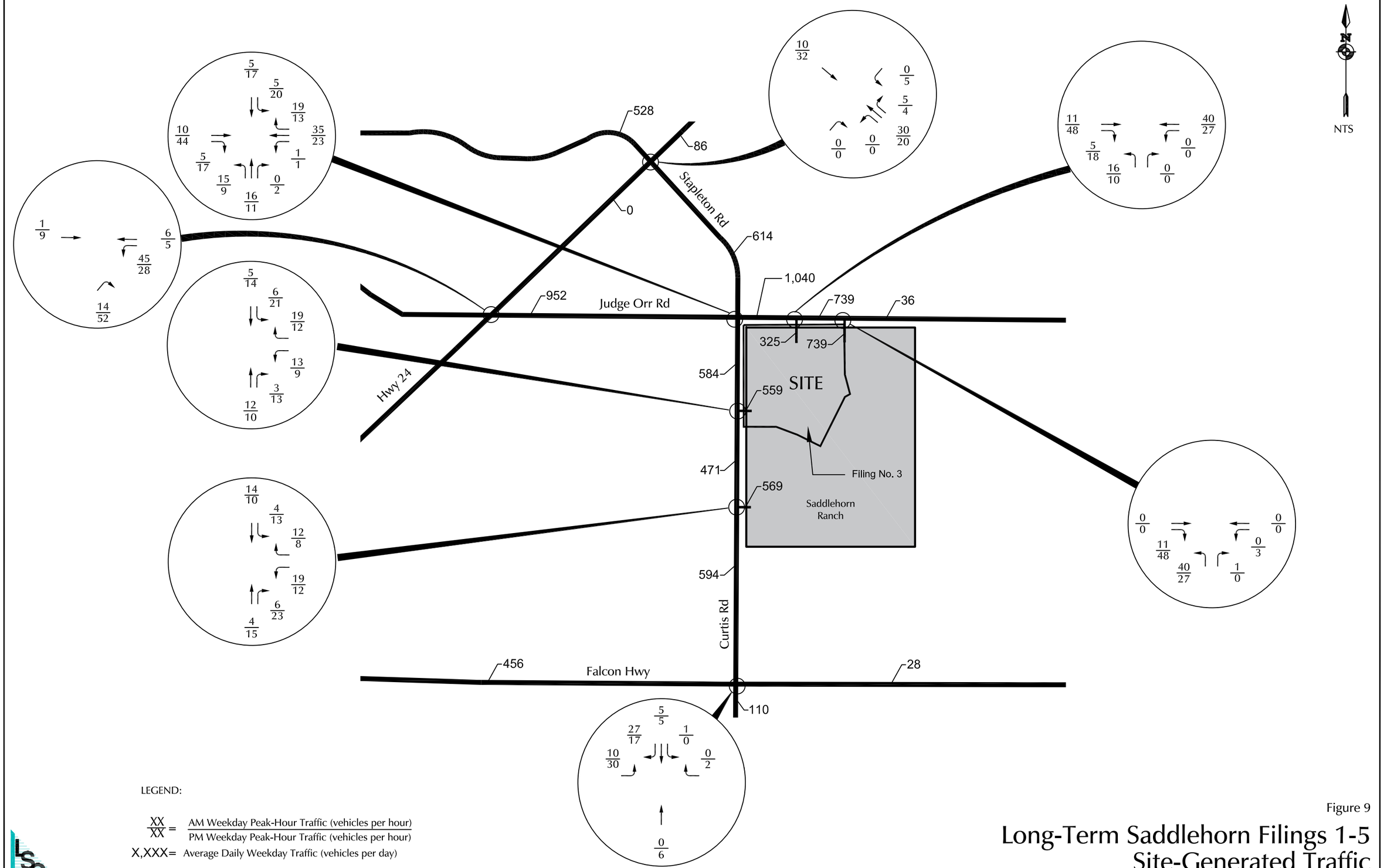



TRANSPORTATION CONSULTANTS, INC.

Figure 8

# Short-Term Saddlehorn Filings 1-5 Site-Generated Traffic

Saddlehorn Ranch Filing 3 (LSC # S224540)




LEGEND:

XX/XX = AM Weekday Peak-Hour Traffic (vehicles per hour) / PM Weekday Peak-Hour Traffic (vehicles per hour)

X,XXX= Average Daily Weekday Traffic (vehicles per day)

TRANSPORTATION CONSULTANTS, INC.

Figure 9

# Long-Term Saddlehorn Filings 1-5 Site-Generated Traffic

Saddlehorn Ranch Filing 3 (LSC # S224540)