# TECHNICAL MEMORANDUM

**DATE:** November 18, 2024

**TO:** Bally's Corporation

**FROM:** Peter Reinhofer, P.E., V3 Companies

**RE:** Jefferson Street Traffic Volume Assessment
Chicago, Illinois

V3 Companies has prepared this updated technical memorandum to present the conclusions of the peak hour analysis of Jefferson Street, a new north/south roadway that will generally provide one travel lane in each direction from Grand Avenue to Chicago Avenue. This new road will provide access to the proposed entertainment district access points and to the adjacent parcels for PD 1426 such as Huron Street, Erie Street, and Desplaines Street. The proposed development is located at the former Chicago Tribune printing plant property at 703 West Chicago Avenue.

The objective of this updated technical memorandum is to determine the capacity of Jefferson Street with the traffic generated by the proposed entertainment district and the full PD 1426 Build Out in 2032 during the weekday commuter and evening casino peak periods. The proposed entertainment district is anticipated to consist of the following:

- Approximately 184,000 square feet of casino area with a total of 4,000 gaming positions
- 500-room hotel
- Approximately 60,000 square feet of restaurant, retail, and bar space
- An entertainment venue with an approximate 3,000-seat theatre

In addition to the entertainment district, the remaining PD 1426 parcel is proposed to be developed with approximately 5,055 residential units with ancillary ground floor retail. The proposed development plan for the remaining parcels is based on the 2018 approved PD 1426 land use plan but may be modified in the future as development occurs.

This analysis of Jefferson Street will evaluate the potential impacts of the proposed entertainment district, which will open in 2026, and the full PD 1426 redevelopment which is anticipated to be built out by 2032.

## Roadway System

### Roadway Descriptions

*Jefferson Street* is a new north/south roadway that will generally provide one travel lane in each direction from Grand Avenue to the south to Chicago Avenue to the north. The southern intersection will be near the existing unsignalized intersection for the Tribune property and align with the public right of way on the south side of Grand Avenue. This intersection is proposed to be signalized as part of the entertainment district redevelopment project. The northern intersection will be located on Chicago

Avenue between Halsted Street and the bridge over the Chicago River. Figure 1 illustrates the proposed Jefferson Street geometrics.

Intersections

The intersection of *Jefferson Street and Parking Garage Driveway/Private Driveway* is planned to be a four-leg, signalized intersection. This intersection warrants a traffic signal based on the four-hour vehicular volume during a typical weekday. The ultimate configuration of the northbound approach consists of one left turn lane, one through lane, and one right turn lane while the southbound approach consists of one left turn lane and one shared through/right turn lane. The westbound approach of the parking garage driveway consists of one shared left turn/through lane and one right turn lane while the eastbound approach for the private driveway will consist of one shared left turn/through/right turn lane. Prior to the development of the west parcel, the northbound left turn lane will be striped out.

South of the parking garage signalized intersection is a right out only driveway from the casino drop off. It is anticipated that the casino drop off area will only be for valet drop off during peak times, therefore this right out only driveway will only be used by vehicles accidentally entering the valet area that do not wish to valet their vehicle.

The intersection of *Jefferson Street and Casino Lobby Driveway/Huron Street* is planned to be a four-leg, unsignalized intersection with eastbound and westbound stop-controlled approaches. The ultimate configuration of the southbound approach consists of one left turn lane and one shared through/right turn lane while the northbound approach consists of one left turn lane, one through lane, and one right turn lane. The eastbound approach consists of one shared left turn/through/right turn lane while the westbound approach consists of one departure lane that enters the casino valet drop off. Prior the development of the west parcels and the construction of Huron Street, the northbound left turn lane will be striped out.

The intersection of *Jefferson Street and Hotel Lobby Driveway/Erie Street* is planned to be a four-leg, unsignalized intersection with eastbound and westbound stop-controlled approaches. The ultimate configuration of the southbound and northbound approaches consists of one left turn lane and one shared through/right turn lane. The eastbound approach of Erie Street consists of one shared left turn/through/right turn lane while the westbound approach of the Hotel Lobby Driveway consists of one left turn lane and one shared through/right turn lane. Prior the development of the west parcels and the construction of Erie Street, the northbound left turn lane will be striped out.

The intersection of *Jefferson Street and South Parking Lot Driveway/Desplaines Street* is planned to be a four-leg, unsignalized intersection with eastbound and westbound stop-controlled approaches. The northbound approach consists of one shared left turn/through lane and one right turn lane while the southbound approach consists of one shared left turn/through lane and one shared through/right turn lane. The eastbound and westbound approaches consist of one shared left turn/through/right turn lane. It should be noted that there will likely be limited traffic to and from the existing parking lot on the east side of Jefferson Street during the Entertainment District only scenario. This driveway will also provide access to CDOT and IDOT to the Ohio Street Bridge House.

It should be noted that a set of ramps are also proposed along Jefferson Street north of the Desplaines Street/South Parking Lot Driveway that will provide access to the lower level of the Casino. This lower level will include the employee parking lot, truck docks, and a charter/casino bus pick up and drop off area. The lower level will be accessed with an inbound ramp from northbound Jefferson Street and with an outbound ramp to southbound Jefferson Street.

## 2026 Entertainment District Scenario

Trip Generation – 2026 Entertainment District

The proposed entertainment district redevelopment consists of a casino with hotel, restaurants, museum, and theatre. Project traffic is estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. The *Trip Generation Manual* assigns trip generation estimates based on either an average rate or a fitted curve equation for each peak period and an independent variable. In this case, the number of gaming positions is the applicable variable for a casino within an entertainment district. The peak hour trip generation equations are selected for the following time periods:

- weekday, am peak hour of generator for the weekday commuter am peak hour (7 – 9 am)
- weekday, peak hour of adjacent street traffic for one hour between 4 pm and 6 pm for the weekday commuter pm peak hour (4 – 6 pm)
- weekday, pm peak hour of generator for the Friday casino peak hour (8 – 11 pm)
- Saturday, peak hour of generator for the Saturday casino peak hour (8 – 11 pm)

The number of trips generated for the entertainment district was estimated based on the ITE data and reviewed for potential reductions for non-vehicular travel such as transit, walking, and capture between the casino and nearby existing and proposed residential, office, retail, and restaurants. Additionally, the number of taxi and rideshare trips was separately estimated as these trips generate entering and exiting trips for each pick up or drop off movement.

A conservative ten percent reduction was applied for non-vehicular traffic, including transit, walking, and biking for casino patrons and employees.

It is assumed that 55 percent of the trips will be personal vehicles that will drive and park in the casino parking lots. Of this traffic, five percent is assumed to be employee traffic that will park in the lower level and the remaining 50 percent will park in the parking garage. An additional 15 percent of trips will drive and utilize the valet parking available at both the Casino Lobby and Hotel Lobby driveways. Finally, it is assumed that 15 percent of trips will use rideshare and five percent will use taxis. A taxi and rideshare trip actually generates two trips, one entering the site to drop off or pick up and one exiting the site; therefore, a redundancy rate was also added to account for the exiting trip. Typically, a redundancy reduction rate is applied to these trips assuming that the taxi or rideshare driver will also wait for or pick up another passenger leaving the site. A redundancy reduction rate of 25 percent of the taxi and rideshare trips was assumed, meaning that one in four taxi and rideshare trips will drop off a patron and wait for and pick up another passenger without leaving the entertainment district area on Chicago Avenue or Grand Avenue.

Table 1 provides a summary of the trip generation for the entertainment district.

Table 1 – Entertainment District Trip Generation

| LAND USE | SIZE | | Weekday Commuter AM Peak | | | Weekday Commuter PM Peak | | | Friday Casino Peak | | | Saturday Casino Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | In | Out | Total | In | Out | Total | In | Out | Total | In | Out | Total |
| ITE Land Use Code 473: Casino | 4,000 | Gaming Positions | 676 | 511 | 1,187 | 867 | 834 | 1,701 | 1,149 | 1,061 | 2,210 | 1,474 | 1,256 | 2,730 |
| *Local Area Capture Reduction (0%)* | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Non-Auto Trip Reduction (10%)* | | | -68 | -51 | -119 | -87 | -83 | -170 | -115 | -106 | -221 | -147 | -126 | -273 |
| *Subtotal Trips Generated* | | | 608 | 460 | 1068 | 780 | 751 | 1531 | 1034 | 955 | 1989 | 1327 | 1130 | 2457 |
| | | | | | | | | | | | | | | |
| *Self-Drive and Park (55%)* | | | 372 | 281 | 653 | 477 | 459 | 936 | 632 | 584 | 1216 | 811 | 691 | 1502 |
| *Self-Drive and Valet (15%)* | | | 101 | 77 | 178 | 130 | 125 | 255 | 172 | 159 | 332 | 221 | 188 | 410 |
| *Taxi (5%)* | | | 34 | 26 | 59 | 43 | 42 | 85 | 57 | 53 | 111 | 74 | 63 | 137 |
| *Rideshare (15%)* | | | 101 | 77 | 178 | 130 | 125 | 255 | 172 | 159 | 332 | 221 | 188 | 410 |
| *Taxi / Rideshare Redundancy* | | | 77 | 101 | 178 | 125 | 130 | 255 | 159 | 172 | 331 | 188 | 221 | 409 |
| ***Total New Vehicle Trips*** | | | **685** | **562** | **1,246** | **905** | **881** | **1,786** | **1,192** | **1,127** | **2,322** | **1,515** | **1,351** | **2,868** |

Trip Distribution and Assignment – 2026 Entertainment District

The directional distribution of new traffic volumes generated by the entertainment district is split between employee trips, valet trips, taxi/rideshare trips, and self-park trips, as these categories are expected to exhibit different distributions based on the proposed access points along Jefferson Street.

Employee trips are assumed to access the site to and from Grand Avenue via the ramping system within Jefferson Street. Additionally, any truck traffic and charter/casino buses along Jefferson Street will also utilize this ramping system.

Valet trips are assumed to have a 75 percent and 25 percent split between the north Casino Lobby Driveway and the south Hotel Lobby Driveway, respectively. Currently, the plan calls for the Hotel Lobby valet area to provide both drop off and pick up at the same location, so all inbound and outbound trips will travel through this driveway. For the Casino Lobby valet area, the drop off will occur at the casino valet area but the pick-up will occur within the parking garage, so exiting vehicles will travel through the parking garage and exit through the signalized parking garage intersection. Therefore, 75 percent of valet trips will enter through the Casino Lobby Driveway and exit through the Parking Garage Driveway to the north, and 25 percent of valet trips will enter and exit through the Hotel Lobby Driveway.

Taxi and rideshare trips are expected to use the Hotel Lobby Drop-off/Pick-Up area as well as the lay-by lanes along Jefferson Street. It is assumed that ten percent of the rideshare trips will utilize the Hotel Lobby Driveway, and the remaining 90 percent will utilize the passenger loading and unloading areas along the east and west side of Jefferson Street. It is anticipated that the lay-by lanes will be signed as passenger loading/unloading only with no parking and no waiting. The curb use will be enforced by traffic control aides during the peak periods of the casino.

Self-park vehicular trips are assumed to have a 90 percent and 10 percent split between the north Casino Lobby Driveway and the south Hotel Lobby Driveway, respectively. Currently, 90 percent of the inbound

and outbound self-park vehicular traffic is expected to utilize the parking garage access driveway approximately 360-feet south of the Jefferson Street and Chicago Avenue intersection and the remaining ten percent will use the Hotel Lobby Driveway.

The various entertainment district project trips are totaled to obtain the Entertainment District Site Traffic Volumes and illustrated in Figure 2. Figure 3 provides the Future with Entertainment District Traffic Volumes for the proposed opening of the casino for the four peak hours. It should be noted that the development on the north side of Chicago Avenue is not assumed to be constructed on the opening day of the entertainment district.

Traffic Signal Warrant Analysis – Entertainment District

Based on the projected traffic volumes at the intersection of Jeferson Street and Parking Garage Driveway, a traffic signal warrant analysis has been conducted. The investigation for the need for a traffic control signal is based on the methodology established in the Manual on Uniform Traffic Control Devices (MUTCD). The MUTCD establishes nine individual warrants. Installation of a traffic signal should be further investigated at locations that meet one or more warrants. However, warrant 1, the eight-hour vehicular volume warrant, and warrant 2, the four-hour vehicular warrant, are typically the primary vehicular volume/delay warrants that are considered for intersections.

Warrant 1 is met if a total of eight hours in the day exceed the thresholds established in the MUTCD. Traditionally, this warrant requires more than eight hours of data collection and substantial projections of future trips. Warrant 2 is met if a total of four hours in the day exceed the MUTCD thresholds. In order to estimate the four highest hours during a typical weekday, the weekday pm commuter peak hour and the Friday night casino peak hour were selected as two of the hours. Taking those two peak hours plus 95 percent of each hour to estimate one hour adjacent those peak hours were utilized in the warrant analysis. The IDOT methodology also requires a reduction of the minor approach right turn volume based on factors such as lane configuration and conflicting volumes.

Using the IDOT methodology to estimate the eighth-highest hour of traffic, the intersections of Jefferson Street and Chicago Avenue and Jefferson Street and Grand Avenue meet Warrant 1, Eight-Hour Vehicular Volume. Based on the projected four highest hours using the weekday pm peak hour and the Friday night casino peak hour traffic volumes, the intersection of Jefferson Street and Parking Garage Driveway meets Warrant 2, Four-Hour Vehicular Volume. The supporting Signal Warrant Review Sheet and Right Turn Factor Sheet is attached.

Capacity Analysis – Entertainment District

The operation of a facility is evaluated based on level of service (LOS) calculations obtained by analytical methods defined in the Transportation Research Board's *Highway Capacity Manual (HCM), 7th Edition*. The concept of LOS is defined as a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

There are six LOS letter designations, from A to F, with LOS A representing the best operating conditions and LOS F the worst.

The LOS of an intersection is based on the average control delay per vehicle. For a signalized intersection, the delay is calculated for each lane group and then aggregated for each approach and for the intersection as a whole. Generally, the LOS is reported for the intersection as a whole. For an unsignalized intersection, the delay is only calculated and reported for each minor movement. An overall intersection LOS is not calculated.

There are different LOS criteria for signalized and unsignalized intersections primarily due to driver perceptions of transportation facilities. The perception is that a signalized intersection is expected to carry higher traffic volumes and experience a greater average delay than an unsignalized intersection. The LOS criteria for signalized and unsignalized intersections are provided in Table 2.

Typically, various state and local governments adopt standards varying between LOS C and LOS E, depending on the area's size and roadway characteristics. Capacity analysis was performed with Synchro 11.1. Models were created for the weekday commuter am, weekday commuter pm, Friday evening casino, and Saturday evening casino peak hours for the future with Entertainment District scenario.

Table 2 – Level of Service Definitions for Signalized and Unsignalized Intersections

| Level of Service | Signalized Intersection Control Delay (seconds/vehicle) | Unsignalized Intersection Control Delay (seconds/vehicle) |
|---|---|---|
| A | ≤ 10 | ≤ 10.0 |
| B | > 10.0 and ≤ 20.0 | > 10.0 and ≤ 15.0 |
| C | > 20.0 and ≤ 35.0 | > 15.0 and ≤ 25.0 |
| D | > 35.0 and ≤ 55.0 | > 25.0 and ≤ 35.0 |
| E | > 55.0 and ≤ 80.0 | > 35.0 and ≤ 50.0 |
| F | > 80.0 | > 50.0 |

Source: Transportation Research Board, *Highway Capacity Manual 6th Edition*, National Research Council, 2016.

The study area includes the proposed signalized and unsignalized intersections along Jefferson Street and include the following:

- Jefferson Street & Parking Garage Driveway (signalized)
- Jefferson Street & Casino Lobby Driveway (unsignalized)
- Jefferson Street & Hotel Lobby Driveway (unsignalized)
- Jefferson Street & South Parking Lot Driveway/Desplaines Street (unsignalized)

The capacity analysis results at the study area intersections are summarized in Table 3.

Table 3 – Entertainment District: Capacity Analysis Results

| Intersection / Approach | Weekday AM | | Weekday PM | | Friday Casino | | Saturday Casino | |
|---|---|---|---|---|---|---|---|---|
| | Future w/ Project | | Future w/ Project | | Future w/ Project | | Future w/ Project | |
| | Delay (s/veh) | LOS | Delay (s/veh) | LOS | Delay (s/veh) | LOS | Delay (s/veh) | LOS |
| **Jefferson Street & Parking Garage Driveway (Signalized)** | | | | | | | | |
| EB Approach | - | - | - | - | - | - | - | - |
| WB Approach | 17.9 | B | 20.9 | C | 19.1 | B | 23.3 | C |
| NB Approach | 5.5 | A | 8.1 | A | 16.4 | B | 31.3 | C |
| SB Approach | 5.5 | A | 2.5 | A | 17.0 | B | 6.5 | A |
| Intersection | 9.5 | A | 11.6 | B | 17.5 | B | 22.3 | C |
| **Jefferson Street & Casino Lobby Driveway (Unsignalized)** | | | | | | | | |
| SB Left | 8.5 | A | 9.2 | A | 10.3 | B | 11.8 | B |
| **Jefferson Street & Hotel Lobby Driveway (Unsignalized)** | | | | | | | | |
| WB Right | 11.8 | B | 14.6 | B | 20.7 | C | 37.2 | E |
| SB Left | 8.5 | A | 9.0 | A | 10.0 | B | 11.5 | B |
| **Jefferson Street & Desplaines Street/South Parking Lot Driveway (Unsignalized)** | | | | | | | | |
| NB Left/Thru | 0.0 | A | 0.0 | A | 0.0 | A | 0.0 | A |
| NB Thru/Right | 0.0 | A | 0.0 | A | 0.0 | A | 0.0 | A |
| EB Approach | 0.0 | A | 0.0 | A | 0.0 | A | 0.0 | A |
| WB Approach | 0.0 | A | 0.0 | A | 0.0 | A | 0.0 | A |
| SB Left/Thru | 0.0 | A | 0.0 | A | 0.0 | A | 0.0 | A |
| SB Thru/Right | 0.0 | A | 0.0 | A | 0.0 | A | 0.0 | A |

Based on the capacity analysis results, all movements operate at LOS D or better during all four time periods with the exception of the westbound right turn movement at the Jefferson Street and Hotel Lobby Driveway which is projected to operate at LOS E during the Saturday casino peak hour.

In the event that any intersections or movements operate with high delays, it is recommended that traffic control aides may be needed to improve traffic flow during those times. Additional details regarding traffic control aides is provided in a later section of this Technical Memorandum.

Queue Analysis – Entertainment District

A queue length analysis was conducted at each of the study area intersections. A summary of this analysis is provided in Table 4. This data is comprised of the 95$^{th}$ percentile queue output from the Synchro analysis.

Table 4 – Entertainment District: 95th Percentile Queue Lengths

| Intersection | Peak Period | 95th Percentile Queue (feet) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Eastbound | | Westbound | | Northbound | | Southbound | |
| | | Left | Right | Left | Right | Left | Right | Left | Right |
| Jefferson Street and Chicago Avenue | Weekday Commuter AM Peak | - | 11 | 92 | - | 144 | 243 | - | - |
| | Weekday Commuter PM Peak | - | 77 | 40 | - | 198 | 454 | - | - |
| | Friday Evening Casino Peak | - | 120 | 148 | - | 200 | 338 | - | - |
| | Saturday Evening Casino Peak | - | 94 | 222 | - | 258 | 639 | - | - |
| ***Storage Length (ft)*** | | - | **55** | **95** | - | **190** | **190** | - | - |
| ***Taper Length (ft)*** | | - | **55** | **90** | - | **75** | **75** | - | - |
| Jefferson Street & Parking Garage Driveway (Signalized) | Weekday Commuter AM Peak | - | | 125 | 52 | - | 10 | 45 | - |
| | Weekday Commuter PM Peak | - | | 198 | 59 | - | 12 | 17 | - |
| | Friday Evening Casino Peak | - | | 205 | 132 | - | 45 | 142 | - |
| | Saturday Evening Casino Peak | - | | 223 | 257 | - | 143 | 25 | - |
| ***Storage Length (ft)*** | | - | - | - | - | - | **100** | **200** | - |
| ***Taper Length (ft)*** | | - | - | - | - | - | **50** | **75** | - |
| Jefferson Street & Casino Lobby Driveway (Unsignalized) | Weekday Commuter AM Peak | - | | - | - | - | 0 | 3 | - |
| | Weekday Commuter PM Peak | - | | - | - | - | 0 | 3 | - |
| | Friday Evening Casino Peak | - | | - | - | - | 0 | 5 | - |
| | Saturday Evening Casino Peak | - | | - | - | - | 0 | 10 | - |
| ***Storage Length (ft)*** | | - | - | - | - | - | **50** | **100** | - |
| ***Taper Length (ft)*** | | - | - | - | - | - | **50** | **75** | - |
| Jefferson Street & Hotel Lobby Driveway (Unsignalized) | Weekday Commuter AM Peak | - | | - | 10 | - | - | 3 | - |
| | Weekday Commuter PM Peak | - | | - | 20 | - | - | 3 | - |
| | Friday Evening Casino Peak | - | | - | 40 | - | - | 5 | - |
| | Saturday Evening Casino Peak | - | | - | 85 | - | - | 10 | - |
| ***Storage Length (ft)*** | | - | - | - | - | - | - | **100** | - |
| ***Taper Length (ft)*** | | - | - | - | - | - | - | **50** | - |
| Jefferson Street & Desplaines Street/South Parking Lot Driveway | Weekday Commuter AM Peak | 0 | | 0 | | - | 0 | - | - |
| | Weekday Commuter PM Peak | 0 | | 0 | | - | 0 | - | - |
| | Friday Evening Casino Peak | 0 | | 0 | | - | 0 | - | - |
| | Saturday Evening Casino Peak | 0 | | 0 | | - | 0 | - | - |
| ***Storage Length (ft)*** | | - | - | - | - | - | **85** | - | - |
| ***Taper Length (ft)*** | | - | - | - | - | - | **100** | - | - |
| Jefferson Street and Grand Avenue | Weekday Commuter AM Peak | 37 | - | - | - | - | - | 96 | 32 |
| | Weekday Commuter PM Peak | 142 | - | - | - | - | - | 135 | 33 |
| | Friday Evening Casino Peak | 96 | - | - | - | - | - | 163 | 30 |
| | Saturday Evening Casino Peak | 155 | - | - | - | - | - | 187 | 27 |
| ***Storage Length (ft)*** | | **100** | - | - | - | - | - | **100** | **100** |
| ***Taper Length (ft)*** | | **100** | - | - | - | - | - | **180** | **180** |

The longest queues occur in the northbound direction at the Chicago Avenue and Jefferson Street intersection. It is anticipated that the queue lengths could back up into the parking garage intersection, blocking traffic from entering and exiting the driveway. It is recommended that traffic control aides be present to prevent northbound vehicles from blocking the driveway to maximize traffic flow through this

area. Additionally, this intersection should be synchronized with the Parking Garage Driveway to maximize efficiency between intersections. Shifting additional green time from Chicago Avenue to Jefferson Street would likely decrease the 95th percentile queue lengths along Jefferson Street. It is recommended that this area be monitored in the future to maximize the efficiency of Chicago Avenue and Jefferson Street.

The westbound right turn queue at the Jefferson Street and Garage Driveway intersection during the Saturday evening casino peak hour is 257 feet, or approximately ten vehicles. While the internal design and operations of the parking garage are still being finalized, particularly the locations of the gates for exiting vehicles, it is recommended that the exit gates be located more than 300 feet from this intersection to maximize the queue length such that queues from this intersection do not back up through the gates. If this does occur, it is recommended that traffic control aides provided by Bally's may be needed to improve traffic flow.

The analysis results indicate that there are no other significant queueing issues at the other study area intersections.

Figure 4 illustrates the proposed lane configuration at the study area intersections.

## 2032 PD 1426 Full Build Out

Trip Generation – 2032 PD 1426 Full Build Out

In addition to the entertainment district which is proposed to be constructed and operating by 2026, there are additional parcels within the study area that are proposed to be redeveloped. The proposed site plan for the remaining parcels of PD 1426 includes 13 new buildings which will primarily include residential dwelling units with the potential for ancillary ground floor retail and one hotel. Project traffic is estimated using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*.

The multifamily housing, high rise provides several subcategories and settings. While this site is within walking distance to the CTA Blue Line station and numerous CTA bus routes, the general urban/suburban setting and not close to rail transit subcategory were utilized. The U.S. Census Bureau publishes data that establishes mode splits for the area around the proposed redevelopment area using data from the 2020 American Community Survey. The data illustrates that the average drive alone split is 25.4 percent, carpooling is 0.9 percent, and taxi cab trips are 3.8 percent. The redundancy for the taxi trips was also assumed. The remaining commute trips included public transportation at 16.8 percent, biking and walking at 37.5 percent and 14.7 percent, respectively.

The peak hour trip generation equations are selected for the following time periods:

- weekday, am peak hour of generator for the weekday commuter am peak hour (7 – 9 am)
- weekday, peak hour of adjacent street traffic for one hour between 4 pm and 6 pm for the weekday commuter pm peak hour (4 – 6 pm)

Trip rates are not available for the Friday or Saturday casino peak hours so the vehicle time of day distribution from the *Trip Generation Manual* was used to estimate the trip generation for those time periods. For the Friday casino peak hour, the distribution percentage for the 8 pm to 9 pm hour, which is the casino peak hour, was compared to the 5 pm to 6 pm hour. The residential pm peak hourly distribution at 5 pm is 8.5 percent and at 8 pm is 5.2 percent. Similarly, the hourly distribution for the hotel at 5 pm is 7.7 percent and at 8 pm is 3.2 percent. It is assumed that the trip generation for the Friday casino peak hour is 61.2 percent of the weekday pm peak hour (5.2 / 8.5) for the multifamily housing and 41.6 percent (3.2 / 7.7) for the hotel.

A similar process was conducted to estimate the Saturday casino peak hour trips for the hotel. However, there is limited Saturday time of day distribution data for most residential housing land uses. The only land use with Saturday data was land use code 221, multi-family housing (mid-rise). It is assumed that hourly trip data for this land use will be similar to land use code 222. Saturday casino peak hour trips were calculated by taking the Saturday 8 pm hour and comparing to the Saturday peak hour of generator hourly distribution and applying that percentage to the Saturday peak hour trip generation.

It should be noted that there is potential for ground floor retail at the residential buildings but will likely be ancillary to the dwelling units and not major trip generating uses. ITE Land Use Code: 232 - High-Rise Residential with 1st-Floor Commercial was initially considered but after reviewing thoroughly, it was decided not to be used due to limited data points to estimate the trip rates, no directional distribution data, and no Saturday peak hour data.

Table 5 provides a summary of the trip generation for the PD 1426 parcels.

Table 5 – PD 1426 Trip Generation (Remaining Parcels)

| PARCEL / Building Size | LAND USE | SIZE | | Weekday Commuter AM Peak | | | Weekday Commuter PM Peak | | | Friday Casino Peak | | | Saturday Casino Peak | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | In | Out | Total | In | Out | Total | In | Out | Total | In | Out | Total |
| D-2.1/D-4.1/D-4.2 1.52 Mil Sq Ft | ITE Land Use Code: 222 Multifamily Housing (High-Rise) | 1,500 | Dwelling Unit | 119 | 230 | 349 | 231 | 182 | 413 | 141 | 111 | 253 | 152 | 116 | 268 |
| | *Self-Drive Reduction (26.3%)* | | | 31 | 60 | 91 | 61 | 48 | 109 | 37 | 29 | 66 | 40 | 30 | 70 |
| | *Taxi (3.8%)* | | | 5 | 9 | 14 | 9 | 7 | 16 | 5 | 4 | 10 | 6 | 4 | 10 |
| | *Taxi Redundancy (3.8%)* | | | 9 | 5 | 14 | 7 | 9 | 16 | 4 | 5 | 9 | 4 | 6 | 10 |
| | Ground Floor Retail* | 30,000 | SF | - | - | - | - | - | - | - | - | - | - | - | - |
| | *Parcel D-2.1/D-4.1/D-4.2 Total New Vehicle Trips* | | | 45 | 74 | 119 | 77 | 64 | 141 | 46 | 38 | 85 | 50 | 40 | 90 |
| D-5.1 510,000 Sq Ft | ITE Land Use Code: 222 Multifamily Housing (High-Rise) | 500 | Dwelling Unit | 44 | 85 | 129 | 86 | 67 | 153 | 53 | 41 | 94 | 57 | 44 | 101 |
| | *Self-Drive Reduction (26.3%)* | | | 12 | 22 | 34 | 23 | 18 | 40 | 14 | 11 | 25 | 15 | 11 | 26 |
| | *Taxi (3.8%)* | | | 2 | 3 | 5 | 3 | 3 | 6 | 2 | 2 | 4 | 2 | 2 | 4 |
| | *Taxi Redundancy (3.8%)* | | | 3 | 2 | 5 | 3 | 3 | 6 | 2 | 2 | 4 | 2 | 2 | 4 |
| | Ground Floor Retail* | 30,000 | SF | - | - | - | - | - | - | - | - | - | - | - | - |
| | *Parcel D-5.1 Total New Vehicle Trips* | | | 17 | 27 | 44 | 29 | 24 | 52 | 18 | 15 | 33 | 19 | 15 | 34 |
| C-1.1 500,000 Sq Ft | ITE Land Use Code: 222 Multifamily Housing (High-Rise) | 495 | Dwelling Unit | 43 | 85 | 128 | 85 | 67 | 152 | 52 | 41 | 93 | 57 | 43 | 100 |
| | *Self-Drive Reduction (26.3%)* | | | 11 | 22 | 33 | 22 | 18 | 40 | 14 | 11 | 24 | 15 | 11 | 26 |
| | *Taxi (3.8%)* | | | 2 | 3 | 5 | 3 | 3 | 6 | 2 | 2 | 4 | 2 | 2 | 4 |
| | *Taxi Redundancy (3.8%)* | | | 3 | 2 | 5 | 3 | 3 | 6 | 2 | 2 | 4 | 2 | 2 | 4 |
| | Ground Floor Retail* | 5,000 | SF | - | - | - | - | - | - | - | - | - | - | - | - |
| | *Parcel C-1.1 Total New Vehicle Trips* | | | 16 | 27 | 43 | 28 | 24 | 52 | 18 | 15 | 32 | 19 | 15 | 34 |
| B-7.1/B-7.2 900,000 Sq Ft | ITE Land Use Code: 222 Multifamily Housing (High-Rise) | 890 | Dwelling Unit | 73 | 142 | 215 | 143 | 112 | 255 | 87 | 69 | 156 | 94 | 71 | 166 |
| | *Self-Drive Reduction (26.3%)* | | | 19 | 37 | 56 | 38 | 29 | 67 | 23 | 18 | 41 | 25 | 19 | 44 |
| | *Taxi (3.8%)* | | | 3 | 5 | 8 | 5 | 4 | 10 | 3 | 3 | 6 | 4 | 3 | 7 |
| | *Taxi Redundancy (3.8%)* | | | 5 | 3 | 8 | 4 | 5 | 9 | 3 | 3 | 6 | 3 | 4 | 7 |
| | Ground Floor Retail* | 10,000 | SF | - | - | - | - | - | - | - | - | - | - | - | - |
| | *Parcel B-7.1/B-7.2 Total New Vehicle Trips* | | | 27 | 45 | 72 | 47 | 38 | 86 | 29 | 24 | 53 | 32 | 26 | 58 |
| B-4.1/B-5.1/B-5.2 1.075 Mil Sq Ft | ITE Land Use Code: 222 Multifamily Housing (High-Rise) | 1,055 | Dwelling Unit | 85 | 166 | 251 | 166 | 131 | 297 | 102 | 80 | 182 | 111 | 83 | 194 |
| | *Self-Drive Reduction (26.3%)* | | | 22 | 44 | 66 | 44 | 34 | 78 | 27 | 21 | 48 | 29 | 22 | 51 |
| | *Taxi (3.8%)* | | | 3 | 6 | 9 | 6 | 5 | 11 | 4 | 3 | 7 | 4 | 3 | 7 |
| | *Taxi Redundancy (3.8%)* | | | 6 | 3 | 9 | 5 | 6 | 11 | 3 | 4 | 7 | 3 | 4 | 7 |
| | Ground Floor Retail* | 20,000 | SF | - | - | - | - | - | - | - | - | - | - | - | - |
| | *Parcel B-4.1/B-5.1/B-5.2 Total New Vehicle Trips* | | | 31 | 53 | 84 | 55 | 45 | 100 | 34 | 28 | 62 | 36 | 29 | 65 |
| B-1.1/B-1.2/B-2.1 1.095 Mil Sq Ft | ITE Land Use Code: 222 Multifamily Housing (High-Rise) | 615 | Dwelling Unit | 52 | 102 | 154 | 102 | 81 | 183 | 62 | 50 | 112 | 68 | 52 | 120 |
| | *Self-Drive Reduction (26.3%)* | | | 14 | 27 | 41 | 27 | 21 | 48 | 16 | 13 | 29 | 18 | 14 | 32 |
| | *Taxi (3.8%)* | | | 2 | 4 | 6 | 4 | 3 | 7 | 2 | 2 | 4 | 3 | 2 | 5 |
| | *Taxi Redundancy (3.8%)* | | | 4 | 2 | 6 | 3 | 4 | 7 | 2 | 2 | 4 | 2 | 3 | 5 |
| | Ground Floor Retail* | 30,000 | SF | - | - | - | - | - | - | - | - | - | - | - | - |
| | ITE Land Use Code: 310 Hotel | 250 | Room | 30 | 48 | 78 | 23 | 30 | 53 | 10 | 12 | 22 | 10 | 5 | 15 |
| | *Parcel B-1.1/B-1.2/B-2.1 Total New Vehicle Trips* | | | 50 | 81 | 131 | 57 | 58 | 115 | 30 | 29 | 59 | 33 | 24 | 57 |
| | | | | | | | | | | | | | | | |
| | ***Total New Vehicle Trips*** | | | 186 | 307 | 493 | 293 | 253 | 546 | 175 | 149 | 324 | 189 | 149 | 338 |

* It is anticipated that the Ground Floor Retail will be ancillary to the proposed development and adjacent developments and will generate minimal primary vehicle trips

Trips Distribution and Assignment – 2032 PD 1426 Full Build Out

The remaining PD 1426 primarily consists of residential buildings with ground floor retail. Following the same methodology from the approved September 2018 *River District Traffic Impact Study* by Sam Schwartz, the direction distribution from which traffic approaches and departs a site is a function of numerous variables, including location of residences, location of employment centers, location of commercial/retail centers, available roadway systems, location and number of access points, and level of congestion on adjacent road systems. The approved 2018 study had different inbound and outbound percentages based on the roadway network. The overall trip distribution, including the street network distribution and the regional distribution is documented in the December 7, 2022 Traffic Impact Study

The proposed roadway network for the full PD 1426 redevelopment includes the construction of Huron Street from Halsted Street to Jefferson Street (south of the existing Huron Street alignment), Erie Street from Union Street to Jefferson Street, and Desplaines Street from Ohio Street to Jefferson Street. These roadway extensions are limited to being constructed after the abandonment of the Union Pacific Rail Spur since the UP requires a minimum height distance over the railroad tracks and discourages new at-grade rail crossings.

The trip assignment is based on the proposed roadway network for the full PD 1426 redevelopment, which includes the construction of the new east/west roadways. Figure 6 illustrates the site traffic for the remaining PD 1426 parcels. This includes vehicle trips on the new roadways for several of the PD 1426 parcels that will not travel on Jefferson Street. Figure 7 provides the overall PD 1426 site traffic with the entertainment district and remaining 13 buildings. Figure 8 provides the Future with Full PD 1426 Development Traffic Volumes for the full build out of the site. This includes traffic generated from the proposed development on the north side of Chicago Avenue.

Capacity Analysis – 2032 PD 1426 Full Build Out

Similar to the Entertainment District capacity analysis, Synchro was used to evaluate the study area intersections for the Full PD 1426 scenario. The capacity analysis results at the study area intersections are summarized in Table 6.

Table 6 – Full PD 1426 Build Out: Capacity Analysis Results

| Intersection / Approach | Weekday AM | | Weekday PM | | Friday Casino | | Saturday Casino | |
|---|---|---|---|---|---|---|---|---|
| | Future w/ Project | | Future w/ Project | | Future w/ Project | | Future w/ Project | |
| | Delay (s/veh) | LOS | Delay (s/veh) | LOS | Delay (s/veh) | LOS | Delay (s/veh) | LOS |
| **Jefferson Street & Parking Garage Driveway (Signalized)** | | | | | | | | |
| EB Approach | 21.5 | C | 12.5 | B | 1.6 | A | 1.2 | A |
| WB Approach | 19.5 | B | 18.1 | B | 17.9 | B | 20.2 | C |
| NB Approach | 7.4 | A | 13.5 | B | 16.1 | B | 31.6 | C |
| SB Approach | 7.1 | A | 14.6 | B | 4.5 | A | 10.2 | B |
| Intersection | 11.5 | B | 15.2 | B | 13.6 | B | 22.0 | C |
| **Jefferson Street & Huron Street/Casino Lobby Driveway (Unsignalized)** | | | | | | | | |
| NB Left | 7.9 | A | 8.2 | A | 8.3 | A | 8.6 | A |
| EB Approach | 15.8 | C | 24.1 | C | 31.6 | D | 60.6 | F |
| SB Left | 8.7 | A | 9.4 | A | 10.4 | B | 11.9 | B |
| **Jefferson Street & Erie Street/Hotel Lobby Driveway (Unsignalized)** | | | | | | | | |
| NB Left | 7.9 | A | 8.3 | A | 8.3 | A | 8.5 | A |
| EB Approach | 16.1 | C | 26.9 | D | 47.1 | E | >100 | F |
| WB Right | 12.6 | B | 15.6 | C | 21.3 | C | 39.5 | E |
| SB Left | 8.6 | A | 9.2 | A | 10.1 | B | 11.6 | B |
| **Jefferson Street & Desplaines Street/South Parking Lot Driveway (Unsignalized)** | | | | | | | | |
| NB Left/Thru | 7.8 | A | 8.2 | A | 8.2 | A | 8.4 | A |
| NB Thru/Right | 0.0 | A | 0.0 | A | 0.0 | A | 0.0 | A |
| EB Approach | 19.7 | C | 33.4 | D | 41.1 | E | 88.5 | F |
| WB Approach | 19.2 | C | 30.1 | D | 32.6 | D | 64.3 | F |
| SB Left/Thru | 8.7 | A | 9.3 | A | 9.9 | A | 11.0 | B |
| SB Thru/Right | 0.0 | A | 0.0 | A | 0.0 | A | 0.0 | A |

Based on the capacity analysis results, all movements operate at LOS C or better during the weekday am commuter peak hour. During the weekday pm commuter peak hour, all movements operate at LOS D or better with the exception of the eastbound approach at Jefferson Street and Desplaines Street which is projected to operate at LOS E. Higher delays are observed during the Friday casino and Saturday casino peak hours with the eastbound approaches of Huron Street, Erie Street, and Desplaines Street operating at LOS F. All other movements operate at LOS D or better for the Friday and Saturday casino peak hours.

In the event that any intersections or movements operate with high delays, it is recommended that traffic control aides may be needed to improve traffic flow during those times. Additional details regarding traffic control aides is provided in a later section of this Technical Memorandum.

Queue Analysis – 2032 PD 1426 Full Build Out

A queue length analysis was conducted at each of the study area intersections for the full PD 1426 build out. A summary of this analysis is provided in Table 7. This data is comprised of the 95th percentile queue output from the Synchro analysis.

Table 7 – Full PD 1426 Build Out: 95th Percentile Queue Lengths

| Intersection | Peak Period | 95th Percentile Queue (feet) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Eastbound | | Westbound | | Northbound | | Southbound | |
| | | Left | Right | Left | Right | Left | Right | Left | Right |
| Jefferson Street and Chicago Avenue | Weekday Commuter AM Peak | 30 | 5 | 111 | 0 | 135 | 158 | 62 | - |
| | Weekday Commuter PM Peak | 62 | 120 | 88 | 12 | 157 | 390 | 81 | - |
| | Friday Evening Casino Peak | 8 | 109 | 163 | 0 | 207 | 374 | 25 | - |
| | Saturday Evening Casino Peak | 6 | 96 | 213 | 0 | 265 | 234 | 25 | - |
| ***Storage Length (ft)*** | | **60** | **55** | **95** | **55** | **190** | **190** | **50** | - |
| ***Taper Length (ft)*** | | **50** | **55** | **90** | **55** | **75** | **75** | **50** | - |
| Jefferson Street & Parking Garage Driveway (Signalized) | Weekday Commuter AM Peak | - | | 130 | 52 | 18 | 34 | 51 | - |
| | Weekday Commuter PM Peak | - | | 195 | 53 | 26 | 81 | 88 | - |
| | Friday Evening Casino Peak | - | | 205 | 146 | 18 | 70 | 21 | - |
| | Saturday Evening Casino Peak | - | | 223 | 268 | 22 | 162 | 58 | - |
| ***Storage Length (ft)*** | | - | - | - | - | **60** | **100** | **200** | - |
| ***Taper Length (ft)*** | | - | - | - | - | **55** | **50** | **75** | - |
| Jefferson Street & Huron Street/Casino Lobby Driveway (Unsignalized) | Weekday Commuter AM Peak | 8 | | - | - | 0 | - | 3 | - |
| | Weekday Commuter PM Peak | 15 | | - | - | 0 | - | 3 | - |
| | Friday Evening Casino Peak | 13 | | - | - | 0 | - | 5 | - |
| | Saturday Evening Casino Peak | 28 | | - | - | 0 | - | 10 | - |
| ***Storage Length (ft)*** | | - | - | - | - | **50** | **50** | **100** | - |
| ***Taper Length (ft)*** | | - | - | - | - | **50** | **50** | **75** | - |
| Jefferson Street & Erie Street/Hotel Lobby Driveway (Unsignalized) | Weekday Commuter AM Peak | 8 | | - | 10 | 0 | - | 3 | - |
| | Weekday Commuter PM Peak | 15 | | - | 23 | 3 | - | 3 | - |
| | Friday Evening Casino Peak | 20 | | - | 40 | 0 | - | 5 | - |
| | Saturday Evening Casino Peak | 68 | | - | 90 | 3 | - | 10 | - |
| ***Storage Length (ft)*** | | - | - | - | - | **50** | - | **100** | - |
| ***Taper Length (ft)*** | | - | - | - | - | **50** | - | **50** | - |
| Jefferson Street & Desplaines Street/South Parking Lot Driveway | Weekday Commuter AM Peak | 10 | | 23 | | - | - | - | - |
| | Weekday Commuter PM Peak | 30 | | 35 | | - | - | - | - |
| | Friday Evening Casino Peak | 28 | | 23 | | - | - | - | - |
| | Saturday Evening Casino Peak | 58 | | 45 | | - | - | - | - |
| ***Storage Length (ft)*** | | - | - | - | - | - | - | - | - |
| ***Taper Length (ft)*** | | - | - | - | - | - | - | - | - |
| Jefferson Street and Grand Avenue | Weekday Commuter AM Peak | 72 | - | - | - | - | - | 131 | 37 |
| | Weekday Commuter PM Peak | 159 | - | - | - | - | - | 163 | 36 |
| | Friday Evening Casino Peak | 165 | - | - | - | - | - | 183 | 31 |
| | Saturday Evening Casino Peak | 228 | - | - | - | - | - | 205 | 26 |
| ***Storage Length (ft)*** | | **100** | - | - | - | - | - | **100** | **100** |
| ***Taper Length (ft)*** | | **100** | - | - | - | - | - | **180** | **180** |

Note: the northbound approach at Desplaines Street consists of one shared left turn/through lane and one shared through/right turn lane

The longest queues occur in the northbound direction at the Chicago Avenue and Jefferson Street intersection. It is anticipated that the queue lengths could back up into the parking garage intersection, blocking traffic from entering and exiting the driveway. It is recommended that traffic control aides be present to prevent northbound vehicles from blocking the driveway to maximize traffic flow through this area. Additionally, this intersection should be synchronized with the Parking Garage Driveway to maximize efficiency between intersections. Shifting additional green time from Chicago Avenue to Jefferson Street would likely decrease the 95$^{th}$ percentile queue lengths along Jefferson Street. It is recommended that this area be monitored in the future to maximize the efficiency of Chicago Avenue and Jefferson Street.

The westbound right turn queue at the Jefferson Street and Garage Driveway intersection during the Saturday evening casino peak hour is 268 feet, or approximately eleven vehicles. While the internal design and operations of the parking garage are still being finalized, particularly the locations of the gates for exiting vehicles, it is recommended that the exit gates be located more than 300 feet from this intersection to maximize the queue length such that queues from this intersection do not back up through the gates. If this does occur, it is recommended that traffic control aides provided by Bally's may be needed to improve traffic flow.

The eastbound left turn queue at Jefferson Street and Grand Avenue may be longer than the left turn storage length for some of the peak hours. This is due to the offset intersection for the north/south movements to align with the existing public right of way to the south and not the existing private residential driveway. This offset results in the need for a split phase due to the overlapping northbound and southbound left turn movements. When the south roadway is constructed, it is anticipated that a traditional signal timing plan can be implemented which would allow more green time for the westbound and southbound left turn movements.

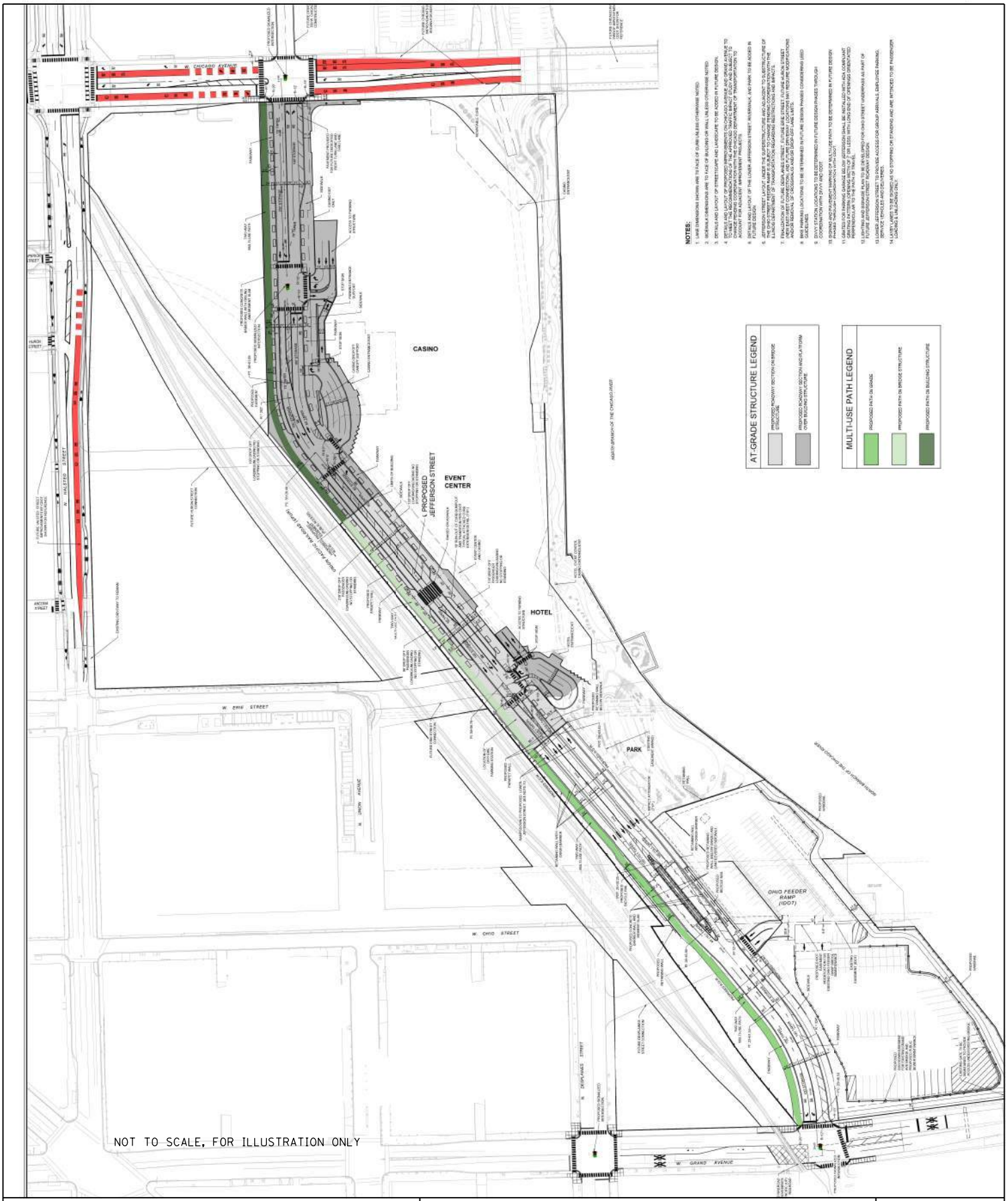
The analysis results indicate that there are no other significant queueing issues at the other study area intersections.

Figure 9 illustrates the proposed lane configuration at the study area intersections for the full PD 1426 Build Out scenario.

## Traffic Control Aides

In order to provide safe and efficient access for entertainment district patrons as well as to limit any roadway impacts to the local businesses and neighborhood, it is recommended that Traffic Control Aides (TCA's) be present as needed along Jefferson Street at the Parking Garage Driveway/Private Driveway and at the Casino Lobby Driveway/Huron Street during the peak casino periods on Friday and Saturday evenings. Using TCAs at these and other locations around the entertainment district will be re-evaluated periodically over time and adjusted accordingly at the discretion of Bally's to verify that adequate TCA coverage is provided to efficiently serve all entertainment district patrons and adjacent modes of transportation. It is anticipated that private TCA's will be utilized along Jefferson Street adjacent to the entertainment district.

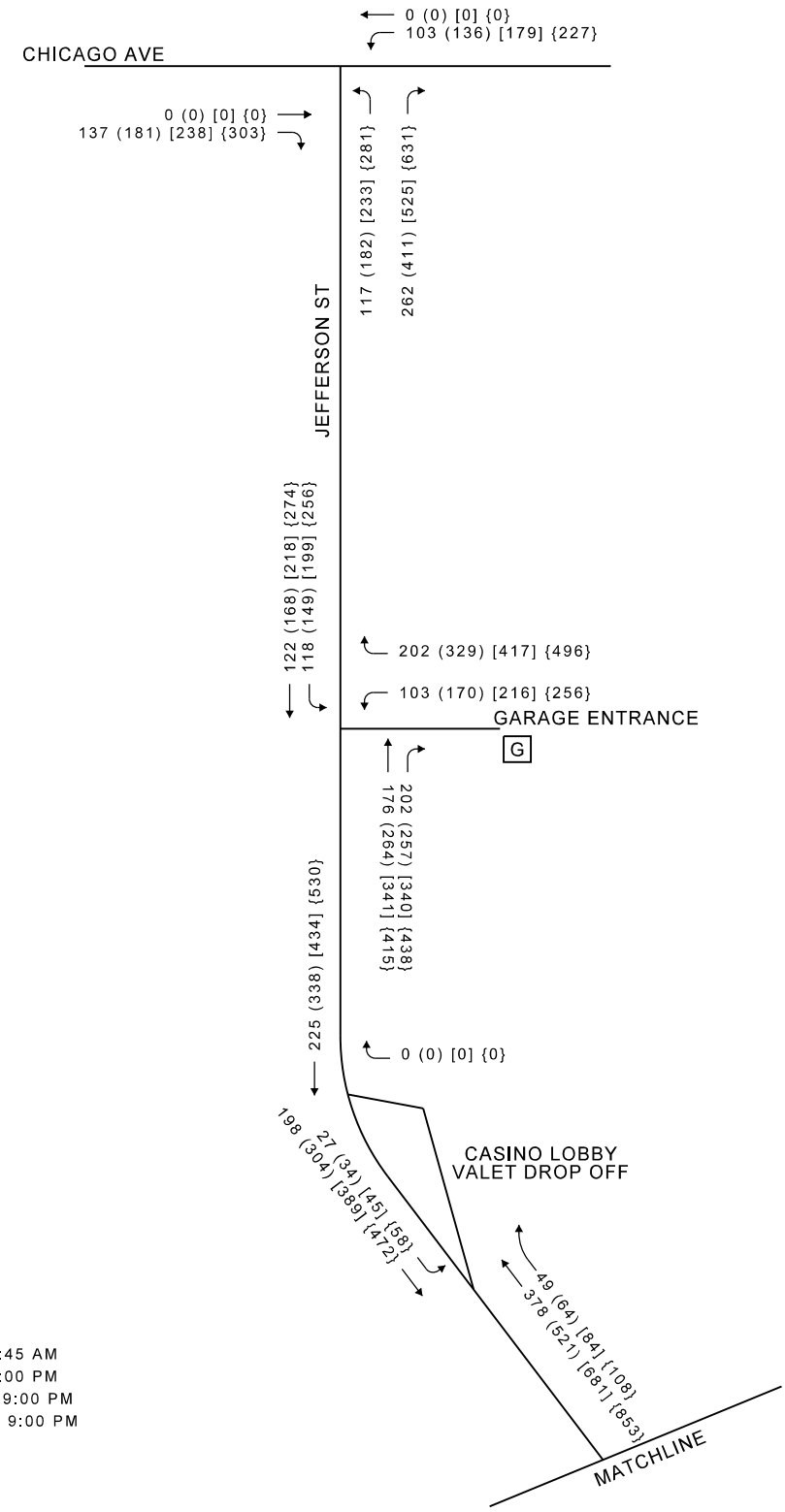
The roles of the TCA's are to keep traffic flowing around the site, keep the intersections clear, limit double parking along the roadways, provide opportunities for minor approaches to enter and exit without causing backups and delay, and limit potential traffic queues. They will be able to limit the queue lengths and delay times for the impacted movements at both driveways by temporarily stopping traffic on Jefferson Street to allow the outbound movements from the driveway. This will minimize queue lengths backing up into the valet operation and hotel rideshare pick up/drop off area. Additional roles will be to enforce the no parking rules, keep rideshare vehicles and taxis from backing up onto the street, enforce no double parking, move pedestrians across the streets, and minimize dwell time and delays for buses, valet, and rideshare vehicles. Since the TCA's will likely be private, ticketing vehicles may not be an option, however towing vehicles along Jefferson Street will be an option.




# BALLY'S CHICAGO CASINO

## FIGURE 1
## ENTERTAINMENT DISTRICT CONCEPTUAL SITE PLAN

CHICAGO ILLINOIS




LEGEND

## - AM PEAK HOUR
(##)- PM PEAK HOUR
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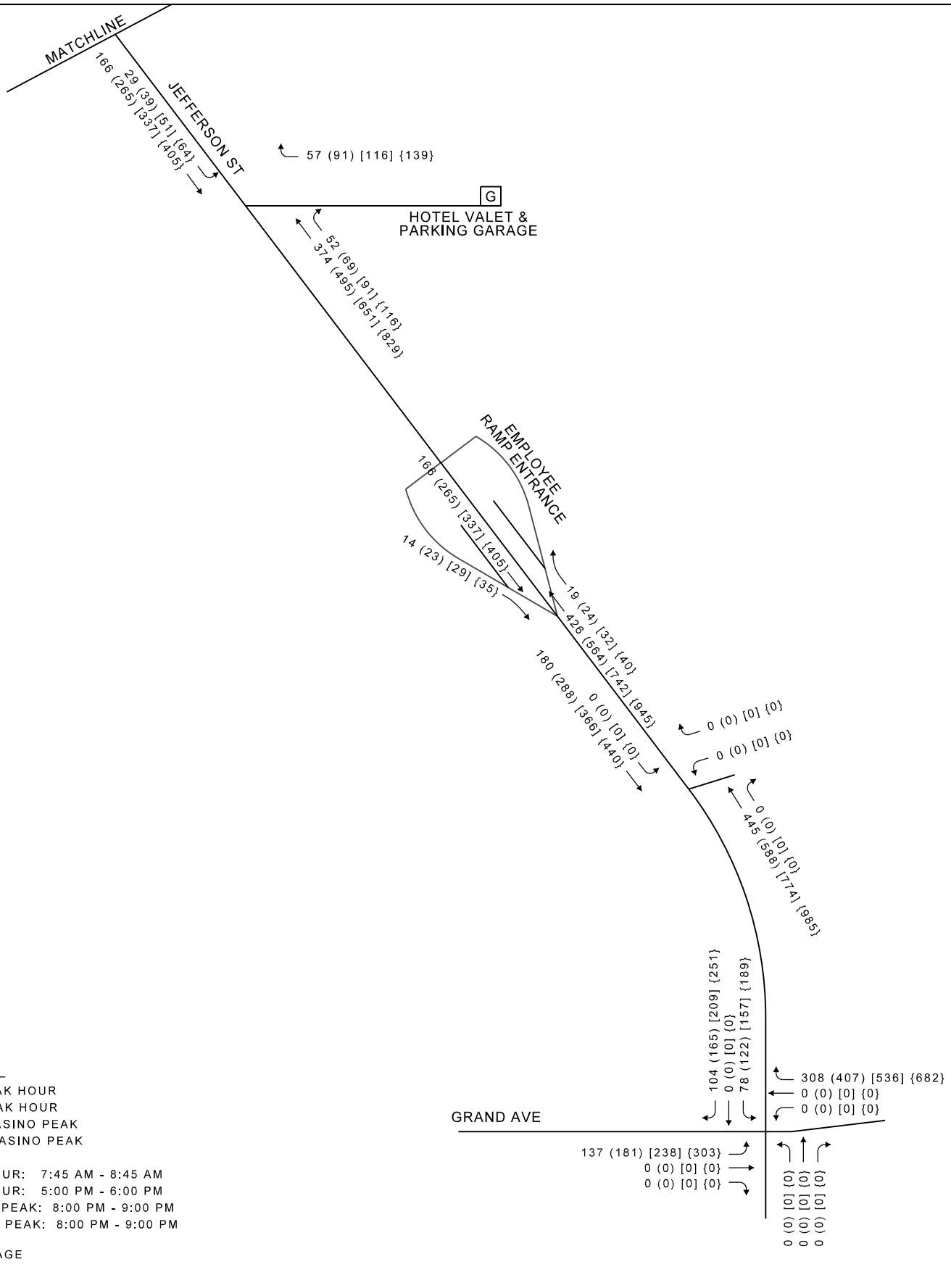
G - GARAGE

# BALLY'S CHICAGO CASINO

# FIGURE 2
# ENTERTAINMENT DISTRICT
# SITE TRAFFIC VOLUMES

CHICAGO ILLINOIS




# BALLY'S CHICAGO CASINO

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# SITE TRAFFIC VOLUMES

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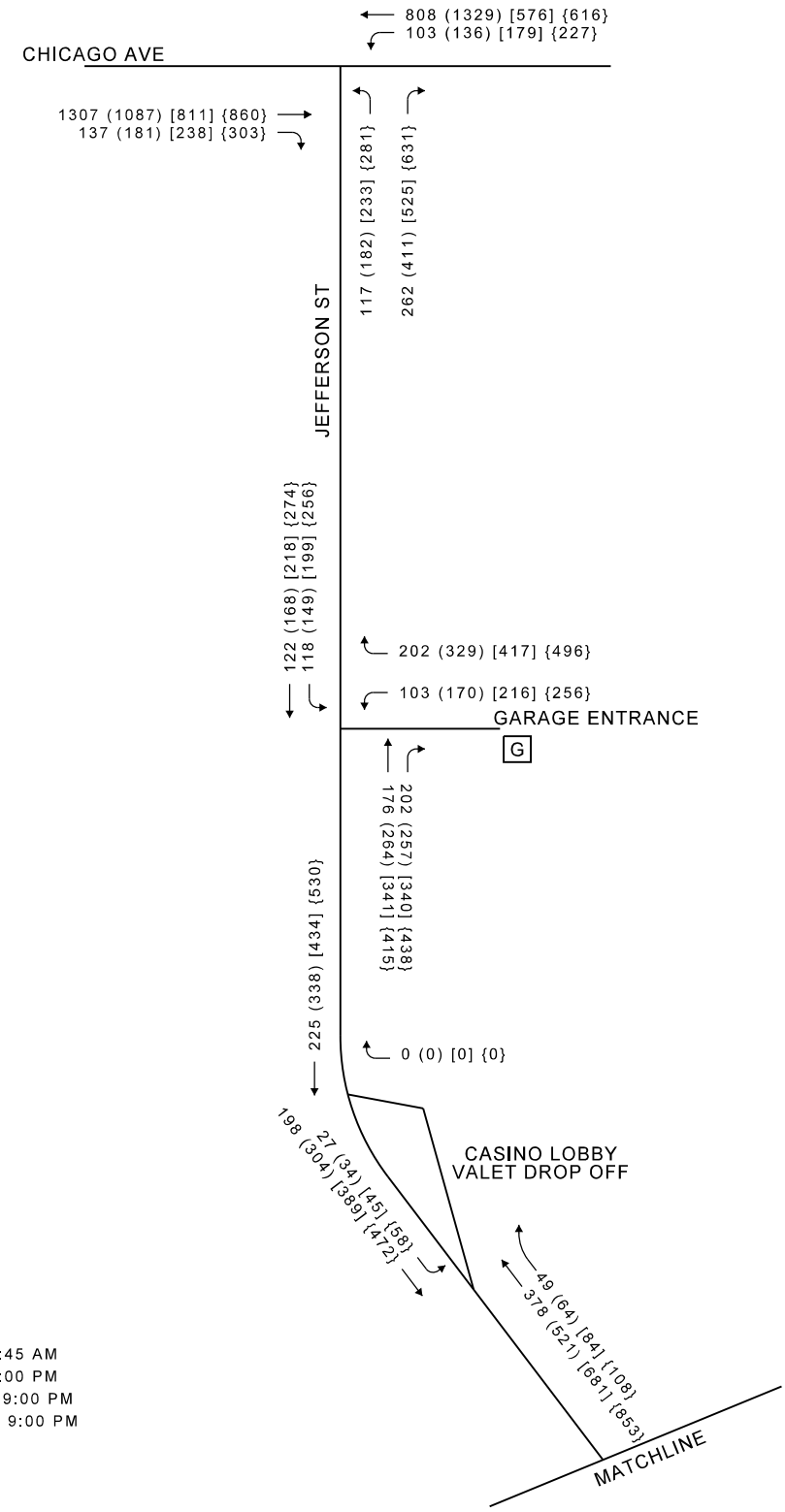


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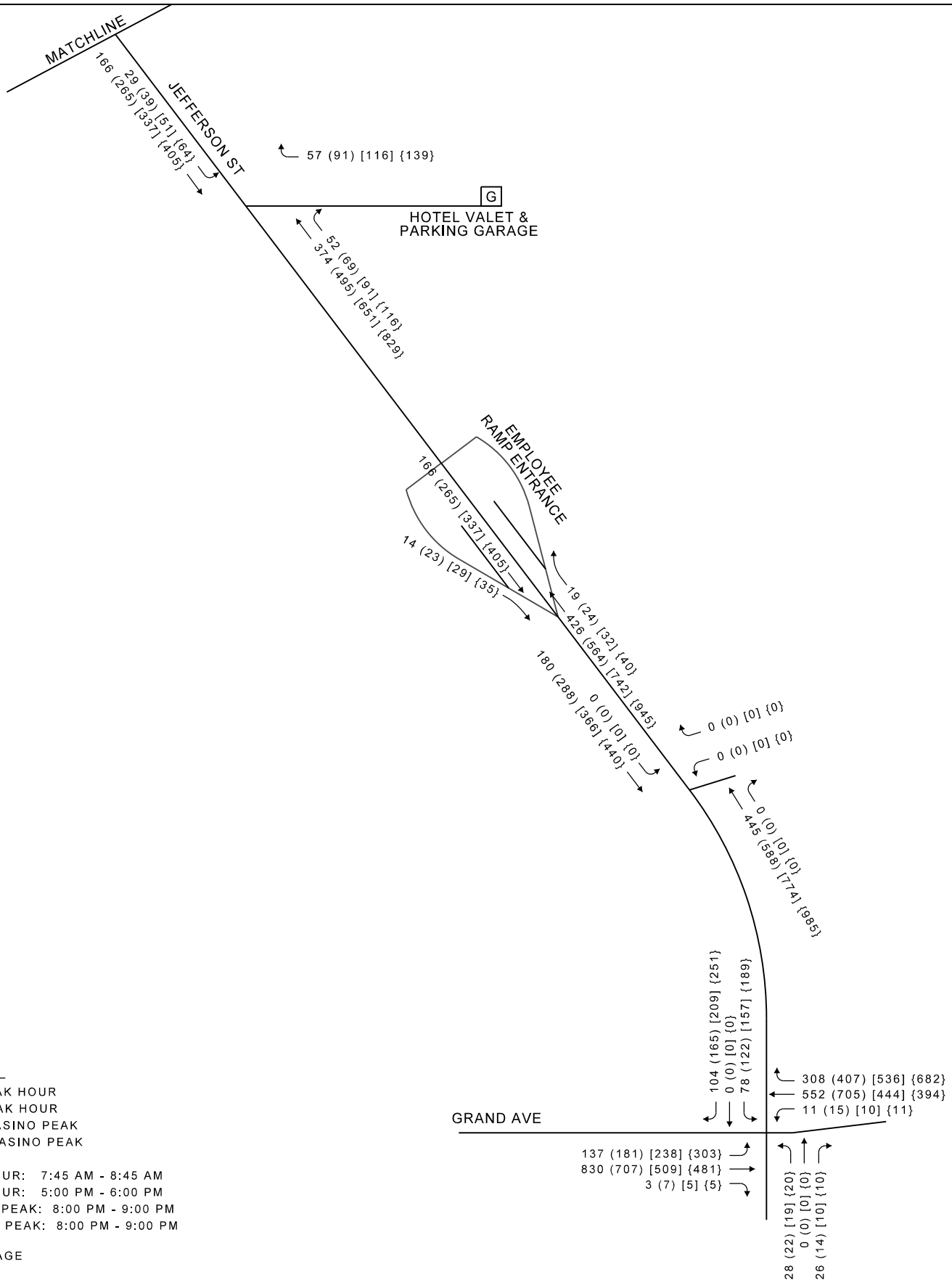
G - GARAGE

# BALLY'S CHICAGO CASINO

# FIGURE 3
# FUTURE WITH ENTERTAINMENT DISTRICT TRAFFIC VOLUMES

CHICAGO ILLINOIS

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# BALLY'S CHICAGO CASINO

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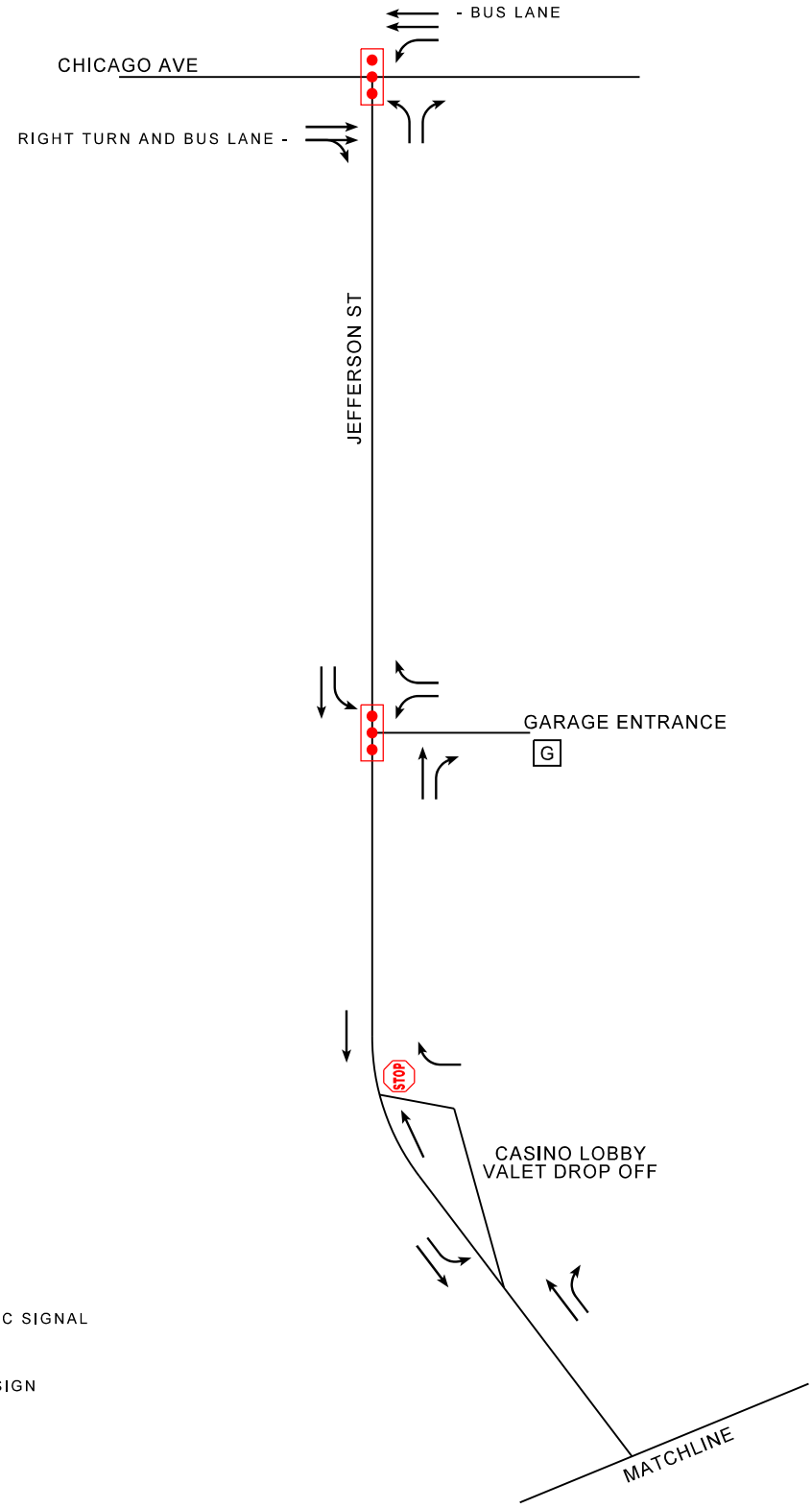
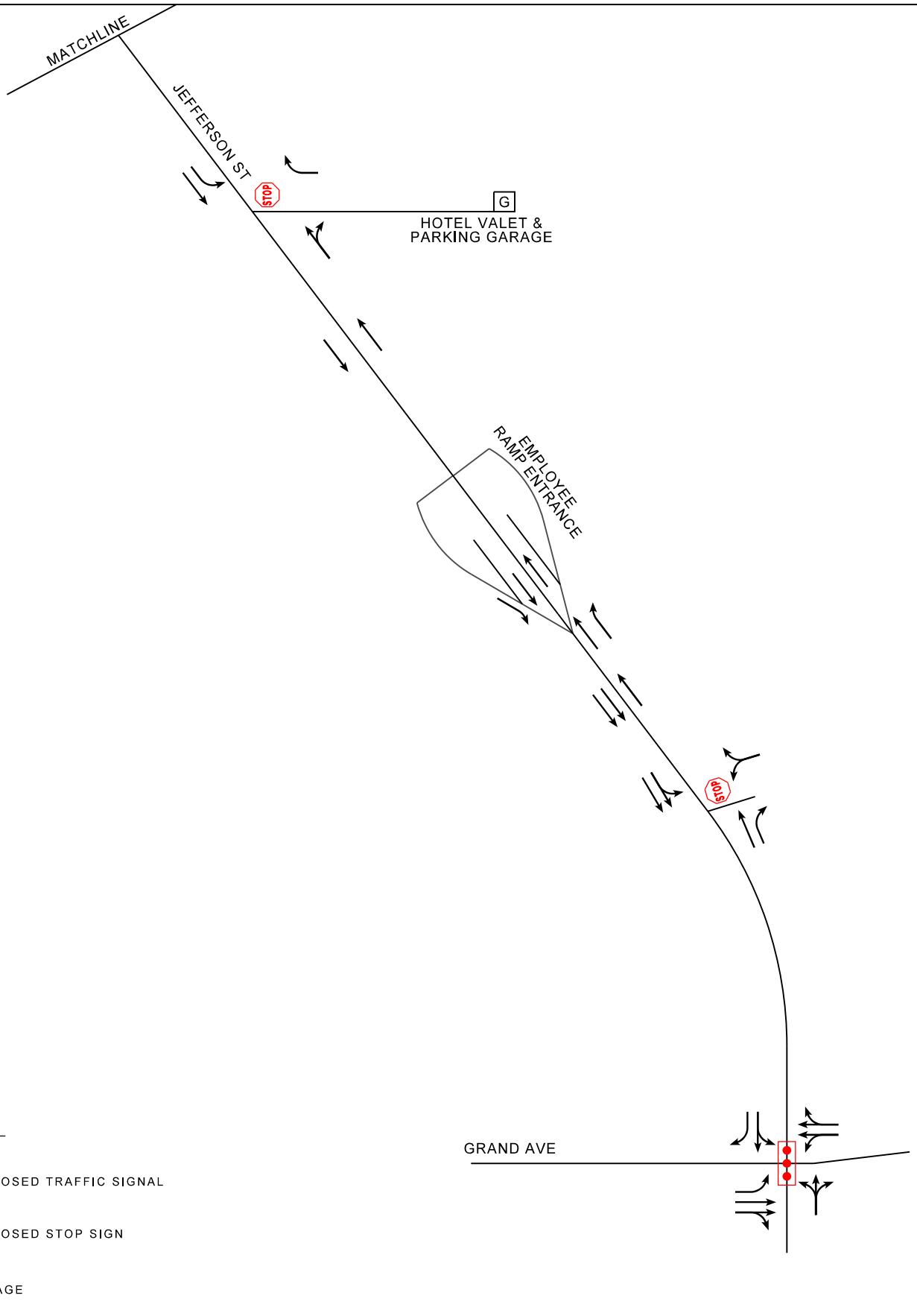



# BALLY'S CHICAGO CASINO

## FIGURE 4
## FUTURE WITH ENTERTAINMENT DISTRICT LANE CONFIGURATION

CHICAGO ILLINOIS




# BALLY'S CHICAGO CASINO

## FIGURE 4
## FUTURE WITH ENTERTAINMENT DISTRICT LANE CONFIGURATION

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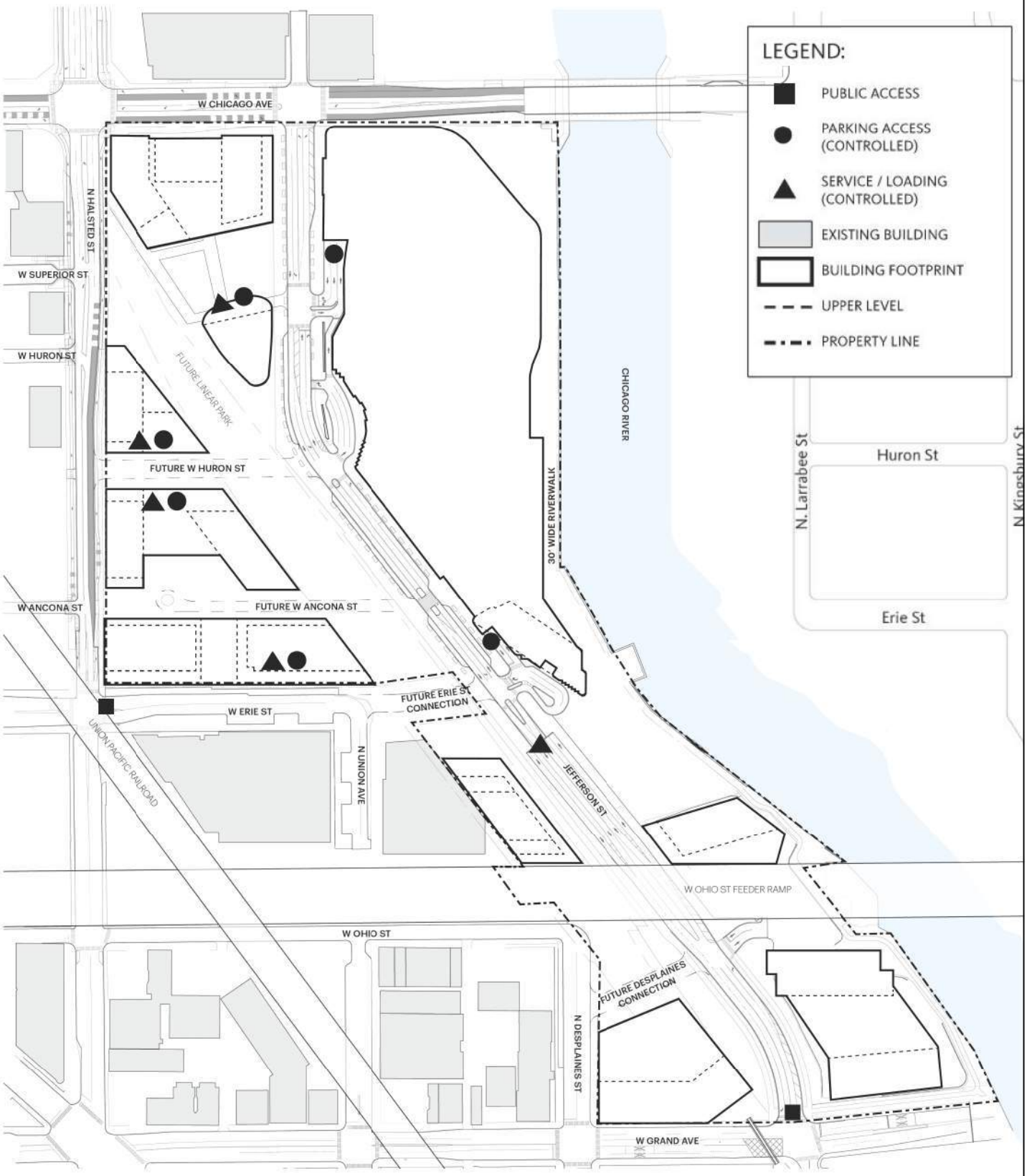
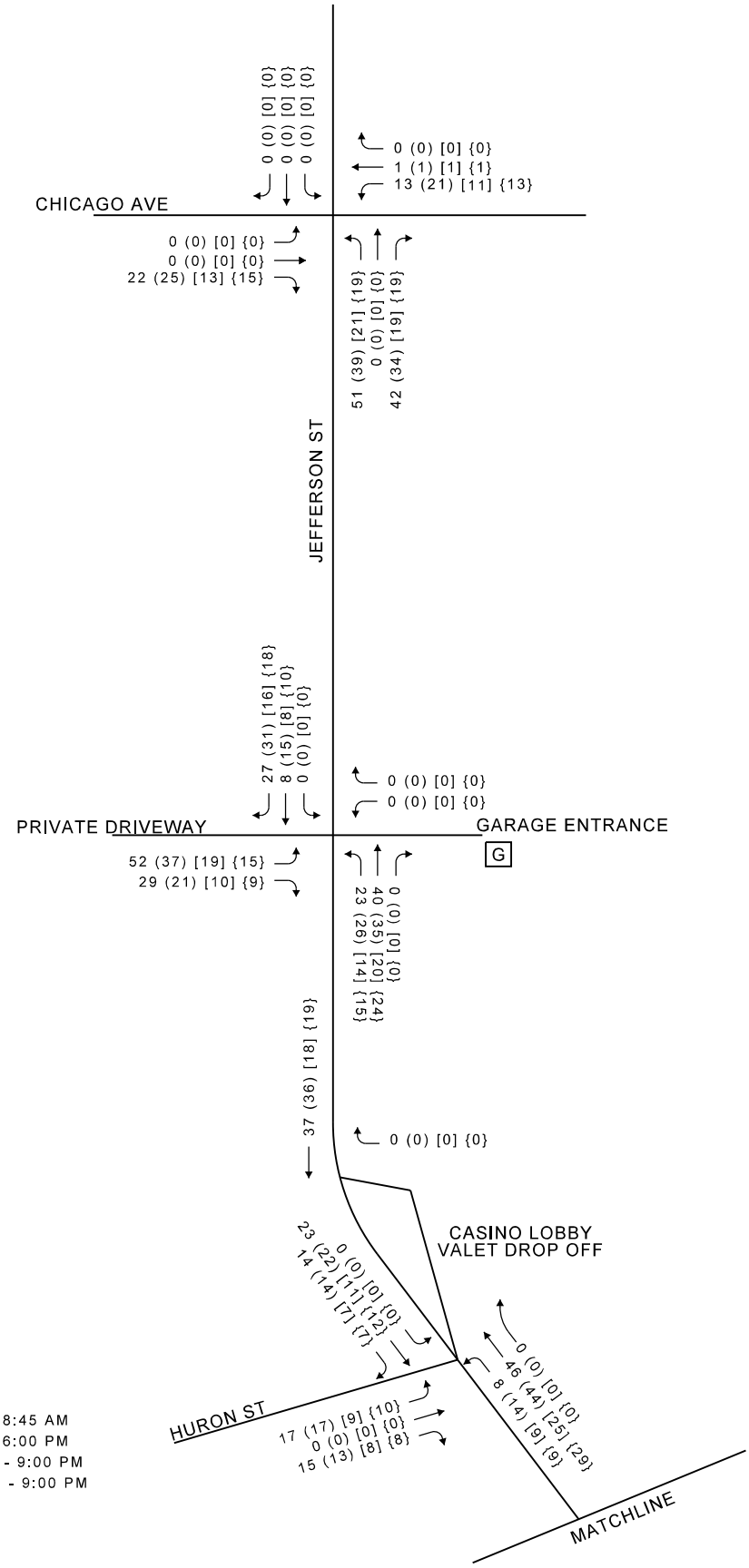



NOT TO SCALE, FOR ILLUSTRATION ONLY

# BALLY'S CHICAGO CASINO

## FIGURE 5
## FULL PD 1426
## CONCEPTUAL SITE PLAN

CHICAGO ILLINOIS

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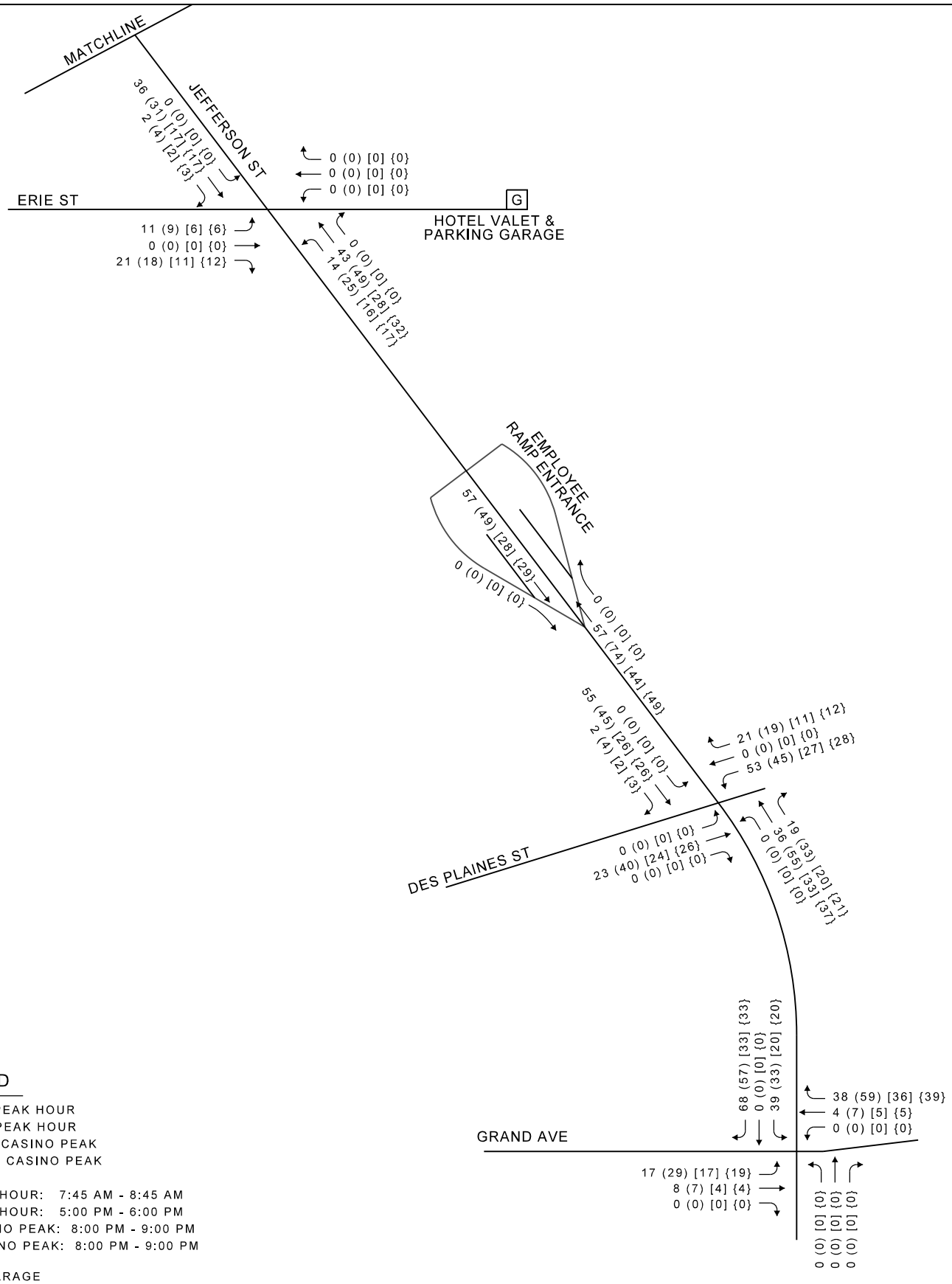
G - GARAGE

# BALLY'S CHICAGO CASINO

# FIGURE 6
# REMAINING PD 1426 PARCELS
# SITE TRAFFIC VOLUMES

CHICAGO ILLINOIS

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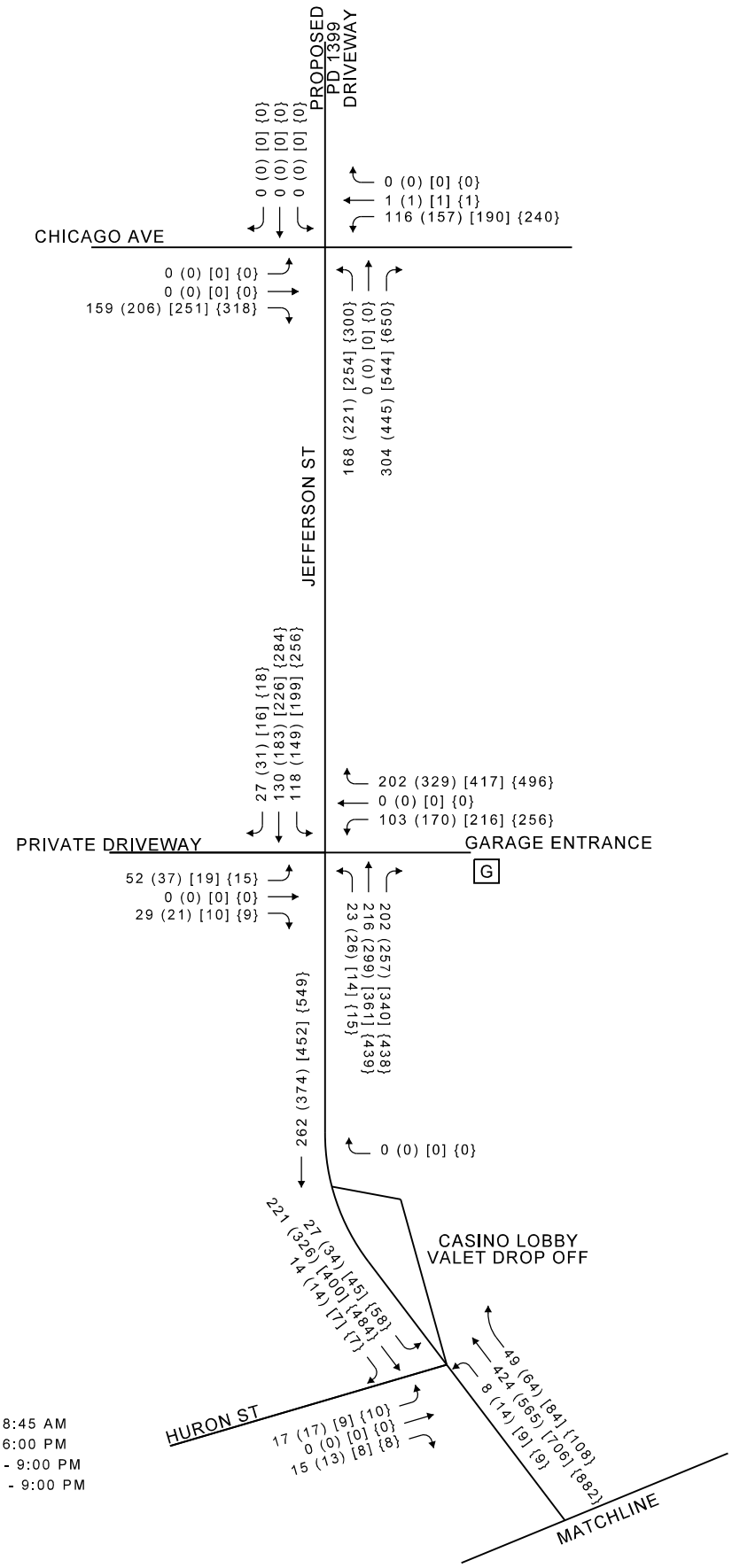
# BALLY'S CHICAGO CASINO

# FIGURE 6
# REMAINING PD 1426 PARCELS
# SITE TRAFFIC VOLUMES

CHICAGO ILLINOIS

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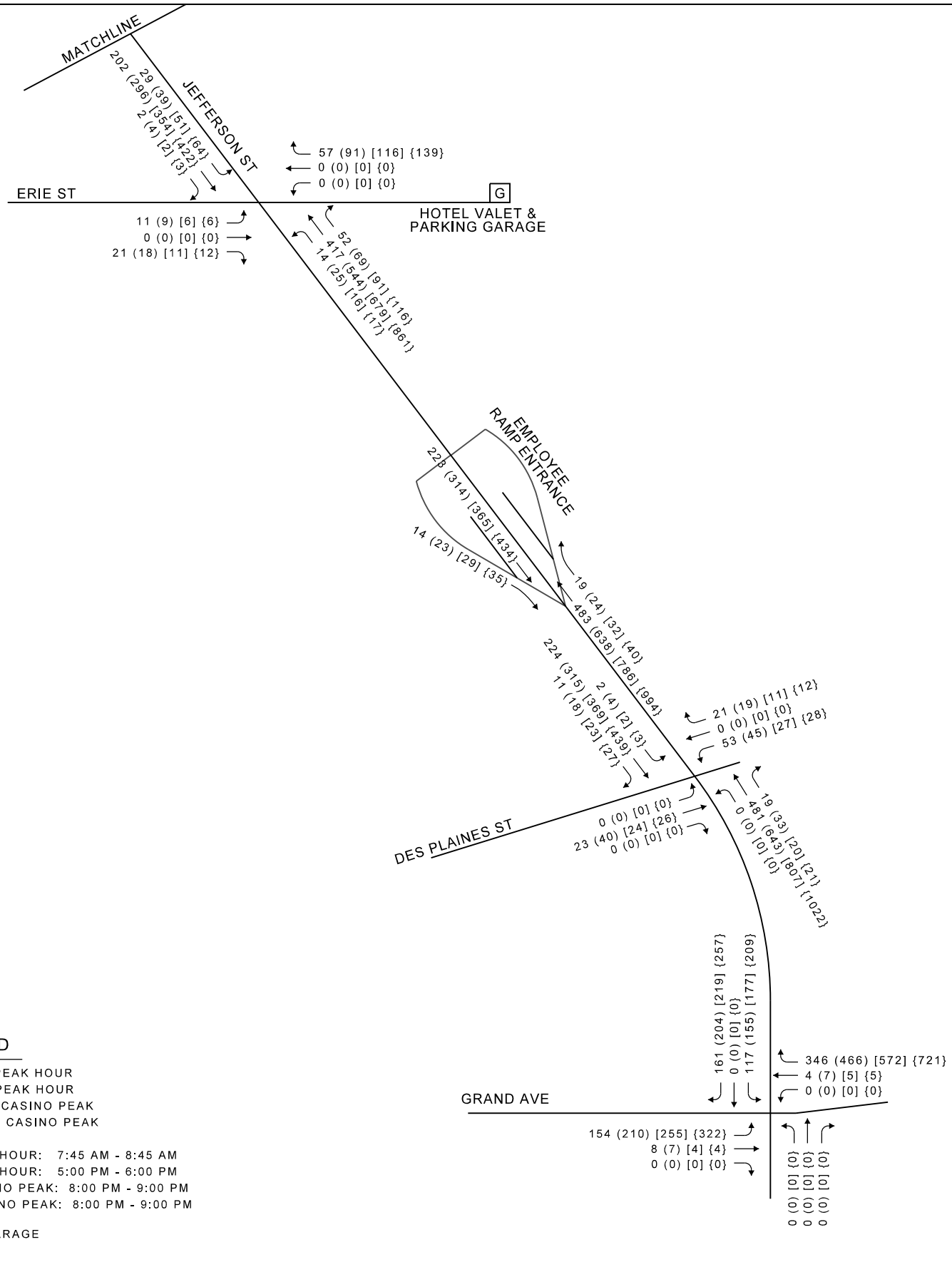
G - GARAGE

# BALLY'S CHICAGO CASINO

# FIGURE 7
# FULL PD1426 SITE TRAFFIC VOLUMES

CHICAGO ILLINOIS

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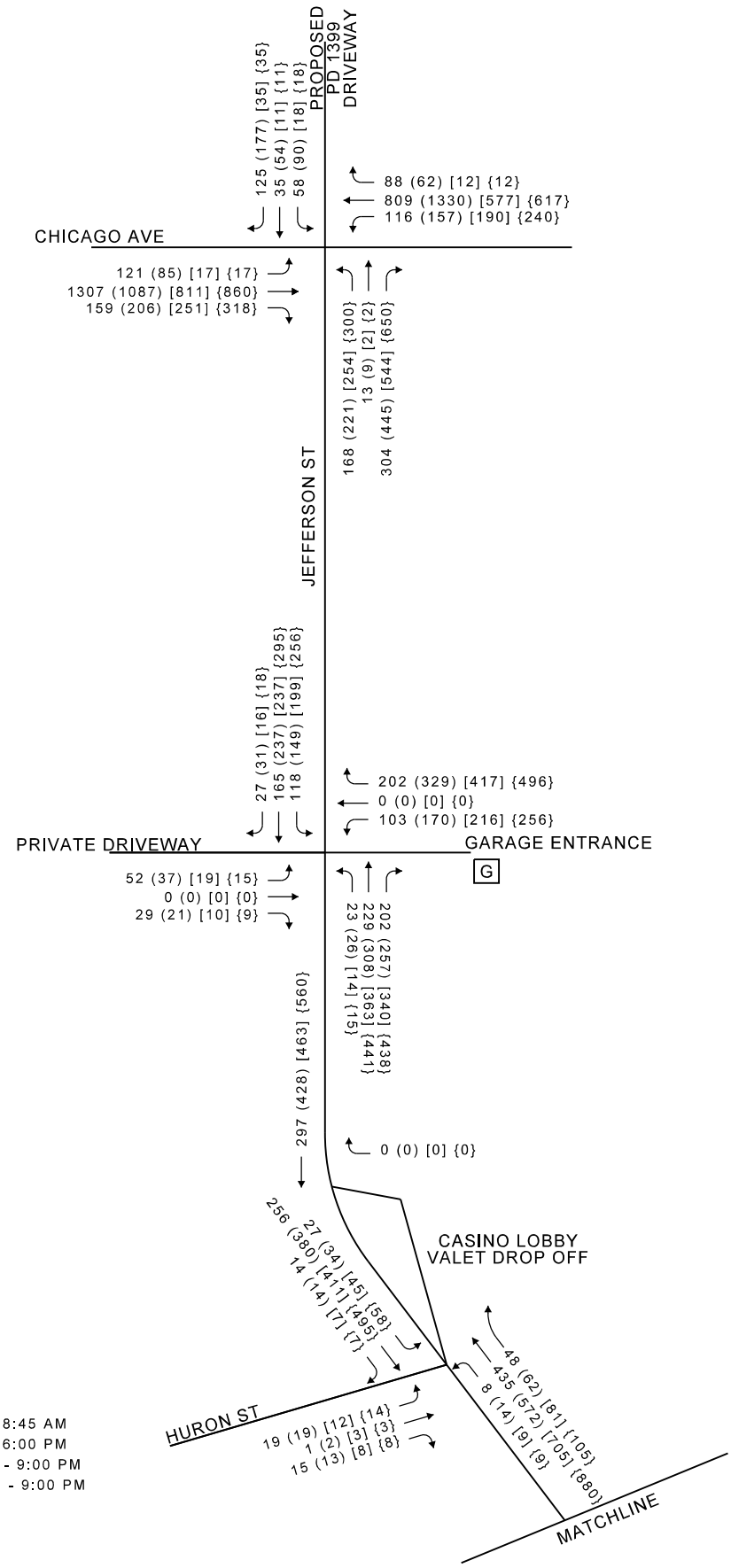
# BALLY'S CHICAGO CASINO

# FIGURE 7
# FULL PD1426 SITE TRAFFIC VOLUMES

CHICAGO ILLINOIS

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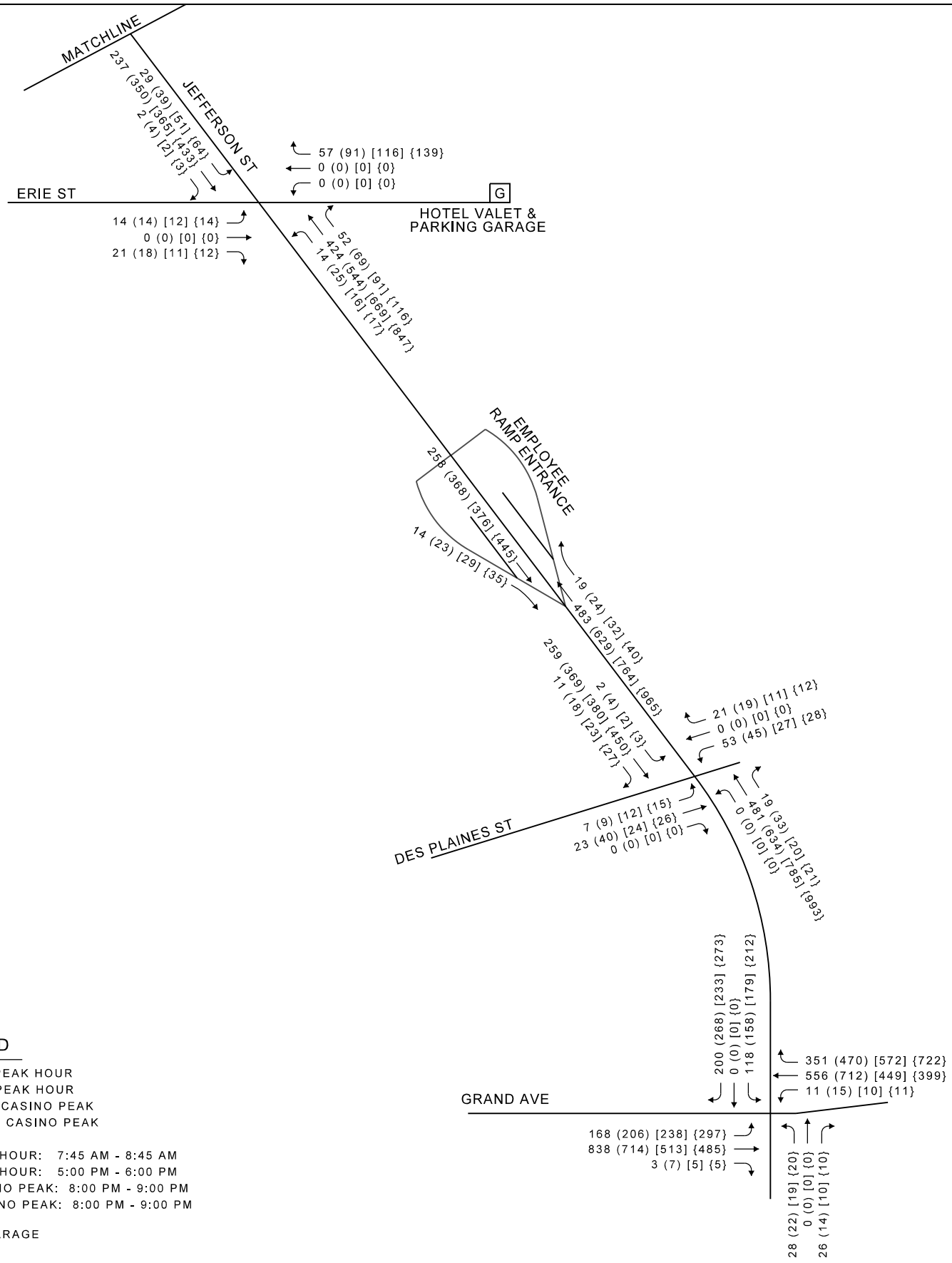
G - GARAGE

# BALLY'S CHICAGO CASINO

# FIGURE 8
# FUTURE WITH PD1426
# TRAFFIC VOLUMES

CHICAGO ILLINOIS

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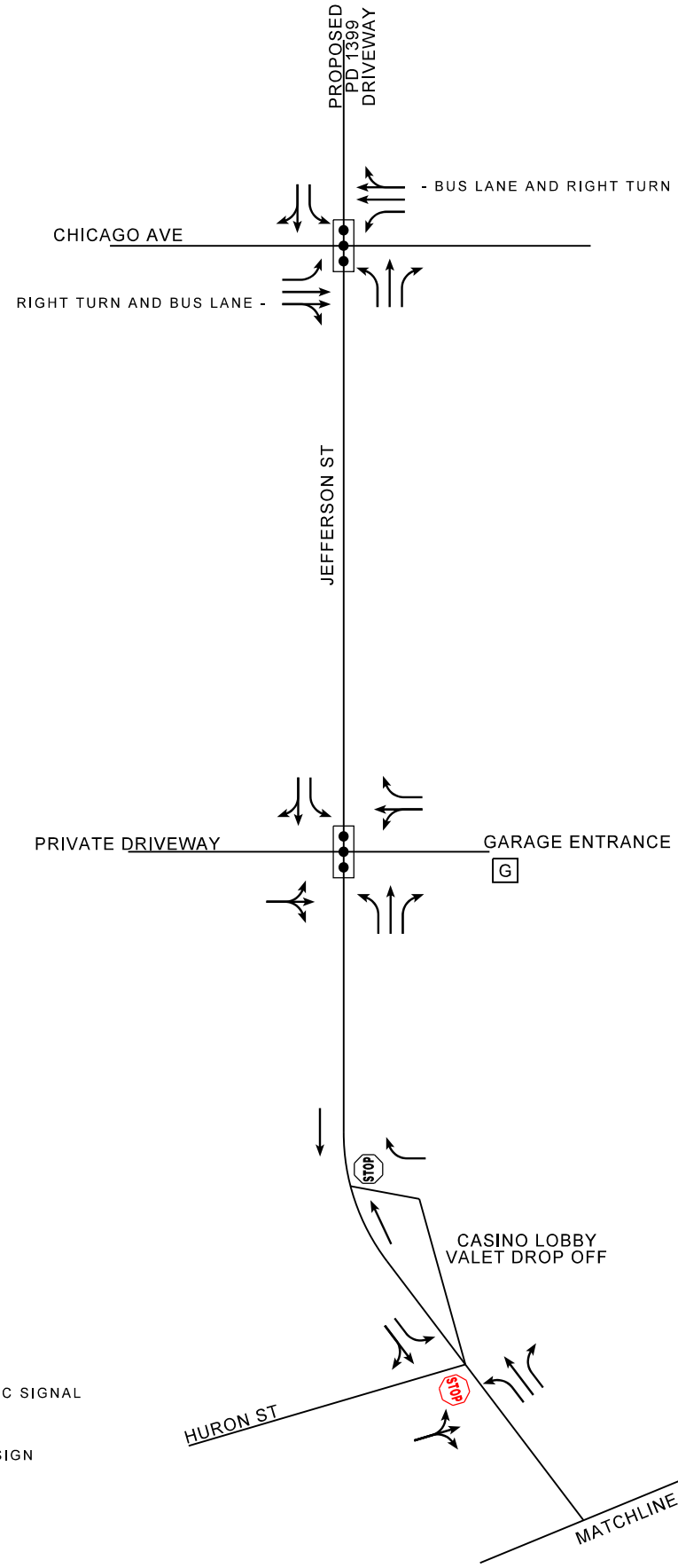
AM PEAK HOUR: 7:45 AM - 8:45 AM
PM PEAK HOUR: 5:00 PM - 6:00 PM
FRI CASINO PEAK: 8:00 PM - 9:00 PM
SAT CASINO PEAK: 8:00 PM - 9:00 PM

G - GARAGE

# BALLY'S CHICAGO CASINO

# FIGURE 8
# FUTURE WITH PD1426
# TRAFFIC VOLUMES

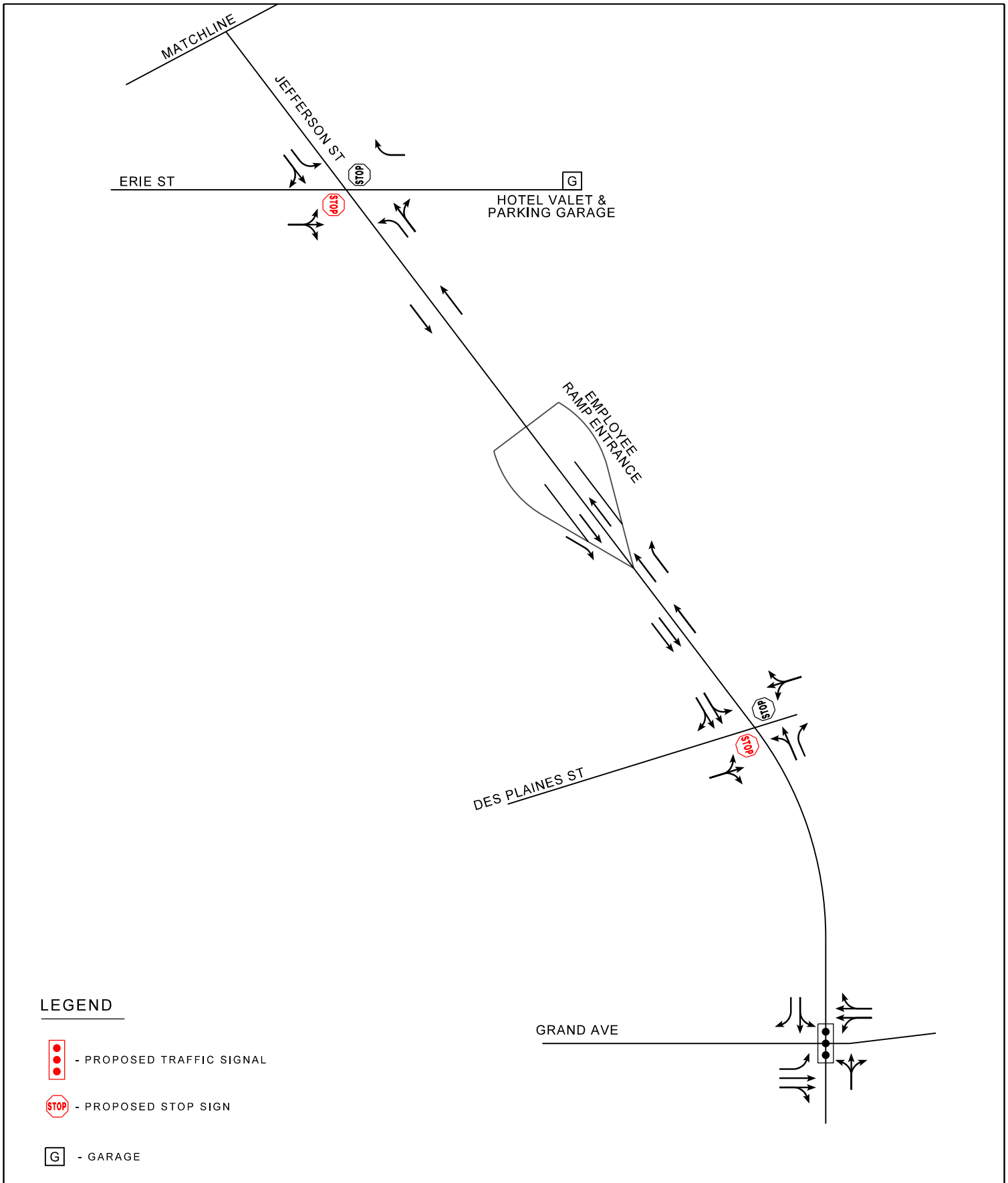
CHICAGO ILLINOIS




# BALLY'S CHICAGO CASINO

# FIGURE 9
# FUTURE WITH PD1426 LANE CONFIGURATION

CHICAGO ILLINOIS




# BALLY'S CHICAGO CASINO

# FIGURE 9
# FUTURE WITH PD1426
# LANE CONFIGURATION

CHICAGO ILLINOIS

# Capacity Analysis Worksheets
# 2026 Entertainment District

| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 1307 | 137 | 103 | 808 | 117 | 262 |
| Future Volume (vph) | 1307 | 137 | 103 | 808 | 117 | 262 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | | 55 | 95 | | 190 | 190 |
| Storage Lanes | | 1 | 1 | | 0 | 1 |
| Taper Length (ft) | | | 90 | | 75 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 0.94 | | | 0.93 | 0.97 |
| Frt | | 0.850 | | | | 0.850 |
| Flt Protected | | | 0.950 | | 0.950 | |
| Satd. Flow (prot) | 1863 | 1583 | 1770 | 1863 | 1770 | 1583 |
| Flt Permitted | | | 0.056 | | 0.950 | |
| Satd. Flow (perm) | 1863 | 1493 | 104 | 1863 | 1648 | 1530 |
| Right Turn on Red | | Yes | | | | Yes |
| Satd. Flow (RTOR) | | 27 | | | | 38 |
| Link Speed (mph) | 30 | | | 30 | 30 | |
| Link Distance (ft) | 390 | | | 893 | 363 | |
| Travel Time (s) | 8.9 | | | 20.3 | 8.3 | |
| Confl. Peds. (#/hr) | | 25 | 25 | | 25 | 25 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 1421 | 149 | 112 | 878 | 127 | 285 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 1421 | 149 | 112 | 878 | 127 | 285 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Right | Left | Left | Left | Right |
| Median Width(ft) | 12 | | | 12 | 12 | |
| Link Offset(ft) | 0 | | | 0 | 0 | |
| Crosswalk Width(ft) | 16 | | | 16 | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | | 9 | 15 | | 15 | 9 |
| Number of Detectors | 2 | 1 | 1 | 2 | 1 | 1 |
| Detector Template | Thru | Right | Left | Thru | Left | Right |
| Leading Detector (ft) | 100 | 20 | 20 | 100 | 20 | 20 |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 6 | 20 | 20 | 6 | 20 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | 94 | | | 94 | | |
| Detector 2 Size(ft) | 6 | | | 6 | | |
| Detector 2 Type | Cl+Ex | | | Cl+Ex | | |
| Detector 2 Channel | | | | | | |
| Detector 2 Extend (s) | 0.0 | | | 0.0 | | |
| Turn Type | NA | Perm | pm+pt | NA | Prot | pt+ov |

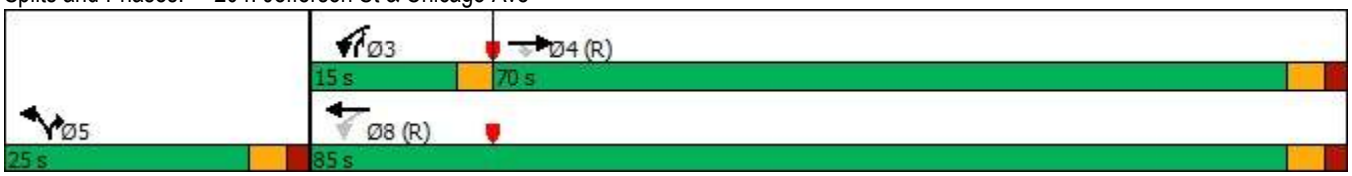
| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Protected Phases | 4 | | 3 | 8 | 5 | 5 3 |
| Permitted Phases | | 4 | 8 | | 5 | 5 3 |
| Detector Phase | 4 | 4 | 3 | 8 | 5 | 5 3 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 3.0 | 5.0 | 3.0 | |
| Minimum Split (s) | 58.0 | 58.0 | 8.0 | 58.0 | 8.0 | |
| Total Split (s) | 70.0 | 70.0 | 15.0 | 85.0 | 25.0 | |
| Total Split (%) | 63.6% | 63.6% | 13.6% | 77.3% | 22.7% | |
| Maximum Green (s) | 65.0 | 65.0 | 12.0 | 80.0 | 20.0 | |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| All-Red Time (s) | 2.0 | 2.0 | 0.0 | 2.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.0 | 5.0 | 3.0 | 5.0 | 5.0 | |
| Lead/Lag | Lag | Lag | Lead | | | |
| Lead-Lag Optimize? | Yes | Yes | Yes | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Recall Mode | C-Max | C-Max | None | C-Max | Max | |
| 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) | 68.7 | 68.7 | 82.0 | 80.0 | 20.0 | 31.3 |
| Actuated g/C Ratio | 0.62 | 0.62 | 0.75 | 0.73 | 0.18 | 0.28 |
| v/c Ratio | 1.22 | 0.16 | 0.55 | 0.65 | 0.40 | 0.60 |
| Control Delay | 117.2 | 4.2 | 47.1 | 10.1 | 40.5 | 32.0 |
| Queue Delay | 0.9 | 0.0 | 0.0 | 35.6 | 1.2 | 0.7 |
| Total Delay | 118.1 | 4.2 | 47.1 | 45.7 | 41.7 | 32.6 |
| LOS | F | A | D | D | D | C |
| Approach Delay | 107.3 | | | 45.9 | 35.4 | |
| Approach LOS | F | | | D | D | |
| 90th %ile Green (s) | 65.0 | 65.0 | 12.0 | 80.0 | 20.0 | |
| 90th %ile Term Code | Coord | Coord | Max | Coord | MaxR | |
| 70th %ile Green (s) | 67.5 | 67.5 | 9.5 | 80.0 | 20.0 | |
| 70th %ile Term Code | Coord | Coord | Gap | Coord | MaxR | |
| 50th %ile Green (s) | 69.6 | 69.6 | 7.4 | 80.0 | 20.0 | |
| 50th %ile Term Code | Coord | Coord | Gap | Coord | MaxR | |
| 30th %ile Green (s) | 70.2 | 70.2 | 6.8 | 80.0 | 20.0 | |
| 30th %ile Term Code | Coord | Coord | Gap | Coord | MaxR | |
| 10th %ile Green (s) | 71.0 | 71.0 | 6.0 | 80.0 | 20.0 | |
| 10th %ile Term Code | Coord | Coord | Gap | Coord | MaxR | |
| Queue Length 50th (ft) | ~1233 | 17 | 42 | 282 | 80 | 153 |
| Queue Length 95th (ft) | m#767 | m11 | m92 | 296 | 144 | 243 |
| Internal Link Dist (ft) | 310 | | | 813 | 283 | |
| Turn Bay Length (ft) | | 55 | 95 | | 190 | 190 |
| Base Capacity (vph) | 1162 | 942 | 259 | 1354 | 321 | 529 |
| Starvation Cap Reductn | 200 | 0 | 0 | 220 | 0 | 66 |
| Spillback Cap Reductn | 0 | 0 | 0 | 527 | 74 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 1.48 | 0.16 | 0.43 | 1.06 | 0.51 | 0.62 |

Intersection Summary

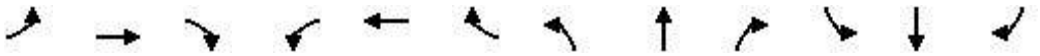
| | |
|---|---|
| Area Type: | Other |
| Cycle Length: 110 | |
| Actuated Cycle Length: 110 | |
| Offset: 16 (15%), Referenced to phase 4:EBT and 8:WBTL, Start of Green | |
| Natural Cycle: 90 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.22 | |
| Intersection Signal Delay: 76.9 | Intersection LOS: E |
| Intersection Capacity Utilization 95.7% | 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.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 204: Jefferson St & Chicago Ave



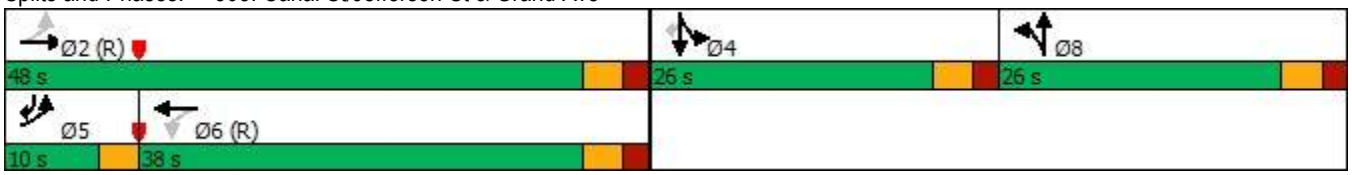
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 137 | 830 | 3 | 11 | 552 | 308 | 28 | 0 | 26 | 78 | 0 | 104 |
| Future Volume (vph) | 137 | 830 | 3 | 11 | 552 | 308 | 28 | 0 | 26 | 78 | 0 | 104 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 1 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 1 |
| Taper Length (ft) | 100 | | | 25 | | | 25 | | | 135 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 1.00 | | | 0.91 | | | 0.97 | | | | 0.95 |
| Frt | | | | | 0.947 | | | 0.935 | | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.999 | | | 0.975 | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3538 | 0 | 0 | 3036 | 0 | 0 | 1649 | 0 | 0 | 1770 | 1583 |
| Flt Permitted | 0.237 | | | | 0.941 | | | 0.975 | | | 0.950 | |
| Satd. Flow (perm) | 441 | 3538 | 0 | 0 | 2859 | 0 | 0 | 1649 | 0 | 0 | 1770 | 1508 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 110 | | | 109 | | | | 113 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 375 | | | 838 | | | 269 | | | 430 | |
| Travel Time (s) | | 8.5 | | | 19.0 | | | 6.1 | | | 9.8 | |
| Confl. Peds. (#/hr) | 101 | | 32 | 32 | | 101 | | | 34 | | | 34 |
| Confl. Bikes (#/hr) | | | 6 | | | 9 | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 149 | 902 | 3 | 12 | 600 | 335 | 30 | 0 | 28 | 85 | 0 | 113 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 149 | 905 | 0 | 0 | 947 | 0 | 0 | 58 | 0 | 0 | 85 | 113 |
| 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 | | | 0 | | | 0 | | | 0 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 |
| Detector 1 Type | 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 |
| Detector 1 Queue (s) | 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 |
| 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 | |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | pm+pt | NA | | Perm | NA | | Split | NA | | Split | NA | pm+ov |
| Protected Phases | 5 | 2 | | | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Permitted Phases | 2 | | | 6 | | | | | | | | 4 |
| Detector Phase | 5 | 2 | | 6 | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.0 | 26.0 | | 26.0 | 26.0 | | 26.0 | 26.0 | | 23.0 | 23.0 | 10.0 |
| Total Split (s) | 10.0 | 48.0 | | 38.0 | 38.0 | | 26.0 | 26.0 | | 26.0 | 26.0 | 10.0 |
| Total Split (%) | 10.0% | 48.0% | | 38.0% | 38.0% | | 26.0% | 26.0% | | 26.0% | 26.0% | 10.0% |
| Maximum Green (s) | 7.0 | 43.0 | | 33.0 | 33.0 | | 21.0 | 21.0 | | 21.0 | 21.0 | 7.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| All-Red Time (s) | 0.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 0.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Lost Time (s) | 3.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | 3.0 |
| Lead/Lag | Lead | | | Lag | Lag | | | | | | | Lead |
| Lead-Lag Optimize? | 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 |
| Recall Mode | None | C-Max | | C-Max | C-Max | | None | None | | None | None | None |
| Walk Time (s) | | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | | | |
| Flash Dont Walk (s) | | 14.0 | | 14.0 | 14.0 | | 14.0 | 14.0 | | | | |
| Pedestrian Calls (#/hr) | | 0 | | 0 | 0 | | 0 | 0 | | | | |
| Act Effct Green (s) | 75.6 | 74.6 | | | 61.8 | | | 5.6 | | | 10.1 | 19.3 |
| Actuated g/C Ratio | 0.76 | 0.75 | | | 0.62 | | | 0.06 | | | 0.10 | 0.19 |
| v/c Ratio | 0.33 | 0.34 | | | 0.52 | | | 0.30 | | | 0.47 | 0.29 |
| Control Delay | 6.2 | 4.7 | | | 12.9 | | | 5.1 | | | 50.5 | 5.9 |
| Queue Delay | 0.0 | 0.1 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Delay | 6.2 | 4.8 | | | 12.9 | | | 5.1 | | | 50.5 | 5.9 |
| LOS | A | A | | | B | | | A | | | D | A |
| Approach Delay | | 5.0 | | | 12.9 | | | 5.1 | | | 25.0 | |
| Approach LOS | | A | | | B | | | A | | | C | |
| 90th %ile Green (s) | 12.0 | 64.9 | | 49.9 | 49.9 | | 6.0 | 6.0 | | 14.1 | 14.1 | 12.0 |
| 90th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 70th %ile Green (s) | 9.7 | 67.8 | | 55.1 | 55.1 | | 5.5 | 5.5 | | 11.7 | 11.7 | 9.7 |
| 70th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 50th %ile Green (s) | 8.7 | 69.4 | | 57.7 | 57.7 | | 5.5 | 5.5 | | 10.1 | 10.1 | 8.7 |
| 50th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 30th %ile Green (s) | 7.9 | 71.0 | | 60.1 | 60.1 | | 5.5 | 5.5 | | 8.5 | 8.5 | 7.9 |
| 30th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 10th %ile Green (s) | 6.0 | 95.0 | | 86.0 | 86.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | 6.0 |
| 10th %ile Term Code | Gap | Coord | | Coord | Coord | | Skip | Skip | | Skip | Skip | Gap |
| Queue Length 50th (ft) | 19 | 92 | | | 162 | | | 0 | | | 52 | 0 |
| Queue Length 95th (ft) | 37 | 101 | | | 266 | | | 7 | | | 96 | 32 |
| Internal Link Dist (ft) | | 295 | | | 758 | | | 189 | | | 350 | |
| Turn Bay Length (ft) | 100 | | | | | | | | | | | |
| Base Capacity (vph) | 453 | 2640 | | | 1807 | | | 432 | | | 371 | 392 |
| Starvation Cap Reductn | 0 | 666 | | | 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 | 0.33 | 0.46 | | | 0.52 | | | 0.13 | | | 0.23 | 0.29 |

| Intersection Summary | | |
|---|---|---|
| Area Type: | Other | |
| Cycle Length: 100 | | |
| Actuated Cycle Length: 100 | | |
| Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green | | |
| Natural Cycle: 85 | | |
| Control Type: Actuated-Coordinated | | |
| Maximum v/c Ratio: 0.52 | | |
| Intersection Signal Delay: 10.1 | | Intersection LOS: B |
| Intersection Capacity Utilization 78.6% | | ICU Level of Service D |
| Analysis Period (min) 15 | | |

Splits and Phases: 305: Canal St/Jefferson St & Grand Ave



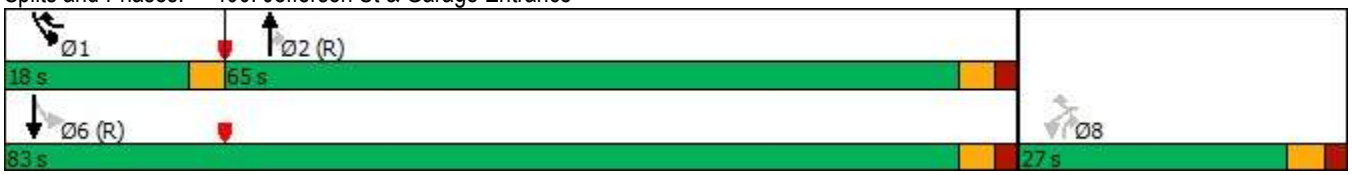
| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 103 | 202 | 176 | 202 | 118 | 122 |
| Future Volume (vph) | 103 | 202 | 176 | 202 | 118 | 122 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | 0 | | 160 | 205 | |
| Storage Lanes | 1 | 1 | | 0 | 0 | |
| Taper Length (ft) | 25 | | | | 70 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | 0.82 | 0.95 | | 0.95 | 0.98 | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1805 | 1615 | 1863 | 775 | 1805 | 1863 |
| Flt Permitted | 0.950 | | | | 0.609 | |
| Satd. Flow (perm) | 1480 | 1534 | 1863 | 736 | 1133 | 1863 |
| Right Turn on Red | | Yes | | Yes | | |
| Satd. Flow (RTOR) | | 220 | | 220 | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 244 | | 120 | | | 363 |
| Travel Time (s) | 5.5 | | 2.7 | | | 8.3 |
| Confl. Peds. (#/hr) | 59 | 10 | | 10 | 10 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 0% | 0% | 2% | 0% | 0% | 2% |
| Parking (#/hr) | | | | 84 | | |
| Adj. Flow (vph) | 112 | 220 | 191 | 220 | 128 | 133 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 112 | 220 | 191 | 220 | 128 | 133 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Right | Left | Right | Left | Left |
| Median Width(ft) | 12 | | 12 | | | 12 |
| Link Offset(ft) | 0 | | 0 | | | 0 |
| Crosswalk Width(ft) | 16 | | 16 | | | 16 |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 2.41 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | 9 | | 9 | 15 | |
| Number of Detectors | 1 | 1 | 2 | 1 | 1 | 2 |
| Detector Template | Left | Right | Thru | Right | Left | Thru |
| Leading Detector (ft) | 20 | 20 | 100 | 20 | 20 | 100 |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 20 | 6 | 20 | 20 | 6 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | 94 | | | 94 |
| Detector 2 Size(ft) | | | 6 | | | 6 |
| Detector 2 Type | | | Cl+Ex | | | Cl+Ex |
| Detector 2 Channel | | | | | | |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Detector 2 Extend (s) | | | 0.0 | | | 0.0 |
| Turn Type | Perm | pm+ov | NA | custom | pm+pt | NA |
| Protected Phases | | 1 | 2 | | 1 | 6 |
| Permitted Phases | 8 | 8 | | 2 8 | 6 | |
| Detector Phase | 8 | 1 | 2 | 2 8 | 1 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 1.0 | | 5.0 | 5.0 |
| Minimum Split (s) | 23.0 | 16.0 | 23.0 | | 16.0 | 23.0 |
| Total Split (s) | 27.0 | 18.0 | 65.0 | | 18.0 | 83.0 |
| Total Split (%) | 24.5% | 16.4% | 59.1% | | 16.4% | 75.5% |
| Maximum Green (s) | 22.0 | 15.0 | 60.0 | | 15.0 | 78.0 |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| All-Red Time (s) | 2.0 | 0.0 | 2.0 | | 0.0 | 2.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 5.0 | 3.0 | 5.0 | | 3.0 | 5.0 |
| Lead/Lag | | Lead | Lag | | Lead | |
| Lead-Lag Optimize? | | Yes | Yes | | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| Recall Mode | Max | None | C-Max | | None | C-Max |
| 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) | 22.0 | 31.8 | 67.2 | 94.2 | 80.0 | 78.0 |
| Actuated g/C Ratio | 0.20 | 0.29 | 0.61 | 0.86 | 0.73 | 0.71 |
| v/c Ratio | 0.38 | 0.36 | 0.17 | 0.33 | 0.15 | 0.10 |
| Control Delay | 42.5 | 5.4 | 9.9 | 1.6 | 5.3 | 5.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 42.5 | 5.4 | 9.9 | 1.6 | 5.3 | 5.8 |
| LOS | D | A | A | A | A | A |
| Approach Delay | 17.9 | | 5.5 | | | 5.5 |
| Approach LOS | B | | A | | | A |
| 90th %ile Green (s) | 22.0 | 9.4 | 65.6 | | 9.4 | 78.0 |
| 90th %ile Term Code | MaxR | Gap | Coord | | Gap | Coord |
| 70th %ile Green (s) | 22.0 | 8.4 | 66.6 | | 8.4 | 78.0 |
| 70th %ile Term Code | MaxR | Gap | Coord | | Gap | Coord |
| 50th %ile Green (s) | 22.0 | 7.7 | 67.3 | | 7.7 | 78.0 |
| 50th %ile Term Code | MaxR | Gap | Coord | | Gap | Coord |
| 30th %ile Green (s) | 22.0 | 7.1 | 67.9 | | 7.1 | 78.0 |
| 30th %ile Term Code | MaxR | Gap | Coord | | Gap | Coord |
| 10th %ile Green (s) | 22.0 | 6.2 | 68.8 | | 6.2 | 78.0 |
| 10th %ile Term Code | MaxR | Gap | Coord | | Gap | Coord |
| Queue Length 50th (ft) | 69 | 0 | 54 | 0 | 27 | 30 |
| Queue Length 95th (ft) | 125 | 52 | 91 | 10 | 45 | 47 |
| Internal Link Dist (ft) | 164 | | 40 | | | 283 |
| Turn Bay Length (ft) | | | | 160 | 205 | |
| Base Capacity (vph) | 296 | 696 | 1138 | 662 | 915 | 1321 |
| 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 |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Reduced v/c Ratio | 0.38 | 0.32 | 0.17 | 0.33 | 0.14 | 0.10 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 68 (62%), Referenced to phase 2:NBT and 6:SBTL, Start of Green | | | |
| Natural Cycle: 65 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.38 | | | |
| Intersection Signal Delay: 9.6 | | Intersection LOS: A | |
| Intersection Capacity Utilization 48.2% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 400: Jefferson St & Garage Entrance



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | WBL | WBR | SEL | SET | NWT | NWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 1 | 27 | 198 | 378 | 49 |
| Future Vol, veh/h | 0 | 1 | 27 | 198 | 378 | 49 |
| Conflicting Peds, #/hr | 0 | 0 | 10 | 0 | 0 | 30 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | 100 | - | - | 50 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 0 | 2 | 2 | 0 |
| Mvmt Flow | 0 | 1 | 29 | 215 | 411 | 53 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 441 | 494 | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.22 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.318 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 0 | 616 | 1080 | - | - | - |
| Stage 1 | 0 | - | - | - | - | - |
| Stage 2 | 0 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | - | 598 | 1049 | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | SE | NW |
|---|---|---|---|
| HCM Control Delay, s | 11 | 1 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NWT | NWR | WBLn1 | SEL | SET |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 598 | 1049 | - |
| HCM Lane V/C Ratio | - | - | 0.002 | 0.028 | - |
| HCM Control Delay (s) | - | - | 11 | 8.5 | - |
| HCM Lane LOS | - | - | B | A | - |
| HCM 95th %tile Q(veh) | - | - | 0 | 0.1 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 1.4 |

| Movement | WBL | WBR | SEL | SET | NWT | NWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 57 | 29 | 166 | 374 | 52 |
| Future Vol, veh/h | 0 | 57 | 29 | 166 | 374 | 52 |
| Conflicting Peds, #/hr | 0 | 10 | 10 | 0 | 0 | 15 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | 100 | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 2 | 0 |
| Mvmt Flow | 0 | 62 | 32 | 180 | 407 | 57 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 461 | 479 | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 0 | 605 | 1094 | - | - | - |
| Stage 1 | 0 | - | - | - | - | - |
| Stage 2 | 0 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | - | 588 | 1073 | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | SE | NW |
|---|---|---|---|
| HCM Control Delay, s | 11.8 | 1.3 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NWT | NWR | WBLn1 | SEL | SET |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 588 | 1073 | - |
| HCM Lane V/C Ratio | - | - | 0.105 | 0.029 | - |
| HCM Control Delay (s) | - | - | 11.8 | 8.5 | - |
| HCM Lane LOS | - | - | B | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.4 | 0.1 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | WBL | WBR | SEL | SET | NWT | NWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 0 | 180 | 445 | 0 |
| Future Vol, veh/h | 0 | 0 | 0 | 180 | 445 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | 100 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 0 | 196 | 484 | 0 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 582 | 484 | 484 | 0 | - | 0 |
| Stage 1 | 484 | - | - | - | - | - |
| Stage 2 | 98 | - | - | - | - | - |
| Critical Hdwy | 6.63 | 6.23 | 4.13 | - | - | - |
| Critical Hdwy Stg 1 | 5.43 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.83 | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 3.319 | 2.219 | - | - | - |
| Pot Cap-1 Maneuver | 459 | 582 | 1077 | - | - | - |
| Stage 1 | 619 | - | - | - | - | - |
| Stage 2 | 915 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 459 | 582 | 1077 | - | - | - |
| Mov Cap-2 Maneuver | 459 | - | - | - | - | - |
| Stage 1 | 619 | - | - | - | - | - |
| Stage 2 | 915 | - | - | - | - | - |

| Approach | WB | SE | NW |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NWT | NWR | WBLn1 | SEL | SET |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 1077 | - |
| HCM Lane V/C Ratio | - | - | - | - | - |
| HCM Control Delay (s) | - | - | 0 | 0 | - |
| HCM Lane LOS | - | - | A | A | - |
| HCM 95th %tile Q(veh) | - | - | - | 0 | - |

| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 1087 | 181 | 136 | 1329 | 182 | 411 |
| Future Volume (vph) | 1087 | 181 | 136 | 1329 | 182 | 411 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | | 55 | 95 | | 190 | 190 |
| Storage Lanes | | 1 | 1 | | 0 | 1 |
| Taper Length (ft) | | | 90 | | 75 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 0.90 | | | 0.86 | 0.94 |
| Frt | | 0.850 | | | | 0.850 |
| Flt Protected | | | 0.950 | | 0.950 | |
| Satd. Flow (prot) | 1863 | 1583 | 1770 | 1863 | 1770 | 1583 |
| Flt Permitted | | | 0.056 | | 0.950 | |
| Satd. Flow (perm) | 1863 | 1422 | 104 | 1863 | 1526 | 1489 |
| Right Turn on Red | | Yes | | | | Yes |
| Satd. Flow (RTOR) | | 46 | | | | 68 |
| Link Speed (mph) | 30 | | | 30 | 30 | |
| Link Distance (ft) | 390 | | | 893 | 363 | |
| Travel Time (s) | 8.9 | | | 20.3 | 8.3 | |
| Confl. Peds. (#/hr) | | 50 | 50 | | 50 | 50 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 1182 | 197 | 148 | 1445 | 198 | 447 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 1182 | 197 | 148 | 1445 | 198 | 447 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Right | Left | Left | Left | Right |
| Median Width(ft) | 12 | | | 12 | 12 | |
| Link Offset(ft) | 0 | | | 0 | 0 | |
| Crosswalk Width(ft) | 16 | | | 16 | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | | 9 | 15 | | 15 | 9 |
| Number of Detectors | 2 | 1 | 1 | 2 | 1 | 1 |
| Detector Template | Thru | Right | Left | Thru | Left | Right |
| Leading Detector (ft) | 100 | 20 | 20 | 100 | 20 | 20 |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 6 | 20 | 20 | 6 | 20 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | 94 | | | 94 | | |
| Detector 2 Size(ft) | 6 | | | 6 | | |
| Detector 2 Type | Cl+Ex | | | Cl+Ex | | |
| Detector 2 Channel | | | | | | |
| Detector 2 Extend (s) | 0.0 | | | 0.0 | | |
| Turn Type | NA | Perm | pm+pt | NA | Prot | pt+ov |

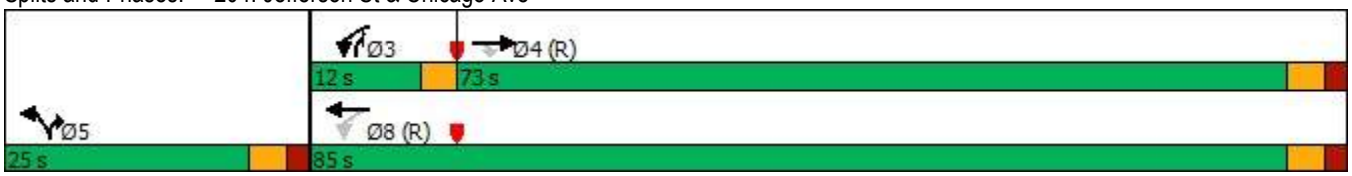
| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Protected Phases | 4 | | 3 | 8 | 5 | 5 3 |
| Permitted Phases | | 4 | 8 | | 5 | 5 3 |
| Detector Phase | 4 | 4 | 3 | 8 | 5 | 5 3 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | |
| Minimum Split (s) | 23.0 | 23.0 | 9.5 | 23.0 | 10.0 | |
| Total Split (s) | 73.0 | 73.0 | 12.0 | 85.0 | 25.0 | |
| Total Split (%) | 66.4% | 66.4% | 10.9% | 77.3% | 22.7% | |
| Maximum Green (s) | 68.0 | 68.0 | 9.0 | 80.0 | 20.0 | |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| All-Red Time (s) | 2.0 | 2.0 | 0.0 | 2.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.0 | 5.0 | 3.0 | 5.0 | 5.0 | |
| Lead/Lag | Lag | Lag | Lead | | | |
| Lead-Lag Optimize? | Yes | Yes | Yes | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Recall Mode | C-Max | C-Max | None | C-Max | Max | |
| 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) | 68.0 | 68.0 | 82.0 | 80.0 | 20.0 | 32.0 |
| Actuated g/C Ratio | 0.62 | 0.62 | 0.75 | 0.73 | 0.18 | 0.29 |
| v/c Ratio | 1.03 | 0.22 | 0.69 | 1.07 | 0.62 | 0.88 |
| Control Delay | 55.8 | 7.7 | 25.6 | 62.8 | 50.8 | 56.6 |
| Queue Delay | 28.8 | 0.0 | 0.0 | 14.1 | 0.0 | 6.3 |
| Total Delay | 84.6 | 7.7 | 25.6 | 76.9 | 50.8 | 62.8 |
| LOS | F | A | C | E | D | E |
| Approach Delay | 73.6 | | | 72.1 | 59.1 | |
| Approach LOS | E | | | E | E | |
| 90th %ile Green (s) | 68.0 | 68.0 | 9.0 | 80.0 | 20.0 | |
| 90th %ile Term Code | Coord | Coord | Max | Coord | MaxR | |
| 70th %ile Green (s) | 68.0 | 68.0 | 9.0 | 80.0 | 20.0 | |
| 70th %ile Term Code | Coord | Coord | Max | Coord | MaxR | |
| 50th %ile Green (s) | 68.0 | 68.0 | 9.0 | 80.0 | 20.0 | |
| 50th %ile Term Code | Coord | Coord | Max | Coord | MaxR | |
| 30th %ile Green (s) | 68.0 | 68.0 | 9.0 | 80.0 | 20.0 | |
| 30th %ile Term Code | Coord | Coord | Max | Coord | MaxR | |
| 10th %ile Green (s) | 68.0 | 68.0 | 9.0 | 80.0 | 20.0 | |
| 10th %ile Term Code | Coord | Coord | Max | Coord | MaxR | |
| Queue Length 50th (ft) | ~893 | 42 | 29 | ~1161 | 140 | 284 |
| Queue Length 95th (ft) | #1148 | 77 | m40 | m#1251 | 198 | #455 |
| Internal Link Dist (ft) | 310 | | | 813 | 283 | |
| Turn Bay Length (ft) | | 55 | 95 | | 190 | 190 |
| Base Capacity (vph) | 1151 | 896 | 213 | 1354 | 321 | 508 |
| Starvation Cap Reductn | 242 | 0 | 0 | 210 | 0 | 36 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 1.30 | 0.22 | 0.69 | 1.26 | 0.62 | 0.95 |

Intersection Summary

| | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 13 (12%), Referenced to phase 4:EBT and 8:WBTL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.07 | | | |
| Intersection Signal Delay: 70.4 | | Intersection LOS: E | |
| Intersection Capacity Utilization 95.0% | | 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.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 204: Jefferson St & Chicago Ave

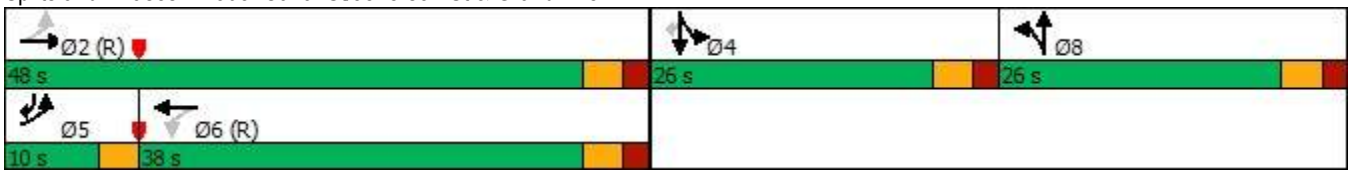


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 181 | 707 | 7 | 15 | 705 | 407 | 22 | 0 | 14 | 122 | 0 | 165 |
| Future Volume (vph) | 181 | 707 | 7 | 15 | 705 | 407 | 22 | 0 | 14 | 122 | 0 | 165 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 1 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 1 |
| Taper Length (ft) | 100 | | | 25 | | | 25 | | | 135 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 1.00 | | | 0.86 | | | 0.97 | | | 0.93 | |
| Frt | | 0.998 | | | 0.946 | | | 0.948 | | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.999 | | | 0.970 | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3528 | 0 | 0 | 2874 | 0 | 0 | 1660 | 0 | 0 | 1770 | 1583 |
| Flt Permitted | 0.130 | | | | 0.940 | | | 0.970 | | | 0.950 | |
| Satd. Flow (perm) | 242 | 3528 | 0 | 0 | 2704 | 0 | 0 | 1660 | 0 | 0 | 1652 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 1 | | | 118 | | | 109 | | | | 179 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 375 | | | 838 | | | 269 | | | 430 | |
| Travel Time (s) | | 8.5 | | | 19.0 | | | 6.1 | | | 9.8 | |
| Confl. Peds. (#/hr) | 149 | | 35 | 35 | | 149 | | | 49 | 49 | | |
| Confl. Bikes (#/hr) | | | 2 | | | 30 | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 197 | 768 | 8 | 16 | 766 | 442 | 24 | 0 | 15 | 133 | 0 | 179 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 197 | 776 | 0 | 0 | 1224 | 0 | 0 | 39 | 0 | 0 | 133 | 179 |
| 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 | | | 0 | | | 0 | | | 0 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 |
| Detector 1 Type | 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 |
| Detector 1 Queue (s) | 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 |
| 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 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | pm+pt | NA | | Perm | NA | | Split | NA | | Split | NA | pm+ov |
| Protected Phases | 5 | 2 | | | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Permitted Phases | 2 | | | 6 | | | | | | | | 4 |
| Detector Phase | 5 | 2 | | 6 | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.0 | 26.0 | | 26.0 | 26.0 | | 26.0 | 26.0 | | 23.0 | 23.0 | 10.0 |
| Total Split (s) | 10.0 | 48.0 | | 38.0 | 38.0 | | 26.0 | 26.0 | | 26.0 | 26.0 | 10.0 |
| Total Split (%) | 10.0% | 48.0% | | 38.0% | 38.0% | | 26.0% | 26.0% | | 26.0% | 26.0% | 10.0% |
| Maximum Green (s) | 7.0 | 43.0 | | 33.0 | 33.0 | | 21.0 | 21.0 | | 21.0 | 21.0 | 7.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| All-Red Time (s) | 0.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 0.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Lost Time (s) | 3.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | 3.0 |
| Lead/Lag | Lead | | | Lag | Lag | | | | | | | Lead |
| Lead-Lag Optimize? | 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 |
| Recall Mode | None | C-Max | | C-Max | C-Max | | None | None | | None | None | None |
| Walk Time (s) | | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | | | |
| Flash Dont Walk (s) | | 14.0 | | 14.0 | 14.0 | | 14.0 | 14.0 | | | | |
| Pedestrian Calls (#/hr) | | 0 | | 0 | 0 | | 0 | 0 | | | | |
| Act Effct Green (s) | 72.9 | 70.9 | | | 54.9 | | | 5.5 | | | 12.8 | 29.0 |
| Actuated g/C Ratio | 0.73 | 0.71 | | | 0.55 | | | 0.06 | | | 0.13 | 0.29 |
| v/c Ratio | 0.53 | 0.31 | | | 0.80 | | | 0.20 | | | 0.59 | 0.31 |
| Control Delay | 22.6 | 5.7 | | | 23.7 | | | 2.3 | | | 51.1 | 3.8 |
| Queue Delay | 0.0 | 0.1 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Delay | 22.6 | 5.8 | | | 23.7 | | | 2.4 | | | 51.1 | 3.9 |
| LOS | C | A | | | C | | | A | | | D | A |
| Approach Delay | | 9.2 | | | 23.7 | | | 2.4 | | | 24.0 | |
| Approach LOS | | A | | | C | | | A | | | C | |
| 90th %ile Green (s) | 16.2 | 61.8 | | 42.6 | 42.6 | | 5.5 | 5.5 | | 17.7 | 17.7 | 16.2 |
| 90th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 70th %ile Green (s) | 13.6 | 64.7 | | 48.1 | 48.1 | | 5.5 | 5.5 | | 14.8 | 14.8 | 13.6 |
| 70th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 50th %ile Green (s) | 12.4 | 66.7 | | 51.3 | 51.3 | | 5.5 | 5.5 | | 12.8 | 12.8 | 12.4 |
| 50th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 30th %ile Green (s) | 11.5 | 79.2 | | 64.7 | 64.7 | | 0.0 | 0.0 | | 10.8 | 10.8 | 11.5 |
| 30th %ile Term Code | Gap | Coord | | Coord | Coord | | Skip | Skip | | Gap | Gap | Gap |
| 10th %ile Green (s) | 11.5 | 82.1 | | 67.6 | 67.6 | | 0.0 | 0.0 | | 7.9 | 7.9 | 11.5 |
| 10th %ile Term Code | Gap | Coord | | Coord | Coord | | Skip | Skip | | Gap | Gap | Gap |
| Queue Length 50th (ft) | 44 | 97 | | | 310 | | | 0 | | | 81 | 0 |
| Queue Length 95th (ft) | 142 | 102 | | | #541 | | | 0 | | | 135 | 33 |
| Internal Link Dist (ft) | | 295 | | | 758 | | | 189 | | | 350 | |
| Turn Bay Length (ft) | 100 | | | | | | | | | | | |
| Base Capacity (vph) | 375 | 2501 | | | 1536 | | | 434 | | | 371 | 586 |
| Starvation Cap Reductn | 0 | 702 | | | 0 | | | 0 | | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | | 3 | | | 33 | | | 0 | 20 |
| Storage Cap Reductn | 0 | 0 | | | 0 | | | 0 | | | 0 | 0 |
| Reduced v/c Ratio | 0.53 | 0.43 | | | 0.80 | | | 0.10 | | | 0.36 | 0.32 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 100 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.80 | | | |
| Intersection Signal Delay: 17.9 | | Intersection LOS: B | |
| Intersection Capacity Utilization 83.9% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |
| # 95th percentile volume exceeds capacity, queue may be longer. | | | |
| Queue shown is maximum after two cycles. | | | |

Splits and Phases: 305: Canal St/Jefferson St & Grand Ave



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 170 | 329 | 264 | 257 | 149 | 168 |
| Future Volume (vph) | 170 | 329 | 264 | 257 | 149 | 168 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | 0 | | 160 | 205 | |
| Storage Lanes | 1 | 1 | | 0 | 0 | |
| Taper Length (ft) | 25 | | | | 70 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | 0.74 | 0.92 | | 0.92 | 0.97 | |
| Frt | | 0.850 | | 0.850 | | |
| Flt Protected | 0.950 | | | | 0.950 | |
| Satd. Flow (prot) | 1805 | 1615 | 1863 | 646 | 1805 | 1863 |
| Flt Permitted | 0.950 | | | | 0.526 | |
| Satd. Flow (perm) | 1342 | 1486 | 1863 | 594 | 967 | 1863 |
| Right Turn on Red | | Yes | | Yes | | |
| Satd. Flow (RTOR) | | 358 | | 279 | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 244 | | 120 | | | 363 |
| Travel Time (s) | 5.5 | | 2.7 | | | 8.3 |
| Confl. Peds. (#/hr) | 84 | 20 | | 20 | 20 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 0% | 0% | 2% | 0% | 0% | 2% |
| Parking (#/hr) | | | | 100 | | |
| Adj. Flow (vph) | 185 | 358 | 287 | 279 | 162 | 183 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 185 | 358 | 287 | 279 | 162 | 183 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Right | Left | Right | Left | Left |
| Median Width(ft) | 12 | | 12 | | | 12 |
| Link Offset(ft) | 0 | | 0 | | | 0 |
| Crosswalk Width(ft) | 16 | | 16 | | | 16 |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 2.95 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | 9 | | 9 | 15 | |
| Number of Detectors | 1 | 1 | 2 | 1 | 1 | 2 |
| Detector Template | Left | Right | Thru | Right | Left | Thru |
| Leading Detector (ft) | 20 | 20 | 100 | 20 | 20 | 100 |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 20 | 6 | 20 | 20 | 6 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | | | 94 | | | 94 |
| Detector 2 Size(ft) | | | 6 | | | 6 |
| Detector 2 Type | | | Cl+Ex | | | Cl+Ex |
| Detector 2 Channel | | | | | | |

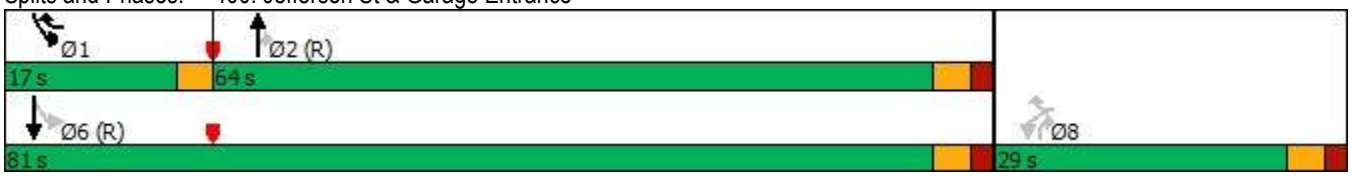
| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Detector 2 Extend (s) | | | 0.0 | | | 0.0 |
| Turn Type | Perm | pm+ov | NA | custom | pm+pt | NA |
| Protected Phases | | 1 | 2 | | 1 | 6 |
| Permitted Phases | 8 | 8 | | 2 8 | 6 | |
| Detector Phase | 8 | 1 | 2 | 2 8 | 1 | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 |
| Minimum Split (s) | 23.0 | 16.0 | 23.0 | | 16.0 | 23.0 |
| Total Split (s) | 29.0 | 17.0 | 64.0 | | 17.0 | 81.0 |
| Total Split (%) | 26.4% | 15.5% | 58.2% | | 15.5% | 73.6% |
| Maximum Green (s) | 24.0 | 14.0 | 59.0 | | 14.0 | 76.0 |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| All-Red Time (s) | 2.0 | 0.0 | 2.0 | | 0.0 | 2.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 |
| Total Lost Time (s) | 5.0 | 3.0 | 5.0 | | 3.0 | 5.0 |
| Lead/Lag | | Lead | Lag | | Lead | |
| Lead-Lag Optimize? | | Yes | Yes | | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | | 3.0 | 3.0 |
| Recall Mode | Max | None | C-Max | | None | C-Max |
| 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 | 34.8 | 64.2 | 93.2 | 78.0 | 76.0 |
| Actuated g/C Ratio | 0.22 | 0.32 | 0.58 | 0.85 | 0.71 | 0.69 |
| v/c Ratio | 0.63 | 0.49 | 0.26 | 0.51 | 0.22 | 0.14 |
| Control Delay | 50.0 | 5.1 | 12.4 | 3.7 | 2.4 | 2.5 |
| Queue Delay | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 50.0 | 5.9 | 12.4 | 3.7 | 2.4 | 2.5 |
| LOS | D | A | B | A | A | A |
| Approach Delay | 20.9 | | 8.1 | | | 2.5 |
| Approach LOS | C | | A | | | A |
| 90th %ile Green (s) | 24.0 | 11.7 | 61.3 | | 11.7 | 76.0 |
| 90th %ile Term Code | MaxR | Gap | Coord | | Gap | Coord |
| 70th %ile Green (s) | 24.0 | 9.4 | 63.6 | | 9.4 | 76.0 |
| 70th %ile Term Code | MaxR | Gap | Coord | | Gap | Coord |
| 50th %ile Green (s) | 24.0 | 8.6 | 64.4 | | 8.6 | 76.0 |
| 50th %ile Term Code | MaxR | Gap | Coord | | Gap | Coord |
| 30th %ile Green (s) | 24.0 | 7.8 | 65.2 | | 7.8 | 76.0 |
| 30th %ile Term Code | MaxR | Gap | Coord | | Gap | Coord |
| 10th %ile Green (s) | 24.0 | 6.7 | 66.3 | | 6.7 | 76.0 |
| 10th %ile Term Code | MaxR | Gap | Coord | | Gap | Coord |
| Queue Length 50th (ft) | 119 | 0 | 93 | 0 | 10 | 14 |
| Queue Length 95th (ft) | 198 | 59 | 152 | 13 | m12 | m17 |
| Internal Link Dist (ft) | 164 | | 40 | | | 283 |
| Turn Bay Length (ft) | | | | 160 | 205 | |
| Base Capacity (vph) | 292 | 784 | 1086 | 545 | 792 | 1287 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 186 | 64 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|---|---|---|---|---|---|---|
| Reduced v/c Ratio | 0.63 | 0.60 | 0.28 | 0.51 | 0.20 | 0.14 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 22 (20%), Referenced to phase 2:NBT and 6:SBTL, Start of Green | | | |
| Natural Cycle: 65 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.63 | | | |
| Intersection Signal Delay: 11.6 | | Intersection LOS: B | |
| Intersection Capacity Utilization 49.9% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 400: Jefferson St & Garage Entrance



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.3 |

| Movement | WBL | WBR | SEL | SET | NWT | NWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 1 | 34 | 304 | 521 | 64 |
| Future Vol, veh/h | 0 | 1 | 34 | 304 | 521 | 64 |
| Conflicting Peds, #/hr | 0 | 0 | 20 | 0 | 0 | 42 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | 100 | - | - | 50 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 0 | 2 | 2 | 0 |
| Mvmt Flow | 0 | 1 | 37 | 330 | 566 | 70 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 608 | 678 | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.22 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.318 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 0 | 496 | 923 | - | - | - |
| Stage 1 | 0 | - | - | - | - | - |
| Stage 2 | 0 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | - | 476 | 886 | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | SE | NW |
|---|---|---|---|
| HCM Control Delay, s | 12.6 | 0.9 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NWT | NWR | WBLn1 | SEL | SET |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 476 | 886 | - |
| HCM Lane V/C Ratio | - | - | 0.002 | 0.042 | - |
| HCM Control Delay (s) | - | - | 12.6 | 9.2 | - |
| HCM Lane LOS | - | - | B | A | - |
| HCM 95th %tile Q(veh) | - | - | 0 | 0.1 | - |

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

| Movement | WBL | WBR | SEL | SET | NWT | NWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 91 | 39 | 265 | 495 | 69 |
| Future Vol, veh/h | 0 | 91 | 39 | 265 | 495 | 69 |
| Conflicting Peds, #/hr | 0 | 20 | 20 | 0 | 0 | 21 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | 100 | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 2 | 0 |
| Mvmt Flow | 0 | 99 | 42 | 288 | 538 | 75 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 617 | 634 | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 0 | 494 | 959 | - | - | - |
| Stage 1 | 0 | - | - | - | - | - |
| Stage 2 | 0 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | - | 472 | 933 | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | SE | NW |
|---|---|---|---|
| HCM Control Delay, s | 14.6 | 1.2 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NWT | NWR | WBLn1 | SEL | SET |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 472 | 933 | - |
| HCM Lane V/C Ratio | - | - | 0.21 | 0.045 | - |
| HCM Control Delay (s) | - | - | 14.6 | 9 | - |
| HCM Lane LOS | - | - | B | A | - |
| HCM 95th %tile Q(veh) | - | - | 0.8 | 0.1 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | WBL | WBR | SEL | SET | NWT | NWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 0 | 288 | 588 | 0 |
| Future Vol, veh/h | 0 | 0 | 0 | 288 | 588 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | 100 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 0 | 313 | 639 | 0 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 796 | 639 | 639 | 0 | - | 0 |
| Stage 1 | 639 | - | - | - | - | - |
| Stage 2 | 157 | - | - | - | - | - |
| Critical Hdwy | 6.63 | 6.23 | 4.13 | - | - | - |
| Critical Hdwy Stg 1 | 5.43 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.83 | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 3.319 | 2.219 | - | - | - |
| Pot Cap-1 Maneuver | 340 | 475 | 943 | - | - | - |
| Stage 1 | 525 | - | - | - | - | - |
| Stage 2 | 856 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 340 | 475 | 943 | - | - | - |
| Mov Cap-2 Maneuver | 340 | - | - | - | - | - |
| Stage 1 | 525 | - | - | - | - | - |
| Stage 2 | 856 | - | - | - | - | - |

| Approach | WB | SE | NW |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NWT | NWR | WBLn1 | SEL | SET |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 943 | - |
| HCM Lane V/C Ratio | - | - | - | - | - |
| HCM Control Delay (s) | - | - | 0 | 0 | - |
| HCM Lane LOS | - | - | A | A | - |
| HCM 95th %tile Q(veh) | - | - | - | 0 | - |

| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 811 | 238 | 179 | 576 | 233 | 525 |
| Future Volume (vph) | 811 | 238 | 179 | 576 | 233 | 525 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | | 55 | 95 | | 190 | 190 |
| Storage Lanes | | 1 | 1 | | 0 | 1 |
| Taper Length (ft) | | | 90 | | 75 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 0.90 | | | 0.91 | 0.96 |
| Frt | | 0.850 | | | | 0.850 |
| Flt Protected | | | 0.950 | | 0.950 | |
| Satd. Flow (prot) | 1863 | 1583 | 1770 | 1863 | 1770 | 1583 |
| Flt Permitted | | | 0.072 | | 0.950 | |
| Satd. Flow (perm) | 1863 | 1422 | 134 | 1863 | 1613 | 1519 |
| Right Turn on Red | | Yes | | | | Yes |
| Satd. Flow (RTOR) | | 53 | | | | 47 |
| Link Speed (mph) | 30 | | | 30 | 30 | |
| Link Distance (ft) | 390 | | | 893 | 363 | |
| Travel Time (s) | 8.9 | | | 20.3 | 8.3 | |
| Confl. Peds. (#/hr) | | 50 | 50 | | 50 | 50 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 882 | 259 | 195 | 626 | 253 | 571 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 882 | 259 | 195 | 626 | 253 | 571 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Right | Left | Left | Left | Right |
| Median Width(ft) | 12 | | | 12 | 12 | |
| Link Offset(ft) | 0 | | | 0 | 0 | |
| Crosswalk Width(ft) | 16 | | | 16 | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Number of Detectors | 2 | 1 | 1 | 2 | 1 | 1 |
| Detector Template | Thru | Right | Left | Thru | Left | Right |
| Leading Detector (ft) | 100 | 20 | 20 | 100 | 20 | 20 |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 6 | 20 | 20 | 6 | 20 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | 94 | | | 94 | | |
| Detector 2 Size(ft) | 6 | | | 6 | | |
| Detector 2 Type | Cl+Ex | | | Cl+Ex | | |
| Detector 2 Channel | | | | | | |
| Detector 2 Extend (s) | 0.0 | | | 0.0 | | |
| Turn Type | NA | Perm | pm+pt | NA | Prot | pt+ov |
| Protected Phases | 4 | | 3 | 8 | 5 | 5 3 |

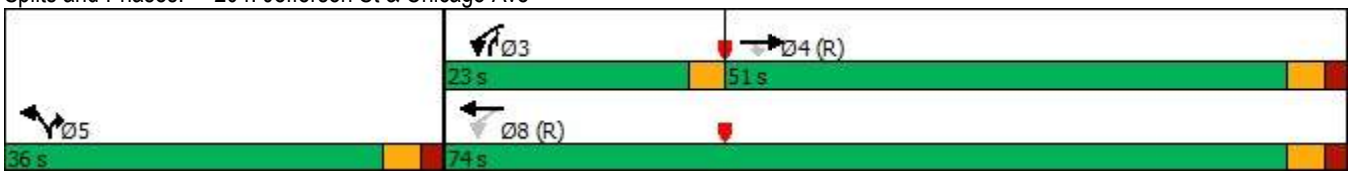
| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Permitted Phases | | 4 | 8 | | 5 | 5 3 |
| Detector Phase | 4 | 4 | 3 | 8 | 5 | 5 3 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | |
| Minimum Split (s) | 44.0 | 44.0 | 16.0 | 54.0 | 16.0 | |
| Total Split (s) | 51.0 | 51.0 | 23.0 | 74.0 | 36.0 | |
| Total Split (%) | 46.4% | 46.4% | 20.9% | 67.3% | 32.7% | |
| Maximum Green (s) | 46.0 | 46.0 | 20.0 | 69.0 | 31.0 | |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| All-Red Time (s) | 2.0 | 2.0 | 0.0 | 2.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.0 | 5.0 | 3.0 | 5.0 | 5.0 | |
| Lead/Lag | Lag | Lag | Lead | | | |
| Lead-Lag Optimize? | Yes | Yes | Yes | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Recall Mode | C-Max | C-Max | None | C-Max | Max | |
| 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) | 52.6 | 52.6 | 71.0 | 69.0 | 31.0 | 47.4 |
| Actuated g/C Ratio | 0.48 | 0.48 | 0.65 | 0.63 | 0.28 | 0.43 |
| v/c Ratio | 0.99 | 0.37 | 0.68 | 0.54 | 0.51 | 0.81 |
| Control Delay | 48.5 | 15.0 | 33.3 | 13.6 | 33.4 | 27.5 |
| Queue Delay | 37.2 | 0.6 | 0.0 | 1.4 | 1.0 | 0.8 |
| Total Delay | 85.8 | 15.6 | 33.3 | 15.0 | 34.4 | 28.2 |
| LOS | F | B | C | B | C | C |
| Approach Delay | 69.8 | | | 19.3 | 30.1 | |
| Approach LOS | E | | | B | C | |
| 90th %ile Green (s) | 46.0 | 46.0 | 20.0 | 69.0 | 31.0 | |
| 90th %ile Term Code | Coord | Coord | Max | Coord | MaxR | |
| 70th %ile Green (s) | 48.6 | 48.6 | 17.4 | 69.0 | 31.0 | |
| 70th %ile Term Code | Coord | Coord | Gap | Coord | MaxR | |
| 50th %ile Green (s) | 53.1 | 53.1 | 12.9 | 69.0 | 31.0 | |
| 50th %ile Term Code | Coord | Coord | Gap | Coord | MaxR | |
| 30th %ile Green (s) | 56.9 | 56.9 | 9.1 | 69.0 | 31.0 | |
| 30th %ile Term Code | Coord | Coord | Gap | Coord | MaxR | |
| 10th %ile Green (s) | 58.4 | 58.4 | 7.6 | 69.0 | 31.0 | |
| 10th %ile Term Code | Coord | Coord | Gap | Coord | MaxR | |
| Queue Length 50th (ft) | 534 | 76 | 78 | 229 | 113 | 201 |
| Queue Length 95th (ft) | m#933 | m120 | 148 | 323 | 200 | 338 |
| Internal Link Dist (ft) | 310 | | | 813 | 283 | |
| Turn Bay Length (ft) | | 55 | 95 | | 190 | 190 |
| Base Capacity (vph) | 891 | 707 | 383 | 1168 | 498 | 801 |
| Starvation Cap Reductn | 99 | 181 | 0 | 0 | 91 | 62 |
| Spillback Cap Reductn | 0 | 0 | 0 | 331 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 1.11 | 0.49 | 0.51 | 0.75 | 0.62 | 0.77 |

Intersection Summary

| | |
|---|---|
| Area Type: | Other |
| Cycle Length: 110 | |
| Actuated Cycle Length: 110 | |
| Offset: 18 (16%), Referenced to phase 4:EBT and 8:WBTL, Start of Green | |
| Natural Cycle: 80 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 0.99 | |
| Intersection Signal Delay: 43.2 | Intersection LOS: D |
| Intersection Capacity Utilization 87.5% | ICU Level of Service E |
| Analysis Period (min) 15 | |

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 204: Jefferson St & Chicago Ave



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 238 | 509 | 5 | 10 | 444 | 536 | 19 | 0 | 10 | 157 | 0 | 209 |
| Future Volume (vph) | 238 | 509 | 5 | 10 | 444 | 536 | 19 | 0 | 10 | 157 | 0 | 209 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 1 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 1 |
| Taper Length (ft) | 100 | | | 25 | | | 25 | | | 135 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 1.00 | | | 0.92 | | | 0.99 | | | 0.98 | |
| Frt | | 0.999 | | | 0.919 | | | 0.954 | | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.999 | | | 0.968 | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3534 | 0 | 0 | 2981 | 0 | 0 | 1698 | 0 | 0 | 1770 | 1583 |
| Flt Permitted | 0.138 | | | | 0.948 | | | 0.968 | | | 0.950 | |
| Satd. Flow (perm) | 257 | 3534 | 0 | 0 | 2828 | 0 | 0 | 1698 | 0 | 0 | 1726 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 1 | | | 310 | | | 109 | | | | 227 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 375 | | | 838 | | | 269 | | | 430 | |
| Travel Time (s) | | 8.5 | | | 19.0 | | | 6.1 | | | 9.8 | |
| Confl. Peds. (#/hr) | 56 | | 17 | 17 | | 56 | | | 18 | 18 | | |
| Confl. Bikes (#/hr) | | | | | | 2 | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 259 | 553 | 5 | 11 | 483 | 583 | 21 | 0 | 11 | 171 | 0 | 227 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 259 | 558 | 0 | 0 | 1077 | 0 | 0 | 32 | 0 | 0 | 171 | 227 |
| 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 | | | 0 | | | 0 | | | 0 | |
| 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 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 |
| Detector 1 Type | 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 |
| Detector 1 Queue (s) | 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 |
| 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 | NA | | Split | NA | | Split | NA | pm+ov |

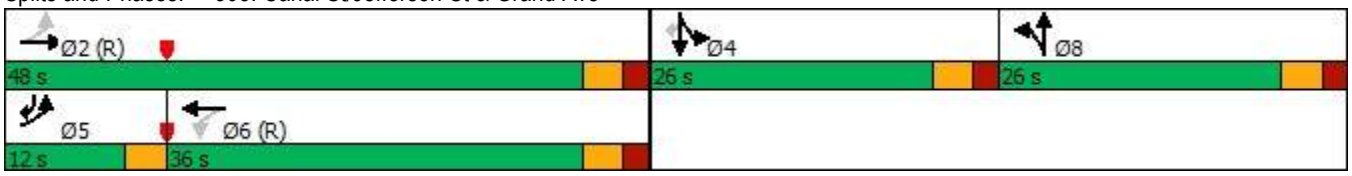
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Protected Phases | 5 | 2 | | | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Permitted Phases | 2 | | | 6 | | | | | | | | 4 |
| Detector Phase | 5 | 2 | | 6 | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.0 | 26.0 | | 26.0 | 26.0 | | 26.0 | 26.0 | | 23.0 | 23.0 | 10.0 |
| Total Split (s) | 12.0 | 48.0 | | 36.0 | 36.0 | | 26.0 | 26.0 | | 26.0 | 26.0 | 12.0 |
| Total Split (%) | 12.0% | 48.0% | | 36.0% | 36.0% | | 26.0% | 26.0% | | 26.0% | 26.0% | 12.0% |
| Maximum Green (s) | 9.0 | 43.0 | | 31.0 | 31.0 | | 21.0 | 21.0 | | 21.0 | 21.0 | 9.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| All-Red Time (s) | 0.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 0.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Lost Time (s) | 3.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | 3.0 |
| Lead/Lag | Lead | | | Lag | Lag | | | | | | | Lead |
| Lead-Lag Optimize? | 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 |
| Recall Mode | None | C-Max | | C-Max | C-Max | | None | None | | None | None | None |
| Walk Time (s) | | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | | | |
| Flash Dont Walk (s) | | 14.0 | | 14.0 | 14.0 | | 14.0 | 14.0 | | | | |
| Pedestrian Calls (#/hr) | | 0 | | 0 | 0 | | 0 | 0 | | | | |
| Act Effct Green (s) | 70.8 | 68.8 | | | 47.3 | | | 5.5 | | | 14.9 | 36.6 |
| Actuated g/C Ratio | 0.71 | 0.69 | | | 0.47 | | | 0.06 | | | 0.15 | 0.37 |
| v/c Ratio | 0.56 | 0.23 | | | 0.72 | | | 0.16 | | | 0.65 | 0.31 |
| Control Delay | 11.4 | 6.3 | | | 19.9 | | | 1.8 | | | 51.2 | 2.8 |
| Queue Delay | 0.0 | 0.2 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Delay | 11.4 | 6.4 | | | 19.9 | | | 1.8 | | | 51.2 | 2.8 |
| LOS | B | A | | | B | | | A | | | D | A |
| Approach Delay | | 8.0 | | | 19.9 | | | 1.8 | | | 23.6 | |
| Approach LOS | | A | | | B | | | A | | | C | |
| 90th %ile Green (s) | 21.7 | 59.1 | | 34.4 | 34.4 | | 5.5 | 5.5 | | 20.4 | 20.4 | 21.7 |
| 90th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 70th %ile Green (s) | 18.3 | 62.3 | | 41.0 | 41.0 | | 5.5 | 5.5 | | 17.2 | 17.2 | 18.3 |
| 70th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 50th %ile Green (s) | 17.2 | 64.6 | | 44.4 | 44.4 | | 5.5 | 5.5 | | 14.9 | 14.9 | 17.2 |
| 50th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 30th %ile Green (s) | 15.8 | 77.4 | | 58.6 | 58.6 | | 0.0 | 0.0 | | 12.6 | 12.6 | 15.8 |
| 30th %ile Term Code | Gap | Coord | | Coord | Coord | | Skip | Skip | | Gap | Gap | Gap |
| 10th %ile Green (s) | 19.6 | 80.7 | | 58.1 | 58.1 | | 0.0 | 0.0 | | 9.3 | 9.3 | 19.6 |
| 10th %ile Term Code | Gap | Coord | | Coord | Coord | | Skip | Skip | | Gap | Gap | Gap |
| Queue Length 50th (ft) | 57 | 68 | | | 213 | | | 0 | | | 104 | 0 |
| Queue Length 95th (ft) | 96 | 93 | | | #399 | | | 0 | | | 163 | 30 |
| Internal Link Dist (ft) | | 295 | | | 758 | | | 189 | | | 350 | |
| Turn Bay Length (ft) | 100 | | | | | | | | | | | |
| Base Capacity (vph) | 462 | 2432 | | | 1500 | | | 442 | | | 371 | 723 |
| Starvation Cap Reductn | 0 | 958 | | | 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 | 0.56 | 0.38 | | | 0.72 | | | 0.07 | | | 0.46 | 0.31 |

Intersection Summary

| | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 100 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.72 | | | |
| Intersection Signal Delay: 16.1 | | Intersection LOS: B | |
| Intersection Capacity Utilization 74.9% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |

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

Splits and Phases: 305: Canal St/Jefferson St & Grand Ave

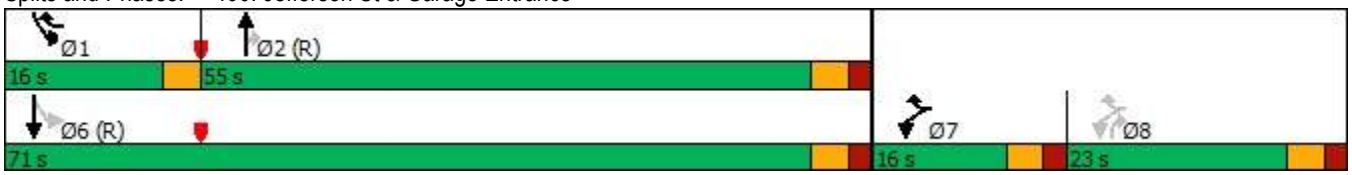


| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT | Ø8 |
|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | |
| Traffic Volume (vph) | 216 | 417 | 341 | 340 | 199 | 218 | |
| Future Volume (vph) | 216 | 417 | 341 | 340 | 199 | 218 | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| Storage Length (ft) | 0 | 0 | | 160 | 205 | | |
| Storage Lanes | 1 | 1 | | 0 | 0 | | |
| Taper Length (ft) | 25 | | | | 70 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Ped Bike Factor | 0.67 | 0.95 | | 0.89 | 0.97 | | |
| Frt | | 0.850 | | 0.850 | | | |
| Flt Protected | 0.950 | | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1615 | 1863 | 646 | 1805 | 1500 | |
| Flt Permitted | 0.950 | | | | 0.412 | | |
| Satd. Flow (perm) | 1204 | 1541 | 1863 | 575 | 756 | 1500 | |
| Right Turn on Red | | Yes | | Yes | | | |
| Satd. Flow (RTOR) | | 319 | | 370 | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 | |
| Link Distance (ft) | 244 | | 120 | | | 363 | |
| Travel Time (s) | 5.5 | | 2.7 | | | 8.3 | |
| Confl. Peds. (#/hr) | 109 | 20 | | 30 | 30 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Heavy Vehicles (%) | 0% | 0% | 2% | 0% | 0% | 2% | |
| Parking (#/hr) | | | | 100 | | 19 | |
| Adj. Flow (vph) | 235 | 453 | 371 | 370 | 216 | 237 | |
| Shared Lane Traffic (%) | | | | | | | |
| Lane Group Flow (vph) | 235 | 453 | 371 | 370 | 216 | 237 | |
| Enter Blocked Intersection | No | No | No | No | No | No | |
| Lane Alignment | Left | Right | Left | Right | Left | Left | |
| Median Width(ft) | 12 | | 12 | | | 12 | |
| Link Offset(ft) | 0 | | 0 | | | 0 | |
| Crosswalk Width(ft) | 16 | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 2.95 | 1.00 | 1.31 | |
| Number of Detectors | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Right | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | 6 | | | 6 | |
| Detector 2 Type | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | |
| Detector 2 Extend (s) | | | 0.0 | | | 0.0 | |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT | Ø8 |
|---|---|---|---|---|---|---|---|
| Turn Type | custom | pt+ov | NA | custom | pm+pt | NA | |
| Protected Phases | 7 | 1 7 | 2 | | 1 | 6 | 8 |
| Permitted Phases | 8 | 7 8 | | 2 8 | 6 | | |
| Detector Phase | 7 | 1 7 | 2 | 2 8 | 1 | 6 | |
| Switch Phase | | | | | | | |
| Minimum Initial (s) | 5.0 | | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 16.0 | | 23.0 | | 16.0 | 23.0 | 23.0 |
| Total Split (s) | 16.0 | | 55.0 | | 16.0 | 71.0 | 23.0 |
| Total Split (%) | 14.5% | | 50.0% | | 14.5% | 64.5% | 21% |
| Maximum Green (s) | 11.0 | | 50.0 | | 13.0 | 66.0 | 18.0 |
| Yellow Time (s) | 3.0 | | 3.0 | | 3.0 | 3.0 | 3.0 |
| All-Red Time (s) | 2.0 | | 2.0 | | 0.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.0 | | 5.0 | | 3.0 | 5.0 | |
| Lead/Lag | Lead | | Lag | | Lead | | Lag |
| Lead-Lag Optimize? | Yes | | Yes | | Yes | | Yes |
| Vehicle Extension (s) | 3.0 | | 3.0 | | 3.0 | 3.0 | 3.0 |
| Recall Mode | None | | C-Max | | None | C-Max | Max |
| 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) | 29.0 | 44.0 | 52.0 | 70.0 | 68.0 | 66.0 | |
| Actuated g/C Ratio | 0.26 | 0.40 | 0.47 | 0.64 | 0.62 | 0.60 | |
| v/c Ratio | 0.62 | 0.55 | 0.42 | 0.74 | 0.38 | 0.26 | |
| Control Delay | 39.5 | 8.4 | 21.4 | 11.2 | 16.2 | 16.8 | |
| Queue Delay | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.9 | |
| Total Delay | 39.5 | 8.5 | 21.5 | 11.2 | 16.2 | 17.7 | |
| LOS | D | A | C | B | B | B | |
| Approach Delay | 19.1 | | 16.4 | | | 17.0 | |
| Approach LOS | B | | B | | | B | |
| 90th %ile Green (s) | 11.0 | | 50.0 | | 13.0 | 66.0 | 18.0 |
| 90th %ile Term Code | Max | | Coord | | Max | Coord | MaxR |
| 70th %ile Green (s) | 11.0 | | 50.0 | | 13.0 | 66.0 | 18.0 |
| 70th %ile Term Code | Max | | Coord | | Max | Coord | MaxR |
| 50th %ile Green (s) | 11.0 | | 51.8 | | 11.2 | 66.0 | 18.0 |
| 50th %ile Term Code | Max | | Coord | | Gap | Coord | MaxR |
| 30th %ile Green (s) | 11.0 | | 53.1 | | 9.9 | 66.0 | 18.0 |
| 30th %ile Term Code | Max | | Coord | | Gap | Coord | MaxR |
| 10th %ile Green (s) | 11.0 | | 54.9 | | 8.1 | 66.0 | 18.0 |
| 10th %ile Term Code | Max | | Coord | | Gap | Coord | MaxR |
| Queue Length 50th (ft) | 131 | 55 | 168 | 0 | 96 | 113 | |
| Queue Length 95th (ft) | 205 | 132 | 254 | 45 | 142 | 166 | |
| Internal Link Dist (ft) | 164 | | 40 | | | 283 | |
| Turn Bay Length (ft) | | | | 160 | 205 | | |
| Base Capacity (vph) | 377 | 847 | 879 | 500 | 591 | 900 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 423 | |
| Spillback Cap Reductn | 0 | 15 | 87 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.62 | 0.54 | 0.47 | 0.74 | 0.37 | 0.50 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 77 (70%), Referenced to phase 2:NBT and 6:SBTL, Start of Green | | | |
| Natural Cycle: 80 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.74 | | | |
| Intersection Signal Delay: 17.5 | | Intersection LOS: B | |
| Intersection Capacity Utilization 53.2% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 400: Jefferson St & Garage Entrance



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.4 |

| Movement | WBL | WBR | SEL | SET | NWT | NWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 1 | 45 | 389 | 681 | 84 |
| Future Vol, veh/h | 0 | 1 | 45 | 389 | 681 | 84 |
| Conflicting Peds, #/hr | 0 | 0 | 30 | 0 | 0 | 54 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | 100 | - | - | 50 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 0 | 2 | 2 | 0 |
| Mvmt Flow | 0 | 1 | 49 | 423 | 740 | 91 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 794 | 885 | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.22 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.318 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 0 | 388 | 773 | - | - | - |
| Stage 1 | 0 | - | - | - | - | - |
| Stage 2 | 0 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | - | 368 | 733 | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | SE | NW |
|---|---|---|---|
| HCM Control Delay, s | 14.8 | 1.1 | 0 |
| HCM LOS | B | | |

| Minor Lane/Major Mvmt | NWT | NWR | WBLn1 | SEL | SET |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 368 | 733 | - |
| HCM Lane V/C Ratio | - | - | 0.003 | 0.067 | - |
| HCM Control Delay (s) | - | - | 14.8 | 10.3 | - |
| HCM Lane LOS | - | - | B | B | - |
| HCM 95th %tile Q(veh) | - | - | 0 | 0.2 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.3 |

| Movement | WBL | WBR | SEL | SET | NWT | NWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 116 | 51 | 337 | 651 | 91 |
| Future Vol, veh/h | 0 | 116 | 51 | 337 | 651 | 91 |
| Conflicting Peds, #/hr | 0 | 30 | 30 | 0 | 0 | 27 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | 100 | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 2 | 0 |
| Mvmt Flow | 0 | 126 | 55 | 366 | 708 | 99 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 818 | 837 | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 0 | 379 | 806 | - | - | - |
| Stage 1 | 0 | - | - | - | - | - |
| Stage 2 | 0 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | - | 354 | 775 | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | SE | NW |
|---|---|---|---|
| HCM Control Delay, s | 20.7 | 1.3 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NWT | NWR | WBLn1 | SEL | SET |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 354 | 775 | - |
| HCM Lane V/C Ratio | - | - | 0.356 | 0.072 | - |
| HCM Control Delay (s) | - | - | 20.7 | 10 | - |
| HCM Lane LOS | - | - | C | B | - |
| HCM 95th %tile Q(veh) | - | - | 1.6 | 0.2 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | WBL | WBR | SEL | SET | NWT | NWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 0 | 366 | 774 | 0 |
| Future Vol, veh/h | 0 | 0 | 0 | 366 | 774 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | 100 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 0 | 398 | 841 | 0 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1040 | 841 | 841 | 0 | - | 0 |
| Stage 1 | 841 | - | - | - | - | - |
| Stage 2 | 199 | - | - | - | - | - |
| Critical Hdwy | 6.63 | 6.23 | 4.13 | - | - | - |
| Critical Hdwy Stg 1 | 5.43 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.83 | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 3.319 | 2.219 | - | - | - |
| Pot Cap-1 Maneuver | 240 | 364 | 792 | - | - | - |
| Stage 1 | 422 | - | - | - | - | - |
| Stage 2 | 816 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 240 | 364 | 792 | - | - | - |
| Mov Cap-2 Maneuver | 240 | - | - | - | - | - |
| Stage 1 | 422 | - | - | - | - | - |
| Stage 2 | 816 | - | - | - | - | - |

| Approach | WB | SE | NW |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NWT | NWR | WBLn1 | SEL | SET |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 792 | - |
| HCM Lane V/C Ratio | - | - | - | - | - |
| HCM Control Delay (s) | - | - | 0 | 0 | - |
| HCM Lane LOS | - | - | A | A | - |
| HCM 95th %tile Q(veh) | - | - | - | 0 | - |

| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 860 | 303 | 227 | 616 | 281 | 631 |
| Future Volume (vph) | 860 | 303 | 227 | 616 | 281 | 631 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | | 55 | 95 | | 190 | 190 |
| Storage Lanes | | 1 | 1 | | 0 | 1 |
| Taper Length (ft) | | | 90 | | 75 | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 0.91 | | | 0.92 | 0.96 |
| Frt | | 0.850 | | | | 0.850 |
| Flt Protected | | | 0.950 | | 0.950 | |
| Satd. Flow (prot) | 1863 | 1583 | 1770 | 1863 | 1770 | 1583 |
| Flt Permitted | | | 0.080 | | 0.950 | |
| Satd. Flow (perm) | 1863 | 1436 | 149 | 1863 | 1631 | 1519 |
| Right Turn on Red | | Yes | | | | Yes |
| Satd. Flow (RTOR) | | 62 | | | | 36 |
| Link Speed (mph) | 30 | | | 30 | 30 | |
| Link Distance (ft) | 390 | | | 893 | 363 | |
| Travel Time (s) | 8.9 | | | 20.3 | 8.3 | |
| Confl. Peds. (#/hr) | | 50 | 50 | | 50 | 50 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 935 | 329 | 247 | 670 | 305 | 686 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 935 | 329 | 247 | 670 | 305 | 686 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Right | Left | Left | Left | Right |
| Median Width(ft) | 12 | | | 12 | 12 | |
| Link Offset(ft) | 0 | | | 0 | 0 | |
| Crosswalk Width(ft) | 16 | | | 16 | 16 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | | 9 | 15 | | 15 | 9 |
| Number of Detectors | 2 | 1 | 1 | 2 | 1 | 1 |
| Detector Template | Thru | Right | Left | Thru | Left | Right |
| Leading Detector (ft) | 100 | 20 | 20 | 100 | 20 | 20 |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 |
| Detector 1 Size(ft) | 6 | 20 | 20 | 6 | 20 | 20 |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(ft) | 94 | | | 94 | | |
| Detector 2 Size(ft) | 6 | | | 6 | | |
| Detector 2 Type | Cl+Ex | | | Cl+Ex | | |
| Detector 2 Channel | | | | | | |
| Detector 2 Extend (s) | 0.0 | | | 0.0 | | |
| Turn Type | NA | Perm | pm+pt | NA | Prot | pt+ov |

| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR |
|---|---|---|---|---|---|---|
| Protected Phases | 4 | | 3 | 8 | 5 | 5 3 |
| Permitted Phases | | 4 | 8 | | 5 | 5 3 |
| Detector Phase | 4 | 4 | 3 | 8 | 5 | 5 3 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | |
| Minimum Split (s) | 25.0 | 25.0 | 9.5 | 25.0 | 10.0 | |
| Total Split (s) | 50.0 | 50.0 | 20.0 | 70.0 | 40.0 | |
| Total Split (%) | 45.5% | 45.5% | 18.2% | 63.6% | 36.4% | |
| Maximum Green (s) | 45.0 | 45.0 | 17.0 | 65.0 | 35.0 | |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| All-Red Time (s) | 2.0 | 2.0 | 0.0 | 2.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.0 | 5.0 | 3.0 | 5.0 | 5.0 | |
| Lead/Lag | Lag | Lag | Lead | | | |
| Lead-Lag Optimize? | Yes | Yes | Yes | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Recall Mode | C-Min | C-Min | None | C-Min | Max | |
| Walk Time (s) | 4.0 | 4.0 | | 4.0 | | |
| Flash Dont Walk (s) | 16.0 | 16.0 | | 16.0 | | |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | | |
| Act Effct Green (s) | 47.2 | 47.2 | 67.0 | 65.0 | 35.0 | 52.8 |
| Actuated g/C Ratio | 0.43 | 0.43 | 0.61 | 0.59 | 0.32 | 0.48 |
| v/c Ratio | 1.17 | 0.51 | 0.80 | 0.61 | 0.54 | 0.88 |
| Control Delay | 108.0 | 16.3 | 44.2 | 17.4 | 31.7 | 38.3 |
| Queue Delay | 0.8 | 1.0 | 0.0 | 27.5 | 2.7 | 35.4 |
| Total Delay | 108.9 | 17.3 | 44.2 | 44.8 | 34.4 | 73.6 |
| LOS | F | B | D | D | C | E |
| Approach Delay | 85.0 | | | 44.7 | 61.5 | |
| Approach LOS | F | | | D | E | |
| 90th %ile Green (s) | 45.0 | 45.0 | 17.0 | 65.0 | 35.0 | |
| 90th %ile Term Code | Coord | Coord | Max | Coord | MaxR | |
| 70th %ile Green (s) | 45.0 | 45.0 | 17.0 | 65.0 | 35.0 | |
| 70th %ile Term Code | Coord | Coord | Max | Coord | MaxR | |
| 50th %ile Green (s) | 45.0 | 45.0 | 17.0 | 65.0 | 35.0 | |
| 50th %ile Term Code | Coord | Coord | Max | Coord | MaxR | |
| 30th %ile Green (s) | 48.2 | 48.2 | 13.8 | 65.0 | 35.0 | |
| 30th %ile Term Code | Coord | Coord | Gap | Coord | MaxR | |
| 10th %ile Green (s) | 52.7 | 52.7 | 9.3 | 65.0 | 35.0 | |
| 10th %ile Term Code | Coord | Coord | Gap | Coord | MaxR | |
| Queue Length 50th (ft) | ~810 | 86 | 113 | 284 | 168 | 457 |
| Queue Length 95th (ft) | m#858 | m94 | #222 | 400 | 258 | #639 |
| Internal Link Dist (ft) | 310 | | | 813 | 283 | |
| Turn Bay Length (ft) | | 55 | 95 | | 190 | 190 |
| Base Capacity (vph) | 799 | 651 | 341 | 1100 | 563 | 809 |
| Starvation Cap Reductn | 102 | 134 | 0 | 0 | 155 | 164 |
| Spillback Cap Reductn | 0 | 0 | 0 | 451 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 1.34 | 0.64 | 0.72 | 1.03 | 0.75 | 1.06 |

Intersection Summary

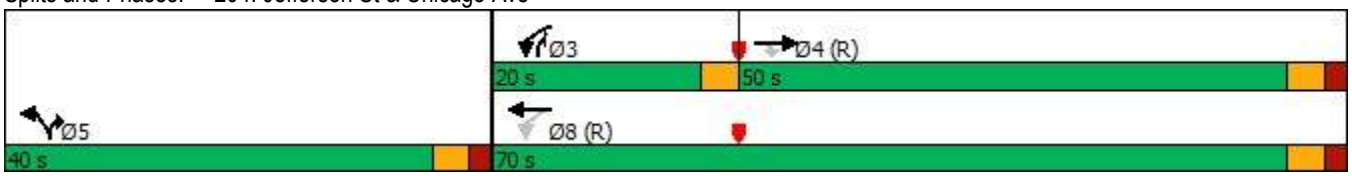
| | |
|---|---|
| Area Type: | Other |
| Cycle Length: 110 | |
| Actuated Cycle Length: 110 | |
| Offset: 21 (19%), Referenced to phase 4:EBT and 8:WBTL, Start of Green | |
| Natural Cycle: 90 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.17 | |
| Intersection Signal Delay: 66.0 | Intersection LOS: E |
| Intersection Capacity Utilization 96.6% | ICU Level of Service F |
| Analysis Period (min) 15 | |

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

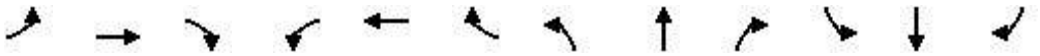
# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 204: Jefferson St & Chicago Ave



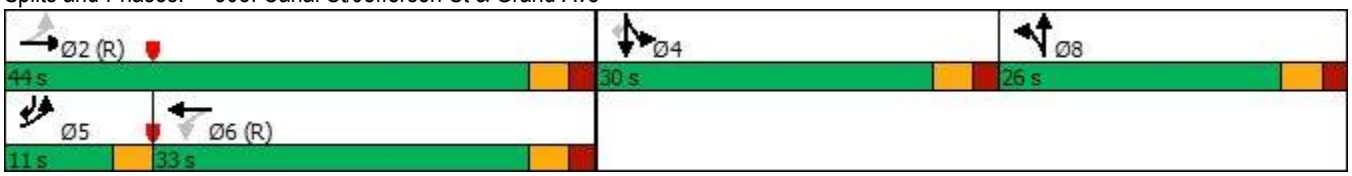
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 303 | 481 | 5 | 11 | 394 | 682 | 20 | 0 | 10 | 189 | 0 | 251 |
| Future Volume (vph) | 303 | 481 | 5 | 11 | 394 | 682 | 20 | 0 | 10 | 189 | 0 | 251 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 1 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 1 |
| Taper Length (ft) | 100 | | | 25 | | | 25 | | | 135 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 1.00 | | | 0.90 | | | 0.99 | | | 0.98 | |
| Frt | | 0.999 | | | 0.906 | | | 0.955 | | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.999 | | | 0.968 | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3534 | 0 | 0 | 2877 | 0 | 0 | 1705 | 0 | 0 | 1770 | 1583 |
| Flt Permitted | 0.114 | | | | 0.948 | | | 0.968 | | | 0.950 | |
| Satd. Flow (perm) | 212 | 3534 | 0 | 0 | 2730 | 0 | 0 | 1705 | 0 | 0 | 1738 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 1 | | | 421 | | | 109 | | | | 273 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 375 | | | 838 | | | 269 | | | 430 | |
| Travel Time (s) | | 8.5 | | | 19.0 | | | 6.1 | | | 9.8 | |
| Confl. Peds. (#/hr) | 56 | | 10 | 10 | | 56 | | | 13 | 13 | | |
| Confl. Bikes (#/hr) | | | 6 | | | 10 | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 329 | 523 | 5 | 12 | 428 | 741 | 22 | 0 | 11 | 205 | 0 | 273 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 329 | 528 | 0 | 0 | 1181 | 0 | 0 | 33 | 0 | 0 | 205 | 273 |
| 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 | | | 0 | | | 0 | | | 0 | |
| 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 | | 12 | 15 | | 12 | 15 | | 12 | 15 | | 12 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 |
| Detector 1 Type | 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 |
| Detector 1 Queue (s) | 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 |
| 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 | |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | pm+pt | NA | | Perm | NA | | Split | NA | | Split | NA | pm+ov |
| Protected Phases | 5 | 2 | | | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Permitted Phases | 2 | | | 6 | | | | | | | | 4 |
| Detector Phase | 5 | 2 | | 6 | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.0 | 30.0 | | 30.0 | 30.0 | | 26.0 | 26.0 | | 30.0 | 30.0 | 10.0 |
| Total Split (s) | 11.0 | 44.0 | | 33.0 | 33.0 | | 26.0 | 26.0 | | 30.0 | 30.0 | 11.0 |
| Total Split (%) | 11.0% | 44.0% | | 33.0% | 33.0% | | 26.0% | 26.0% | | 30.0% | 30.0% | 11.0% |
| Maximum Green (s) | 8.0 | 39.0 | | 28.0 | 28.0 | | 21.0 | 21.0 | | 25.0 | 25.0 | 8.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| All-Red Time (s) | 0.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 0.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Lost Time (s) | 3.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | 3.0 |
| Lead/Lag | Lead | | | Lag | Lag | | | | | | | Lead |
| Lead-Lag Optimize? | 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 |
| Recall Mode | None | C-Max | | C-Max | C-Max | | None | None | | None | None | None |
| Walk Time (s) | | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | | | |
| Flash Dont Walk (s) | | 14.0 | | 14.0 | 14.0 | | 14.0 | 14.0 | | | | |
| Pedestrian Calls (#/hr) | | 0 | | 0 | 0 | | 0 | 0 | | | | |
| Act Effct Green (s) | 68.9 | 66.9 | | | 34.3 | | | 5.5 | | | 16.8 | 49.6 |
| Actuated g/C Ratio | 0.69 | 0.67 | | | 0.34 | | | 0.06 | | | 0.17 | 0.50 |
| v/c Ratio | 0.54 | 0.22 | | | 0.97 | | | 0.17 | | | 0.69 | 0.30 |
| Control Delay | 13.8 | 6.5 | | | 42.7 | | | 1.9 | | | 50.9 | 1.9 |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Delay | 13.8 | 6.5 | | | 42.7 | | | 1.9 | | | 50.9 | 1.9 |
| LOS | B | A | | | D | | | A | | | D | A |
| Approach Delay | | 9.3 | | | 42.7 | | | 1.9 | | | 22.9 | |
| Approach LOS | | A | | | D | | | A | | | C | |
| 90th %ile Green (s) | 25.7 | 56.7 | | 28.0 | 28.0 | | 5.5 | 5.5 | | 22.8 | 22.8 | 25.7 |
| 90th %ile Term Code | Max | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Max |
| 70th %ile Green (s) | 25.1 | 60.2 | | 32.1 | 32.1 | | 5.5 | 5.5 | | 19.3 | 19.3 | 25.1 |
| 70th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 50th %ile Green (s) | 25.4 | 62.7 | | 34.3 | 34.3 | | 5.5 | 5.5 | | 16.8 | 16.8 | 25.4 |
| 50th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 30th %ile Green (s) | 28.0 | 75.7 | | 44.7 | 44.7 | | 0.0 | 0.0 | | 14.3 | 14.3 | 28.0 |
| 30th %ile Term Code | Gap | Coord | | Coord | Coord | | Skip | Skip | | Gap | Gap | Gap |
| 10th %ile Green (s) | 44.1 | 79.3 | | 32.2 | 32.2 | | 0.0 | 0.0 | | 10.7 | 10.7 | 44.1 |
| 10th %ile Term Code | Gap | Coord | | Coord | Coord | | Skip | Skip | | Gap | Gap | Gap |
| Queue Length 50th (ft) | 95 | 69 | | | 276 | | | 0 | | | 124 | 0 |
| Queue Length 95th (ft) | 155 | 96 | | | #479 | | | 0 | | | 187 | 27 |
| Internal Link Dist (ft) | | 295 | | | 758 | | | 189 | | | 350 | |
| Turn Bay Length (ft) | 100 | | | | | | | | | | | |
| Base Capacity (vph) | 607 | 2365 | | | 1212 | | | 444 | | | 442 | 923 |
| Starvation Cap Reductn | 0 | 0 | | | 0 | | | 0 | | | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | | | 0 | | | 0 | | | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | | | 0 | | | 0 | | | 0 | 0 |
| Reduced v/c Ratio | 0.54 | 0.22 | | | 0.97 | | | 0.07 | | | 0.46 | 0.30 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 100 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green | | | |
| Natural Cycle: 100 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.97 | | | |
| Intersection Signal Delay: 27.3 | | Intersection LOS: C | |
| Intersection Capacity Utilization 80.2% | | 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: 305: Canal St/Jefferson St & Grand Ave



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT | Ø8 |
|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | |
| Traffic Volume (vph) | 256 | 496 | 415 | 438 | 256 | 274 | |
| Future Volume (vph) | 256 | 496 | 415 | 438 | 256 | 274 | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | |
| Storage Length (ft) | 0 | 0 | | 160 | 205 | | |
| Storage Lanes | 1 | 1 | | 0 | 0 | | |
| Taper Length (ft) | 25 | | | | 70 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | |
| Ped Bike Factor | 0.56 | 0.96 | | 0.85 | | | |
| Frt | | 0.850 | | 0.850 | | | |
| Flt Protected | 0.950 | | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1615 | 1863 | 646 | 1805 | 1453 | |
| Flt Permitted | 0.950 | | | | 0.294 | | |
| Satd. Flow (perm) | 1017 | 1546 | 1863 | 551 | 559 | 1453 | |
| Right Turn on Red | | Yes | | Yes | | | |
| Satd. Flow (RTOR) | | 192 | | 476 | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 | |
| Link Distance (ft) | 244 | | 120 | | | 363 | |
| Travel Time (s) | 5.5 | | 2.7 | | | 8.3 | |
| Confl. Peds. (#/hr) | 135 | 20 | | 40 | 40 | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | |
| Heavy Vehicles (%) | 0% | 0% | 2% | 0% | 0% | 2% | |
| Parking (#/hr) | | | | 100 | | 24 | |
| Adj. Flow (vph) | 278 | 539 | 451 | 476 | 278 | 298 | |
| Shared Lane Traffic (%) | | | | | | | |
| Lane Group Flow (vph) | 278 | 539 | 451 | 476 | 278 | 298 | |
| Enter Blocked Intersection | No | No | No | No | No | No | |
| Lane Alignment | Left | Right | Left | Right | Left | Left | |
| Median Width(ft) | 12 | | 12 | | | 12 | |
| Link Offset(ft) | 0 | | 0 | | | 0 | |
| Crosswalk Width(ft) | 16 | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 2.95 | 1.00 | 1.37 | |
| Turning Speed (mph) | 15 | 9 | | 9 | 15 | | |
| Number of Detectors | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Right | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | |
| Detector 1 Channel | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Detector 2 Position(ft) | | | 94 | | | 94 | |
| Detector 2 Size(ft) | | | 6 | | | 6 | |
| Detector 2 Type | | | Cl+Ex | | | Cl+Ex | |
| Detector 2 Channel | | | | | | | |

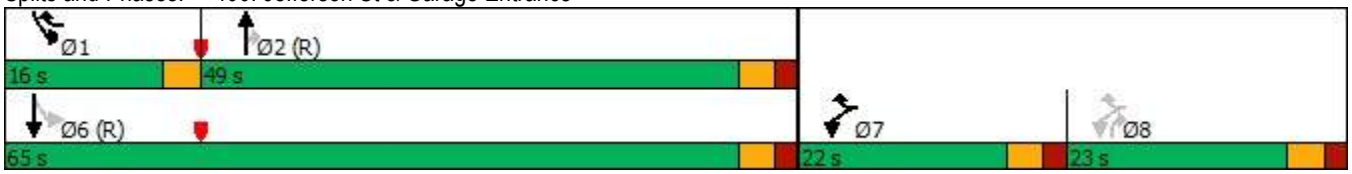
| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT | Ø8 |
|---|---|---|---|---|---|---|---|
| Detector 2 Extend (s) | | | 0.0 | | | 0.0 | |
| Turn Type | custom | pt+ov | NA | custom | pm+pt | NA | |
| Protected Phases | 7 | 1 7 | 2 | | 1 | 6 | 8 |
| Permitted Phases | 8 | 7 8 | | 2 8 | 6 | | |
| Detector Phase | 7 | 1 7 | 2 | 2 8 | 1 | 6 | |
| Switch Phase | | | | | | | |
| Minimum Initial (s) | 5.0 | | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 16.0 | | 22.0 | | 16.0 | 23.0 | 22.0 |
| Total Split (s) | 22.0 | | 49.0 | | 16.0 | 65.0 | 23.0 |
| Total Split (%) | 20.0% | | 44.5% | | 14.5% | 59.1% | 21% |
| Maximum Green (s) | 17.0 | | 44.0 | | 13.0 | 60.0 | 18.0 |
| Yellow Time (s) | 3.0 | | 3.0 | | 3.0 | 3.0 | 3.0 |
| All-Red Time (s) | 2.0 | | 2.0 | | 0.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) | 0.0 | | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 5.0 | | 5.0 | | 3.0 | 5.0 | |
| Lead/Lag | Lead | | Lag | | Lead | | Lag |
| Lead-Lag Optimize? | Yes | | Yes | | Yes | | Yes |
| Vehicle Extension (s) | 3.0 | | 3.0 | | 3.0 | 3.0 | 3.0 |
| Recall Mode | None | | C-Max | | None | C-Max | Max |
| Walk Time (s) | | | 7.0 | | | 7.0 | 7.0 |
| Flash Dont Walk (s) | | | 10.0 | | | 11.0 | 10.0 |
| Pedestrian Calls (#/hr) | | | 25 | | | 25 | 25 |
| Act Effct Green (s) | 35.0 | 51.3 | 44.7 | 63.5 | 62.0 | 60.0 | |
| Actuated g/C Ratio | 0.32 | 0.47 | 0.41 | 0.58 | 0.56 | 0.55 | |
| v/c Ratio | 0.63 | 0.64 | 0.60 | 0.92 | 0.61 | 0.38 | |
| Control Delay | 34.0 | 15.1 | 29.8 | 27.8 | 8.6 | 4.1 | |
| Queue Delay | 0.0 | 2.6 | 5.3 | 0.0 | 0.0 | 0.5 | |
| Total Delay | 34.0 | 17.7 | 35.1 | 27.8 | 8.6 | 4.5 | |
| LOS | C | B | D | C | A | A | |
| Approach Delay | 23.3 | | 31.3 | | | 6.5 | |
| Approach LOS | C | | C | | | A | |
| 90th %ile Green (s) | 17.0 | | 44.0 | | 13.0 | 60.0 | 18.0 |
| 90th %ile Term Code | Max | | Coord | | Max | Coord | MaxR |
| 70th %ile Green (s) | 17.0 | | 44.0 | | 13.0 | 60.0 | 18.0 |
| 70th %ile Term Code | Max | | Coord | | Max | Coord | MaxR |
| 50th %ile Green (s) | 17.0 | | 44.0 | | 13.0 | 60.0 | 18.0 |
| 50th %ile Term Code | Max | | Coord | | Max | Coord | MaxR |
| 30th %ile Green (s) | 17.0 | | 44.6 | | 12.4 | 60.0 | 18.0 |
| 30th %ile Term Code | Max | | Coord | | Gap | Coord | MaxR |
| 10th %ile Green (s) | 13.3 | | 47.0 | | 10.0 | 60.0 | 21.7 |
| 10th %ile Term Code | Gap | | Coord | | Gap | Coord | MaxR |
| Queue Length 50th (ft) | 146 | 154 | 248 | 0 | 11 | 17 | |
| Queue Length 95th (ft) | 223 | 257 | 356 | #143 | m25 | m19 | |
| Internal Link Dist (ft) | 164 | | 40 | | | 283 | |
| Turn Bay Length (ft) | | | | 160 | 205 | | |
| Base Capacity (vph) | 452 | 859 | 757 | 519 | 462 | 792 | |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 187 | |
| Spillback Cap Reductn | 0 | 204 | 239 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | |

| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT | Ø8 |
|---|---|---|---|---|---|---|---|
| Reduced v/c Ratio | 0.62 | 0.82 | 0.87 | 0.92 | 0.60 | 0.49 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 27 (25%), Referenced to phase 2:NBT and 6:SBTL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.92 | | | |
| Intersection Signal Delay: 22.3 | | Intersection LOS: C | |
| Intersection Capacity Utilization 62.0% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 400: Jefferson St & Garage Entrance



| Intersection | |
|---|---|
| Int Delay, s/veh | 0.5 |

| Movement | WBL | WBR | SEL | SET | NWT | NWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 1 | 58 | 472 | 853 | 108 |
| Future Vol, veh/h | 0 | 1 | 58 | 472 | 853 | 108 |
| Conflicting Peds, #/hr | 0 | 0 | 40 | 0 | 0 | 68 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | 100 | - | - | 50 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 0 | 2 | 2 | 0 |
| Mvmt Flow | 0 | 1 | 63 | 513 | 927 | 117 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 995 | 1112 | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.22 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.318 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 0 | 297 | 635 | - | - | - |
| Stage 1 | 0 | - | - | - | - | - |
| Stage 2 | 0 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | - | 278 | 594 | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | SE | NW |
|---|---|---|---|
| HCM Control Delay, s | 18 | 1.3 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NWT | NWR | WBLn1 | SEL | SET |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 278 | 594 | - |
| HCM Lane V/C Ratio | - | - | 0.004 | 0.106 | - |
| HCM Control Delay (s) | - | - | 18 | 11.8 | - |
| HCM Lane LOS | - | - | C | B | - |
| HCM 95th %tile Q(veh) | - | - | 0 | 0.4 | - |

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

| Movement | WBL | WBR | SEL | SET | NWT | NWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 139 | 64 | 405 | 829 | 116 |
| Future Vol, veh/h | 0 | 139 | 64 | 405 | 829 | 116 |
| Conflicting Peds, #/hr | 0 | 40 | 40 | 0 | 0 | 34 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | 100 | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 2 | 0 |
| Mvmt Flow | 0 | 151 | 70 | 440 | 901 | 126 |

| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | - | 1044 | 1067 | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 6.2 | 4.1 | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.3 | 2.2 | - | - | - |
| Pot Cap-1 Maneuver | 0 | 281 | 661 | - | - | - |
| Stage 1 | 0 | - | - | - | - | - |
| Stage 2 | 0 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | - | 257 | 627 | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | WB | SE | NW |
|---|---|---|---|
| HCM Control Delay, s | 37.2 | 1.6 | 0 |
| HCM LOS | E | | |

| Minor Lane/Major Mvmt | NWT | NWR | WBLn1 | SEL | SET |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | 257 | 627 | - |
| HCM Lane V/C Ratio | - | - | 0.588 | 0.111 | - |
| HCM Control Delay (s) | - | - | 37.2 | 11.5 | - |
| HCM Lane LOS | - | - | E | B | - |
| HCM 95th %tile Q(veh) | - | - | 3.4 | 0.4 | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 0 |

| Movement | WBL | WBR | SEL | SET | NWT | NWR |
|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 0 | 440 | 985 | 0 |
| Future Vol, veh/h | 0 | 0 | 0 | 440 | 985 | 0 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | 100 |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 0 | 0 | 0 | 478 | 1071 | 0 |

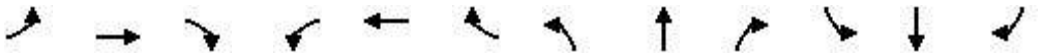
| Major/Minor | Minor2 | | Major1 | | Major2 | |
|---|---|---|---|---|---|---|
| Conflicting Flow All | 1310 | 1071 | 1071 | 0 | - | 0 |
| Stage 1 | 1071 | - | - | - | - | - |
| Stage 2 | 239 | - | - | - | - | - |
| Critical Hdwy | 6.63 | 6.23 | 4.13 | - | - | - |
| Critical Hdwy Stg 1 | 5.43 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.83 | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 3.319 | 2.219 | - | - | - |
| Pot Cap-1 Maneuver | 163 | 267 | 649 | - | - | - |
| Stage 1 | 328 | - | - | - | - | - |
| Stage 2 | 779 | - | - | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | 163 | 267 | 649 | - | - | - |
| Mov Cap-2 Maneuver | 163 | - | - | - | - | - |
| Stage 1 | 328 | - | - | - | - | - |
| Stage 2 | 779 | - | - | - | - | - |

| Approach | WB | SE | NW |
|---|---|---|---|
| HCM Control Delay, s | 0 | 0 | 0 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NWT | NWR | WBLn1 | SEL | SET |
|---|---|---|---|---|---|
| Capacity (veh/h) | - | - | - | 649 | - |
| HCM Lane V/C Ratio | - | - | - | - | - |
| HCM Control Delay (s) | - | - | 0 | 0 | - |
| HCM Lane LOS | - | - | A | A | - |
| HCM 95th %tile Q(veh) | - | - | - | 0 | - |

# Capacity Analysis Worksheets
# 2032 Full Build-out PD 1426

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 121 | 1307 | 159 | 116 | 809 | 88 | 168 | 13 | 304 | 58 | 35 | 125 |
| Future Volume (vph) | 121 | 1307 | 159 | 116 | 809 | 88 | 168 | 13 | 304 | 58 | 35 | 125 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 80 | | 55 | 95 | | 55 | 190 | | 190 | 0 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 0 | | 1 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 90 | | | 75 | | | 25 | | |
| 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 |
| Ped Bike Factor | | | 0.94 | | | 0.91 | 0.95 | | 0.94 | 0.96 | 0.93 | |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.883 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1523 | 0 |
| Flt Permitted | 0.074 | | | 0.074 | | | 0.517 | | | 0.748 | | |
| Satd. Flow (perm) | 138 | 1863 | 1493 | 138 | 1863 | 1433 | 912 | 1863 | 1493 | 1331 | 1523 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 79 | | | 79 | | | 107 | | 136 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 390 | | | 893 | | | 363 | | | 230 | |
| Travel Time (s) | | 8.9 | | | 20.3 | | | 8.3 | | | 5.2 | |
| Confl. Peds. (#/hr) | 25 | | 25 | 25 | | 25 | 25 | | 25 | 25 | | 25 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 132 | 1421 | 173 | 126 | 879 | 96 | 183 | 14 | 330 | 63 | 38 | 136 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 132 | 1421 | 173 | 126 | 879 | 96 | 183 | 14 | 330 | 63 | 174 | 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) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 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 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| 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 | |
| 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 | |
| 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 | |
| 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 | |
| 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 | pm+pt | NA | pm+ov | pm+pt | NA | |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | 3 | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | 2 | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 3 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 3.0 | 5.0 | 5.0 | 3.0 | 5.0 | 5.0 | 3.0 | 1.0 | 3.0 | 3.0 | 5.0 | |
| Minimum Split (s) | 8.0 | 58.0 | 58.0 | 8.0 | 58.0 | 58.0 | 8.0 | 28.0 | 8.0 | 8.0 | 28.0 | |
| Total Split (s) | 10.0 | 60.0 | 60.0 | 10.0 | 60.0 | 60.0 | 10.0 | 30.0 | 10.0 | 10.0 | 30.0 | |
| Total Split (%) | 9.1% | 54.5% | 54.5% | 9.1% | 54.5% | 54.5% | 9.1% | 27.3% | 9.1% | 9.1% | 27.3% | |
| Maximum Green (s) | 7.0 | 55.0 | 55.0 | 7.0 | 55.0 | 55.0 | 7.0 | 25.0 | 7.0 | 7.0 | 25.0 | |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| All-Red Time (s) | 0.0 | 2.0 | 2.0 | 0.0 | 2.0 | 2.0 | 0.0 | 2.0 | 0.0 | 0.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 3.0 | 5.0 | 5.0 | 3.0 | 5.0 | 5.0 | 3.0 | 5.0 | 3.0 | 3.0 | 5.0 | |
| Lead/Lag | Lead | Lag | Lag | Lead | Lag | Lag | Lead | Lag | Lead | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Recall Mode | None | C-Max | C-Max | None | C-Max | C-Max | None | Max | None | None | Max | |
| Walk Time (s) | | 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 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | 0 | 0 | | 0 | | | 0 | |
| Act Effct Green (s) | 64.0 | 55.0 | 55.0 | 64.0 | 55.0 | 55.0 | 34.6 | 27.0 | 36.0 | 33.7 | 25.0 | |
| Actuated g/C Ratio | 0.58 | 0.50 | 0.50 | 0.58 | 0.50 | 0.50 | 0.31 | 0.25 | 0.33 | 0.31 | 0.23 | |
| v/c Ratio | 0.72 | 1.53 | 0.22 | 0.68 | 0.94 | 0.13 | 0.54 | 0.03 | 0.58 | 0.14 | 0.39 | |
| Control Delay | 31.4 | 258.7 | 5.1 | 52.9 | 33.2 | 0.4 | 30.8 | 29.8 | 20.3 | 26.2 | 12.7 | |
| Queue Delay | 0.0 | 1.0 | 0.0 | 0.0 | 48.2 | 0.0 | 1.9 | 0.0 | 0.0 | 0.0 | 1.4 | |
| Total Delay | 31.4 | 259.7 | 5.1 | 52.9 | 81.3 | 0.4 | 32.7 | 29.8 | 20.4 | 26.2 | 14.1 | |
| LOS | C | F | A | D | F | A | C | C | C | C | B | |
| Approach Delay | | 216.7 | | | 71.0 | | | 24.9 | | | 17.3 | |
| Approach LOS | | F | | | E | | | C | | | B | |
| 90th %ile Green (s) | 7.0 | 55.0 | 55.0 | 7.0 | 55.0 | 55.0 | 7.0 | 25.0 | 7.0 | 7.0 | 25.0 | |
| 90th %ile Term Code | Max | Coord | Coord | Max | Coord | Coord | Max | MaxR | Max | Max | MaxR | |
| 70th %ile Green (s) | 7.0 | 55.0 | 55.0 | 7.0 | 55.0 | 55.0 | 7.0 | 25.0 | 7.0 | 7.0 | 25.0 | |
| 70th %ile Term Code | Max | Coord | Coord | Max | Coord | Coord | Max | MaxR | Max | Max | MaxR | |
| 50th %ile Green (s) | 7.0 | 55.0 | 55.0 | 7.0 | 55.0 | 55.0 | 7.0 | 25.0 | 7.0 | 7.0 | 25.0 | |
| 50th %ile Term Code | Max | Coord | Coord | Max | Coord | Coord | Max | MaxR | Max | Max | MaxR | |
| 30th %ile Green (s) | 7.0 | 55.0 | 55.0 | 7.0 | 55.0 | 55.0 | 7.0 | 25.0 | 7.0 | 7.0 | 25.0 | |
| 30th %ile Term Code | Max | Coord | Coord | Max | Coord | Coord | Max | MaxR | Max | Max | MaxR | |
| 10th %ile Green (s) | 7.0 | 55.1 | 55.1 | 6.9 | 55.0 | 55.0 | 7.0 | 35.0 | 6.9 | 0.0 | 25.0 | |
| 10th %ile Term Code | Max | Coord | Coord | Gap | Coord | Coord | Max | MaxR | Gap | Skip | MaxR | |
| Queue Length 50th (ft) | 52 | ~1459 | 13 | 38 | 630 | 0 | 81 | 7 | 83 | 30 | 21 | |
| Queue Length 95th (ft) | m30 | m#954 | m5 | m#111 | #870 | m0 | 135 | 22 | 158 | 62 | 81 | |
| Internal Link Dist (ft) | | 310 | | | 813 | | | 283 | | | 150 | |
| Turn Bay Length (ft) | 80 | | 55 | 95 | | 55 | 190 | | 190 | | | |
| Base Capacity (vph) | 184 | 931 | 786 | 184 | 931 | 756 | 341 | 457 | 566 | 439 | 451 | |
| Starvation Cap Reductn | 0 | 156 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 483 | 0 | 64 | 0 | 0 | 0 | 139 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.72 | 1.83 | 0.22 | 0.68 | 1.96 | 0.13 | 0.66 | 0.03 | 0.59 | 0.14 | 0.56 | |

Intersection Summary

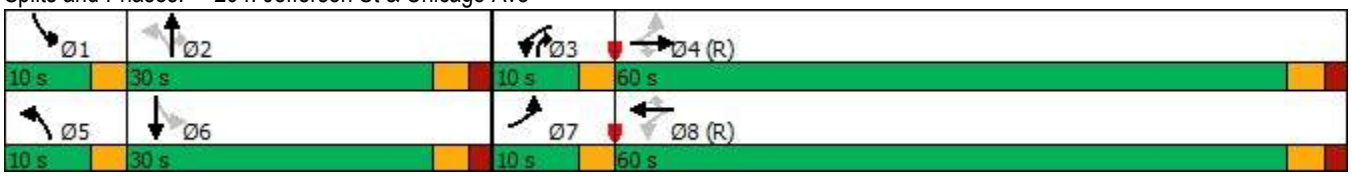
| | | |
|---|---|---|
| Area Type: | Other | |
| Cycle Length: 110 | | |
| Actuated Cycle Length: 110 | | |
| Offset: 16 (15%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green | | |
| Natural Cycle: 105 | | |
| Control Type: Actuated-Coordinated | | |
| Maximum v/c Ratio: 1.53 | | |
| Intersection Signal Delay: 130.7 | | Intersection LOS: F |
| Intersection Capacity Utilization 114.5% | | 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.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 204: Jefferson St & Chicago Ave

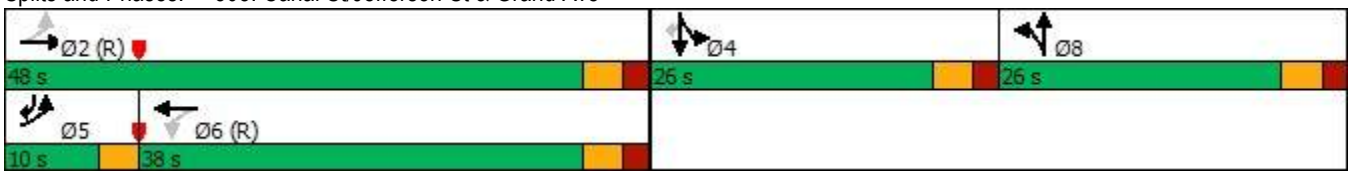


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 168 | 838 | 3 | 11 | 556 | 351 | 28 | 0 | 26 | 118 | 0 | 200 |
| Future Volume (vph) | 168 | 838 | 3 | 11 | 556 | 351 | 28 | 0 | 26 | 118 | 0 | 200 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 1 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 1 |
| Taper Length (ft) | 100 | | | 25 | | | 25 | | | 135 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 1.00 | | | 0.90 | | | 0.97 | | | | 0.95 |
| Frt | | | | | 0.943 | | | 0.935 | | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.999 | | | 0.975 | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3538 | 0 | 0 | 2998 | 0 | 0 | 1649 | 0 | 0 | 1770 | 1583 |
| Flt Permitted | 0.200 | | | | 0.941 | | | 0.975 | | | 0.950 | |
| Satd. Flow (perm) | 373 | 3538 | 0 | 0 | 2823 | 0 | 0 | 1649 | 0 | 0 | 1770 | 1508 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | | | 144 | | | 109 | | | | 217 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 375 | | | 838 | | | 269 | | | 430 | |
| Travel Time (s) | | 8.5 | | | 19.0 | | | 6.1 | | | 9.8 | |
| Confl. Peds. (#/hr) | 101 | | 32 | 32 | | 101 | | | 34 | | | 34 |
| Confl. Bikes (#/hr) | | | 6 | | | 9 | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 183 | 911 | 3 | 12 | 604 | 382 | 30 | 0 | 28 | 128 | 0 | 217 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 183 | 914 | 0 | 0 | 998 | 0 | 0 | 58 | 0 | 0 | 128 | 217 |
| 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 | | | 0 | | | 0 | | | 0 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 |
| Detector 1 Type | 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 |
| Detector 1 Queue (s) | 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 |
| 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 | |

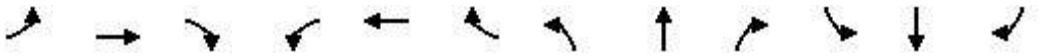
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | pm+pt | NA | | Perm | NA | | Split | NA | | Split | NA | pm+ov |
| Protected Phases | 5 | 2 | | | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Permitted Phases | 2 | | | 6 | | | | | | | | 4 |
| Detector Phase | 5 | 2 | | 6 | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.0 | 26.0 | | 26.0 | 26.0 | | 26.0 | 26.0 | | 23.0 | 23.0 | 10.0 |
| Total Split (s) | 10.0 | 48.0 | | 38.0 | 38.0 | | 26.0 | 26.0 | | 26.0 | 26.0 | 10.0 |
| Total Split (%) | 10.0% | 48.0% | | 38.0% | 38.0% | | 26.0% | 26.0% | | 26.0% | 26.0% | 10.0% |
| Maximum Green (s) | 7.0 | 43.0 | | 33.0 | 33.0 | | 21.0 | 21.0 | | 21.0 | 21.0 | 7.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| All-Red Time (s) | 0.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 0.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Lost Time (s) | 3.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | 3.0 |
| Lead/Lag | Lead | | | Lag | Lag | | | | | | | Lead |
| Lead-Lag Optimize? | 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 |
| Recall Mode | None | C-Max | | C-Max | C-Max | | None | None | | None | None | None |
| Walk Time (s) | | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | | | |
| Flash Dont Walk (s) | | 14.0 | | 14.0 | 14.0 | | 14.0 | 14.0 | | | | |
| Pedestrian Calls (#/hr) | | 0 | | 0 | 0 | | 0 | 0 | | | | |
| Act Effct Green (s) | 71.0 | 69.0 | | | 54.4 | | | 5.6 | | | 12.5 | 26.1 |
| Actuated g/C Ratio | 0.71 | 0.69 | | | 0.54 | | | 0.06 | | | 0.12 | 0.26 |
| v/c Ratio | 0.43 | 0.37 | | | 0.62 | | | 0.30 | | | 0.58 | 0.39 |
| Control Delay | 9.0 | 7.9 | | | 17.1 | | | 5.1 | | | 51.2 | 4.4 |
| Queue Delay | 0.0 | 0.7 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Delay | 9.0 | 8.6 | | | 17.1 | | | 5.1 | | | 51.2 | 4.4 |
| LOS | A | A | | | B | | | A | | | D | A |
| Approach Delay | | 8.7 | | | 17.1 | | | 5.1 | | | 21.7 | |
| Approach LOS | | A | | | B | | | A | | | C | |
| 90th %ile Green (s) | 15.1 | 61.7 | | 43.6 | 43.6 | | 6.0 | 6.0 | | 17.3 | 17.3 | 15.1 |
| 90th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 70th %ile Green (s) | 12.3 | 65.0 | | 49.7 | 49.7 | | 5.5 | 5.5 | | 14.5 | 14.5 | 12.3 |
| 70th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 50th %ile Green (s) | 11.3 | 67.0 | | 52.7 | 52.7 | | 5.5 | 5.5 | | 12.5 | 12.5 | 11.3 |
| 50th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 30th %ile Green (s) | 10.7 | 69.0 | | 55.3 | 55.3 | | 5.5 | 5.5 | | 10.5 | 10.5 | 10.7 |
| 30th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 10th %ile Green (s) | 8.8 | 82.3 | | 70.5 | 70.5 | | 0.0 | 0.0 | | 7.7 | 7.7 | 8.8 |
| 10th %ile Term Code | Gap | Coord | | Coord | Coord | | Skip | Skip | | Gap | Gap | Gap |
| Queue Length 50th (ft) | 35 | 121 | | | 194 | | | 0 | | | 78 | 0 |
| Queue Length 95th (ft) | 72 | 186 | | | 322 | | | 7 | | | 131 | 37 |
| Internal Link Dist (ft) | | 295 | | | 758 | | | 189 | | | 350 | |
| Turn Bay Length (ft) | 100 | | | | | | | | | | | |
| Base Capacity (vph) | 427 | 2441 | | | 1600 | | | 432 | | | 371 | 563 |
| Starvation Cap Reductn | 0 | 1093 | | | 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 | 0.43 | 0.68 | | | 0.62 | | | 0.13 | | | 0.35 | 0.39 |

| Intersection Summary | | |
|---|---|---|
| Area Type: | Other | |
| Cycle Length: 100 | | |
| Actuated Cycle Length: 100 | | |
| Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green | | |
| Natural Cycle: 85 | | |
| Control Type: Actuated-Coordinated | | |
| Maximum v/c Ratio: 0.62 | | |
| Intersection Signal Delay: 13.8 | | Intersection LOS: B |
| Intersection Capacity Utilization 80.5% | | ICU Level of Service D |
| Analysis Period (min) 15 | | |

Splits and Phases: 305: Canal St/Jefferson St & Grand Ave



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 52 | 0 | 29 | 103 | 0 | 202 | 23 | 229 | 202 | 118 | 165 | 27 |
| Future Volume (vph) | 52 | 0 | 29 | 103 | 0 | 202 | 23 | 229 | 202 | 118 | 165 | 27 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 60 | | 100 | 205 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 1 | 1 | | 0 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 55 | | | 70 | | |
| 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 |
| Ped Bike Factor | | 0.95 | | | 0.86 | 0.95 | 0.98 | | 0.95 | 0.98 | 0.99 | |
| Frt | | 0.951 | | | | 0.850 | | | 0.850 | | 0.979 | |
| Flt Protected | | 0.969 | | | 0.950 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1701 | 0 | 0 | 1805 | 1615 | 1805 | 1863 | 775 | 1805 | 1816 | 0 |
| Flt Permitted | | 0.758 | | | 0.712 | | 0.628 | | | 0.563 | | |
| Satd. Flow (perm) | 0 | 1304 | 0 | 0 | 1157 | 1538 | 1166 | 1863 | 736 | 1050 | 1816 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 50 | | | | 220 | | | 220 | | 18 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 130 | | | 244 | | | 120 | | | 363 | |
| Travel Time (s) | | 3.0 | | | 5.5 | | | 2.7 | | | 8.3 | |
| Confl. Peds. (#/hr) | 20 | | 20 | 59 | | 20 | 10 | | 10 | 10 | | 10 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 2% | 0% | 0% | 2% | 0% |
| Parking (#/hr) | | | | | | | | | 84 | | | |
| Adj. Flow (vph) | 57 | 0 | 32 | 112 | 0 | 220 | 25 | 249 | 220 | 128 | 179 | 29 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 89 | 0 | 0 | 112 | 220 | 25 | 249 | 220 | 128 | 208 | 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 | 2.41 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | 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 | |
| Detector 1 Queue (s) | 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 | |
| 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 | | | | | | | | | | | | |



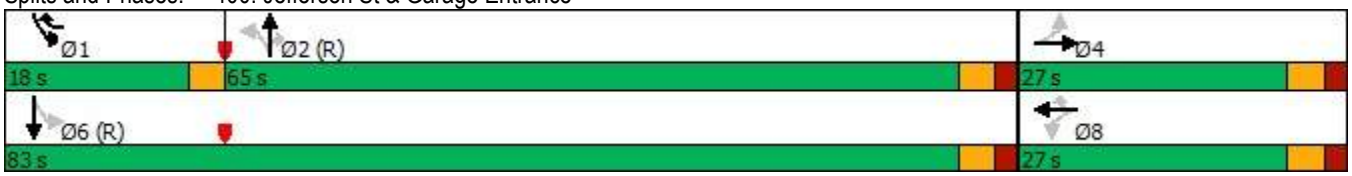
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | Perm | NA | pm+ov | Perm | NA | Perm | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | 1 | | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | 2 | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | 1 | 2 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 1.0 | 1.0 | 1.0 | 5.0 | 5.0 | |
| Minimum Split (s) | 23.0 | 23.0 | | 23.0 | 23.0 | 16.0 | 23.0 | 23.0 | 23.0 | 16.0 | 23.0 | |
| Total Split (s) | 27.0 | 27.0 | | 27.0 | 27.0 | 18.0 | 65.0 | 65.0 | 65.0 | 18.0 | 83.0 | |
| Total Split (%) | 24.5% | 24.5% | | 24.5% | 24.5% | 16.4% | 59.1% | 59.1% | 59.1% | 16.4% | 75.5% | |
| Maximum Green (s) | 22.0 | 22.0 | | 22.0 | 22.0 | 15.0 | 60.0 | 60.0 | 60.0 | 15.0 | 78.0 | |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | 0.0 | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | 3.0 | 5.0 | 5.0 | 5.0 | 3.0 | 5.0 | |
| Lead/Lag | | | | | | Lead | Lag | Lag | Lag | Lead | | |
| Lead-Lag Optimize? | | | | | | 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 | |
| Recall Mode | None | None | | Max | Max | None | C-Max | C-Max | C-Max | None | C-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) | | 22.0 | | | 22.0 | 31.8 | 67.2 | 67.2 | 67.2 | 80.0 | 78.0 | |
| Actuated g/C Ratio | | 0.20 | | | 0.20 | 0.29 | 0.61 | 0.61 | 0.61 | 0.73 | 0.71 | |
| v/c Ratio | | 0.30 | | | 0.48 | 0.36 | 0.04 | 0.22 | 0.41 | 0.16 | 0.16 | |
| Control Delay | | 21.5 | | | 47.1 | 5.4 | 9.1 | 10.4 | 3.8 | 6.7 | 7.3 | |
| Queue Delay | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Delay | | 21.5 | | | 47.1 | 5.4 | 9.1 | 10.4 | 3.8 | 6.7 | 7.3 | |
| LOS | | C | | | D | A | A | B | A | A | A | |
| Approach Delay | | 21.5 | | | 19.5 | | | 7.4 | | | 7.1 | |
| Approach LOS | | C | | | B | | | A | | | A | |
| 90th %ile Green (s) | 22.0 | 22.0 | | 22.0 | 22.0 | 9.4 | 65.6 | 65.6 | 65.6 | 9.4 | 78.0 | |
| 90th %ile Term Code | Hold | Hold | | MaxR | MaxR | Gap | Coord | Coord | Coord | Gap | Coord | |
| 70th %ile Green (s) | 22.0 | 22.0 | | 22.0 | 22.0 | 8.4 | 66.6 | 66.6 | 66.6 | 8.4 | 78.0 | |
| 70th %ile Term Code | Hold | Hold | | MaxR | MaxR | Gap | Coord | Coord | Coord | Gap | Coord | |
| 50th %ile Green (s) | 22.0 | 22.0 | | 22.0 | 22.0 | 7.7 | 67.3 | 67.3 | 67.3 | 7.7 | 78.0 | |
| 50th %ile Term Code | Hold | Hold | | MaxR | MaxR | Gap | Coord | Coord | Coord | Gap | Coord | |
| 30th %ile Green (s) | 22.0 | 22.0 | | 22.0 | 22.0 | 7.1 | 67.9 | 67.9 | 67.9 | 7.1 | 78.0 | |
| 30th %ile Term Code | Hold | Hold | | MaxR | MaxR | Gap | Coord | Coord | Coord | Gap | Coord | |
| 10th %ile Green (s) | 22.0 | 22.0 | | 22.0 | 22.0 | 6.2 | 68.8 | 68.8 | 68.8 | 6.2 | 78.0 | |
| 10th %ile Term Code | Hold | Hold | | MaxR | MaxR | Gap | Coord | Coord | Coord | Gap | Coord | |
| Queue Length 50th (ft) | | 23 | | | 71 | 0 | 7 | 73 | 0 | 35 | 61 | |
| Queue Length 95th (ft) | | 69 | | | 130 | 52 | 18 | 118 | 34 | m51 | m81 | |
| Internal Link Dist (ft) | | 50 | | | 164 | | | 40 | | | 283 | |
| Turn Bay Length (ft) | | | | | | | 60 | | 100 | 205 | | |
| Base Capacity (vph) | | 300 | | | 231 | 697 | 712 | 1138 | 535 | 866 | 1292 | |
| Starvation Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Spillback Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Reduced v/c Ratio | | 0.30 | | | 0.48 | 0.32 | 0.04 | 0.22 | 0.41 | 0.15 | 0.16 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 94 (85%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 65 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.48 | | | |
| Intersection Signal Delay: 11.5 | | Intersection LOS: B | |
| Intersection Capacity Utilization 51.1% | | ICU Level of Service A | |
| Analysis Period (min) 15 | | | |

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 400: Jefferson St & Garage Entrance



| Intersection | |
|---|---|
| Int Delay, s/veh | 1 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 19 | 1 | 15 | 0 | 0 | 0 | 27 | 256 | 14 | 8 | 435 | 48 |
| Future Vol, veh/h | 19 | 1 | 15 | 0 | 0 | 0 | 27 | 256 | 14 | 8 | 435 | 48 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 30 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 100 | - | - | 50 | - | 50 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 21 | 1 | 16 | 0 | 0 | 0 | 29 | 278 | 15 | 9 | 473 | 52 |

| Major/Minor | Minor1 | | | Minor2 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 861 | 917 | 286 | - | - | 503 | 555 | 0 | 0 | 293 | 0 | 0 |
| Stage 1 | 344 | 344 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 517 | 573 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | - | - | 6.22 | 4.1 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | - | - | 3.318 | 2.2 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 278 | 274 | 758 | 0 | 0 | 569 | 1026 | - | - | 1269 | - | - |
| Stage 1 | 676 | 640 | - | 0 | 0 | - | - | - | - | - | - | - |
| Stage 2 | 545 | 507 | - | 0 | 0 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 270 | 256 | 758 | - | - | 553 | 997 | - | - | 1269 | - | - |
| Mov Cap-2 Maneuver | 270 | 256 | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | 656 | 621 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 541 | 489 | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | SE | NW |
|---|---|---|---|---|
| HCM Control Delay, s | 15.8 | 0 | 0.8 | 0.1 |
| HCM LOS | C | A | | |

| Minor Lane/Major Mvmt | NWL | NWT | NWR | EBLn1 | WBLn1 | SEL | SET | SER |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1269 | - | - | 372 | - | 997 | - | - |
| HCM Lane V/C Ratio | 0.007 | - | - | 0.102 | - | 0.029 | - | - |
| HCM Control Delay (s) | 7.9 | - | - | 15.8 | 0 | 8.7 | - | - |
| HCM Lane LOS | A | - | - | C | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.3 | - | 0.1 | - | - |

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 14 | 0 | 21 | 0 | 0 | 57 | 29 | 237 | 2 | 14 | 424 | 52 |
| Future Vol, veh/h | 14 | 0 | 21 | 0 | 0 | 57 | 29 | 237 | 2 | 14 | 424 | 52 |
| Conflicting Peds, #/hr | 20 | 0 | 20 | 0 | 0 | 10 | 10 | 0 | 20 | 20 | 0 | 15 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 100 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 15 | 0 | 23 | 0 | 0 | 62 | 32 | 258 | 2 | 15 | 461 | 57 |

| Major/Minor | Minor1 | | | Minor2 | | Major1 | | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 914 | 906 | 299 | - | - | 525 | 533 | 0 | 0 | 280 | 0 | 0 |
| Stage 1 | 343 | 343 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 571 | 563 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.5 | 6.22 | - | - | 6.2 | 4.1 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4 | 3.318 | - | - | 3.3 | 2.2 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 254 | 278 | 741 | 0 | 0 | 556 | 1045 | - | - | 1283 | - | - |
| Stage 1 | 672 | 641 | - | 0 | 0 | - | - | - | - | - | - | - |
| Stage 2 | 506 | 512 | - | 0 | 0 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 209 | 256 | 713 | - | - | 535 | 1025 | - | - | 1259 | - | - |
| Mov Cap-2 Maneuver | 209 | 256 | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | 638 | 610 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 434 | 496 | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | SE | NW |
|---|---|---|---|---|
| HCM Control Delay, s | 16.1 | 12.6 | 0.9 | 0.2 |
| HCM LOS | C | B | | |

| Minor Lane/Major Mvmt | NWL | NWT | NWR | EBLn1 | WBLn1 | SEL | SET | SER |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1259 | - | - | 363 | 535 | 1025 | - | - |
| HCM Lane V/C Ratio | 0.012 | - | - | 0.105 | 0.116 | 0.031 | - | - |
| HCM Control Delay (s) | 7.9 | - | - | 16.1 | 12.6 | 8.6 | - | - |
| HCM Lane LOS | A | - | - | C | B | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.3 | 0.4 | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↰ | ↱ |
| Traffic Vol, veh/h | 7 | 23 | 0 | 53 | 0 | 21 | 2 | 259 | 11 | 1 | 481 | 19 |
| Future Vol, veh/h | 7 | 23 | 0 | 53 | 0 | 21 | 2 | 259 | 11 | 1 | 481 | 19 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 20 | 0 | 20 | 20 | 0 | 0 | 0 | 0 | 20 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | 100 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 8 | 25 | 0 | 58 | 0 | 23 | 2 | 282 | 12 | 1 | 523 | 21 |

| Major/Minor | Minor1 | | | Minor2 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 859 | 858 | 167 | 723 | 843 | 563 | 564 | 0 | 0 | 294 | 0 | 0 |
| Stage 1 | 292 | 292 | - | 545 | 545 | - | - | - | - | - | - | - |
| Stage 2 | 567 | 566 | - | 178 | 298 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.33 | 6.53 | 6.93 | 7.33 | 6.53 | 6.23 | 4.13 | - | - | 4.13 | - | - |
| Critical Hdwy Stg 1 | 6.53 | 5.53 | - | 6.13 | 5.53 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.13 | 5.53 | - | 6.53 | 5.53 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 4.019 | 3.319 | 3.519 | 4.019 | 3.319 | 2.219 | - | - | 2.219 | - | - |
| Pot Cap-1 Maneuver | 263 | 294 | 849 | 327 | 300 | 525 | 1006 | - | - | 1266 | - | - |
| Stage 1 | 692 | 670 | - | 522 | 518 | - | - | - | - | - | - | - |
| Stage 2 | 507 | 507 | - | 807 | 666 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 246 | 288 | 833 | 293 | 293 | 505 | 987 | - | - | 1266 | - | - |
| Mov Cap-2 Maneuver | 246 | 288 | - | 293 | 293 | - | - | - | - | - | - | - |
| Stage 1 | 691 | 669 | - | 511 | 508 | - | - | - | - | - | - | - |
| Stage 2 | 474 | 497 | - | 761 | 665 | - | - | - | - | - | - | - |

| Approach | EB | WB | SE | NW |
|---|---|---|---|---|
| HCM Control Delay, s | 19.7 | 19.2 | 0.1 | 0 |
| HCM LOS | C | C | | |

| Minor Lane/Major Mvmt | NWL | NWT | NWR | EBLn1 | WBLn1 | SEL | SET | SER |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1266 | - | - | 277 | 333 | 987 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.118 | 0.242 | 0.002 | - | - |
| HCM Control Delay (s) | 7.8 | 0 | - | 19.7 | 19.2 | 8.7 | 0 | - |
| HCM Lane LOS | A | A | - | C | C | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.4 | 0.9 | 0 | - | - |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 85 | 1087 | 206 | 157 | 1330 | 62 | 221 | 9 | 445 | 90 | 54 | 177 |
| Future Volume (vph) | 85 | 1087 | 206 | 157 | 1330 | 62 | 221 | 9 | 445 | 90 | 54 | 177 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 80 | | 55 | 95 | | 55 | 190 | | 190 | 0 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 0 | | 1 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 90 | | | 75 | | | 25 | | |
| 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 |
| Ped Bike Factor | | | 0.90 | | | 0.83 | 0.92 | | 0.90 | 0.91 | 0.87 | |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.885 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1435 | 0 |
| Flt Permitted | 0.082 | | | 0.077 | | | 0.416 | | | 0.751 | | |
| Satd. Flow (perm) | 153 | 1863 | 1422 | 143 | 1863 | 1315 | 709 | 1863 | 1422 | 1272 | 1435 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 79 | | | 79 | | | 216 | | 148 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 390 | | | 893 | | | 363 | | | 230 | |
| Travel Time (s) | | 8.9 | | | 20.3 | | | 8.3 | | | 5.2 | |
| Confl. Peds. (#/hr) | 50 | | 50 | 50 | | 50 | 50 | | 50 | 50 | | 50 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 92 | 1182 | 224 | 171 | 1446 | 67 | 240 | 10 | 484 | 98 | 59 | 192 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 92 | 1182 | 224 | 171 | 1446 | 67 | 240 | 10 | 484 | 98 | 251 | 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 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 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 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| 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 | |
| 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 | |
| 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 | |
| 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 | |
| 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 | pm+pt | NA | Perm | pm+pt | NA | |

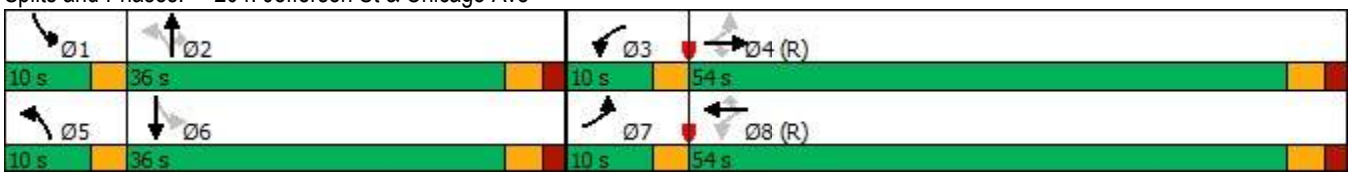
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | 2 | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 3.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 3.0 | 5.0 | |
| Minimum Split (s) | 8.0 | 42.0 | 42.0 | 8.0 | 50.0 | 50.0 | 8.0 | 35.0 | 35.0 | 8.0 | 25.0 | |
| Total Split (s) | 10.0 | 54.0 | 54.0 | 10.0 | 54.0 | 54.0 | 10.0 | 36.0 | 36.0 | 10.0 | 36.0 | |
| Total Split (%) | 9.1% | 49.1% | 49.1% | 9.1% | 49.1% | 49.1% | 9.1% | 32.7% | 32.7% | 9.1% | 32.7% | |
| Maximum Green (s) | 7.0 | 49.0 | 49.0 | 7.0 | 49.0 | 49.0 | 7.0 | 31.0 | 31.0 | 7.0 | 31.0 | |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| All-Red Time (s) | 0.0 | 2.0 | 2.0 | 0.0 | 2.0 | 2.0 | 0.0 | 2.0 | 2.0 | 0.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 3.0 | 5.0 | 5.0 | 3.0 | 5.0 | 5.0 | 3.0 | 5.0 | 5.0 | 3.0 | 5.0 | |
| Lead/Lag | Lead | Lag | Lag | Lead | Lag | Lag | Lead | Lag | Lag | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | Yes | Yes | | | | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Recall Mode | None | C-Max | C-Max | Max | C-Max | C-Max | Max | None | None | None | None | |
| Walk Time (s) | | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | |
| Flash Dont Walk (s) | | 11.0 | 11.0 | | 11.0 | 11.0 | | 11.0 | 11.0 | | 11.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | |
| Act Effct Green (s) | 57.8 | 49.0 | 49.0 | 62.9 | 54.7 | 54.7 | 36.4 | 27.4 | 27.4 | 36.2 | 27.3 | |
| Actuated g/C Ratio | 0.53 | 0.45 | 0.45 | 0.57 | 0.50 | 0.50 | 0.33 | 0.25 | 0.25 | 0.33 | 0.25 | |
| v/c Ratio | 0.51 | 1.43 | 0.33 | 0.72 | 1.56 | 0.10 | 0.79 | 0.02 | 0.94 | 0.22 | 0.54 | |
| Control Delay | 23.1 | 226.2 | 14.0 | 29.2 | 280.0 | 3.7 | 41.8 | 25.0 | 42.0 | 24.0 | 18.2 | |
| Queue Delay | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | |
| Total Delay | 23.1 | 227.3 | 14.0 | 29.2 | 280.0 | 3.7 | 41.8 | 25.0 | 43.0 | 24.0 | 18.2 | |
| LOS | C | F | B | C | F | A | D | C | D | C | B | |
| Approach Delay | | 182.9 | | | 243.5 | | | 42.4 | | | 19.8 | |
| Approach LOS | | F | | | F | | | D | | | B | |
| 90th %ile Green (s) | 7.0 | 49.0 | 49.0 | 7.0 | 49.0 | 49.0 | 7.0 | 31.0 | 31.0 | 7.0 | 31.0 | |
| 90th %ile Term Code | Max | Coord | Coord | MaxR | Coord | Coord | MaxR | Max | Max | Max | Hold | |
| 70th %ile Green (s) | 7.0 | 49.0 | 49.0 | 7.0 | 49.0 | 49.0 | 7.0 | 31.0 | 31.0 | 7.0 | 31.0 | |
| 70th %ile Term Code | Max | Coord | Coord | MaxR | Coord | Coord | MaxR | Max | Max | Max | Hold | |
| 50th %ile Green (s) | 7.0 | 49.0 | 49.0 | 7.0 | 49.0 | 49.0 | 7.0 | 31.0 | 31.0 | 7.0 | 31.0 | |
| 50th %ile Term Code | Max | Coord | Coord | MaxR | Coord | Coord | MaxR | Max | Max | Max | Hold | |
| 30th %ile Green (s) | 7.1 | 49.0 | 49.0 | 11.8 | 53.7 | 53.7 | 7.0 | 26.2 | 26.2 | 7.0 | 26.2 | |
| 30th %ile Term Code | Gap | Coord | Coord | MaxR | Coord | Coord | MaxR | Gap | Gap | Max | Hold | |
| 10th %ile Green (s) | 0.0 | 49.0 | 49.0 | 20.7 | 72.7 | 72.7 | 7.0 | 17.7 | 17.7 | 6.6 | 17.3 | |
| 10th %ile Term Code | Skip | Coord | Coord | MaxR | Coord | Coord | MaxR | Gap | Gap | Gap | Hold | |
| Queue Length 50th (ft) | 29 | ~1130 | 62 | 57 | ~1559 | 10 | 86 | 4 | 81 | 44 | 56 | |
| Queue Length 95th (ft) | 62 | #1385 | 120 | m#88 | m#1656 | m12 | #157 | m11 | #390 | 81 | 135 | |
| Internal Link Dist (ft) | | 310 | | | 813 | | | 283 | | | 150 | |
| Turn Bay Length (ft) | 80 | | 55 | 95 | | 55 | 190 | | 190 | | | |
| Base Capacity (vph) | 183 | 829 | 677 | 239 | 925 | 693 | 302 | 525 | 555 | 451 | 510 | |
| Starvation Cap Reductn | 0 | 139 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.50 | 1.71 | 0.33 | 0.72 | 1.56 | 0.10 | 0.79 | 0.02 | 0.89 | 0.22 | 0.49 | |

Intersection Summary

| | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 13 (12%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green | | | |
| Natural Cycle: 105 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.56 | | | |
| Intersection Signal Delay: 169.3 | | Intersection LOS: F | |
| Intersection Capacity Utilization 118.7% | | 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.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 204: Jefferson St & Chicago Ave

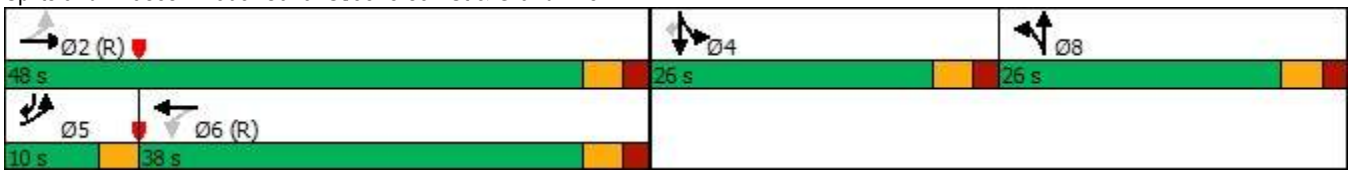


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 206 | 714 | 7 | 15 | 712 | 470 | 22 | 0 | 14 | 158 | 0 | 268 |
| Future Volume (vph) | 206 | 714 | 7 | 15 | 712 | 470 | 22 | 0 | 14 | 158 | 0 | 268 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 1 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 1 |
| Taper Length (ft) | 100 | | | 25 | | | 25 | | | 135 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 1.00 | | | 0.85 | | | 0.97 | | | 0.93 | |
| Frt | | 0.998 | | | 0.941 | | | 0.948 | | | | 0.850 |
| Flt Protected | 0.950 | | | | 0.999 | | | 0.970 | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3528 | 0 | 0 | 2818 | 0 | 0 | 1660 | 0 | 0 | 1770 | 1583 |
| Flt Permitted | 0.082 | | | | 0.941 | | | 0.970 | | | 0.950 | |
| Satd. Flow (perm) | 153 | 3528 | 0 | 0 | 2654 | 0 | 0 | 1660 | 0 | 0 | 1652 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 1 | | | 158 | | | 109 | | | | 291 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 375 | | | 838 | | | 269 | | | 430 | |
| Travel Time (s) | | 8.5 | | | 19.0 | | | 6.1 | | | 9.8 | |
| Confl. Peds. (#/hr) | 149 | | 35 | 35 | | 149 | | | 49 | 49 | | |
| Confl. Bikes (#/hr) | | | 2 | | | 30 | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 224 | 776 | 8 | 16 | 774 | 511 | 24 | 0 | 15 | 172 | 0 | 291 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 224 | 784 | 0 | 0 | 1301 | 0 | 0 | 39 | 0 | 0 | 172 | 291 |
| 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 | | | 0 | | | 0 | | | 0 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 |
| Detector 1 Type | 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 |
| Detector 1 Queue (s) | 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 |
| 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 | |

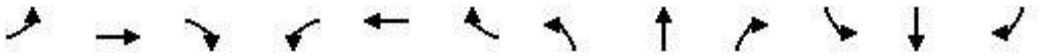
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | pm+pt | NA | | Perm | NA | | Split | NA | | Split | NA | pm+ov |
| Protected Phases | 5 | 2 | | | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Permitted Phases | 2 | | | 6 | | | | | | | | 4 |
| Detector Phase | 5 | 2 | | 6 | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.0 | 26.0 | | 26.0 | 26.0 | | 26.0 | 26.0 | | 23.0 | 23.0 | 10.0 |
| Total Split (s) | 10.0 | 48.0 | | 38.0 | 38.0 | | 26.0 | 26.0 | | 26.0 | 26.0 | 10.0 |
| Total Split (%) | 10.0% | 48.0% | | 38.0% | 38.0% | | 26.0% | 26.0% | | 26.0% | 26.0% | 10.0% |
| Maximum Green (s) | 7.0 | 43.0 | | 33.0 | 33.0 | | 21.0 | 21.0 | | 21.0 | 21.0 | 7.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| All-Red Time (s) | 0.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 0.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Lost Time (s) | 3.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | 3.0 |
| Lead/Lag | Lead | | | Lag | Lag | | | | | | | Lead |
| Lead-Lag Optimize? | 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 |
| Recall Mode | None | C-Max | | C-Max | C-Max | | None | None | | None | None | None |
| Walk Time (s) | | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | | | |
| Flash Dont Walk (s) | | 14.0 | | 14.0 | 14.0 | | 14.0 | 14.0 | | | | |
| Pedestrian Calls (#/hr) | | 0 | | 0 | 0 | | 0 | 0 | | | | |
| Act Effct Green (s) | 70.8 | 68.8 | | | 48.8 | | | 5.5 | | | 14.9 | 35.1 |
| Actuated g/C Ratio | 0.71 | 0.69 | | | 0.49 | | | 0.06 | | | 0.15 | 0.35 |
| v/c Ratio | 0.59 | 0.32 | | | 0.94 | | | 0.20 | | | 0.65 | 0.39 |
| Control Delay | 24.2 | 7.9 | | | 38.4 | | | 2.3 | | | 51.2 | 3.2 |
| Queue Delay | 0.0 | 0.5 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Delay | 24.2 | 8.4 | | | 38.4 | | | 2.3 | | | 51.2 | 3.2 |
| LOS | C | A | | | D | | | A | | | D | A |
| Approach Delay | | 11.9 | | | 38.4 | | | 2.3 | | | 21.0 | |
| Approach LOS | | B | | | D | | | A | | | C | |
| 90th %ile Green (s) | 19.4 | 59.1 | | 36.7 | 36.7 | | 5.5 | 5.5 | | 20.4 | 20.4 | 19.4 |
| 90th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 70th %ile Green (s) | 16.2 | 62.3 | | 43.1 | 43.1 | | 5.5 | 5.5 | | 17.2 | 17.2 | 16.2 |
| 70th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 50th %ile Green (s) | 15.3 | 64.5 | | 46.2 | 46.2 | | 5.5 | 5.5 | | 15.0 | 15.0 | 15.3 |
| 50th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 30th %ile Green (s) | 14.9 | 77.3 | | 59.4 | 59.4 | | 0.0 | 0.0 | | 12.7 | 12.7 | 14.9 |
| 30th %ile Term Code | Gap | Coord | | Coord | Coord | | Skip | Skip | | Gap | Gap | Gap |
| 10th %ile Green (s) | 18.8 | 80.6 | | 58.8 | 58.8 | | 0.0 | 0.0 | | 9.4 | 9.4 | 18.8 |
| 10th %ile Term Code | Gap | Coord | | Coord | Coord | | Skip | Skip | | Gap | Gap | Gap |
| Queue Length 50th (ft) | 78 | 108 | | | 385 | | | 0 | | | 105 | 0 |
| Queue Length 95th (ft) | 159 | 166 | | | #639 | | | 0 | | | 163 | 36 |
| Internal Link Dist (ft) | | 295 | | | 758 | | | 189 | | | 350 | |
| Turn Bay Length (ft) | 100 | | | | | | | | | | | |
| Base Capacity (vph) | 382 | 2426 | | | 1377 | | | 434 | | | 371 | 744 |
| Starvation Cap Reductn | 0 | 1079 | | | 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 | 0.59 | 0.58 | | | 0.94 | | | 0.09 | | | 0.46 | 0.39 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 100 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.94 | | | |
| Intersection Signal Delay: 25.5 | | Intersection LOS: C | |
| Intersection Capacity Utilization 86.5% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |
| # 95th percentile volume exceeds capacity, queue may be longer. | | | |
| Queue shown is maximum after two cycles. | | | |

Splits and Phases: 305: Canal St/Jefferson St & Grand Ave



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 37 | 0 | 21 | 170 | 0 | 329 | 26 | 308 | 257 | 149 | 237 | 31 |
| Future Volume (vph) | 37 | 0 | 21 | 170 | 0 | 329 | 26 | 308 | 257 | 149 | 237 | 31 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 60 | | 100 | 205 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 1 | 1 | | 0 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 55 | | | 70 | | |
| 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 |
| Ped Bike Factor | | 0.96 | | | 0.77 | 0.95 | 0.96 | | 0.92 | 0.97 | 0.99 | |
| Frt | | 0.951 | | | | 0.850 | | | 0.850 | | 0.983 | |
| Flt Protected | | 0.969 | | | 0.950 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1700 | 0 | 0 | 1805 | 1615 | 1805 | 1863 | 646 | 1805 | 1818 | 0 |
| Flt Permitted | | 0.764 | | | 0.748 | | 0.581 | | | 0.466 | | |
| Satd. Flow (perm) | 0 | 1319 | 0 | 0 | 1094 | 1538 | 1059 | 1863 | 594 | 862 | 1818 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 50 | | | | 358 | | | 279 | | 12 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 130 | | | 244 | | | 120 | | | 363 | |
| Travel Time (s) | | 3.0 | | | 5.5 | | | 2.7 | | | 8.3 | |
| Confl. Peds. (#/hr) | 20 | | 20 | 84 | | 20 | 20 | | 20 | 20 | | 20 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 2% | 0% | 0% | 2% | 0% |
| Parking (#/hr) | | | | | | | | | 100 | | | |
| Adj. Flow (vph) | 40 | 0 | 23 | 185 | 0 | 358 | 28 | 335 | 279 | 162 | 258 | 34 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 63 | 0 | 0 | 185 | 358 | 28 | 335 | 279 | 162 | 292 | 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 | 2.95 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 60 | | 60 | 15 | | 9 | 60 | | 9 | 15 | | 60 |
| Number of Detectors | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | 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 | |
| Detector 1 Queue (s) | 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 | |
| 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 | | | | | | | | | | | | |



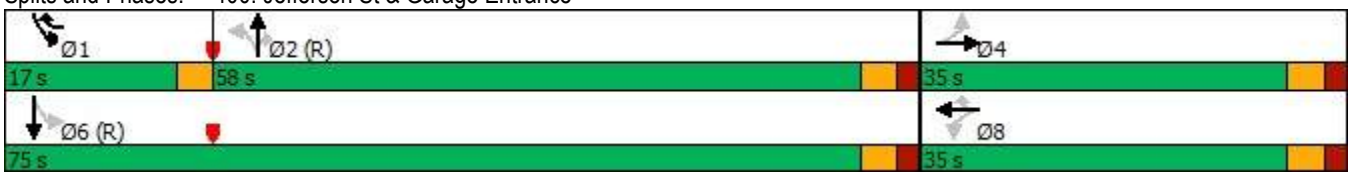
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | Perm | NA | pm+ov | Perm | NA | Perm | pm+pt | NA | |
| Protected Phases | | 4 | | | 8 | 1 | | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | 2 | 6 | | |
| Detector Phase | 4 | 4 | | 8 | 8 | 1 | 2 | 2 | 2 | 1 | 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 | |
| Minimum Split (s) | 23.0 | 23.0 | | 23.0 | 23.0 | 16.0 | 23.0 | 23.0 | 23.0 | 16.0 | 23.0 | |
| Total Split (s) | 35.0 | 35.0 | | 35.0 | 35.0 | 17.0 | 58.0 | 58.0 | 58.0 | 17.0 | 75.0 | |
| Total Split (%) | 31.8% | 31.8% | | 31.8% | 31.8% | 15.5% | 52.7% | 52.7% | 52.7% | 15.5% | 68.2% | |
| Maximum Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 14.0 | 53.0 | 53.0 | 53.0 | 14.0 | 70.0 | |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 2.0 | 2.0 | 0.0 | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | 3.0 | 5.0 | 5.0 | 5.0 | 3.0 | 5.0 | |
| Lead/Lag | | | | | | Lead | Lag | Lag | Lag | Lead | | |
| Lead-Lag Optimize? | | | | | | 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 | |
| Recall Mode | None | None | | Max | Max | None | C-Max | C-Max | C-Max | None | C-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) | | 30.0 | | | 30.0 | 41.5 | 57.5 | 57.5 | 57.5 | 72.0 | 70.0 | |
| Actuated g/C Ratio | | 0.27 | | | 0.27 | 0.38 | 0.52 | 0.52 | 0.52 | 0.65 | 0.64 | |
| v/c Ratio | | 0.16 | | | 0.62 | 0.44 | 0.05 | 0.34 | 0.63 | 0.25 | 0.25 | |
| Control Delay | | 12.5 | | | 45.5 | 3.9 | 14.1 | 16.9 | 9.2 | 12.0 | 14.8 | |
| Queue Delay | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | |
| Total Delay | | 12.5 | | | 45.5 | 4.0 | 14.1 | 16.9 | 9.2 | 12.0 | 16.0 | |
| LOS | | B | | | D | A | B | B | A | B | B | |
| Approach Delay | | 12.5 | | | 18.1 | | | 13.5 | | | 14.6 | |
| Approach LOS | | B | | | B | | | B | | | B | |
| 90th %ile Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 12.7 | 54.3 | 54.3 | 54.3 | 12.7 | 70.0 | |
| 90th %ile Term Code | Hold | Hold | | MaxR | MaxR | Gap | Coord | Coord | Coord | Gap | Coord | |
| 70th %ile Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 10.2 | 56.8 | 56.8 | 56.8 | 10.2 | 70.0 | |
| 70th %ile Term Code | Hold | Hold | | MaxR | MaxR | Gap | Coord | Coord | Coord | Gap | Coord | |
| 50th %ile Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 9.2 | 57.8 | 57.8 | 57.8 | 9.2 | 70.0 | |
| 50th %ile Term Code | Hold | Hold | | MaxR | MaxR | Gap | Coord | Coord | Coord | Gap | Coord | |
| 30th %ile Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 8.3 | 58.7 | 58.7 | 58.7 | 8.3 | 70.0 | |
| 30th %ile Term Code | Hold | Hold | | MaxR | MaxR | Gap | Coord | Coord | Coord | Gap | Coord | |
| 10th %ile Green (s) | 30.0 | 30.0 | | 30.0 | 30.0 | 7.0 | 60.0 | 60.0 | 60.0 | 7.0 | 70.0 | |
| 10th %ile Term Code | Hold | Hold | | MaxR | MaxR | Gap | Coord | Coord | Coord | Gap | Coord | |
| Queue Length 50th (ft) | | 7 | | | 114 | 0 | 9 | 131 | 0 | 49 | 109 | |
| Queue Length 95th (ft) | | 40 | | | 195 | 53 | 26 | 209 | 81 | m88 | 173 | |
| Internal Link Dist (ft) | | 50 | | | 164 | | | 40 | | | 283 | |
| Turn Bay Length (ft) | | | | | | | 60 | | 100 | 205 | | |
| Base Capacity (vph) | | 396 | | | 298 | 861 | 553 | 974 | 443 | 684 | 1161 | |
| Starvation Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 644 | |
| Spillback Cap Reductn | | 0 | | | 0 | 4 | 0 | 25 | 0 | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Reduced v/c Ratio | | 0.16 | | | 0.62 | 0.42 | 0.05 | 0.35 | 0.63 | 0.24 | 0.56 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 79 (72%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 65 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.63 | | | |
| Intersection Signal Delay: 15.2 | | Intersection LOS: B | |
| Intersection Capacity Utilization 59.6% | | ICU Level of Service B | |
| Analysis Period (min) 15 | | | |

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 400: Jefferson St & Garage Entrance



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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 19 | 2 | 13 | 0 | 0 | 0 | 34 | 380 | 14 | 14 | 572 | 62 |
| Future Vol, veh/h | 19 | 2 | 13 | 0 | 0 | 0 | 34 | 380 | 14 | 14 | 572 | 62 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 42 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 100 | - | - | 50 | - | 50 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 21 | 2 | 14 | 0 | 0 | 0 | 37 | 413 | 15 | 15 | 622 | 67 |

| Major/Minor | Minor1 | | | Minor2 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1181 | 1256 | 421 | - | - | 664 | 731 | 0 | 0 | 428 | 0 | 0 |
| Stage 1 | 495 | 495 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 686 | 761 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | - | - | 6.22 | 4.1 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | - | - | 3.318 | 2.2 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 168 | 173 | 637 | 0 | 0 | 461 | 883 | - | - | 1131 | - | - |
| Stage 1 | 560 | 549 | - | 0 | 0 | - | - | - | - | - | - | - |
| Stage 2 | 441 | 417 | - | 0 | 0 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 161 | 157 | 637 | - | - | 443 | 848 | - | - | 1131 | - | - |
| Mov Cap-2 Maneuver | 161 | 157 | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | 535 | 525 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 435 | 395 | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | SE | NW |
|---|---|---|---|---|
| HCM Control Delay, s | 24.1 | 0 | 0.7 | 0.2 |
| HCM LOS | C | A | | |

| Minor Lane/Major Mvmt | NWL | NWT | NWR | EBLn1 | WBLn1 | SEL | SET | SER |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1131 | - | - | 225 | - | 848 | - | - |
| HCM Lane V/C Ratio | 0.013 | - | - | 0.164 | - | 0.044 | - | - |
| HCM Control Delay (s) | 8.2 | - | - | 24.1 | 0 | 9.4 | - | - |
| HCM Lane LOS | A | - | - | C | A | A | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.6 | - | 0.1 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 14 | 0 | 18 | 0 | 0 | 91 | 39 | 350 | 4 | 25 | 544 | 69 |
| Future Vol, veh/h | 14 | 0 | 18 | 0 | 0 | 91 | 39 | 350 | 4 | 25 | 544 | 69 |
| Conflicting Peds, #/hr | 20 | 0 | 20 | 0 | 0 | 20 | 20 | 0 | 20 | 20 | 0 | 21 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 100 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 15 | 0 | 20 | 0 | 0 | 99 | 42 | 380 | 4 | 27 | 591 | 75 |

| Major/Minor | Minor1 | | | Minor2 | | Major1 | | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1238 | 1227 | 422 | - | - | 670 | 687 | 0 | 0 | 404 | 0 | 0 |
| Stage 1 | 486 | 486 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 752 | 741 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.5 | 6.22 | - | - | 6.2 | 4.1 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4 | 3.318 | - | - | 3.3 | 2.2 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 152 | 180 | 632 | 0 | 0 | 460 | 916 | - | - | 1155 | - | - |
| Stage 1 | 563 | 554 | - | 0 | 0 | - | - | - | - | - | - | - |
| Stage 2 | 402 | 426 | - | 0 | 0 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 107 | 160 | 608 | - | - | 439 | 892 | - | - | 1133 | - | - |
| Mov Cap-2 Maneuver | 107 | 160 | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | 526 | 518 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 298 | 405 | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | SE | NW |
|---|---|---|---|---|
| HCM Control Delay, s | 26.9 | 15.6 | 0.9 | 0.3 |
| HCM LOS | D | C | | |

| Minor Lane/Major Mvmt | NWL | NWT | NWR | EBLn1 | WBLn1 | SEL | SET | SER |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1133 | - | - | 199 | 439 | 892 | - | - |
| HCM Lane V/C Ratio | 0.024 | - | - | 0.175 | 0.225 | 0.048 | - | - |
| HCM Control Delay (s) | 8.3 | - | - | 26.9 | 15.6 | 9.2 | - | - |
| HCM Lane LOS | A | - | - | D | C | A | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.6 | 0.9 | 0.1 | - | - |

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

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↰ | ↱ |
| Traffic Vol, veh/h | 9 | 40 | 0 | 45 | 0 | 19 | 4 | 369 | 18 | 1 | 634 | 33 |
| Future Vol, veh/h | 9 | 40 | 0 | 45 | 0 | 19 | 4 | 369 | 18 | 1 | 634 | 33 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 20 | 0 | 20 | 20 | 0 | 0 | 0 | 0 | 20 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | 100 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 10 | 43 | 0 | 49 | 0 | 21 | 4 | 401 | 20 | 1 | 689 | 36 |

| Major/Minor | Minor1 | | | Minor2 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1159 | 1166 | 231 | 961 | 1140 | 729 | 745 | 0 | 0 | 421 | 0 | 0 |
| Stage 1 | 419 | 419 | - | 711 | 711 | - | - | - | - | - | - | - |
| Stage 2 | 740 | 747 | - | 250 | 429 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.33 | 6.53 | 6.93 | 7.33 | 6.53 | 6.23 | 4.13 | - | - | 4.13 | - | - |
| Critical Hdwy Stg 1 | 6.53 | 5.53 | - | 6.13 | 5.53 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.13 | 5.53 | - | 6.53 | 5.53 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 4.019 | 3.319 | 3.519 | 4.019 | 3.319 | 2.219 | - | - | 2.219 | - | - |
| Pot Cap-1 Maneuver | 161 | 193 | 772 | 223 | 200 | 422 | 861 | - | - | 1136 | - | - |
| Stage 1 | 583 | 589 | - | 423 | 435 | - | - | - | - | - | - | - |
| Stage 2 | 408 | 419 | - | 733 | 583 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 149 | 188 | 757 | 176 | 195 | 406 | 845 | - | - | 1136 | - | - |
| Mov Cap-2 Maneuver | 149 | 188 | - | 176 | 195 | - | - | - | - | - | - | - |
| Stage 1 | 580 | 585 | - | 412 | 426 | - | - | - | - | - | - | - |
| Stage 2 | 379 | 411 | - | 662 | 580 | - | - | - | - | - | - | - |

| Approach | EB | WB | SE | NW |
|---|---|---|---|---|
| HCM Control Delay, s | 33.4 | 30.1 | 0.1 | 0 |
| HCM LOS | D | D | | |

| Minor Lane/Major Mvmt | NWL | NWT | NWR | EBLn1 | WBLn1 | SEL | SET | SER |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1136 | - | - | 179 | 212 | 845 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.298 | 0.328 | 0.005 | - | - |
| HCM Control Delay (s) | 8.2 | 0 | - | 33.4 | 30.1 | 9.3 | 0 | - |
| HCM Lane LOS | A | A | - | D | D | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.2 | 1.4 | 0 | - | - |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 17 | 811 | 251 | 190 | 577 | 12 | 254 | 2 | 544 | 18 | 11 | 35 |
| Future Volume (vph) | 17 | 811 | 251 | 190 | 577 | 12 | 254 | 2 | 544 | 18 | 11 | 35 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 80 | | 55 | 95 | | 55 | 190 | | 190 | 0 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 0 | | 1 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 90 | | | 75 | | | 25 | | |
| 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 |
| Ped Bike Factor | 0.97 | | 0.90 | | | 0.83 | 0.87 | | 0.90 | 0.91 | 0.87 | |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.886 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1438 | 0 |
| Flt Permitted | 0.262 | | | 0.090 | | | 0.619 | | | 0.757 | | |
| Satd. Flow (perm) | 472 | 1863 | 1422 | 168 | 1863 | 1315 | 1002 | 1863 | 1422 | 1281 | 1438 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 139 | | | 109 | | | 384 | | 38 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 390 | | | 893 | | | 363 | | | 230 | |
| Travel Time (s) | | 8.9 | | | 20.3 | | | 8.3 | | | 5.2 | |
| Confl. Peds. (#/hr) | 50 | | 50 | 50 | | 50 | 50 | | 50 | 50 | | 50 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 18 | 882 | 273 | 207 | 627 | 13 | 276 | 2 | 591 | 20 | 12 | 38 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 18 | 882 | 273 | 207 | 627 | 13 | 276 | 2 | 591 | 20 | 50 | 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 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 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 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| 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 | |
| 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 | |
| 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 | |
| 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 | |
| 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 | pm+pt | NA | Perm | pm+pt | NA | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | 2 | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 3.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 3.0 | 3.0 | |
| Minimum Split (s) | 8.0 | 44.0 | 44.0 | 16.0 | 54.0 | 54.0 | 16.0 | 35.0 | 35.0 | 8.0 | 25.0 | |
| Total Split (s) | 10.0 | 44.0 | 44.0 | 20.0 | 54.0 | 54.0 | 20.0 | 36.0 | 36.0 | 10.0 | 26.0 | |
| Total Split (%) | 9.1% | 40.0% | 40.0% | 18.2% | 49.1% | 49.1% | 18.2% | 32.7% | 32.7% | 9.1% | 23.6% | |
| Maximum Green (s) | 7.0 | 39.0 | 39.0 | 17.0 | 49.0 | 49.0 | 17.0 | 31.0 | 31.0 | 7.0 | 21.0 | |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| All-Red Time (s) | 0.0 | 2.0 | 2.0 | 0.0 | 2.0 | 2.0 | 0.0 | 2.0 | 2.0 | 0.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 3.0 | 5.0 | 5.0 | 3.0 | 5.0 | 5.0 | 3.0 | 5.0 | 5.0 | 3.0 | 5.0 | |
| Lead/Lag | Lead | Lag | Lag | Lead | Lag | Lag | Lead | Lag | Lag | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Recall Mode | None | C-Max | C-Max | None | C-Max | C-Max | Max | Max | Max | None | None | |
| Walk Time (s) | | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | 7.0 | |
| Flash Dont Walk (s) | | 11.0 | 11.0 | | 11.0 | 11.0 | | 11.0 | 11.0 | | 11.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | |
| Act Effct Green (s) | 51.1 | 43.1 | 43.1 | 61.0 | 55.2 | 55.2 | 43.0 | 37.1 | 37.1 | 24.6 | 17.9 | |
| Actuated g/C Ratio | 0.46 | 0.39 | 0.39 | 0.55 | 0.50 | 0.50 | 0.39 | 0.34 | 0.34 | 0.22 | 0.16 | |
| v/c Ratio | 0.06 | 1.21 | 0.43 | 0.74 | 0.67 | 0.02 | 0.51 | 0.00 | 0.81 | 0.06 | 0.19 | |
| Control Delay | 12.0 | 132.1 | 13.3 | 37.0 | 26.2 | 0.1 | 25.4 | 26.0 | 21.1 | 22.1 | 17.7 | |
| Queue Delay | 0.0 | 0.7 | 0.4 | 0.0 | 5.3 | 0.0 | 0.9 | 0.0 | 1.2 | 0.0 | 0.0 | |
| Total Delay | 12.0 | 132.8 | 13.8 | 37.0 | 31.4 | 0.1 | 26.3 | 26.0 | 22.4 | 22.1 | 17.7 | |
| LOS | B | F | B | D | C | A | C | C | C | C | B | |
| Approach Delay | | 103.2 | | | 32.3 | | | 23.6 | | | 18.9 | |
| Approach LOS | | F | | | C | | | C | | | B | |
| 90th %ile Green (s) | 6.8 | 39.0 | 39.0 | 17.0 | 49.2 | 49.2 | 17.0 | 31.0 | 31.0 | 7.0 | 21.0 | |
| 90th %ile Term Code | Gap | Coord | Coord | Max | Coord | Coord | MaxR | MaxR | MaxR | Max | Hold | |
| 70th %ile Green (s) | 6.3 | 40.2 | 40.2 | 15.8 | 49.7 | 49.7 | 17.0 | 31.3 | 31.3 | 6.7 | 21.0 | |
| 70th %ile Term Code | Gap | Coord | Coord | Gap | Coord | Coord | MaxR | MaxR | MaxR | Gap | Hold | |
| 50th %ile Green (s) | 0.0 | 43.1 | 43.1 | 12.9 | 59.0 | 59.0 | 17.0 | 41.0 | 41.0 | 0.0 | 21.0 | |
| 50th %ile Term Code | Skip | Coord | Coord | Gap | Coord | Coord | MaxR | MaxR | MaxR | Skip | Hold | |
| 30th %ile Green (s) | 0.0 | 45.5 | 45.5 | 10.5 | 59.0 | 59.0 | 17.0 | 41.0 | 41.0 | 0.0 | 21.0 | |
| 30th %ile Term Code | Skip | Coord | Coord | Gap | Coord | Coord | MaxR | MaxR | MaxR | Skip | Hold | |
| 10th %ile Green (s) | 0.0 | 47.6 | 47.6 | 8.4 | 59.0 | 59.0 | 43.0 | 41.0 | 41.0 | 0.0 | 0.0 | |
| 10th %ile Term Code | Skip | Coord | Coord | Gap | Coord | Coord | Hold | MaxR | MaxR | Skip | Skip | |
| Queue Length 50th (ft) | 5 | ~751 | 44 | 85 | 295 | 0 | 147 | 1 | 168 | 9 | 7 | |
| Queue Length 95th (ft) | m8 | m#1027 | m109 | 163 | 508 | 0 | 207 | m2 | #374 | 25 | 41 | |
| Internal Link Dist (ft) | | 310 | | | 813 | | | 283 | | | 150 | |
| Turn Bay Length (ft) | 80 | | 55 | 95 | | 55 | 190 | | 190 | | | |
| Base Capacity (vph) | 306 | 729 | 641 | 340 | 934 | 713 | 546 | 627 | 733 | 326 | 305 | |
| Starvation Cap Reductn | 0 | 70 | 105 | 0 | 0 | 0 | 96 | 0 | 39 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 241 | 0 | 0 | 0 | 0 | 0 | 4 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.06 | 1.34 | 0.51 | 0.61 | 0.90 | 0.02 | 0.61 | 0.00 | 0.85 | 0.06 | 0.17 | |

Intersection Summary

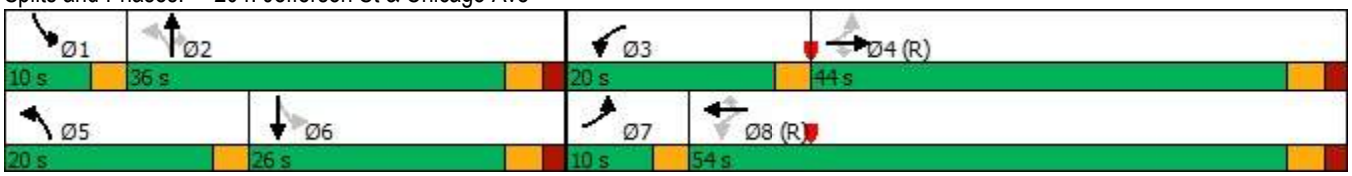
| | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 18 (16%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green | | | |
| Natural Cycle: 105 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 1.21 | | | |
| Intersection Signal Delay: 57.5 | | Intersection LOS: E | |
| Intersection Capacity Utilization 95.3% | | 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.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 204: Jefferson St & Chicago Ave

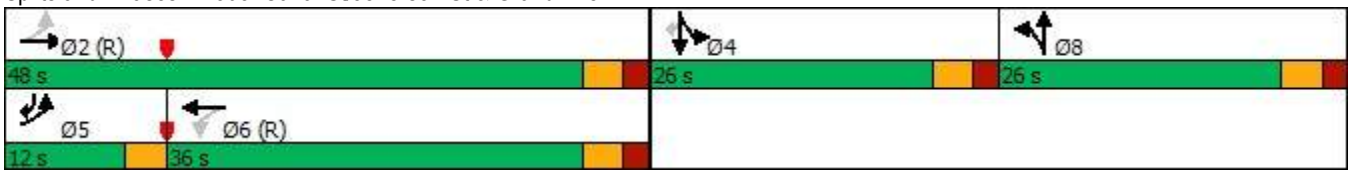


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 238 | 513 | 5 | 10 | 449 | 572 | 19 | 0 | 10 | 179 | 0 | 233 |
| Future Volume (vph) | 238 | 513 | 5 | 10 | 449 | 572 | 19 | 0 | 10 | 179 | 0 | 233 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 1 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 1 |
| Taper Length (ft) | 100 | | | 25 | | | 25 | | | 135 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 1.00 | | | 0.92 | | | 0.99 | | | 0.98 | |
| Frt | | 0.999 | | | 0.917 | | | 0.954 | | | | 0.850 |
| Flt Protected | 0.950 | | | | | | | 0.968 | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3534 | 0 | 0 | 2970 | 0 | 0 | 1698 | 0 | 0 | 1770 | 1583 |
| Flt Permitted | 0.117 | | | | 0.948 | | | 0.968 | | | 0.950 | |
| Satd. Flow (perm) | 218 | 3534 | 0 | 0 | 2815 | 0 | 0 | 1698 | 0 | 0 | 1726 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 1 | | | 328 | | | 109 | | | | 253 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 375 | | | 838 | | | 269 | | | 430 | |
| Travel Time (s) | | 8.5 | | | 19.0 | | | 6.1 | | | 9.8 | |
| Confl. Peds. (#/hr) | 56 | | 17 | 17 | | 56 | | | 18 | 18 | | |
| Confl. Bikes (#/hr) | | | | | | 2 | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 259 | 558 | 5 | 11 | 488 | 622 | 21 | 0 | 11 | 195 | 0 | 253 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 259 | 563 | 0 | 0 | 1121 | 0 | 0 | 32 | 0 | 0 | 195 | 253 |
| 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 | | | 0 | | | 0 | | | 0 | |
| Link Offset(ft) | | 0 | | | 0 | | | 0 | | | 0 | |
| Crosswalk Width(ft) | | 16 | | | 16 | | | 16 | | | 16 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (mph) | 15 | | 9 | 15 | | 9 | 15 | | 9 | 15 | | 9 |
| Number of Detectors | 1 | 2 | | 1 | 2 | | 1 | 2 | | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 |
| Detector 1 Type | 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 |
| Detector 1 Queue (s) | 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 |
| 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 | |

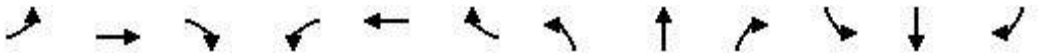
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | pm+pt | NA | | Perm | NA | | Split | NA | | Split | NA | pm+ov |
| Protected Phases | 5 | 2 | | | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Permitted Phases | 2 | | | 6 | | | | | | | | 4 |
| Detector Phase | 5 | 2 | | 6 | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.0 | 26.0 | | 26.0 | 26.0 | | 26.0 | 26.0 | | 23.0 | 23.0 | 10.0 |
| Total Split (s) | 12.0 | 48.0 | | 36.0 | 36.0 | | 26.0 | 26.0 | | 26.0 | 26.0 | 12.0 |
| Total Split (%) | 12.0% | 48.0% | | 36.0% | 36.0% | | 26.0% | 26.0% | | 26.0% | 26.0% | 12.0% |
| Maximum Green (s) | 9.0 | 43.0 | | 31.0 | 31.0 | | 21.0 | 21.0 | | 21.0 | 21.0 | 9.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| All-Red Time (s) | 0.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 0.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Lost Time (s) | 3.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | 3.0 |
| Lead/Lag | Lead | | | Lag | Lag | | | | | | | Lead |
| Lead-Lag Optimize? | 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 |
| Recall Mode | None | C-Max | | C-Max | C-Max | | None | None | | None | None | None |
| Walk Time (s) | | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | | | |
| Flash Dont Walk (s) | | 14.0 | | 14.0 | 14.0 | | 14.0 | 14.0 | | | | |
| Pedestrian Calls (#/hr) | | 0 | | 0 | 0 | | 0 | 0 | | | | |
| Act Effct Green (s) | 69.7 | 67.7 | | | 46.0 | | | 5.5 | | | 16.0 | 37.9 |
| Actuated g/C Ratio | 0.70 | 0.68 | | | 0.46 | | | 0.06 | | | 0.16 | 0.38 |
| v/c Ratio | 0.59 | 0.24 | | | 0.76 | | | 0.16 | | | 0.69 | 0.33 |
| Control Delay | 19.3 | 7.7 | | | 21.7 | | | 1.8 | | | 52.0 | 2.7 |
| Queue Delay | 0.0 | 0.3 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Delay | 19.3 | 8.0 | | | 21.7 | | | 1.8 | | | 52.0 | 2.7 |
| LOS | B | A | | | C | | | A | | | D | A |
| Approach Delay | | 11.5 | | | 21.7 | | | 1.8 | | | 24.2 | |
| Approach LOS | | B | | | C | | | A | | | C | |
| 90th %ile Green (s) | 21.9 | 58.5 | | 33.6 | 33.6 | | 5.5 | 5.5 | | 21.0 | 21.0 | 21.9 |
| 90th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Max | Max | Gap |
| 70th %ile Green (s) | 18.5 | 60.9 | | 39.4 | 39.4 | | 5.5 | 5.5 | | 18.6 | 18.6 | 18.5 |
| 70th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 50th %ile Green (s) | 17.4 | 63.3 | | 42.9 | 42.9 | | 5.5 | 5.5 | | 16.2 | 16.2 | 17.4 |
| 50th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 30th %ile Green (s) | 16.0 | 76.2 | | 57.2 | 57.2 | | 0.0 | 0.0 | | 13.8 | 13.8 | 16.0 |
| 30th %ile Term Code | Gap | Coord | | Coord | Coord | | Skip | Skip | | Gap | Gap | Gap |
| 10th %ile Green (s) | 19.7 | 79.7 | | 57.0 | 57.0 | | 0.0 | 0.0 | | 10.3 | 10.3 | 19.7 |
| 10th %ile Term Code | Gap | Coord | | Coord | Coord | | Skip | Skip | | Gap | Gap | Gap |
| Queue Length 50th (ft) | 77 | 75 | | | 234 | | | 0 | | | 118 | 0 |
| Queue Length 95th (ft) | 165 | 116 | | | #431 | | | 0 | | | 183 | 31 |
| Internal Link Dist (ft) | | 295 | | | 758 | | | 189 | | | 350 | |
| Turn Bay Length (ft) | 100 | | | | | | | | | | | |
| Base Capacity (vph) | 442 | 2393 | | | 1472 | | | 442 | | | 371 | 756 |
| Starvation Cap Reductn | 0 | 1145 | | | 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 | 0.59 | 0.45 | | | 0.76 | | | 0.07 | | | 0.53 | 0.33 |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 100 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green | | | |
| Natural Cycle: 85 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.76 | | | |
| Intersection Signal Delay: 18.4 | | Intersection LOS: B | |
| Intersection Capacity Utilization 77.2% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |
| # 95th percentile volume exceeds capacity, queue may be longer. | | | |
| Queue shown is maximum after two cycles. | | | |

Splits and Phases: 305: Canal St/Jefferson St & Grand Ave



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 19 | 0 | 10 | 216 | 0 | 417 | 14 | 363 | 340 | 199 | 237 | 16 |
| Future Volume (vph) | 19 | 0 | 10 | 216 | 0 | 417 | 14 | 363 | 340 | 199 | 237 | 16 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 60 | | 100 | 205 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 1 | 1 | | 0 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 55 | | | 70 | | |
| 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 |
| Ped Bike Factor | | 0.96 | | | 0.71 | 0.95 | 0.94 | | 0.89 | 0.97 | 0.99 | |
| Frt | | 0.954 | | | | 0.850 | | | 0.850 | | 0.991 | |
| Flt Protected | | 0.968 | | | 0.950 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1706 | 0 | 0 | 1805 | 1615 | 1805 | 1863 | 646 | 1805 | 1478 | 0 |
| Flt Permitted | | 0.687 | | | 0.755 | | 0.590 | | | 0.381 | | |
| Satd. Flow (perm) | 0 | 1190 | 0 | 0 | 1016 | 1538 | 1051 | 1863 | 575 | 701 | 1478 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 79 | | | | 297 | | | 370 | | 5 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 130 | | | 244 | | | 120 | | | 363 | |
| Travel Time (s) | | 3.0 | | | 5.5 | | | 2.7 | | | 8.3 | |
| Confl. Peds. (#/hr) | 20 | | 20 | 109 | | 20 | 30 | | 30 | 30 | | 30 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 2% | 0% | 0% | 2% | 0% |
| Parking (#/hr) | | | | | | | | | 100 | | 19 | |
| Adj. Flow (vph) | 21 | 0 | 11 | 235 | 0 | 453 | 15 | 395 | 370 | 216 | 258 | 17 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 32 | 0 | 0 | 235 | 453 | 15 | 395 | 370 | 216 | 275 | 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 | 2.95 | 1.00 | 1.31 | 1.00 |
| Turning Speed (mph) | 60 | | 60 | 15 | | 9 | 60 | | 9 | 15 | | 60 |
| Number of Detectors | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | 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 | |
| Detector 1 Queue (s) | 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 | |
| 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 | | | | | | | | | | | | |

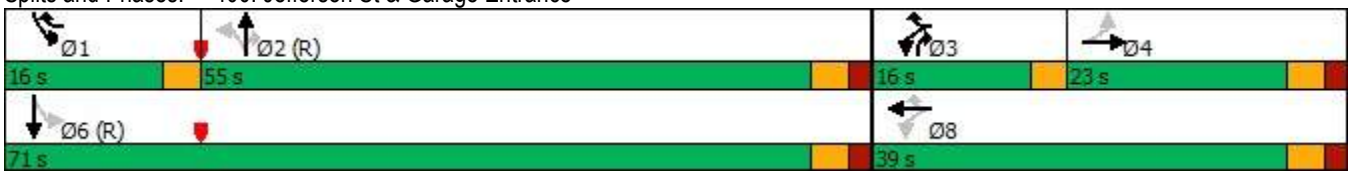


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Turn Type | Perm | NA | | pm+pt | NA | custom | Perm | NA | pm+ov | pm+pt | NA | |
| Protected Phases | | 4 | | 3 | 8 | 1 3 | | 2 | 3 | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | 2 | 6 | | |
| Detector Phase | 4 | 4 | | 3 | 8 | 1 3 | 2 | 2 | 3 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 1.0 | 1.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | |
| Minimum Split (s) | 23.0 | 23.0 | | 16.0 | 23.0 | | 23.0 | 23.0 | 16.0 | 16.0 | 23.0 | |
| Total Split (s) | 23.0 | 23.0 | | 16.0 | 39.0 | | 55.0 | 55.0 | 16.0 | 16.0 | 71.0 | |
| Total Split (%) | 20.9% | 20.9% | | 14.5% | 35.5% | | 50.0% | 50.0% | 14.5% | 14.5% | 64.5% | |
| Maximum Green (s) | 18.0 | 18.0 | | 13.0 | 34.0 | | 50.0 | 50.0 | 13.0 | 13.0 | 66.0 | |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 0.0 | 2.0 | | 2.0 | 2.0 | 0.0 | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | | 5.0 | 5.0 | 3.0 | 3.0 | 5.0 | |
| Lead/Lag | Lag | Lag | | Lead | | | Lag | Lag | Lead | Lead | | |
| Lead-Lag Optimize? | 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 | |
| Recall Mode | None | None | | None | Max | | C-Max | C-Max | None | None | C-Max | |
| Walk Time (s) | 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 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | 0 | | 0 | 0 | | | 0 | |
| Act Effct Green (s) | | 13.0 | | | 34.0 | 48.2 | 52.0 | 52.0 | 76.2 | 68.0 | 66.0 | |
| Actuated g/C Ratio | | 0.12 | | | 0.31 | 0.44 | 0.47 | 0.47 | 0.69 | 0.62 | 0.60 | |
| v/c Ratio | | 0.15 | | | 0.51 | 0.52 | 0.03 | 0.45 | 0.70 | 0.40 | 0.31 | |
| Control Delay | | 1.6 | | | 35.2 | 8.8 | 16.7 | 21.9 | 9.9 | 4.6 | 3.9 | |
| Queue Delay | | 0.0 | | | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | |
| Total Delay | | 1.6 | | | 35.2 | 8.9 | 16.7 | 21.9 | 9.9 | 4.6 | 4.4 | |
| LOS | | A | | | D | A | B | C | A | A | A | |
| Approach Delay | | 1.6 | | | 17.9 | | | 16.1 | | | 4.5 | |
| Approach LOS | | A | | | B | | | B | | | A | |
| 90th %ile Green (s) | 18.0 | 18.0 | | 13.0 | 34.0 | | 50.0 | 50.0 | 13.0 | 13.0 | 66.0 | |
| 90th %ile Term Code | Hold | Hold | | Max | MaxR | | Coord | Coord | Max | Max | Coord | |
| 70th %ile Green (s) | 18.0 | 18.0 | | 13.0 | 34.0 | | 50.0 | 50.0 | 13.0 | 13.0 | 66.0 | |
| 70th %ile Term Code | Hold | Hold | | Max | MaxR | | Coord | Coord | Max | Max | Coord | |
| 50th %ile Green (s) | 18.0 | 18.0 | | 13.0 | 34.0 | | 51.8 | 51.8 | 13.0 | 11.2 | 66.0 | |
| 50th %ile Term Code | Hold | Hold | | Max | MaxR | | Coord | Coord | Max | Gap | Coord | |
| 30th %ile Green (s) | 0.0 | 0.0 | | 36.0 | 34.0 | | 53.1 | 53.1 | 36.0 | 9.9 | 66.0 | |
| 30th %ile Term Code | Skip | Skip | | Hold | MaxR | | Coord | Coord | Hold | Gap | Coord | |
| 10th %ile Green (s) | 0.0 | 0.0 | | 36.0 | 34.0 | | 54.9 | 54.9 | 36.0 | 8.1 | 66.0 | |
| 10th %ile Term Code | Skip | Skip | | Hold | MaxR | | Coord | Coord | Hold | Gap | Coord | |
| Queue Length 50th (ft) | | 0 | | | 131 | 65 | 6 | 182 | 0 | 18 | 23 | |
| Queue Length 95th (ft) | | 0 | | | 205 | 146 | 18 | 273 | 70 | 21 | 26 | |
| Internal Link Dist (ft) | | 50 | | | 164 | | | 40 | | | 283 | |
| Turn Bay Length (ft) | | | | | | | 60 | | 100 | 205 | | |
| Base Capacity (vph) | | 260 | | | 458 | 889 | 496 | 879 | 526 | 563 | 888 | |
| Starvation Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 294 | |
| Spillback Cap Reductn | | 1 | | | 0 | 25 | 0 | 0 | 0 | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Reduced v/c Ratio | | 0.12 | | | 0.51 | 0.52 | 0.03 | 0.45 | 0.70 | 0.38 | 0.46 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 23 (21%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 80 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.70 | | | |
| Intersection Signal Delay: 13.6 | | Intersection LOS: B | |
| Intersection Capacity Utilization 67.5% | | ICU Level of Service C | |
| Analysis Period (min) 15 | | | |

Splits and Phases: 400: Jefferson St & Garage Entrance



| Intersection | |
|---|---|
| Int Delay, s/veh | 1 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 12 | 3 | 8 | 0 | 0 | 0 | 45 | 411 | 7 | 9 | 705 | 81 |
| Future Vol, veh/h | 12 | 3 | 8 | 0 | 0 | 0 | 45 | 411 | 7 | 9 | 705 | 81 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 54 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 100 | - | - | 50 | - | 50 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 13 | 3 | 9 | 0 | 0 | 0 | 49 | 447 | 8 | 10 | 766 | 88 |

| Major/Minor | Minor1 | | | Minor2 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1379 | 1477 | 451 | - | - | 820 | 908 | 0 | 0 | 455 | 0 | 0 |
| Stage 1 | 549 | 549 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 830 | 928 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | - | - | 6.22 | 4.1 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | - | - | 3.318 | 2.2 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 123 | 127 | 613 | 0 | 0 | 375 | 758 | - | - | 1106 | - | - |
| Stage 1 | 524 | 520 | - | 0 | 0 | - | - | - | - | - | - | - |
| Stage 2 | 367 | 349 | - | 0 | 0 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 116 | 111 | 613 | - | - | 356 | 719 | - | - | 1106 | - | - |
| Mov Cap-2 Maneuver | 116 | 111 | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | 488 | 485 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 364 | 328 | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | SE | NW |
|---|---|---|---|---|
| HCM Control Delay, s | 31.6 | 0 | 1 | 0.1 |
| HCM LOS | D | A | | |

| Minor Lane/Major Mvmt | NWL | NWT | NWR | EBLn1 | WBLn1 | SEL | SET | SER |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1106 | - | - | 160 | - | 719 | - | - |
| HCM Lane V/C Ratio | 0.009 | - | - | 0.156 | - | 0.068 | - | - |
| HCM Control Delay (s) | 8.3 | - | - | 31.6 | 0 | 10.4 | - | - |
| HCM Lane LOS | A | - | - | D | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.5 | - | 0.2 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 3.2 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 12 | 0 | 11 | 0 | 0 | 116 | 51 | 365 | 2 | 16 | 669 | 91 |
| Future Vol, veh/h | 12 | 0 | 11 | 0 | 0 | 116 | 51 | 365 | 2 | 16 | 669 | 91 |
| Conflicting Peds, #/hr | 20 | 0 | 20 | 0 | 0 | 30 | 30 | 0 | 20 | 20 | 0 | 27 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 100 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 13 | 0 | 12 | 0 | 0 | 126 | 55 | 397 | 2 | 17 | 727 | 99 |

| Major/Minor | Minor1 | | | Minor2 | | Major1 | | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1432 | 1418 | 438 | - | - | 837 | 856 | 0 | 0 | 419 | 0 | 0 |
| Stage 1 | 528 | 528 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 904 | 890 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.5 | 6.22 | - | - | 6.2 | 4.1 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4 | 3.318 | - | - | 3.3 | 2.2 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 112 | 138 | 619 | 0 | 0 | 370 | 793 | - | - | 1140 | - | - |
| Stage 1 | 534 | 531 | - | 0 | 0 | - | - | - | - | - | - | - |
| Stage 2 | 331 | 364 | - | 0 | 0 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 63 | 119 | 596 | - | - | 346 | 763 | - | - | 1118 | - | - |
| Mov Cap-2 Maneuver | 63 | 119 | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | 486 | 483 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 201 | 345 | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | SE | NW |
|---|---|---|---|---|
| HCM Control Delay, s | 47.1 | 21.3 | 1.2 | 0.2 |
| HCM LOS | E | C | | |

| Minor Lane/Major Mvmt | NWL | NWT | NWR | EBLn1 | WBLn1 | SEL | SET | SER |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1118 | - | - | 110 | 346 | 763 | - | - |
| HCM Lane V/C Ratio | 0.016 | - | - | 0.227 | 0.364 | 0.073 | - | - |
| HCM Control Delay (s) | 8.3 | - | - | 47.1 | 21.3 | 10.1 | - | - |
| HCM Lane LOS | A | - | - | E | C | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.8 | 1.6 | 0.2 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 2.1 |

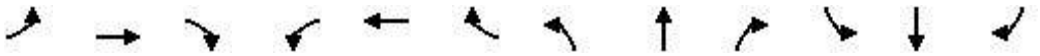
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 12 | 24 | 0 | 27 | 0 | 11 | 2 | 380 | 23 | 1 | 785 | 20 |
| Future Vol, veh/h | 12 | 24 | 0 | 27 | 0 | 11 | 2 | 380 | 23 | 1 | 785 | 20 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 20 | 0 | 20 | 20 | 0 | 0 | 0 | 0 | 20 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | 100 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 13 | 26 | 0 | 29 | 0 | 12 | 2 | 413 | 25 | 1 | 853 | 22 |

| Major/Minor | Minor1 | | | Minor2 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1322 | 1327 | 239 | 1119 | 1317 | 893 | 895 | 0 | 0 | 438 | 0 | 0 |
| Stage 1 | 430 | 430 | - | 875 | 875 | - | - | - | - | - | - | - |
| Stage 2 | 892 | 897 | - | 244 | 442 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.33 | 6.53 | 6.93 | 7.33 | 6.53 | 6.23 | 4.13 | - | - | 4.13 | - | - |
| Critical Hdwy Stg 1 | 6.53 | 5.53 | - | 6.13 | 5.53 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.13 | 5.53 | - | 6.53 | 5.53 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 4.019 | 3.319 | 3.519 | 4.019 | 3.319 | 2.219 | - | - | 2.219 | - | - |
| Pot Cap-1 Maneuver | 124 | 155 | 763 | 172 | 157 | 339 | 756 | - | - | 1120 | - | - |
| Stage 1 | 574 | 583 | - | 343 | 366 | - | - | - | - | - | - | - |
| Stage 2 | 336 | 357 | - | 739 | 576 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 117 | 151 | 748 | 143 | 153 | 326 | 742 | - | - | 1120 | - | - |
| Mov Cap-2 Maneuver | 117 | 151 | - | 143 | 153 | - | - | - | - | - | - | - |
| Stage 1 | 572 | 581 | - | 335 | 358 | - | - | - | - | - | - | - |
| Stage 2 | 317 | 350 | - | 690 | 574 | - | - | - | - | - | - | - |

| Approach | EB | WB | SE | NW |
|---|---|---|---|---|
| HCM Control Delay, s | 41.1 | 32.6 | 0 | 0 |
| HCM LOS | E | D | | |

| Minor Lane/Major Mvmt | NWL | NWT | NWR | EBLn1 | WBLn1 | SEL | SET | SER |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1120 | - | - | 138 | 171 | 742 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.284 | 0.242 | 0.003 | - | - |
| HCM Control Delay (s) | 8.2 | 0 | - | 41.1 | 32.6 | 9.9 | 0 | - |
| HCM Lane LOS | A | A | - | E | D | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.1 | 0.9 | 0 | - | - |

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 17 | 860 | 318 | 240 | 617 | 12 | 300 | 2 | 650 | 18 | 11 | 35 |
| Future Volume (vph) | 17 | 860 | 318 | 240 | 617 | 12 | 300 | 2 | 650 | 18 | 11 | 35 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 80 | | 55 | 95 | | 55 | 190 | | 190 | 0 | | 0 |
| Storage Lanes | 1 | | 1 | 1 | | 1 | 0 | | 1 | 1 | | 0 |
| Taper Length (ft) | 100 | | | 90 | | | 75 | | | 25 | | |
| 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 |
| Ped Bike Factor | 0.97 | | 0.91 | | | 0.85 | 0.87 | | 0.91 | 0.92 | 0.87 | |
| Frt | | | 0.850 | | | 0.850 | | | 0.850 | | 0.886 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1863 | 1583 | 1770 | 1438 | 0 |
| Flt Permitted | 0.249 | | | 0.092 | | | 0.618 | | | 0.757 | | |
| Satd. Flow (perm) | 450 | 1863 | 1436 | 171 | 1863 | 1338 | 1001 | 1863 | 1436 | 1294 | 1438 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | | 139 | | | 109 | | | 431 | | 38 | |
| Link Speed (mph) | | 30 | | | 30 | | | 20 | | | 30 | |
| Link Distance (ft) | | 390 | | | 893 | | | 363 | | | 230 | |
| Travel Time (s) | | 8.9 | | | 20.3 | | | 12.4 | | | 5.2 | |
| Confl. Peds. (#/hr) | 50 | | 50 | 50 | | 50 | 50 | | 50 | 50 | | 50 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 18 | 935 | 346 | 261 | 671 | 13 | 326 | 2 | 707 | 20 | 12 | 38 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 18 | 935 | 346 | 261 | 671 | 13 | 326 | 2 | 707 | 20 | 50 | 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 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 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 | |
| Detector 1 Size(ft) | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| 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 | |
| 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 | |
| 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 | |
| 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 | |
| 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 | pm+pt | NA | Perm | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Permitted Phases | 4 | | 4 | 8 | | 8 | 2 | | 2 | 6 | | |
| Detector Phase | 7 | 4 | 4 | 3 | 8 | 8 | 5 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 3.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 3.0 | 5.0 | |
| Minimum Split (s) | 8.0 | 38.0 | 38.0 | 16.0 | 50.0 | 50.0 | 16.0 | 36.0 | 36.0 | 8.0 | 25.0 | |
| Total Split (s) | 10.0 | 41.0 | 41.0 | 23.0 | 54.0 | 54.0 | 20.0 | 36.0 | 36.0 | 10.0 | 26.0 | |
| Total Split (%) | 9.1% | 37.3% | 37.3% | 20.9% | 49.1% | 49.1% | 18.2% | 32.7% | 32.7% | 9.1% | 23.6% | |
| Maximum Green (s) | 7.0 | 36.0 | 36.0 | 20.0 | 49.0 | 49.0 | 17.0 | 31.0 | 31.0 | 7.0 | 21.0 | |
| Yellow Time (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| All-Red Time (s) | 0.0 | 2.0 | 2.0 | 0.0 | 2.0 | 2.0 | 0.0 | 2.0 | 2.0 | 0.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | 3.0 | 5.0 | 5.0 | 3.0 | 5.0 | 5.0 | 3.0 | 5.0 | 5.0 | 3.0 | 5.0 | |
| Lead/Lag | Lead | Lag | Lag | Lead | Lag | Lag | Lead | Lag | Lag | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| Recall Mode | None | C-Max | C-Max | None | C-Max | C-Max | None | None | None | None | None | |
| Walk Time (s) | | 4.0 | 4.0 | | 4.0 | 4.0 | | 4.0 | 4.0 | | 7.0 | |
| Flash Dont Walk (s) | | 16.0 | 16.0 | | 16.0 | 16.0 | | 16.0 | 16.0 | | 11.0 | |
| Pedestrian Calls (#/hr) | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | |
| Act Effct Green (s) | 50.1 | 42.1 | 42.1 | 62.5 | 56.7 | 56.7 | 41.5 | 35.5 | 35.5 | 24.6 | 17.9 | |
| Actuated g/C Ratio | 0.46 | 0.38 | 0.38 | 0.57 | 0.52 | 0.52 | 0.38 | 0.32 | 0.32 | 0.22 | 0.16 | |
| v/c Ratio | 0.06 | 1.31 | 0.55 | 0.81 | 0.70 | 0.02 | 0.62 | 0.00 | 0.94 | 0.06 | 0.19 | |
| Control Delay | 12.4 | 173.5 | 16.9 | 44.0 | 26.8 | 0.1 | 26.5 | 27.5 | 30.5 | 22.1 | 17.7 | |
| Queue Delay | 0.0 | 0.7 | 0.6 | 0.0 | 53.0 | 0.0 | 2.8 | 0.0 | 9.7 | 0.0 | 0.0 | |
| Total Delay | 12.4 | 174.2 | 17.5 | 44.0 | 79.8 | 0.1 | 29.3 | 27.5 | 40.1 | 22.1 | 17.7 | |
| LOS | B | F | B | D | E | A | C | C | D | C | B | |
| Approach Delay | | 130.2 | | | 68.9 | | | 36.7 | | | 19.0 | |
| Approach LOS | | F | | | E | | | D | | | B | |
| 90th %ile Green (s) | 6.8 | 36.0 | 36.0 | 20.0 | 49.2 | 49.2 | 17.0 | 31.0 | 31.0 | 7.0 | 21.0 | |
| 90th %ile Term Code | Gap | Coord | Coord | Max | Coord | Coord | Max | Max | Max | Max | Hold | |
| 70th %ile Green (s) | 6.3 | 36.6 | 36.6 | 19.4 | 49.7 | 49.7 | 17.0 | 31.3 | 31.3 | 6.7 | 21.0 | |
| 70th %ile Term Code | Gap | Coord | Coord | Gap | Coord | Coord | Max | Max | Max | Gap | Hold | |
| 50th %ile Green (s) | 0.0 | 39.9 | 39.9 | 16.1 | 59.0 | 59.0 | 17.0 | 41.0 | 41.0 | 0.0 | 21.0 | |
| 50th %ile Term Code | Skip | Coord | Coord | Gap | Coord | Coord | Max | Max | Max | Skip | Hold | |
| 30th %ile Green (s) | 0.0 | 43.2 | 43.2 | 12.8 | 59.0 | 59.0 | 17.0 | 41.0 | 41.0 | 0.0 | 21.0 | |
| 30th %ile Term Code | Skip | Coord | Coord | Gap | Coord | Coord | Max | Max | Max | Skip | Hold | |
| 10th %ile Green (s) | 0.0 | 54.6 | 54.6 | 9.1 | 66.7 | 66.7 | 35.3 | 33.3 | 33.3 | 0.0 | 0.0 | |
| 10th %ile Term Code | Skip | Coord | Coord | Gap | Coord | Coord | Hold | Gap | Gap | Skip | Skip | |
| Queue Length 50th (ft) | 6 | ~874 | 86 | 124 | 328 | 0 | 167 | 1 | 199 | 9 | 7 | |
| Queue Length 95th (ft) | m6 | m#974 | m96 | 213 | 563 | 0 | 265 | m1 | #234 | 25 | 41 | |
| Internal Link Dist (ft) | | 310 | | | 813 | | | 283 | | | 150 | |
| Turn Bay Length (ft) | 80 | | 55 | 95 | | 55 | 190 | | 190 | | | |
| Base Capacity (vph) | 293 | 712 | 634 | 387 | 960 | 742 | 522 | 601 | 755 | 329 | 305 | |
| Starvation Cap Reductn | 0 | 71 | 85 | 0 | 0 | 0 | 106 | 0 | 46 | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 431 | 0 | 0 | 0 | 0 | 0 | 8 | |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | 0.06 | 1.46 | 0.63 | 0.67 | 1.27 | 0.02 | 0.78 | 0.00 | 1.00 | 0.06 | 0.17 | |

Intersection Summary

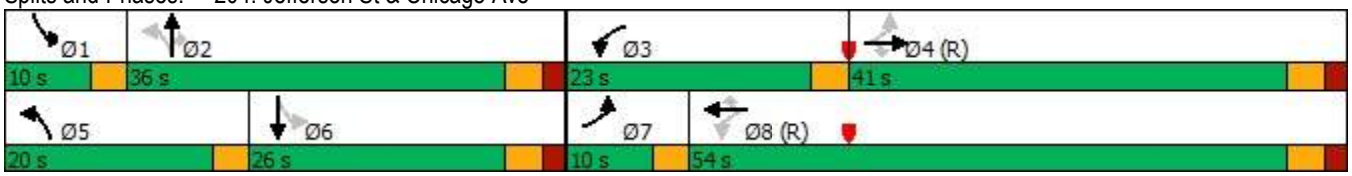
| | |
|---|---|
| Area Type: | Other |
| Cycle Length: 110 | |
| Actuated Cycle Length: 110 | |
| Offset: 21 (19%), Referenced to phase 4:EBTL and 8:WBTL, Start of Green | |
| Natural Cycle: 105 | |
| Control Type: Actuated-Coordinated | |
| Maximum v/c Ratio: 1.31 | |
| Intersection Signal Delay: 81.7 | Intersection LOS: F |
| Intersection Capacity Utilization 104.5% | 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.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 204: Jefferson St & Chicago Ave



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 297 | 485 | 5 | 11 | 399 | 722 | 20 | 0 | 10 | 212 | 0 | 273 |
| Future Volume (vph) | 297 | 485 | 5 | 11 | 399 | 722 | 20 | 0 | 10 | 212 | 0 | 273 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 100 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 |
| Storage Lanes | 1 | | 0 | 0 | | 0 | 0 | | 0 | 0 | | 1 |
| Taper Length (ft) | 100 | | | 25 | | | 25 | | | 135 | | |
| Lane Util. Factor | 1.00 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Ped Bike Factor | | 1.00 | | | 0.90 | | | 0.99 | | | 0.98 | |
| Frt | | 0.999 | | | 0.904 | | | 0.955 | | | | 0.850 |
| Flt Protected | 0.950 | | | | | | | 0.968 | | | 0.950 | |
| Satd. Flow (prot) | 1770 | 3534 | 0 | 0 | 2867 | 0 | 0 | 1705 | 0 | 0 | 1770 | 1583 |
| Flt Permitted | 0.106 | | | | 0.948 | | | 0.968 | | | 0.950 | |
| Satd. Flow (perm) | 197 | 3534 | 0 | 0 | 2717 | 0 | 0 | 1705 | 0 | 0 | 1738 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 1 | | | 429 | | | 109 | | | | 297 |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 375 | | | 838 | | | 269 | | | 430 | |
| Travel Time (s) | | 8.5 | | | 19.0 | | | 6.1 | | | 9.8 | |
| Confl. Peds. (#/hr) | 56 | | 10 | 10 | | 56 | | | 13 | 13 | | |
| Confl. Bikes (#/hr) | | | 6 | | | 10 | | | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 323 | 527 | 5 | 12 | 434 | 785 | 22 | 0 | 11 | 230 | 0 | 297 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 323 | 532 | 0 | 0 | 1231 | 0 | 0 | 33 | 0 | 0 | 230 | 297 |
| 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 | | | 0 | | | 0 | | | 0 | |
| 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 | 1 |
| Detector Template | Left | Thru | | Left | Thru | | Left | Thru | | Left | Thru | Right |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | | 20 | 100 | | 20 | 100 | 20 |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | 0 |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | | 20 | 6 | | 20 | 6 | 20 |
| Detector 1 Type | 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 |
| Detector 1 Queue (s) | 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 |
| 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 | NA | | Split | NA | | Split | NA | pm+ov |

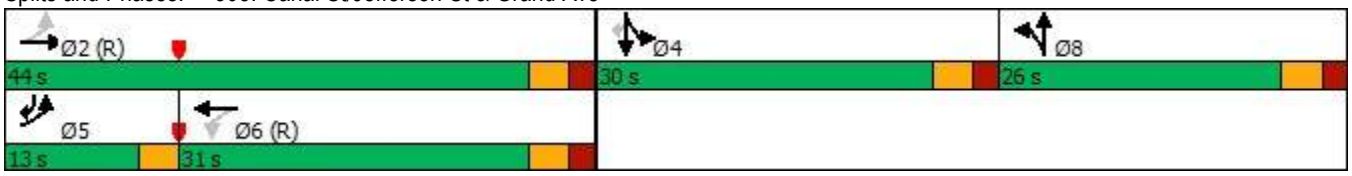
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Protected Phases | 5 | 2 | | | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Permitted Phases | 2 | | | 6 | | | | | | | | 4 |
| Detector Phase | 5 | 2 | | 6 | 6 | | 8 | 8 | | 4 | 4 | 5 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| Minimum Split (s) | 10.0 | 30.0 | | 30.0 | 30.0 | | 26.0 | 26.0 | | 26.0 | 26.0 | 10.0 |
| Total Split (s) | 13.0 | 44.0 | | 31.0 | 31.0 | | 26.0 | 26.0 | | 30.0 | 30.0 | 13.0 |
| Total Split (%) | 13.0% | 44.0% | | 31.0% | 31.0% | | 26.0% | 26.0% | | 30.0% | 30.0% | 13.0% |
| Maximum Green (s) | 10.0 | 39.0 | | 26.0 | 26.0 | | 21.0 | 21.0 | | 25.0 | 25.0 | 10.0 |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 |
| All-Red Time (s) | 0.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | | 2.0 | 2.0 | 0.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Lost Time (s) | 3.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | 3.0 |
| Lead/Lag | Lead | | | Lag | Lag | | | | | | | Lead |
| Lead-Lag Optimize? | 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 |
| Recall Mode | None | C-Max | | C-Max | C-Max | | None | None | | None | None | None |
| Walk Time (s) | | 7.0 | | 7.0 | 7.0 | | 7.0 | 7.0 | | | | |
| Flash Dont Walk (s) | | 14.0 | | 14.0 | 14.0 | | 14.0 | 14.0 | | | | |
| Pedestrian Calls (#/hr) | | 0 | | 0 | 0 | | 0 | 0 | | | | |
| Act Effct Green (s) | 67.5 | 65.5 | | | 36.6 | | | 5.5 | | | 18.2 | 47.3 |
| Actuated g/C Ratio | 0.68 | 0.66 | | | 0.37 | | | 0.06 | | | 0.18 | 0.47 |
| v/c Ratio | 0.60 | 0.23 | | | 0.97 | | | 0.17 | | | 0.72 | 0.33 |
| Control Delay | 23.3 | 8.7 | | | 41.7 | | | 1.9 | | | 50.6 | 2.0 |
| Queue Delay | 0.0 | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | 0.0 |
| Total Delay | 23.3 | 8.7 | | | 41.7 | | | 1.9 | | | 50.6 | 2.0 |
| LOS | C | A | | | D | | | A | | | D | A |
| Approach Delay | | 14.2 | | | 41.7 | | | 1.9 | | | 23.2 | |
| Approach LOS | | B | | | D | | | A | | | C | |
| 90th %ile Green (s) | 26.0 | 55.0 | | 26.0 | 26.0 | | 5.5 | 5.5 | | 24.5 | 24.5 | 26.0 |
| 90th %ile Term Code | Max | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Max |
| 70th %ile Green (s) | 24.0 | 58.7 | | 31.7 | 31.7 | | 5.5 | 5.5 | | 20.8 | 20.8 | 24.0 |
| 70th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 50th %ile Green (s) | 23.0 | 61.3 | | 35.3 | 35.3 | | 5.5 | 5.5 | | 18.2 | 18.2 | 23.0 |
| 50th %ile Term Code | Gap | Coord | | Coord | Coord | | Gap | Gap | | Gap | Gap | Gap |
| 30th %ile Green (s) | 23.1 | 74.4 | | 48.3 | 48.3 | | 0.0 | 0.0 | | 15.6 | 15.6 | 23.1 |
| 30th %ile Term Code | Gap | Coord | | Coord | Coord | | Skip | Skip | | Gap | Gap | Gap |
| 10th %ile Green (s) | 33.4 | 78.3 | | 41.9 | 41.9 | | 0.0 | 0.0 | | 11.7 | 11.7 | 33.4 |
| 10th %ile Term Code | Gap | Coord | | Coord | Coord | | Skip | Skip | | Gap | Gap | Gap |
| Queue Length 50th (ft) | 128 | 74 | | | 297 | | | 0 | | | 139 | 0 |
| Queue Length 95th (ft) | 228 | 120 | | | #526 | | | 0 | | | 205 | 26 |
| Internal Link Dist (ft) | | 295 | | | 758 | | | 189 | | | 350 | |
| Turn Bay Length (ft) | 100 | | | | | | | | | | | |
| Base Capacity (vph) | 540 | 2316 | | | 1267 | | | 444 | | | 442 | 904 |
| 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 | 0.60 | 0.23 | | | 0.97 | | | 0.07 | | | 0.52 | 0.33 |

Intersection Summary

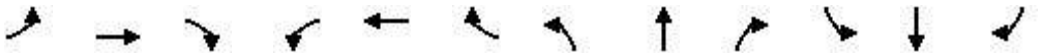
| | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 100 | | | |
| Actuated Cycle Length: 100 | | | |
| Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green | | | |
| Natural Cycle: 95 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.97 | | | |
| Intersection Signal Delay: 28.6 | | Intersection LOS: C | |
| Intersection Capacity Utilization 83.4% | | ICU Level of Service E | |
| Analysis Period (min) 15 | | | |

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

Splits and Phases: 305: Canal St/Jefferson St & Grand Ave



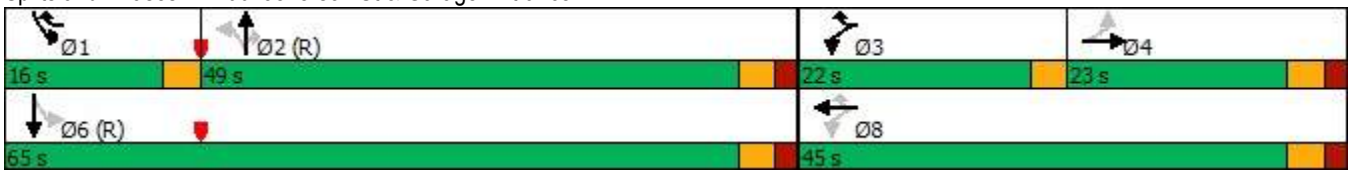
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 15 | 0 | 9 | 256 | 0 | 496 | 15 | 441 | 438 | 256 | 295 | 18 |
| Future Volume (vph) | 15 | 0 | 9 | 256 | 0 | 496 | 15 | 441 | 438 | 256 | 295 | 18 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (ft) | 0 | | 0 | 0 | | 0 | 60 | | 100 | 205 | | 0 |
| Storage Lanes | 0 | | 0 | 0 | | 1 | 1 | | 0 | 0 | | 0 |
| Taper Length (ft) | 25 | | | 25 | | | 55 | | | 70 | | |
| 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 |
| Ped Bike Factor | | 0.95 | | | 0.64 | 0.95 | 0.92 | | 0.85 | | 0.99 | |
| Frt | | 0.948 | | | | 0.850 | | | 0.850 | | 0.991 | |
| Flt Protected | | 0.970 | | | 0.950 | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 0 | 1693 | 0 | 0 | 1805 | 1615 | 1805 | 1863 | 646 | 1805 | 1430 | 0 |
| Flt Permitted | | 0.698 | | | 0.755 | | 0.556 | | | 0.250 | | |
| Satd. Flow (perm) | 0 | 1200 | 0 | 0 | 911 | 1538 | 976 | 1863 | 551 | 475 | 1430 | 0 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 79 | | | | 174 | | | 476 | | 4 | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 130 | | | 244 | | | 120 | | | 363 | |
| Travel Time (s) | | 3.0 | | | 5.5 | | | 2.7 | | | 8.3 | |
| Confl. Peds. (#/hr) | 20 | | 20 | 135 | | 20 | 40 | | 40 | 40 | | 40 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 2% | 0% | 0% | 2% | 0% |
| Parking (#/hr) | | | | | | | | | 100 | | 24 | |
| Adj. Flow (vph) | 16 | 0 | 10 | 278 | 0 | 539 | 16 | 479 | 476 | 278 | 321 | 20 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 26 | 0 | 0 | 278 | 539 | 16 | 479 | 476 | 278 | 341 | 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 | 2.95 | 1.00 | 1.37 | 1.00 |
| Number of Detectors | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 | |
| Detector Template | Left | Thru | | Left | Thru | Right | Left | Thru | Right | Left | Thru | |
| Leading Detector (ft) | 20 | 100 | | 20 | 100 | 20 | 20 | 100 | 20 | 20 | 100 | |
| Trailing Detector (ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Position(ft) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Detector 1 Size(ft) | 20 | 6 | | 20 | 6 | 20 | 20 | 6 | 20 | 20 | 6 | |
| Detector 1 Type | 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 | |
| Detector 1 Queue (s) | 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 | |
| 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 | |



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Turn Type | Perm | NA | | pm+pt | NA | custom | Perm | NA | Perm | pm+pt | NA | |
| Protected Phases | | 4 | | 3 | 8 | 1 3 | | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | 2 | 6 | | |
| Detector Phase | 4 | 4 | | 3 | 8 | 1 3 | 2 | 2 | 2 | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 5.0 | 5.0 | | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | |
| Minimum Split (s) | 23.0 | 23.0 | | 16.0 | 23.0 | | 22.0 | 22.0 | 22.0 | 13.0 | 23.0 | |
| Total Split (s) | 23.0 | 23.0 | | 22.0 | 45.0 | | 49.0 | 49.0 | 49.0 | 16.0 | 65.0 | |
| Total Split (%) | 20.9% | 20.9% | | 20.0% | 40.9% | | 44.5% | 44.5% | 44.5% | 14.5% | 59.1% | |
| Maximum Green (s) | 18.0 | 18.0 | | 19.0 | 40.0 | | 44.0 | 44.0 | 44.0 | 13.0 | 60.0 | |
| Yellow Time (s) | 3.0 | 3.0 | | 3.0 | 3.0 | | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | |
| All-Red Time (s) | 2.0 | 2.0 | | 0.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 | |
| Lost Time Adjust (s) | | 0.0 | | | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| Total Lost Time (s) | | 5.0 | | | 5.0 | | 5.0 | 5.0 | 5.0 | 3.0 | 5.0 | |
| Lead/Lag | Lag | Lag | | Lead | | | Lag | Lag | Lag | Lead | | |
| Lead-Lag Optimize? | 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 | |
| Recall Mode | None | None | | Max | Max | | C-Max | C-Max | C-Max | None | C-Max | |
| Walk Time (s) | 7.0 | 7.0 | | | 7.0 | | 7.0 | 7.0 | 7.0 | | 7.0 | |
| Flash Dont Walk (s) | 11.0 | 11.0 | | | 11.0 | | 10.0 | 10.0 | 10.0 | | 11.0 | |
| Pedestrian Calls (#/hr) | 0 | 0 | | | 25 | | 25 | 25 | 25 | | 25 | |
| Act Effct Green (s) | | 13.0 | | | 40.0 | 55.5 | 44.7 | 44.7 | 44.7 | 62.0 | 60.0 | |
| Actuated g/C Ratio | | 0.12 | | | 0.36 | 0.50 | 0.41 | 0.41 | 0.41 | 0.56 | 0.55 | |
| v/c Ratio | | 0.12 | | | 0.51 | 0.60 | 0.04 | 0.63 | 0.94 | 0.67 | 0.44 | |
| Control Delay | | 1.2 | | | 30.3 | 14.9 | 20.7 | 30.9 | 32.6 | 13.4 | 6.2 | |
| Queue Delay | | 0.0 | | | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.8 | 0.8 | |
| Total Delay | | 1.2 | | | 30.3 | 14.9 | 20.7 | 31.0 | 32.6 | 14.2 | 7.0 | |
| LOS | | A | | | C | B | C | C | C | B | A | |
| Approach Delay | | 1.2 | | | 20.2 | | | 31.6 | | | 10.2 | |
| Approach LOS | | A | | | C | | | C | | | B | |
| 90th %ile Green (s) | 18.0 | 18.0 | | 19.0 | 40.0 | | 44.0 | 44.0 | 44.0 | 13.0 | 60.0 | |
| 90th %ile Term Code | Hold | Hold | | MaxR | MaxR | | Coord | Coord | Coord | Max | Coord | |
| 70th %ile Green (s) | 18.0 | 18.0 | | 19.0 | 40.0 | | 44.0 | 44.0 | 44.0 | 13.0 | 60.0 | |
| 70th %ile Term Code | Hold | Hold | | MaxR | MaxR | | Coord | Coord | Coord | Max | Coord | |
| 50th %ile Green (s) | 18.0 | 18.0 | | 19.0 | 40.0 | | 44.0 | 44.0 | 44.0 | 13.0 | 60.0 | |
| 50th %ile Term Code | Hold | Hold | | MaxR | MaxR | | Coord | Coord | Coord | Max | Coord | |
| 30th %ile Green (s) | 0.0 | 0.0 | | 42.0 | 40.0 | | 44.6 | 44.6 | 44.6 | 12.4 | 60.0 | |
| 30th %ile Term Code | Skip | Skip | | Hold | MaxR | | Coord | Coord | Coord | Gap | Coord | |
| 10th %ile Green (s) | 0.0 | 0.0 | | 42.0 | 40.0 | | 47.0 | 47.0 | 47.0 | 10.0 | 60.0 | |
| 10th %ile Term Code | Skip | Skip | | Hold | MaxR | | Coord | Coord | Coord | Gap | Coord | |
| Queue Length 50th (ft) | | 0 | | | 146 | 164 | 7 | 269 | 0 | 25 | 64 | |
| Queue Length 95th (ft) | | 0 | | | 223 | 268 | 22 | 385 | #162 | 58 | 62 | |
| Internal Link Dist (ft) | | 50 | | | 164 | | | 40 | | | 283 | |
| Turn Bay Length (ft) | | | | | | | 60 | | 100 | 205 | | |
| Base Capacity (vph) | | 262 | | | 544 | 900 | 396 | 757 | 506 | 424 | 781 | |
| Starvation Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | 0 | 28 | 199 | |
| Spillback Cap Reductn | | 0 | | | 0 | 1 | 0 | 12 | 0 | 0 | 0 | |
| Storage Cap Reductn | | 0 | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Reduced v/c Ratio | | 0.10 | | | 0.51 | 0.60 | 0.04 | 0.64 | 0.94 | 0.70 | 0.59 | |

| Intersection Summary | | | |
|---|---|---|---|
| Area Type: | Other | | |
| Cycle Length: 110 | | | |
| Actuated Cycle Length: 110 | | | |
| Offset: 27 (25%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green | | | |
| Natural Cycle: 90 | | | |
| Control Type: Actuated-Coordinated | | | |
| Maximum v/c Ratio: 0.94 | | | |
| Intersection Signal Delay: 22.0 | | Intersection LOS: C | |
| Intersection Capacity Utilization 77.0% | | ICU Level of Service D | |
| Analysis Period (min) 15 | | | |
| # 95th percentile volume exceeds capacity, queue may be longer. | | | |
| Queue shown is maximum after two cycles. | | | |

Splits and Phases: 400: Jefferson St & Garage Entrance



| Intersection | |
|---|---|
| Int Delay, s/veh | 1.4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 14 | 3 | 8 | 0 | 0 | 0 | 58 | 495 | 7 | 9 | 880 | 105 |
| Future Vol, veh/h | 14 | 3 | 8 | 0 | 0 | 0 | 58 | 495 | 7 | 9 | 880 | 105 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 68 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 100 | - | - | 50 | - | 50 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 15 | 3 | 9 | 0 | 0 | 0 | 63 | 538 | 8 | 10 | 957 | 114 |

| Major/Minor | Minor1 | | | Minor2 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1702 | 1827 | 542 | - | - | 1025 | 1139 | 0 | 0 | 546 | 0 | 0 |
| Stage 1 | 668 | 668 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 1034 | 1159 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.2 | - | - | 6.22 | 4.1 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.3 | - | - | 3.318 | 2.2 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 73 | 78 | 544 | 0 | 0 | 285 | 621 | - | - | 1023 | - | - |
| Stage 1 | 451 | 459 | - | 0 | 0 | - | - | - | - | - | - | - |
| Stage 2 | 283 | 272 | - | 0 | 0 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 66 | 64 | 544 | - | - | 267 | 581 | - | - | 1023 | - | - |
| Mov Cap-2 Maneuver | 66 | 64 | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | 402 | 409 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 280 | 252 | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | SE | NW |
|---|---|---|---|---|
| HCM Control Delay, s | 60.6 | 0 | 1.2 | 0.1 |
| HCM LOS | F | A | | |

| Minor Lane/Major Mvmt | NWL | NWT | NWR | EBLn1 | WBLn1 | SEL | SET | SER |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1023 | - | - | 91 | - | 581 | - | - |
| HCM Lane V/C Ratio | 0.01 | - | - | 0.299 | - | 0.109 | - | - |
| HCM Control Delay (s) | 8.6 | - | - | 60.6 | 0 | 11.9 | - | - |
| HCM Lane LOS | A | - | - | F | A | B | - | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.1 | - | 0.4 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 7.3 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 14 | 0 | 12 | 0 | 0 | 139 | 64 | 433 | 3 | 17 | 847 | 116 |
| Future Vol, veh/h | 14 | 0 | 12 | 0 | 0 | 139 | 64 | 433 | 3 | 17 | 847 | 116 |
| Conflicting Peds, #/hr | 20 | 0 | 20 | 0 | 0 | 40 | 40 | 0 | 20 | 20 | 0 | 34 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | 0 | 100 | - | - | 50 | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 0 |
| Mvmt Flow | 15 | 0 | 13 | 0 | 0 | 151 | 70 | 471 | 3 | 18 | 921 | 126 |

| Major/Minor | Minor1 | | | Minor2 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1769 | 1756 | 513 | - | - | 1064 | 1087 | 0 | 0 | 494 | 0 | 0 |
| Stage 1 | 633 | 633 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 1136 | 1123 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.5 | 6.22 | - | - | 6.2 | 4.1 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.5 | - | - | - | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4 | 3.318 | - | - | 3.3 | 2.2 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 65 | 86 | 561 | 0 | 0 | 273 | 649 | - | - | 1070 | - | - |
| Stage 1 | 468 | 476 | - | 0 | 0 | - | - | - | - | - | - | - |
| Stage 2 | 246 | 283 | - | 0 | 0 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 22 | 70 | 540 | - | - | 249 | 616 | - | - | 1050 | - | - |
| Mov Cap-2 Maneuver | 22 | 70 | - | - | - | - | - | - | - | - | - | - |
| Stage 1 | 407 | 414 | - | - | - | - | - | - | - | - | - | - |
| Stage 2 | 91 | 264 | - | - | - | - | - | - | - | - | - | - |

| Approach | EB | WB | SE | NW |
|---|---|---|---|---|
| HCM Control Delay, s | 219.6 | 39.5 | 1.5 | 0.1 |
| HCM LOS | F | E | | |

| Minor Lane/Major Mvmt | NWL | NWT | NWR | EBLn1 | WBLn1 | SEL | SET | SER |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1050 | - | - | 39 | 249 | 616 | - | - |
| HCM Lane V/C Ratio | 0.018 | - | - | 0.725 | 0.607 | 0.113 | - | - |
| HCM Control Delay (s) | 8.5 | - | - | 219.6 | 39.5 | 11.6 | - | - |
| HCM Lane LOS | A | - | - | F | E | B | - | - |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 2.7 | 3.6 | 0.4 | - | - |

| Intersection | |
|---|---|
| Int Delay, s/veh | 4 |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | SEL | SET | SER | NWL | NWT | NWR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 15 | 26 | 0 | 28 | 0 | 12 | 3 | 450 | 27 | 1 | 993 | 21 |
| Future Vol, veh/h | 15 | 26 | 0 | 28 | 0 | 12 | 3 | 450 | 27 | 1 | 993 | 21 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 20 | 0 | 20 | 20 | 0 | 0 | 0 | 0 | 20 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | 100 |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 28 | 0 | 30 | 0 | 13 | 3 | 489 | 29 | 1 | 1079 | 23 |

| Major/Minor | Minor1 | | | Minor2 | | | Major1 | | | Major2 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Conflicting Flow All | 1629 | 1634 | 279 | 1386 | 1625 | 1119 | 1122 | 0 | 0 | 518 | 0 | 0 |
| Stage 1 | 510 | 510 | - | 1101 | 1101 | - | - | - | - | - | - | - |
| Stage 2 | 1119 | 1124 | - | 285 | 524 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.33 | 6.53 | 6.93 | 7.33 | 6.53 | 6.23 | 4.13 | - | - | 4.13 | - | - |
| Critical Hdwy Stg 1 | 6.53 | 5.53 | - | 6.13 | 5.53 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.13 | 5.53 | - | 6.53 | 5.53 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.519 | 4.019 | 3.319 | 3.519 | 4.019 | 3.319 | 2.219 | - | - | 2.219 | - | - |
| Pot Cap-1 Maneuver | 74 | 101 | 719 | 111 | 102 | 251 | 620 | - | - | 1046 | - | - |
| Stage 1 | 515 | 537 | - | 256 | 287 | - | - | - | - | - | - | - |
| Stage 2 | 250 | 280 | - | 699 | 529 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | | - | - |
| Mov Cap-1 Maneuver | 68 | 98 | 705 | 82 | 99 | 242 | 608 | - | - | 1046 | - | - |
| Mov Cap-2 Maneuver | 68 | 98 | - | 82 | 99 | - | - | - | - | - | - | - |
| Stage 1 | 511 | 533 | - | 249 | 281 | - | - | - | - | - | - | - |
| Stage 2 | 232 | 274 | - | 645 | 525 | - | - | - | - | - | - | - |

| Approach | EB | WB | SE | NW |
|---|---|---|---|---|
| HCM Control Delay, s | 88.5 | 64.3 | 0.1 | 0 |
| HCM LOS | F | F | | |

| Minor Lane/Major Mvmt | NWL | NWT | NWR | EBLn1 | WBLn1 | SEL | SET | SER |
|---|---|---|---|---|---|---|---|---|
| Capacity (veh/h) | 1046 | - | - | 84 | 102 | 608 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.531 | 0.426 | 0.005 | - | - |
| HCM Control Delay (s) | 8.4 | 0 | - | 88.5 | 64.3 | 11 | 0 | - |
| HCM Lane LOS | A | A | - | F | F | B | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 2.3 | 1.8 | 0 | - | - |

# Traffic Signal Warrant Analysis Worksheet

| | |
|---|---|
| Date | 11/15/2024 |

**Location Information**

| | |
|---|---|
| Intersection | Jefferson St and Chicago Ave |
| City | Chicago |
| County | Cook |
| District | 1 |

**Street Information**

| | |
|---|---|
| Major Street (EB/WB) | Chicago Ave |
| Minor Street (NB/SB) | Jefferson St |

**Review Information**

| | |
|---|---|
| Counts Used | 2026 Future with Entertainment District Traffic Volumes |
| Count Dates | - |
| Date Reviewed | 11/15/2024 |
| Reviewed By | MFM |

**Warrant Information**

| | |
|---|---|
| Speed Limit of Major Street | 30 |
| Number of Lanes on Major | 1 |
| Number of Lanes on Minor | 1 |
| Isolated Community? | No |
| SRA Route Number | N/A |

**Jefferson St and Chicago Ave**
City: **Chicago**
County: **Cook**
District: **1**

**Major** Chicago Ave
**Minor** Jefferson St

**State Of Illinois**
**Department of Transportation**
**Bureau of Traffic**

**Date:** 11/15/2024

# SUMMARY OF TRAFFIC SURVEY

| **Route:** | **TRAFFIC FROM EAST** **Chicago Ave** E. of: **Jefferson St** Going | | | | **TRAFFIC FROM WEST** **Chicago Ave** W. of: **Jefferson St** Going | | | | **TOTAL NORTH AND SOUTH** | **TRAFFIC FROM NORTH** **Jefferson St** N. of: **Chicago Ave** Going | | | | **TRAFFIC FROM SOUTH** **Jefferson St** S. of: **Chicago Ave** Going | | | | **TOTAL NORTH AND SOUTH** | **GRAND TOTAL** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **START TIME** | **SOUTH** | **WEST** | **NORTH** | **TOTAL** | **NORTH** | **EAST** | **SOUTH** | **TOTAL** | | **EAST** | **SOUTH** | **WEST** | **TOTAL** | **WEST** | **NORTH** | **EAST** | **TOTAL** | | |
| AM | 103 | 808 | 0 | 911 | 0 | 1,307 | 137 | 1,444 | **2,355** | 0 | 0 | 0 | 0 | 117 | 0 | 262 | 379 | **379** | **2,734** |
| PM | 136 | 1,329 | 0 | 1,465 | 0 | 1,087 | 181 | 1,268 | **2,733** | 0 | 0 | 0 | 0 | 182 | 0 | 411 | 593 | **593** | **3,326** |
| SAT | 227 | 616 | 0 | 843 | 0 | 860 | 303 | 1,163 | **2,006** | 0 | 0 | 0 | 0 | 281 | 0 | 631 | 912 | **912** | **2,918** |
| 55th % AM | 57 | 444 | 0 | 501 | 0 | 719 | 75 | 794 | **1,295** | 0 | 0 | 0 | 0 | 64 | 0 | 147 | 211 | **211** | **1,506** |
| 55th % PM | 75 | 731 | 0 | 806 | 0 | 598 | 100 | 698 | **1,504** | 0 | 0 | 0 | 0 | 100 | 0 | 230 | 330 | **330** | **1,834** |
| 55th % Sat | 125 | 339 | 0 | 464 | 0 | 473 | 167 | 640 | **1,104** | 0 | 0 | 0 | 0 | 155 | 0 | 353 | 508 | **508** | **1,612** |

**REVIEW INFORMATION**

COUNTS USED: 2026 Future with Entertainment District Traffic Volumes
COUNT DATE(S): -
DATA REVIEWED: 11/15/2024
REVIEWED BY: MFM

## RIGHT TURN FACTORIZATION SHEET

INTERSECTION: Jefferson St and Chicago Ave
MUNCIPALITY: Chicago
COUNTY: Cook

| DIR | PEAK HOUR | MINOR STREET STREET NAME | | Jefferson St | | CRITICAL MAINLINE APPROACH VOLUME PER LANE | BASE RIGHT TURN REDUCTION % | MAINLINE CONGESTION FACTOR % | ADJUSTED RIGHT TURN REDUCTION % | ADJUSTED RIGHT TURNS | ADJUSTED MINOR STREET VOLUME |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CONFIG. # | | 3 | | | | | | | |
| | | CRIT. MAINLINE LANE # | | 1 | | | | | | | |
| | | LEFT | THROUGH | RIGHT | APP. TOTAL | | | | | | |
| NB | AM | 117 | 0 | 262 | 379 | 1,444 | 75% | 0% | 75% | 66 | 183 |
| NB | PM | 182 | 0 | 411 | 593 | 1,268 | 75% | 0% | 75% | 103 | 285 |
| NB | SAT | 281 | 0 | 631 | 912 | 1,163 | 75% | 0% | 75% | 158 | 439 |
| NB | 55th AM | 64 | 0 | 147 | 211 | 444 | 75% | 5% | 70% | 44 | 101 |
| NB | 55th PM | 100 | 0 | 230 | 330 | 731 | 75% | 20% | 55% | 104 | 157 |
| NB | 55th Sat | 155 | 0 | 353 | 508 | 339 | 75% | 0% | 75% | 88 | 241 |

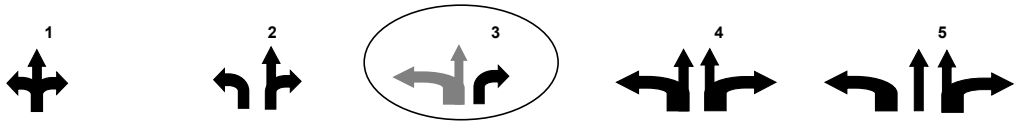
| MAINLINE CONGESTION FACTORS | |
|---|---|
| VOLUMES | FACTOR % |
| 0-399 | 0% |
| 400-499 | 5% |
| 500-599 | 10% |
| 600-699 | 15% |
| 700-799 | 20% |
| 800-899 | 25% |
| 900-999 | 30% |
| 1000-1099 | 35% |
| 1100-1199 | 40% |
| 1200-1299 | 45% |
| 1300-1399 | 50% |
| 1400-1499 | 55% |

REVIEW INFORMATION
COUNTS USED: 2026 Future with Entertainment District Traffic Volumes
COUNT DATE(S): -
DATE REVIEWED 11/15/2024
REVIEWED BY: MFM

## RIGHT TURN FACTORIZATION SHEET (CONT.)

### LANE CONFIGURATIONS

1 2 3 4 5



Any configuration with an exclusive right turn lane (usually up to 600 ft. long)

| PH | LEFT | THROUGH | RIGHT | TOTAL (A) | 0.7A | 0.35A | 3T | T/3 | (T+L) | (T+R) | 3R | 3L | T/2 | T/4 | L=T=R (+/-) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AM | 117 | 0 | 262 | 379 | 265 | 133 | 0 | 0 | 117 | 262 | 786 | 351 | 0 | 0 | NO |
| PM | 182 | 0 | 411 | 593 | 415 | 208 | 0 | 0 | 182 | 411 | 1233 | 546 | 0 | 0 | NO |
| SAT | 281 | 0 | 631 | 912 | 638 | 319 | 0 | 0 | 281 | 631 | 1893 | 843 | 0 | 0 | NO |
| 55th AM | 64 | 0 | 147 | 211 | 148 | 74 | 0 | 0 | 64 | 147 | 441 | 192 | 0 | 0 | NO |
| 55th PM | 100 | 0 | 230 | 330 | 231 | 116 | 0 | 0 | 100 | 230 | 690 | 300 | 0 | 0 | NO |
| 55th Sat | 155 | 0 | 353 | 508 | 356 | 178 | 0 | 0 | 155 | 353 | 1059 | 465 | 0 | 0 | NO |

| PH | BASE REDUCTION | | | | |
|---|---|---|---|---|---|
| | CONFIG 1 | CONFIG 2 | CONFIG 3 | CONFIG 4 | CONFIG 5 |
| AM | 40% | 60% | 75% | 65% | 75% |
| PM | 40% | 60% | 75% | 65% | 75% |
| SAT | 40% | 60% | 75% | 65% | 75% |
| 55th AM | 40% | 60% | 75% | 65% | 75% |
| 55th PM | 40% | 60% | 75% | 65% | 75% |
| 55th Sat | 40% | 60% | 75% | 65% | 75% |

# SIGNAL WARRANT REVIEW SHEET

District #1

**SRA:** N/A

YES (NO)

**INTERSECTION:** Jefferson St and Chicago Ave
**MUNCIPALITY:** Chicago

**COUNTY:** Cook

**Speed Limit of Major Route** 30
**Number of Lanes of Major Approach** 1

**Isolated Community with Population< 10,** No
**Number of Lanes of Minor Approach** 1

| | MAJOR | ADJ. MINOR | Check any hours which meet the following Warrants | | | |
|---|---|---|---|---|---|---|
| | STREET | STREET | WARRANT 1 | | | |
| | VOLUME | VOLUME | A | B | WARRANT 1 A/B: 8 hrs of both | |
| HOUR BEGIN | (both approaches) | (higher volume approaches) | 100% | 100% | 80% of A | 80% of B |
| AM | 2,355 | 183 | X | X | X | X |
| PM | 2,733 | 285 | X | X | X | X |
| SAT | 2,006 | 439 | X | X | X | X |
| 55th % AM | 1,295 | 101 | | X | | X |
| 55th % PM | 1,504 | 157 | X | X | X | X |
| 55th % SAT | 1,104 | 241 | X | X | X | X |
| Met: | | | Yes | Yes | Yes | Yes |
| Volume Requirements: MAJOR: | | | 500 | 750 | 400 | 600 |
| MINOR: | | | 150 | 100 | 120 | 60 |

**REVIEW INFORMATION**

COUNTS USED: 2026 Future with Entertainment District Traffic Volumes
COUNT DATE(S): -
DATE REVIEWED: 11/15/2024
REVIEWED BY: MFM

**Comments**

| | | | |
|---|---|---|---|
| **WARRANT 1** | (YES) | NO | N/A |
| Warrant 1 is met if any of the following Conditions are met: | | | |
| • CONDITION A Minmum Vehicular Volume | (YES) | NO | N/A |
| • CONDITION B Interruption of Continuous Traffic | (YES) | NO | N/A |
| • CONDITION A/B Combination of Warranrts | (YES) | NO | N/A |
| **WARRANT 2** Four Hour Volume | YES | NO | (N/A) |
| **WARRANT 3** Peak Hour Volume | YES | NO | (N/A) |
| **WARRANT 4** Pedestrian Volume | YES | NO | (N/A) |
| **WARRANT 5** School Crossing | YES | NO | (N/A) |
| **WARRANT 6** Coordinated Signal System | YES | NO | (N/A) |
| **WARRANT 7** Accidents Experience | YES | NO | (N/A) |
| **WARRANT 8** Roadway Network | YES | NO | (N/A) |
| **WARRANT 9** Intersection Near a Grade Crossing | YES | NO | (N/A) |

| | |
|---|---|
| Date | 11/15/2024 |

**Location Information**

| | |
|---|---|
| Intersection | Grand Ave & Jefferson St |
| City | Chicago |
| County | Cook |
| District | 1 |

**Street Information**

| | |
|---|---|
| Major Street (EB/WB) | Grand Ave |
| Minor Street (NB/SB) | Jefferson St |

**Review Information**

| | |
|---|---|
| Counts Used | 2026 Future w/Entertainment District Traffic Volumes |
| Count Dates | - |
| Date Reviewed | 11/15/2024 |
| Reviewed By | MFM |

**Warrant Information**

| | |
|---|---|
| Speed Limit of Major Street | 30 |
| Number of Lanes on Major | 2 |
| Number of Lanes on Minor | 2 |
| Isolated Community? | No |
| SRA Route Number | N/A |

**Grand Ave & Jefferson St**
City: **Chicago**
County: **Cook**
District: **1**

**Major** Grand Ave
**Minor** Jefferson St

**State Of Illinois**
**Department of Transportation**
**Bureau of Traffic**

**Date:** 11/15/2024

# SUMMARY OF TRAFFIC SURVEY

| **Route:** | **TRAFFIC FROM NORTH** **Jefferson St** N. of: **Grand Ave** Going | | | | **TRAFFIC FROM SOUTH** **Jefferson St** S. of: **Grand Ave** Going | | | | **TOTAL NORTH AND SOUTH** | **TRAFFIC FROM EAST** **Grand Ave** E. of: **Jefferson St** Going | | | | **TRAFFIC FROM WEST** **Grand Ave** W. of: **Jefferson St** Going | | | | **TOTAL EAST AND WEST** | **GRAND TOTAL** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **START TIME** | **EAST** | **SOUTH** | **WEST** | **TOTAL** | **WEST** | **NORTH** | **EAST** | **TOTAL** | | **SOUTH** | **WEST** | **NORTH** | **TOTAL** | **NORTH** | **EAST** | **SOUTH** | **TOTAL** | | |
| AM | 78 | 0 | 104 | 182 | 28 | 0 | 26 | 54 | **236** | 11 | 552 | 308 | 871 | 137 | 830 | 3 | 970 | **1,841** | **2,077** |
| PM | 122 | 0 | 165 | 287 | 22 | 0 | 14 | 36 | **323** | 15 | 705 | 407 | 1,127 | 181 | 707 | 7 | 895 | **2,022** | **2,345** |
| SAT | 189 | 0 | 251 | 440 | 20 | 0 | 10 | 30 | **470** | 11 | 394 | 682 | 1,087 | 303 | 481 | 5 | 789 | **1,876** | **2,346** |
| 55th % AM | 43 | 0 | 57 | 100 | 15 | 0 | 15 | 30 | **130** | 6 | 304 | 169 | 479 | 75 | 457 | 2 | 534 | **1,013** | **1,143** |
| 55th % PM | 67 | 0 | 91 | 158 | 12 | 0 | 8 | 20 | **178** | 8 | 388 | 224 | 620 | 100 | 389 | 4 | 493 | **1,113** | **1,291** |
| 55th % Sat | 104 | 0 | 138 | 242 | 11 | 0 | 6 | 17 | **259** | 6 | 217 | 375 | 598 | 167 | 265 | 3 | 435 | **1,033** | **1,292** |

**REVIEW INFORMATION**

COUNTS USED: 2026 Future w/Entertainment District Traffic Volumes
COUNT DATE(S): -
DATA REVIEWED: 11/15/2024
REVIEWED BY: MFM

## RIGHT TURN FACTORIZATION SHEET

INTERSECTION: Grand Ave & Jefferson St
MUNCIPALITY: Chicago
COUNTY: Cook

| DIR | PEAK HOUR | MINOR STREET STREET NAME | | Jefferson St | | CRITICAL MAINLINE APPROACH VOLUME PER LANE | BASE RIGHT TURN REDUCTION % | MAINLINE CONGESTION FACTOR % | ADJUSTED RIGHT TURN REDUCTION % | ADJUSTED RIGHT TURNS | ADJUSTED MINOR STREET VOLUME |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CONFIG. # | | 3 | | | | | | | |
| | | CRIT. MAINLINE LANE # | | 2 | | | | | | | |
| | | LEFT | THROUGH | RIGHT | APP. TOTAL | | | | | | |
| WB | AM | 78 | 0 | 104 | 182 | 430 | 75% | 5% | 70% | 31 | 109 |
| WB | PM | 122 | 0 | 165 | 287 | 556 | 75% | 10% | 65% | 58 | 180 |
| WB | SAT | 189 | 0 | 251 | 440 | 538 | 75% | 10% | 65% | 88 | 277 |
| | | 116 | 0 | 157 | 273 | 529 | 0% | 10% | -10% | 173 | 289 |
| WB | 55th AM | 43 | 0 | 57 | 100 | 237 | 75% | 0% | 75% | 14 | 60 |
| WB | 55th PM | 67 | 0 | 91 | 158 | 306 | 75% | 0% | 75% | 23 | 99 |
| WB | 55th Sat | 104 | 0 | 138 | 242 | 296 | 75% | 0% | 75% | 35 | 152 |

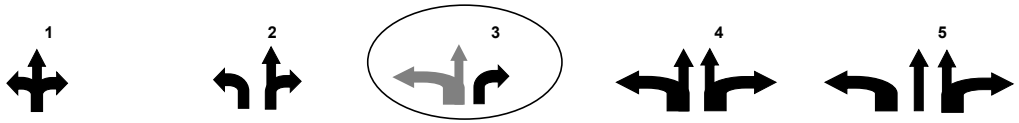
| MAINLINE CONGESTION FACTORS | |
|---|---|
| VOLUMES | FACTOR % |
| 0-399 | 0% |
| 400-499 | 5% |
| 500-599 | 10% |
| 600-699 | 15% |
| 700-799 | 20% |
| 800-899 | 25% |
| 900-999 | 30% |
| 1000-1099 | 35% |
| 1100-1199 | 40% |
| 1200-1299 | 45% |
| 1300-1399 | 50% |
| 1400-1499 | 55% |

REVIEW INFORMATION
COUNTS USED: 2026 Future w/Entertainment District Traffic Volumes
COUNT DATE(S): -
DATE REVIEWED 11/15/2024
REVIEWED BY: MFM

## RIGHT TURN FACTORIZATION SHEET (CONT.)

### LANE CONFIGURATIONS

1 2 3 4 5



Any configuration with an exclusive right turn lane (usually up to 600 ft. long)

| PH | LEFT | THROUGH | RIGHT | TOTAL (A) | 0.7A | 0.35A | 3T | T/3 | (T+L) | (T+R) | 3R | 3L | T/2 | T/4 | L=T=R (+/-) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AM | 78 | 0 | 104 | 182 | 127 | 64 | 0 | 0 | 78 | 104 | 312 | 234 | 0 | 0 | NO |
| PM | 122 | 0 | 165 | 287 | 201 | 100 | 0 | 0 | 122 | 165 | 495 | 366 | 0 | 0 | NO |
| SAT | 189 | 0 | 251 | 440 | 308 | 154 | 0 | 0 | 189 | 251 | 753 | 567 | 0 | 0 | NO |
| 55th AM | 43 | 0 | 57 | 100 | 70 | 35 | 0 | 0 | 43 | 57 | 171 | 129 | 0 | 0 | NO |
| 55th PM | 67 | 0 | 91 | 158 | 111 | 55 | 0 | 0 | 67 | 91 | 273 | 201 | 0 | 0 | NO |
| 55th Sat | 104 | 0 | 138 | 242 | 169 | 85 | 0 | 0 | 104 | 138 | 414 | 312 | 0 | 0 | NO |

| PH | BASE REDUCTION | | | | |
|---|---|---|---|---|---|
| | CONFIG 1 | CONFIG 2 | CONFIG 3 | CONFIG 4 | CONFIG 5 |
| AM | 40% | 60% | 75% | 65% | 75% |
| PM | 40% | 60% | 75% | 65% | 75% |
| SAT | 40% | 60% | 75% | 65% | 75% |
| 55th AM | 40% | 60% | 75% | 65% | 75% |
| 55th PM | 40% | 60% | 75% | 65% | 75% |
| 55th Sat | 40% | 60% | 75% | 65% | 75% |

# SIGNAL WARRANT REVIEW SHEET

District #1

**SRA:** N/A

YES (NO)

**INTERSECTION:** Grand Ave & Jefferson St
**MUNCIPALITY:** Chicago

**COUNTY:** Cook

**Speed Limit of Major Route** 30
**Number of Lanes of Major Approach** 2

**Isolated Community with Population< 10,** No
**Number of Lanes of Minor Approach** 2

| HOUR BEGIN | MAJOR STREET VOLUME (both approaches) | ADJ. MINOR STREET VOLUME (higher volume approaches) | Check any hours which meet the following Warrants: WARRANT 1 A | WARRANT 1 B | WARRANT 1 A/B: 8 hrs of both 80% of A | WARRANT 1 A/B: 8 hrs of both 80% of B |
|---|---|---|---|---|---|---|
| | | | 100% | 100% | | |
| AM | 1,841 | 109 | | X | | X |
| PM | 2,022 | 180 | | X | X | X |
| SAT | 1,876 | 277 | X | X | X | X |
| 55th % AM | 1,013 | 60 | | | | |
| 55th % PM | 1,113 | 99 | | | | X |
| 55th % SAT | 1,033 | 152 | | X | | X |

| | Met: | No | Yes | No | Yes |
|---|---|---|---|---|---|
| Volume Requirements: | MAJOR: | 600 | 900 | 480 | 720 |
| | MINOR: | 200 | 100 | 160 | 80 |

**REVIEW INFORMATION**

COUNTS USED: 2026 Future w/Entertainment District Traffic Volumes
COUNT DATE(S): -
DATE REVIEWED: 11/15/2024
REVIEWED BY: MFM

**Comments**

**WARRANT 1** YES NO N/A
Warrant 1 is met if any of the following Conditions are met:

- CONDITION A — Minmum Vehicular Volume: YES (NO) N/A
- CONDITION B — Interruption of Continuous Traffic: (YES) NO N/A
- CONDITION A/B — Combination of Warranrts: YES (NO) N/A

**WARRANT 2** — Four Hour Volume: YES NO (N/A)

**WARRANT 3** — Peak Hour Volume: YES NO (N/A)

**WARRANT 4** — Pedestrian Volume: YES NO (N/A)

**WARRANT 5** — School Crossing: YES NO (N/A)

**WARRANT 6** — Coordinated Signal System: YES NO (N/A)

**WARRANT 7** — Accidents Experience: YES NO (N/A)

**WARRANT 8** — Roadway Network: YES NO (N/A)

**WARRANT 9** — Intersection Near a Grade Crossing: YES NO (N/A)

| | |
|---|---|
| Date | 11/15/2024 |

**Location Information**

| | |
|---|---|
| Intersection | Jefferson St & Garage Entrance |
| City | Chicago |
| County | Cook |
| District | 1 |

**Street Information**

| | |
|---|---|
| Major Street (NB/SB) | Jefferson Street |
| Minor Street (EB/WB) | Parking Garage Entrance |

**Review Information**

| | |
|---|---|
| Counts Used | Future with Entertainment District Traffic Volumes |
| Count Dates | - |
| Date Reviewed | 11/15/2024 |
| Reviewed By | MFM |

**Warrant Information**

| | |
|---|---|
| Speed Limit of Major Street | 30 |
| Number of Lanes on Major | 1 |
| Number of Lanes on Minor | 1 |
| Isolated Community? | No |
| SRA Route Number | N/A |

**Jefferson St & Garage Entrance**
City: **Chicago**
County: **Cook**
District: **1**

**State Of Illinois**
**Department of Transportation**
**Bureau of Traffic**

**Date:** 11/15/2024

**Major** Jefferson Street
**Minor** Parking Garage Entrance

# SUMMARY OF TRAFFIC SURVEY

| **Route:** | **TRAFFIC FROM NORTH** Jefferson Street N. of: Parking Garage Entrance Going | | | | **TRAFFIC FROM SOUTH** Jefferson Street S. of: Parking Garage Entrance Going | | | | **TOTAL NORTH AND SOUTH** | **TRAFFIC FROM EAST** Parking Garage Entrance E. of: Jefferson Street Going | | | | **TRAFFIC FROM WEST** Jefferson Street W. of: Jefferson Street Going | | | | **TOTAL EAST AND WEST** | **GRAND TOTAL** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **START TIME** | **EAST** | **SOUTH** | **WEST** | **TOTAL** | **WEST** | **NORTH** | **EAST** | **TOTAL** | | **SOUTH** | **WEST** | **NORTH** | **TOTAL** | **NORTH** | **EAST** | **SOUTH** | **TOTAL** | | |
| Friday Casino | 199 | 218 | 0 | 417 | 0 | 341 | 340 | 681 | **1,098** | 216 | 0 | 417 | 633 | 0 | 0 | 0 | 0 | **633** | **1,731** |
| Friday 95% | 189 | 207 | 0 | 396 | 0 | 324 | 323 | 647 | **1,043** | 205 | 0 | 396 | 601 | 0 | 0 | 0 | 0 | **601** | **1,644** |
| Weekday PM | 149 | 168 | 0 | 317 | 0 | 264 | 257 | 521 | **838** | 170 | 0 | 329 | 499 | 0 | 0 | 0 | 0 | **499** | **1,337** |
| Wkday PM 95% | 142 | 160 | 0 | 302 | 0 | 251 | 244 | 495 | **797** | 162 | 0 | 313 | 475 | 0 | 0 | 0 | 0 | **475** | **1,272** |
| 55th % AM | 109 | 120 | 0 | 229 | 0 | 191 | 190 | 381 | **610** | 119 | 0 | 229 | 348 | 0 | 0 | 0 | 0 | **348** | **958** |
| 55th % PM | 104 | 114 | 0 | 218 | 0 | 181 | 181 | 362 | **580** | 113 | 0 | 218 | 331 | 0 | 0 | 0 | 0 | **331** | **911** |
| 55th % Sat | 82 | 92 | 0 | 174 | 0 | 148 | 144 | 292 | **466** | 94 | 0 | 181 | 275 | 0 | 0 | 0 | 0 | **275** | **741** |

**REVIEW INFORMATION**

COUNTS USED: Future with Entertainment District Traffic Volumes
COUNT DATE(S): -
DATA REVIEWED: 11/15/2024
REVIEWED BY: MFM

# RIGHT TURN FACTORIZATION SHEET

INTERSECTION: Jefferson St & Garage Entrance
MUNCIPALITY: Chicago
COUNTY: Cook

| DIR | PEAK HOUR | MINOR STREET STREET NAME | | Parking Garage Entrance | | CRITICAL MAINLINE APPROACH VOLUME PER LANE | BASE RIGHT TURN REDUCTION % | MAINLINE CONGESTION FACTOR % | ADJUSTED RIGHT TURN REDUCTION % | ADJUSTED RIGHT TURNS | ADJUSTED MINOR STREET VOLUME |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CONFIG. # | | 3 | | | | | | | |
| | | CRIT. MAINLINE LANE # | | 1 | | | | | | | |
| | | LEFT | THROUGH | RIGHT | APP. TOTAL | | | | | | |
| | | | | | | | | | | | |
| WB | AM | 216 | 0 | 417 | 633 | 681 | 75% | 15% | 60% | 167 | 383 |
| WB | PM | 205 | 0 | 396 | 601 | 647 | 75% | 15% | 60% | 158 | 363 |
| WB | SAT | 170 | 0 | 329 | 499 | 521 | 75% | 10% | 65% | 115 | 285 |
| | | 162 | 0 | 313 | 475 | 495 | 75% | 5% | 70% | 94 | 256 |
| WB | 55th AM | 119 | 0 | 229 | 348 | 191 | 75% | 0% | 75% | 57 | 211 |
| WB | 55th PM | 113 | 0 | 218 | 331 | 181 | 75% | 0% | 75% | 55 | 200 |
| WB | 55th Sat | 94 | 0 | 181 | 275 | 148 | 75% | 0% | 75% | 45 | 157 |

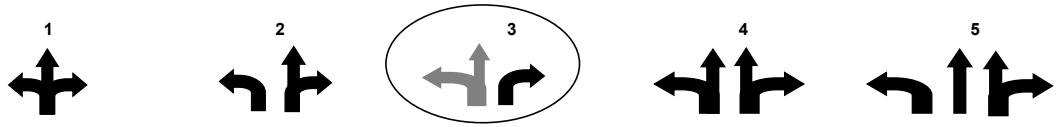
| MAINLINE CONGESTION FACTORS | |
|---|---|
| VOLUMES | FACTOR % |
| 0-399 | 0% |
| 400-499 | 5% |
| 500-599 | 10% |
| 600-699 | 15% |
| 700-799 | 20% |
| 800-899 | 25% |
| 900-999 | 30% |
| 1000-1099 | 35% |
| 1100-1199 | 40% |
| 1200-1299 | 45% |
| 1300-1399 | 50% |
| 1400-1499 | 55% |

REVIEW INFORMATION
COUNTS USED: Future with Entertainment District Traffic Volumes
COUNT DATE(S): -
DATE REVIEWED: 11/15/2024
REVIEWED BY: MFM

## RIGHT TURN FACTORIZATION SHEET (CONT.)

### LANE CONFIGURATIONS

1 2 3 4 5



Any configuration with an exclusive right turn lane (usually up to 600 ft. long)

| PH | LEFT | THROUGH | RIGHT | TOTAL (A) | 0.7A | 0.35A | 3T | T/3 | (T+L) | (T+R) | 3R | 3L | T/2 | T/4 | L=T=R (+/-) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AM | 216 | 0 | 417 | 633 | 443 | 222 | 0 | 0 | 216 | 417 | 1251 | 648 | 0 | 0 | NO |
| PM | 205 | 0 | 396 | 601 | 421 | 210 | 0 | 0 | 205 | 396 | 1188 | 615 | 0 | 0 | NO |
| SAT | 170 | 0 | 329 | 499 | 349 | 175 | 0 | 0 | 170 | 329 | 987 | 510 | 0 | 0 | NO |
| 55th AM | 119 | 0 | 229 | 348 | 244 | 122 | 0 | 0 | 119 | 229 | 687 | 357 | 0 | 0 | NO |
| 55th PM | 113 | 0 | 218 | 331 | 232 | 116 | 0 | 0 | 113 | 218 | 654 | 339 | 0 | 0 | NO |
| 55th Sat | 94 | 0 | 181 | 275 | 193 | 96 | 0 | 0 | 94 | 181 | 543 | 282 | 0 | 0 | NO |

| PH | BASE REDUCTION | | | | |
|---|---|---|---|---|---|
| | CONFIG 1 | CONFIG 2 | CONFIG 3 | CONFIG 4 | CONFIG 5 |
| AM | 40% | 60% | 75% | 65% | 75% |
| PM | 40% | 60% | 75% | 65% | 75% |
| SAT | 40% | 60% | 75% | 65% | 75% |
| 55th AM | 40% | 60% | 75% | 65% | 75% |
| 55th PM | 40% | 60% | 75% | 65% | 75% |
| 55th Sat | 40% | 60% | 75% | 65% | 75% |

# SIGNAL WARRANT REVIEW SHEET

District #1

**SRA:** N/A

YES (NO)

**INTERSECTION:** Jefferson St & Garage Entrance
**MUNCIPALITY:** Chicago

**COUNTY:** Cook

**Speed Limit of Major Route** 30
**Number of Lanes of Major Approach** 1

**Isolated Community with Population< 10,** No
**Number of Lanes of Minor Approach** 1

| HOUR BEGIN | MAJOR STREET VOLUME (both approaches) | ADJ. MINOR STREET VOLUME (higher volume approaches) | Check any hours which meet the following Warrants: WARRANT 1 A | WARRANT 1 B | WARRANT 1 A/B: 8 hrs of both 80% of A | WARRANT 1 A/B: 8 hrs of both 80% of B |
|---|---|---|---|---|---|---|
| | | | 100% | 100% | | |
| Wkdy Fri | 1,098 | 383 | X | X | X | X |
| Wkdy Fri 95% | 1,043 | 363 | X | X | X | X |
| Wkdy PM | 838 | 285 | X | X | X | X |
| 55th % Wkdy Fri | 610 | 211 | X | | X | X |
| 55th % Wkdy Fri 95% | 580 | 200 | X | | X | |
| 55th % Wkdy PM | 466 | 157 | | | X | |

| | Met: | Yes | No | Yes | Yes |
|---|---|---|---|---|---|
| Volume Requirements: | MAJOR: | 500 | 750 | 400 | 600 |
| | MINOR: | 150 | 75 | 120 | 60 |

**REVIEW INFORMATION**

COUNTS USED: Future with Entertainment District Traffic Volumes
COUNT DATE(S): -
DATE REVIEWED: 11/15/2024
REVIEWED BY: MFM

**Comments**

**WARRANT 1** (YES) NO N/A
Warrant 1 is met if any of the following Conditions are met:

- CONDITION A (YES) NO N/A
  Minmum Vehicular Volume
- CONDITION B YES (NO) N/A
  Interruption of Continuous Traffic
- CONDITION A/B (YES) NO N/A
  Combination of Warranrts

**WARRANT 2** YES NO (N/A)
Four Hour Volume

**WARRANT 3** YES NO (N/A)
Peak Hour Volume

**WARRANT 4** YES NO (N/A)
Pedestrian Volume

**WARRANT 5** YES NO (N/A)
School Crossing

**WARRANT 6** YES NO (N/A)
Coordinated Signal System

**WARRANT 7** YES NO (N/A)
Accidents Experience

**WARRANT 8** YES NO (N/A)
Roadway Network

**WARRANT 9** YES NO (N/A)
Intersection Near a Grade Crossing

# TRAFFIC SIGNAL WARRANT SUMMARY

City: **Chicago**
County: **Cook**

Engineer: **MFM**
Date: **11/15/2024**

Major Street: **Jefferson Street** Lanes: **1** Critical Approach Speed: **30**
Minor Street: **Parking Garage Entrance** Lanes: **1**

**Volume Level Criteria**

| | | | | |
|---|---|---|---|---|
| 1. Is the critical speed of major street traffic > 70 km/h (40 mph) ? | ☐ | Yes | ☒ | No |
| 2. Is the intersection in a built-up area of isolated community of <10,000 population? | ☐ | Yes | ☒ | No |
| If Question 1 or 2 above is answered "Yes", then use "70%" volume level | ☐ | 70% | ☒ | 100% |

## WARRANT 2 - FOUR-HOUR VEHICULAR VOLUME

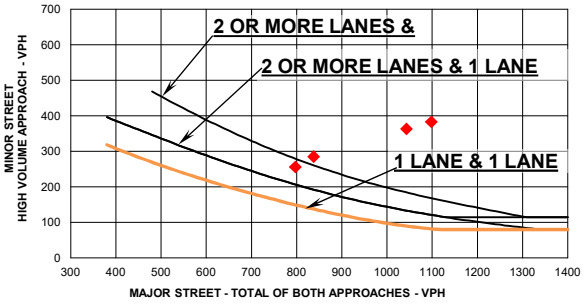
*If all four points lie above the appropriate line, then the warrant is satisfied.*

Applicable: ☒ Yes ☐ No
Satisfied: ☒ Yes ☐ No

*Plot four volume combinations on the applicable figure below.*

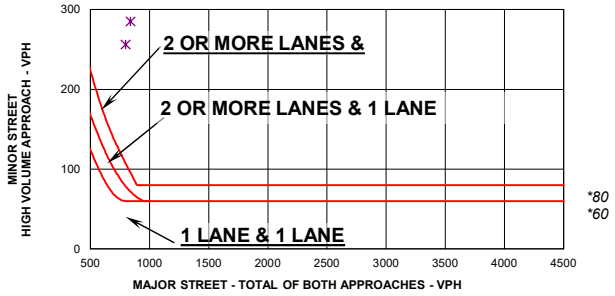
| FOUR HIGHEST HOURS | Volumes | |
|---|---|---|
| | MAJOR STREET | MINOR STREET |
| Friday Casino Peak Hour | 1,098 | 383 |
| Friday Casino 95% | 1,043 | 363 |
| PM Peak Hour | 838 | 285 |
| PM Peak Hour 95% | 797 | 256 |

**FIGURE 4C-1: Criteria for "100%" Volume Level**




** Note: 115 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor street approach with one lane.*

**FIGURE 4C-2: Criteria for "70%" Volume Level**




** Note: 80 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor street approach with one lane.*

Source: Revised from NCHRP Report 457