



# Transportation Systems Management and Operations Study



OCTOBER 2019

Prepared on behalf of the  
City of Paris, TN by:



in cooperation with



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# 1 INTRODUCTION

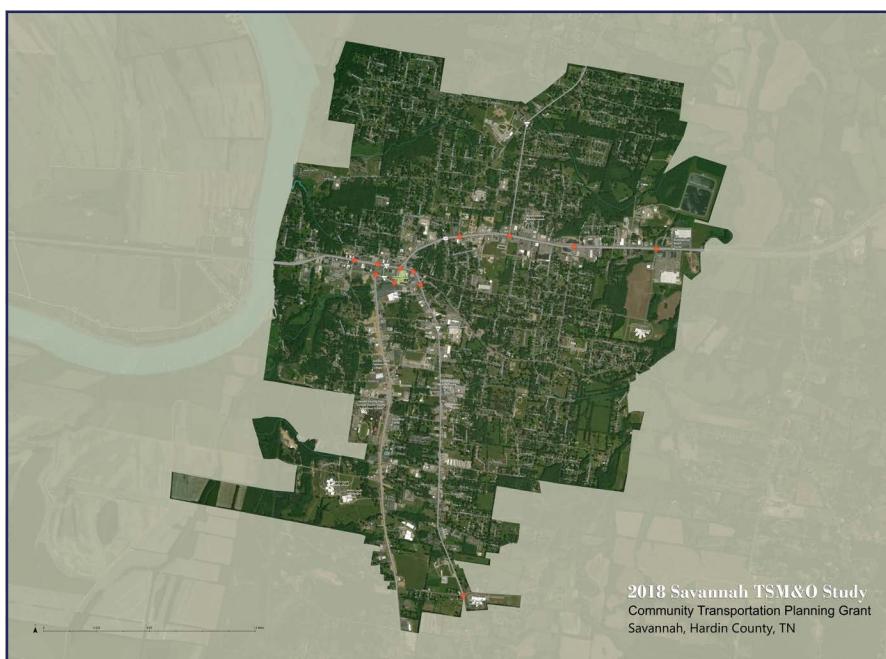
The City of Paris and the Tennessee Department of Transportation (TDOT) initiated the city-wide signal study in October 2018 after the City made a successful application for Tennessee Transportation Systems Management and Operations (TSM&O) funds. This document identifies the vision and goals for the study and presents the findings of the study team in the form of a data inventory, overview of public involvement, existing conditions review, traffic analysis and recommendations for improvements and policy guidance.

Paris is located in the north-western portion of Tennessee. The purpose for the grant was to facilitate the city's request for a needs assessment of the city's signalized intersections, optimizing traffic signal timings and operations, determining viability of signal coordination and establishing a recommendation plan that would lead to implementation of recommendations as part of future procurement phases.

## 1.1 PROJECT STUDY AREA

The project study area includes an approximately 2.3 mile section of Wood Street, 0.3 mile portion of Market Street, 0.1 mile portion of Poplar Street, 0.5 mile portion of Veterans Drive, 0.8 mile portion of Mineral Wells Drive, 0.6 mile portion of Memorial Drive, 0.4 mile portion of Volunteer Drive, and the intersections of SR-76 at SR-218, Lone Oak Road at Wilson Street, and Tyson Ave at Joy Street within Paris, Henry County. The study area is shown in **Figure 1.1**.

Wood Street serves as the primary east-west route throughout the city, which feeds into the downtown district. Veterans Drive is the primary north-south route that feeds into the downtown district. The main routes within the downtown district are Market Street and Wood Street. Mineral Wells Avenue also serves as a main corridor with access to numerous commercial developments.



**Figure 1.1** Paris TSM&O Study Area

## 1.2 GRANT APPLICATION BACKGROUND

The purpose of the grant application was to seek funds for a study to identify strategies to improve existing traffic signal operations within the study area for vehicular traffic and pedestrians. Specifically, the study analyzed the corridors to identify deficiencies and develop improvement strategies for:

- Safety improvements at intersections and identified high accident locations
- Operational improvements at critical locations
- Proposed coordination and signal timing optimization
- Accommodation of pedestrian improvements at signalized intersections

The benefits to the community will take the form of visible, near-term improvements that will be critical for vehicular traffic that commutes daily throughout the city. Immediate benefits will come from operational modifications and minor construction projects for spot improvements. A proposed action plan will provide a systematic approach to implementation and further development of study recommendations.

The goal of the study included four distinct but related concepts: overall signalized corridor plan, signal timing and maintenance issues, spot intersection improvements, and safety-focused considerations.

- The spot intersection improvement considerations include both low-cost operational improvements, as well as, slightly more involved projects, which require cabinet equipment replacement, pedestrian improvements, and phasing operational changes. The study provides information regarding these projects, including functional schematics and cost estimates where applicable, to allow them to be developed either as locally funded projects, through the TDOT Locally Managed Projects process, or through traditional TDOT project development channels.
- Safety considerations play a direct role in the study's evaluation and suggestions. This includes intersection and segmental factors. Vehicle crash records and field observations inform the study's review and ultimate recommendations.
- Signal timing and maintenance issues are addressed on both an intersection and corridor level. Uniform documentation of coding sheets and coordination for major routes will be investigated and analyzed for the betterment of the community.
- The overall plan will be used to guide implementation of the individual study elements to ensure that future improvements are done in a way that is logical for the planned future development of the corridor.

## 1.3 VISION

The vision of the Paris TSM&O Study is to address prevailing community concerns and plan for future needs within the study area by developing a comprehensive signal timing optimization plan for the study area that addresses current deficiencies in safety, provides actionable guidance for improvements, and creates a framework to guide future transportation infrastructure development and public investment through economic development policy for the subject routes.

## 1.4 STUDY TEAM

Individuals representing TDOT and the City of Paris comprised the Study Team. Neel-Schaffer, Inc. assisted in the process. Representatives of the organizations include:

**Kim Foster**, *City Manager, City of Paris*

**Jennifer Morris**, *Community Development Director, City of Paris*

**Ben Bradberry**, *Northwest Tennessee Development Director*

### **Paris Board of Public Utilities**

**Ashley Owens**, *TDOT*

**Antoine Hawkins**, *TDOT*

**Greg Judy**, *Neel-Schaffer, Inc.*

**Trey Todd**, *Neel-Schaffer, Inc.*

**Jacob Carson**, *Neel-Schaffer, Inc*

## 2 DATA COLLECTION AND INVENTORY

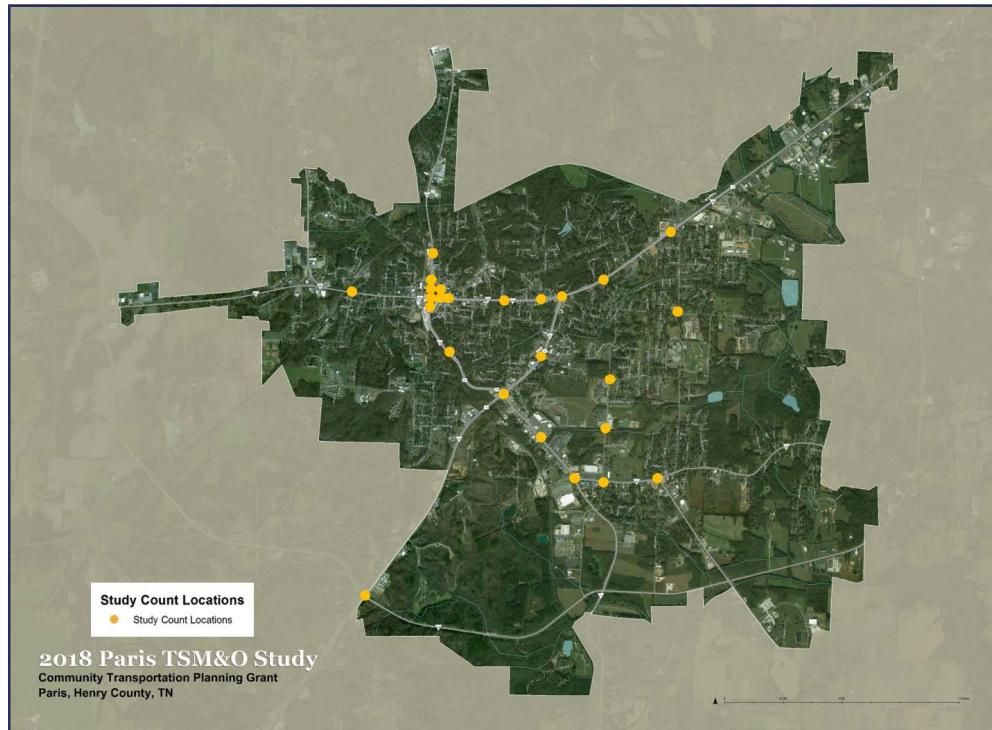
The data collection and inventory process included a review of traffic, crash history and existing plan documents.

### 2.1 TRAFFIC COUNTS

Traffic Counts were conducted on February 21, 2019 at the locations shown in **Figure 2.1** and listed below.

Peak Hour Turning Movement Count Locations:

- 1.** Mineral Wells Drive at Memorial Drive
- 2.** Memorial Drive at Volunteer Drive
- 3.** Memorial Drive at Mineral Wells Drive
- 4.** Mineral Wells Drive at Jim Adams Drive
- 5.** Mineral Wells Drive at Tyson Ave
- 6.** Veterans Drive at Dunlap Street
- 7.** W. Wood Street at Irvine Street
- 8.** S. Market Street at Blythe Street
- 9.** Market Street at Wood Street
- 10.** N. Market Street at Washington Street
- 11.** N. Market Street at Ruff Street
- 12.** Washington Street at Poplar Street
- 13.** E. Wood Street at Poplar Street
- 14.** E. Wood Street at Brewer Street
- 15.** E. Wood Street at Highland Street
- 16.** E. Wood Street at Lake Street
- 17.** E. Wood Street at Tyson Avenue
- 18.** E. Wood Street at Chickasaw Road/  
Fairgrounds Road



**Figure 2.1** Paris TSM&O Study Count Locations

The count data was collected using video cameras on site and processed manually in the office. Counts were conducted between the hours of 7 AM-9 AM, 11 AM-1 PM, and 4 PM-6 PM for all intersections. These counts made it possible to conduct the capacity analysis on both an intersection and corridor basis. Results of the counts are included in Appendix A.

In addition to the turning movement counts, 24-hour bi-directional ADT counts were utilized from TDOT at the below intersections:

- E. Wood Street between Market Street and Highland Street
- E. Wood Street between Highland Street and Fairgrounds Road/Chickasaw Road
- Veterans Drive between Blythe Street and Tyson Avenue
- Mineral Wells Drive between Tyson Avenue and Memorial Drive
- Memorial Drive between Mineral Wells Avenue and US-641
- Volunteer Drive between Patriot Avenue and Jim Adams Drive

Along with these traffic counts, a field inventory was collected at all study area intersections to clearly define traffic parameters. These parameters include lane widths, speed limits, and photo record of all approaches at each intersection. Sample field inventory data collection sheets are included as **Figure 2.2**.

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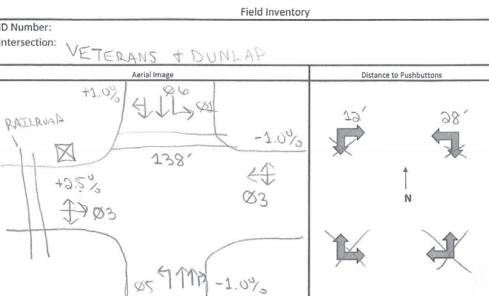
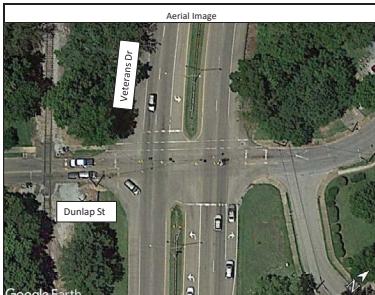
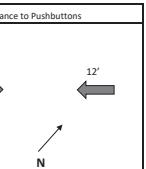
Field Inventory									
ID Number: _____	Intersection: <u>VETERANS &amp; DUNLAP</u>								
Aerial Image									
									
Distance to Pushbuttons									
									
Lane Settings									
Notes / Direction	NB	S0	EB	WB					
Street Name	VETERANS	4u	25	35					
Speed Limits (mph)	40	40	35	35					
Lane Assignments	L-T-R	L-T-R	L-T-R	L-T-R					
Lane Widths (ft)	12-12-12-12	12-12-12-12	12	12					
Crosswalk width (ft)	-	-	-	-					
Driveway width (ft)	-	-	-	-					
Push button to curb	-	-	-	-					
Approach Grade (%)	+1.0%	+1.0%	+1.0%	+1.0%					
Storage Bay Length	1-2-2-2	1-2-2-2	CURVY	CURVY					
Right Turn on Red	Y	Y	Y	Y					
Adjacent Bus Stops	N	N	N	N					
Adjusting Phasing	N	N	N	N					
Signal Head (Number & type)	1-150 2-310	1-150 2-310	2-130	2-130					
Vehicle detection (Model)									
Pedestrian Needs	N	N	N	N					
Ped Push Buttons	N	N	N	Y					
Mac. Info:	Signing / Restrictions / School Zone								
I/S Width									
Signal Phasing									
Notes	*PED BUTTON STOPS VETS  GIVES GREEN TO DUNLAP FOR WALK (NO DED HEAD)								
Field Inventory Date: <u>2/24/19</u>									

Figure 2.2 Example Field Inventory Sheets – Veterans Drive at Dunlap Street

The project team conducted a field visit on February 14, 2019 to collect data required for analyzing existing conditions and developing the proposed signal timings. A sample of the type of information documented consisted of, but was not limited to, the following parameters:

- Number of approach lanes
- Length of auxiliary turn lanes
- Lane assignments
- Regulatory and warning signs in close proximity to intersection
- Adjacent bus stops, bike lanes, and parking surrounding the intersection
- Speed Limits
- Traffic signal phasing
- Storage Bay Length
- Vehicle detection
- Crosswalk distance
- Approach grades
- Intersection width
- Number and type of signal head for all approaches
- Pictures of each approach and signal cabinet

Field inventory sheets were formalized for City of Paris staff and others to readily use and are provided in Appendix B. An example of the formatting of the sheet is below in **Figure 2.3.**

ID Number: Intersection: SR-69 (US641) Veterans Dr / Dunlap St																																																																																																			
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<table border="1"> <thead> <tr> <th>Notes / Direction</th> <th>NB</th> <th>SB</th> <th>EB</th> <th>WB</th> </tr> </thead> <tbody> <tr> <td>Street Name</td> <td>Veterans Dr</td> <td>Veterans Dr</td> <td>Dunlap St</td> <td>Dunlap St</td> </tr> <tr> <td>Speed Limits (mph)</td> <td>40</td> <td>40</td> <td>35</td> <td>35</td> </tr> <tr> <td>Lane Assignments</td> <td>L-T-T-R</td> <td>L-T-TR</td> <td>LTR</td> <td>LTR</td> </tr> <tr> <td>Lane Width (ft)</td> <td>11-12-12-11</td> <td>11-12-12</td> <td>12</td> <td>12</td> </tr> <tr> <td>Crosswalk width (ft)</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>138</td> </tr> <tr> <td>Distance from red curb</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>See diagram</td> </tr> <tr> <td>Approach Grade (%)</td> <td>-1.00</td> <td>+1.00</td> <td>+2.50</td> <td>-1.00</td> </tr> <tr> <td>Storage Bay Length</td> <td>L=100', R=55'</td> <td>L=110'</td> <td>CONT.</td> <td>CONT.</td> </tr> <tr> <td>Right Turn on Red</td> <td>Y</td> <td>Y</td> <td>Y</td> <td>Y</td> </tr> <tr> <td>Adjacent Bus Stops</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> </tr> <tr> <td>Adjacent Parking</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> </tr> <tr> <td>Signs (Number &amp; type), Vehicle detection (Phase)</td> <td>1-150A2L, 1-130</td> <td>1-150A2L, 1-130</td> <td>2-130</td> <td>2-130</td> </tr> <tr> <td>Pedestrian Heads</td> <td>N</td> <td>N</td> <td>N</td> <td>N</td> </tr> <tr> <td>Ped Push Buttons</td> <td>N</td> <td>N</td> <td>N</td> <td>Y</td> </tr> <tr> <td>Misc. Info</td> <td colspan="4">Signing / Restrictions / School Zone n/a</td> </tr> <tr> <td>I/S Width</td> <td>70'</td> <td>70'</td> <td>115'</td> <td>115'</td> </tr> <tr> <td>Signal Phasing</td> <td colspan="4"> </td> </tr> <tr> <td>Notes</td> <td colspan="4">Ped button stops Veterans Dr and gives green to Dunlap St. Ped push button on Cabinet. Ped push button on utility pole.</td> </tr> </tbody> </table>					Notes / Direction	NB	SB	EB	WB	Street Name	Veterans Dr	Veterans Dr	Dunlap St	Dunlap St	Speed Limits (mph)	40	40	35	35	Lane Assignments	L-T-T-R	L-T-TR	LTR	LTR	Lane Width (ft)	11-12-12-11	11-12-12	12	12	Crosswalk width (ft)	n/a	n/a	n/a	138	Distance from red curb	n/a	n/a	n/a	See diagram	Approach Grade (%)	-1.00	+1.00	+2.50	-1.00	Storage Bay Length	L=100', R=55'	L=110'	CONT.	CONT.	Right Turn on Red	Y	Y	Y	Y	Adjacent Bus Stops	N	N	N	N	Adjacent Parking	N	N	N	N	Signs (Number & type), Vehicle detection (Phase)	1-150A2L, 1-130	1-150A2L, 1-130	2-130	2-130	Pedestrian Heads	N	N	N	N	Ped Push Buttons	N	N	N	Y	Misc. Info	Signing / Restrictions / School Zone n/a				I/S Width	70'	70'	115'	115'	Signal Phasing					Notes	Ped button stops Veterans Dr and gives green to Dunlap St. Ped push button on Cabinet. Ped push button on utility pole.			
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**Figure 2.3 Formalized Field Inventory Sheet**

## 2.2 CRASH HISTORY

Crash data was collected within the study area for records dating from 2016 to 2018. The crash data was taken from information maintained by TDOT. Data was aggregated by intersection for use in the crash analysis discussed in Section 3.3 of this document. The data was used to identify high hazard locations and crash patterns in the crash analysis. Appendix D provides raw crash data from TDOT.

## 2.3 EXISTING TRANSPORTATION STUDIES AND REPORTS

The following documents were consulted during the study process:

- 1.** TDOT Multi-modal Standard Drawings
- 2.** TDOT Traffic Design Manual

These documents were consulted to ensure consistency and efficiency of the plan with all ongoing planning efforts.

## 3 CHAPTER 3: EXISTING CONDITIONS

### 3.1 CAPACITY ANALYSIS/LEVEL OF SERVICE

Assimilation of the traffic movement counts and field inventory made it possible to conduct a capacity analysis on all the intersections within the study area and along the subject corridors. The analysis was quantified Level of Service (LOS), which incorporated overall total delay for signalized intersections.

The concept of Level of Service is defined as a qualitative measure of traffic flow describing operational conditions within a traffic stream based on road conditions and the perceptions of motorists. A Level of Service (LOS) designation provides characterization of the quality of traffic flow in terms of factors such as speed, travel time, freedom to maneuver, traffic interruptions, comfort, and convenience. The LOS analysis results in an assignment of a letter value to the intersection based on traffic control measures at the respective location.

#### 3.1.1 SIGNALIZED INTERSECTIONS

The LOS criterion for signalized intersections is referred to as control delay. Control delay accounts for interruption of traffic flow in addition to the time actually spent stopped. Control delay involves delay in association with deceleration, queue up-movement, and re-start acceleration. Levels of service for signalized intersections are calculated using the operational analysis methodology of the 2016 *Highway Capacity Manual, Version 6*. This method assesses the effects of signal type, timing, phasing, and progression; vehicle mix, and geometrics on delay. Level of Service designations are based solely on the criterion of calculated average control-delay per vehicle, since delay is a measure of driver discomfort, frustration, fuel consumption, and increased travel time (**Table 3.1**).

**Table 3.1 Level of Service Criteria  
Signalized Intersections<sup>1</sup>**

Level of Service	Control Display per Vehicle (Seconds)
A	$\leq 10$
B	$>10 \text{ and } \leq 20$
C	$>20 \text{ and } \leq 35$
D	$>35 \text{ and } \leq 55$
E	$>55 \text{ and } \leq 80$
F	$>80$

<sup>1</sup>Source: *Highway Capacity Manual*, 5th Edition, Transportation Research Board; Washington, DC; 2011.

#### 3.1.2 INTERSECTION LEVELS OF SERVICE

After review of the LOS analysis results, it was determined if a LOS grade of D or lower was assigned then further recommendations should be established to promote efficient traffic operations. Study assessment determined that a LOS designation of C would be the threshold of acceptable performance. Dense urban areas frequently experience high traffic volumes where LOS designations of D and lower are commonly accepted by drivers because. In more rural areas, such as Paris and Henry County, a LOS condition of D or worse is an indication that improvements to infrastructure could improve service levels and alleviate congestion. Traffic count data was used to determine the peak AM, mid-day, and PM travel times at each intersection. The AM peak travel time was determined to be 7:30 AM- 8:30 AM, the mid-day peak lasted from 11:30 AM to 12:30 PM and the PM peak lasted

from 4:00 PM to 5:00 PM. **Table 3.2** documents the existing LOS for each intersection in the study area. For signalized intersections, LOS represents overall intersection performance for each peak period. The LOS for AM, mid-day and PM peaks is illustrated in **Figures 3.1, 3.2, and 3.3**. Appendix D provides LOS output reports for each intersection under existing conditions.

**Table 3.2 Existing Level of Service – Intersection Level of Service Analysis**

Intersection	EXISTING (2019)			PROPOSED (2019)			Comment
	PEAK PERIOD			AM	MD	PM	
W Wood St & Irvine St	A	A	A				Detection present on NB approach but constant call for Phase 4 (NB & SB)
W Wood St & Market St	B	B	B				Left turn phases operate under the same phase due to existing equipment
N Market St & Rison St	A	A	A				
N Market St & Ruff St	B	B	B				
N Market St & Washington St	A	A	B				
S Market St & Blythe St	A	A	B				
E Washington St & Poplar St	A	A	A				
E Wood St & Poplar St	A	A	A				
E Wood St & Brewer St	A	A	A				
E Wood St & Highland St	A	A	A				
E Wood St & Lake St	A	A	A				
E Wood St & Tyson Ave	B	B	B				
E Wood St & Volunteer Dr	B	B	B				
E Wood St & Fairgrounds Rd /Chickasaw Rd	A	A	A				Broken detector on SB approach. Phase 2 (SB) constant call.
Veterans Dr & Dunlap St	A	A	A				Pedestrian Push Button stops Veterans Dr (NB & SB) and gives green to Dunlap St. Phase 1 (SB LT) and Phase 5 (NB LT) are disconnected but two 150A2L signal heads are present.
Veterans Dr/Mineral Wells Dr & Tyson Ave	B	B	C				
Mineral Wells Dr & Jim Adams Dr	B	B	B				
Mineral Wells Dr & Memorial Dr	B	B	B				
Memorial Dr & Volunteer Dr	A	B	B				
Memorial Dr & SR-69/US-641	B	B	B				
Volunteer Dr & Patriot Ave	C	B	C				AM and PM Peak Plan programs are not running.
Volunteer Dr & Jim Adams Dr	B	B	B				AM and PM Peak Plan programs are not running.
Tyson Ave & Joy St	B	B	B				
SR-76/US-79 & SR-218	A	A	A				
Lone Oak Rd & Wilson St	A	A	A				Stop Bars are not present.

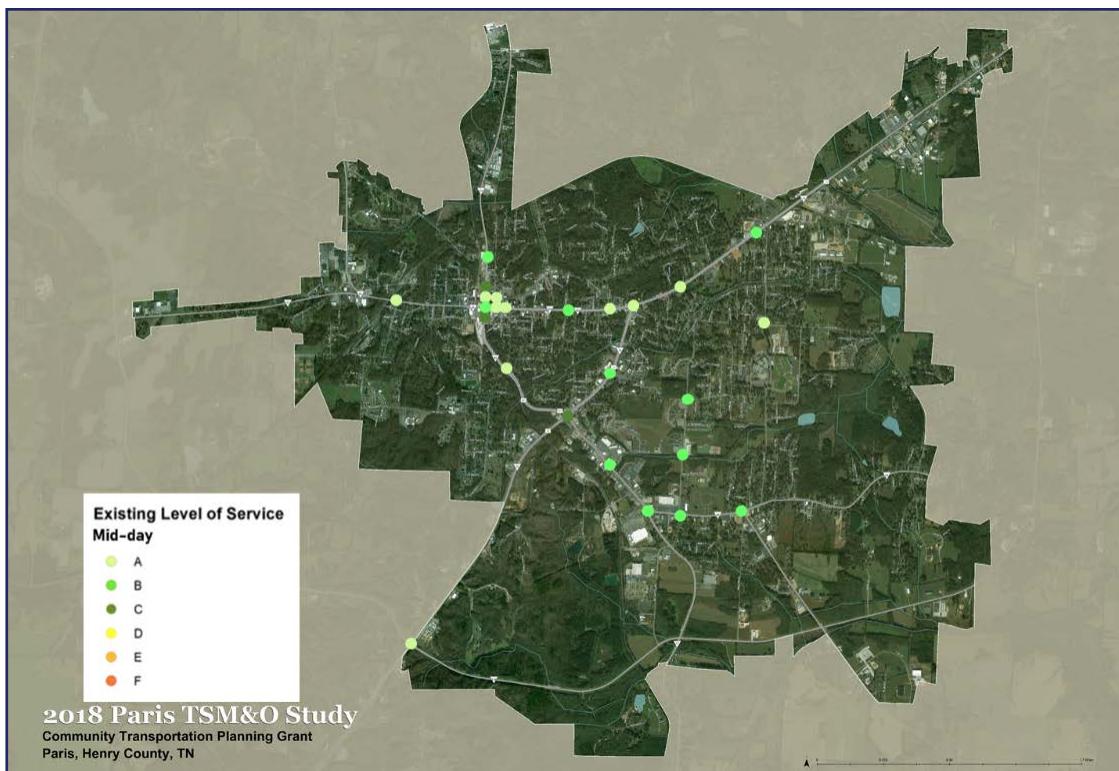


Figure 3.1 Existing Level of Service – AM Peak

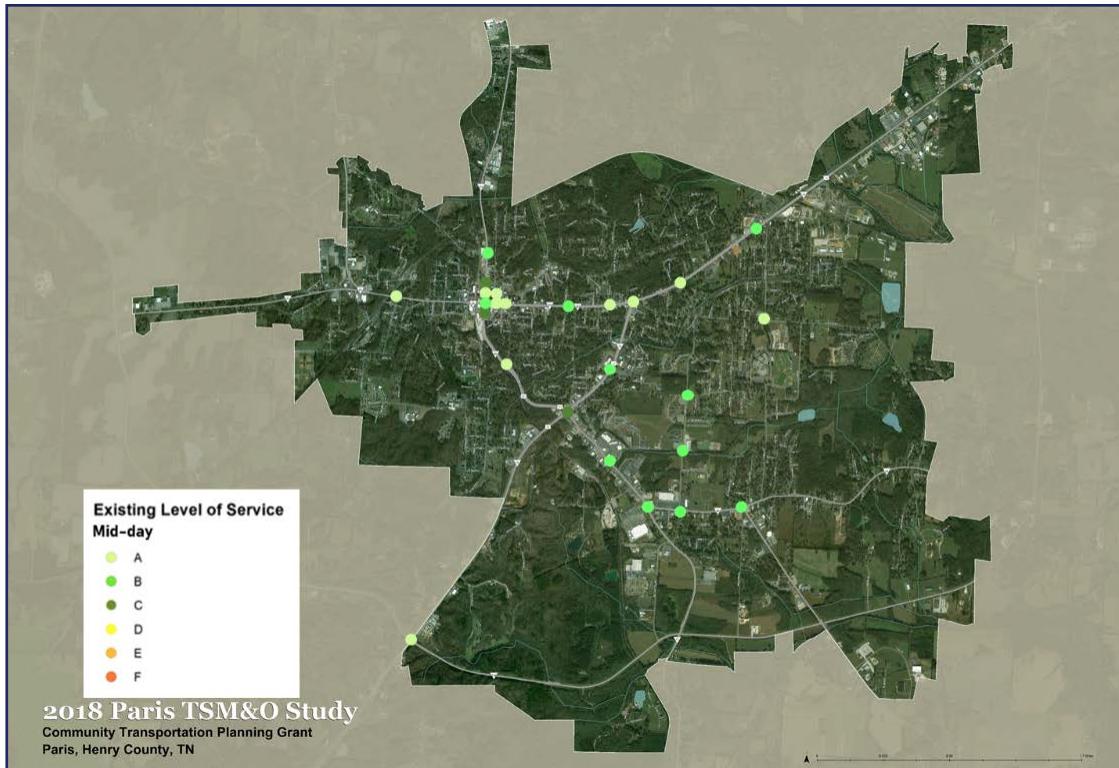


Figure 3.2 Existing Level of Service – Mid-day Peak

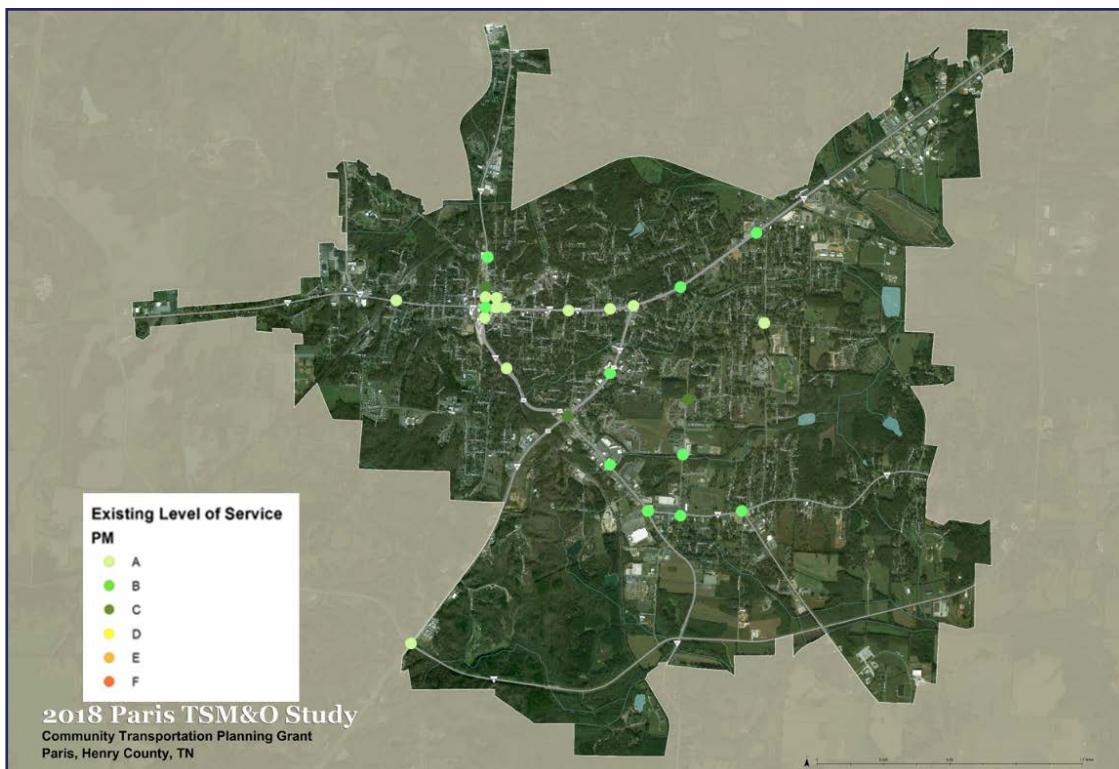


Figure 3.3 Existing Level of Service – PM Peak

### 3.2 AVERAGE DAILY TRAFFIC

In addition to Level of Service analysis, the overall magnitude of average daily traffic (ADT) volumes traveling within corridor segments can indicate desired directional preference and planned vehicle progression.

ADT counts also made it possible to develop Time-of-Day operating plans for different traffic signal timing plans at individual intersection. The project team documented 24-hour, ADT counts along three main arterials within the city. Results of these count volumes are included for Veterans Drive, E. Wood Street, and Mineral Wells Avenue within the study area (**Figure 3.4, 3.5, 3.6**). These figures identify peak points of vehicular volume throughout the typical day.

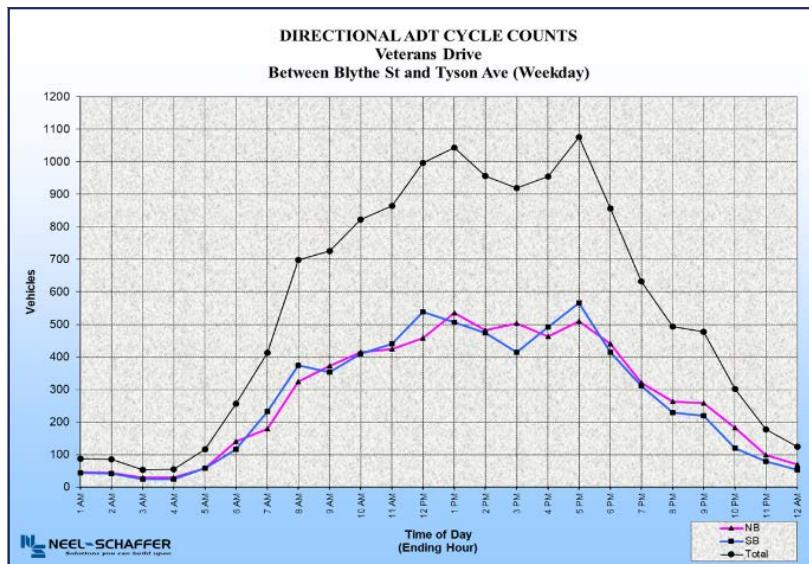


Figure 3.4 Veterans Drive Peak Hour Volume

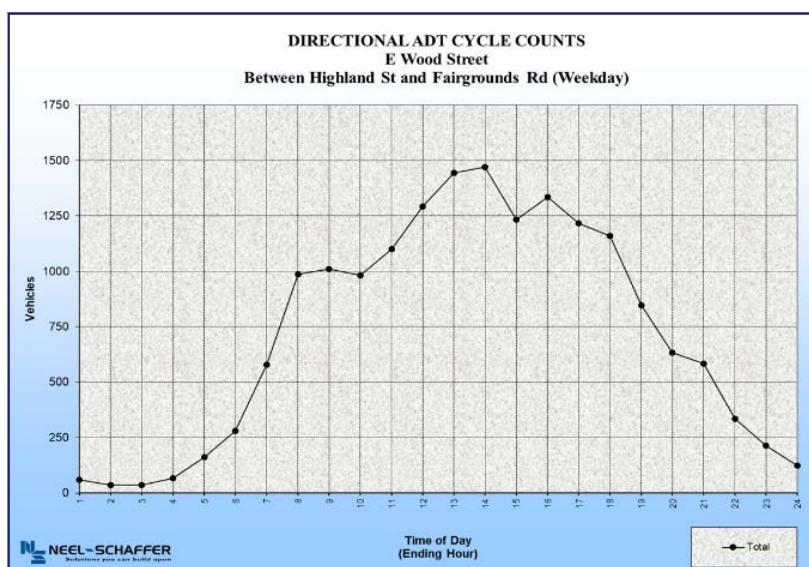


Figure 3.5 E. Wood Street Peak Hour Volume

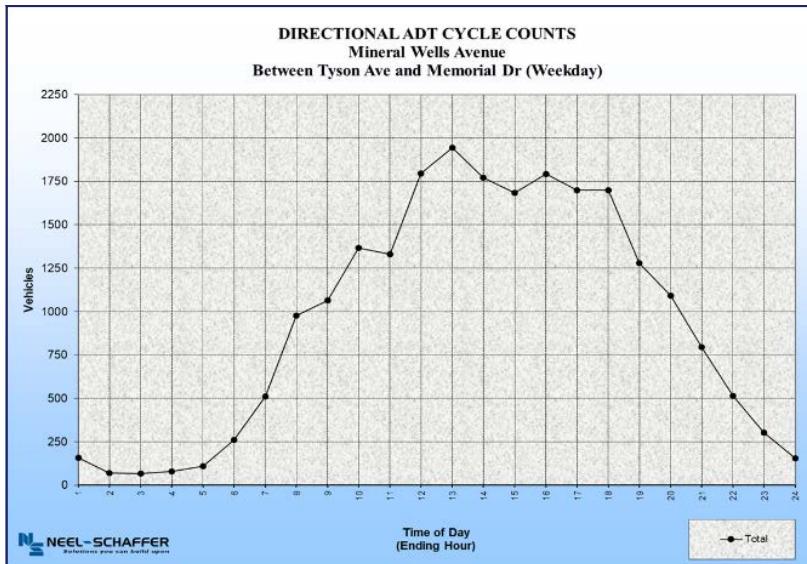


Figure 3.6 Minerals Wells Avenue Peak Hour Volume

### 3.3 CRASH ANALYSIS

data between the years of 2016 to 2018, roadway geometrics based on number of lanes and median type, and Annual Average Daily Traffic Volumes were compiled for the study area by intersection and utilized to determine a critical crash rate for each intersection.

The methodology of the crash analysis is detailed as follow:

1. Crash data was presented to the consultant group from TDOT for all intersections within the corridor
2. The manner of collision made it possible to identify possible trends of safety concerns.
3. The total number of crashes at study intersections and statewide crash rate averages made it possible to develop a critical crash rate for all intersections.
4. Crash rates at each intersection were compared to the Tennessee Statewide Average Crash Rate. Locations moderately above state average are highlighted in yellow while areas only slightly above average are highlighted in green on **Table 3.3**. These rates are illustrated in **Figures 3.7**.
5. Evaluation of the crash data identified several intersections moderately above the average statewide crash rate, most notably:
  - S Market Street at Blythe Street
  - Mineral Wells Drive at Tyson Avenue
  - Mineral Wells Drive at Jim Adams Drive
  - Memorial Drive at US-641
  - SR-76 at SR-218

The referenced intersections exhibited a trend of experiencing angle collisions. This could indicate insufficient clearance intervals that have not been updated using the latest standard formulas provided by TDOT's Clearance Interval Policy. Another possible indicator of angle collisions are signal operations. Most notably, Mineral Wells Drive and Tyson Avenue has protected and protected-permissive left turn phasing. When conducting field inventory, it was noticed that "0" seconds of All-Red clearance time was programmed. This could be a notable contributing factor to the amount of angle collisions.

**Table 3.3 Paris Crash Rates – Crash Data Analysis (2016-2018)**

LOCATION Intersection	CRASH TYPE				MANNER OF COLLISION				VOLUME Avg Entering Traffic Volume (vpd)	STATISTICAL COMPUTATIONS			
	Total Number of Crashes	Property Damage	Injury	Fatal	Rear-End	Angle	HeadOn	Sideswipe		Crash Rate	Critical Crash Rate	TN Statewide Avg Crash Rate	Equiv PDO Rating <sup>1</sup>
W Wood St & Irvine St	5	2	3	0	3	2	0	0	9,152	0.499	0.674	0.666	35
Wood St & Market St	4	3	1	0	3	1	0	0	19,966	0.183	0.672	0.666	14
N Market St & Rison St	0	0	0	0	0	0	0	0	9,101	0.000	0.674	0.666	0
N Market St & Ruff St	0	0	0	0	0	0	0	0	12,563	0.000	0.673	0.666	0
N Market St & Washington St	3	3	0	0	1	2	0	0	12,596	0.218	0.673	0.666	3
S Market St & Blythe St	10	8	2	0	2	7	1	0	12,568	0.727	0.673	0.666	30
E Washington St & N Poplar St	2	2	0	0	1	1	0	0	2,950	0.619	0.680	0.666	2
E Wood St & Poplar St	0	0	0	0	0	0	0	0	9,897	0.000	0.674	0.666	0
E Wood St & Brewer St	1	1	0	0	0	1	0	0	9,861	0.093	0.674	0.666	1
E Wood St & Highland St	2	1	1	0	2	0	0	0	8,627	0.212	0.674	0.666	12
E Wood St & Lake St	4	2	2	0	1	3	0	0	9,942	0.367	0.674	0.666	24
E Wood St & Tyson Ave	10	8	2	0	3	4	1	2	18,577	0.492	0.778	0.772	30
E Wood St & Volunteer Dr	8	5	3	0	3	4	1	0	20,140	0.363	0.778	0.772	38
E Wood St & Fairground Rd /Chickasaw Rd	14	9	5	0	5	8	1	0	20,815	0.614	0.778	0.772	64
Veterans Dr & Dunlap St	12	5	7	0	3	8	1	0	14,518	0.755	0.779	0.772	82
Veterans Dr/ Mineral Wells Dr & Tyson Ave	37	22	15	0	12	21	0	4	25,308	1.335	0.777	0.772	187
Mineral Wells Dr & Jim Adams Dr	20	11	9	0	9	9	0	2	20,442	0.894	0.778	0.772	110
Mineral Wells Dr & Memorial Dr	11	11	0	0	2	6	0	3	17,015	0.590	0.778	0.772	11
Memorial Dr & Volunteer Dr	5	2	3	0	0	5	0	0	15,307	0.298	0.779	0.772	35
Memorial Dr & SR-69/US-641	10	8	2	0	1	6	1	2	11,688	0.781	0.780	0.772	30
Volunteer Dr & Patriot Ave*	3	1	1	1	2	1	0	0	13,068	0.210	0.779	0.772	554
Volunteer Dr & Jim Adams Dr	1	1	0	0	0	0	0	1	11,935	0.077	0.780	0.772	1
Tyson Ave & Joy St	3	1	2	0	0	3	0	0	13,187	0.208	0.779	0.772	23
SR-76/US-79 & SR-218	13	11	2	0	4	7	1	1	13,090	0.907	0.779	0.772	33
Lone Oak Rd & Wilson St	1	0	1	0	0	1	0	0	3,987	0.229	0.851	0.837	11

<sup>1</sup> EPDO Weighted Factors have come from HSM and AASHTO (2010). Fatal = 542, Injury = 11, PDO = 1

\* FATALITY OCCURRED IN 2017

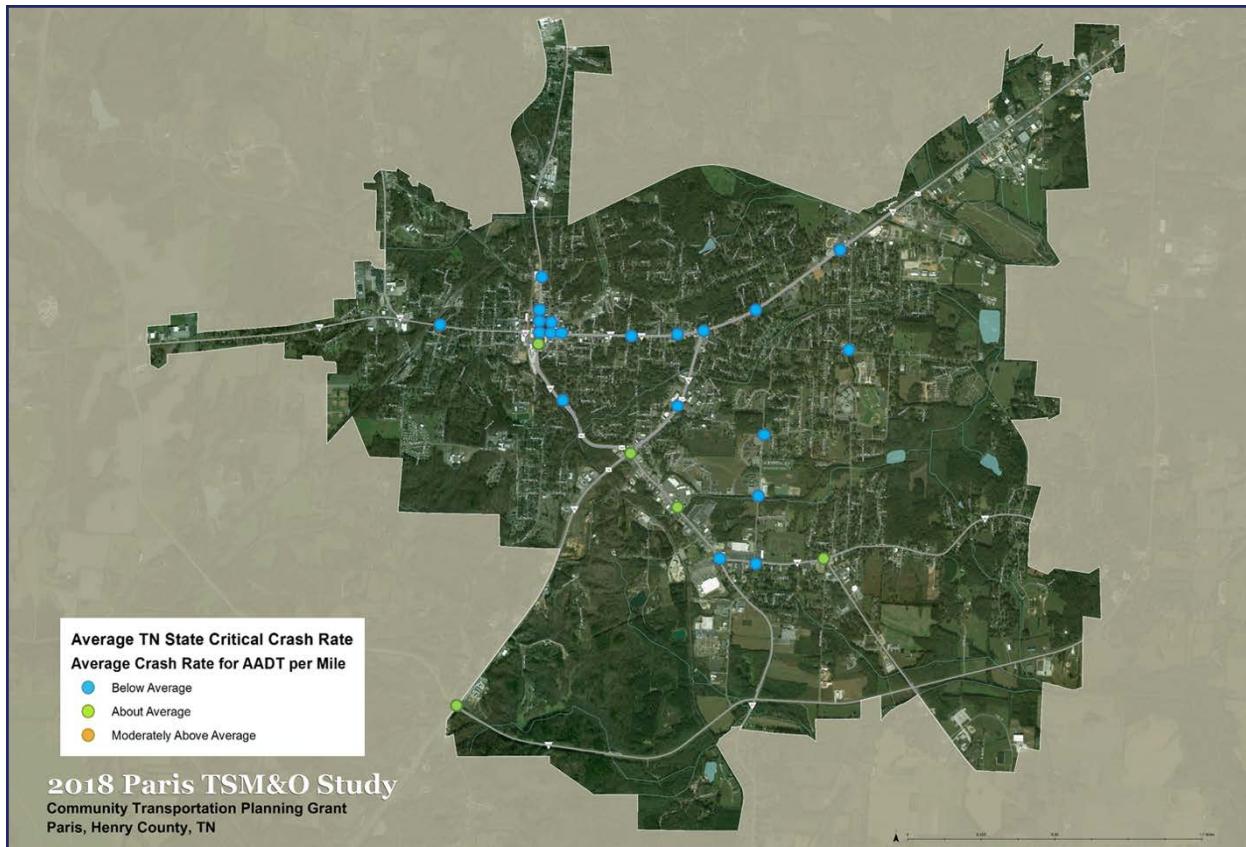


Figure 3.7 Paris Crash Rate Map

### 3.4 GEOMETRIC OPERATIONS REVIEW ASSESSMENT

Existing geometric conditions for all signalized intersection within the project were analyzed, and improvement opportunities were identified as needed. Five intersections were identified as potential locations that could benefit from operational changes, which will be discussed in depth in Chapter 4. These intersections are:

- Wood Street at Tyson Avenue
- Wood Street at Fairgrounds Road/Chickasaw Road
- Lone Oak Road at Wilson Street
- Wood Street at Irvine Street
- Wood Street at Lake Street

In addition to operational changes, review of existing conditions allowed for the project team to identify potential pedestrian and signal-related improvements at the following twelve intersections:

- Market Street at Ruff Street
- Market Street at Washington Street
- Washington Street at Poplar Street
- Market Street at Wood Street
- Wood Street at Poplar Street
- Wood Street at Brewer Street
- Market Street at Blythe Street
- Wood Street at Volunteer Drive
- Veterans Drive at Dunlap Street
- Veterans Drive/Mineral Wells Drive at Tyson Ave
- Mineral Wells Drive at Jim Adams Drive
- Memorial Drive at Volunteer Drive

### 3.5 BASIC TRAFFIC SIGNAL TIMING AND COORDINATED SIGNAL TIMING ANALYSIS RESULTS

Existing traffic signal timings for each intersection were analyzed, and Synchro 9 software was used to provide capacity analysis results. While conducting field inventory, it was noted that most intersection within the project area currently operate under “Free” operation with no coordinated timings. Signal timings were updated and customized based on demand throughout the entire day. Clearance intervals were also updated and carefully reviewed. Chapter 4 provides detailed discussion on the benefits of coordination and the assessment measures used to determine if arterials are candidates for coordination.

## 4 CHAPTER 4: RECOMMENDATIONS

### 4.1 INTERSECTION OPERATIONAL IMPROVEMENTS

After careful analysis of existing conditions and existing signal timings, evaluation concluded that specific intersections could benefit from operational improvements. These improvements include, but are not limited to signal phase changes, equipment modernization, including signal cabinet replacement, pedestrian accessibility modifications. Functional drawings were created for all proposed intersection operational improvement scenarios and can be in Appendix I.

Intersections that were identified as candidates for operational improvements include:

- Market Street at Ruff Street (Downtown CBD Area)
- Market Street at Washington Street (Downtown CBD Area)
- Washington Street at Poplar Street (Downtown CBD Area)
- Market Street at Wood Street (Downtown CBD Area)
- Wood Street at Poplar Street (Downtown CBD Area)
- Wood Street at Brewer Street (Downtown CBD Area)
- Market Street at Blythe Street (Downtown CBD Area)
- Wood Street at Tyson Avenue
- Wood Street at Volunteer Drive
- Wood Street at Fairgrounds Road/Chickasaw Road
- Veterans Drive at Dunlap Street
- Veterans Drive/Mineral Wells Drive at Tyson Avenue
- Mineral Wells Drive at Jim Adams Drive
- Memorial Drive at Volunteer Drive
- Lone Oak Road Wilson Street
- Wood Street at Irvine Street
- Wood Street at Lake Street

**Table 4.1** below provides a summary of improvements that are proposed based on intersection.

**Table 4.1 Summary of Proposed Improvements**

Intersection	Action Plan	Planning Level Cost Estimate
Ruff Street & Market Street	ADA Improvements, Pedestrian and Signal Upgrade	\$116,499.03
Washington Street & Market Street	ADA Improvements, Pedestrian and Signal Upgrade	\$142,823.96
Washington Street & Poplar Street	ADA Improvements, Pedestrian and Signal Upgrade	\$143,910.71
Wood Street & Market Street	ADA Improvements, Pedestrian and Signal Upgrade	\$150,270.21
Wood Street & Poplar Street	ADA Improvements, Pedestrian and Signal Upgrade	\$144,053.03
Wood Street & Brewer Street	ADA Improvements, Pedestrian and Signal Upgrade	\$131,341.21
Blythe Street & Market Street	ADA Improvements, Pedestrian and Signal Upgrade	\$102,228.96
Wood Street & Tyson Avenue	Operational Improvement	\$20,324.53
Wood Street & Volunteer Drive	Pedestrian Upgrade	\$40,325.73
Wood Street & Chickasaw/Fairgrounds	Operational Improvement	\$119,807.12
Veterans Drive & Dunlap Street	Pedestrian Upgrade	\$37,935.28
Veterans Drive & Tyson Avenue	Sign Replacement and Operational Improvement	\$13,800.00
Mineral Wells & Jim Adams	Pedestrian Upgrade	\$32,579.39
Memorial Drive & Volunteer	Pedestrian Upgrade	\$41,185.93
Lone Oak & Wilson	Signal Upgrade and Operational Improvement	\$54,649.55
Wood Street & Irvine Street	Signal Upgrade and Operational Improvement	\$58,778.17
Wood Street & Lake Street	Signal Upgrade and Operational Improvement	\$52,912.82
City-wide Improvements	Equipment Upgrades and Operational Improvement	\$48,222.56
<b>Paris TSMO</b>	<b>Full Implementation of all Proposed Improvements</b>	<b>\$1,451,648.19</b>

**Downtown CBD intersections** currently have electromechanical equipment and operate under two-phase conditions, except for Market Street at Wood Street which is operating under four-phase conditions due to the protected-permissive left turns. All of these intersections (seven in total) also have crosswalks with no pedestrian signalization. As an outcome of the study, the following improvements have been suggested at all intersections within the downtown area: improve curb ramps to meet current accessibility guidelines; install pole-mounted signal cabinets, install new signal controllers, install GPS synchronization units; install new longitudinal crosswalks; replace signal heads with those that have backplates. Curb ramps are to be installed per TDOT standard drawings.

**Wood Street at Tyson Avenue** currently operates under four-phase conditions. It has been proposed to install new vehicle detectors, signal controller, and GPS unit at this intersection. It would be beneficial to implement eight-phase traffic signal operation at this intersection.

**Wood Street at Fairgrounds Road/Chickasaw Road** currently operates under two-phase conditions. It has been proposed to install new vehicle detectors, signal controller, and GPS unit at this intersection. Along with this, there are future plans to extend the sidewalk along Fairgrounds Road. It was brought to the attention of the project team to improve pedestrian facilities at this intersection, which includes raised channelized islands for pedestrian refuge, longitudinal crosswalk pavement markings, and pedestrian signalization.

**Veterans Drive at Dunlap Street** currently has pedestrian pushbuttons installed on the signal cabinet and adjacent utility pole, which allow pedestrians to activate the signal's pedestrian signal features and to cross Veterans Drive. It has been proposed to remove the existing pedestrian pushbuttons and install new pedestal poles with modern pedestrian signal equipment along with longitudinal crosswalk pavement markings to provide sufficient visibility.

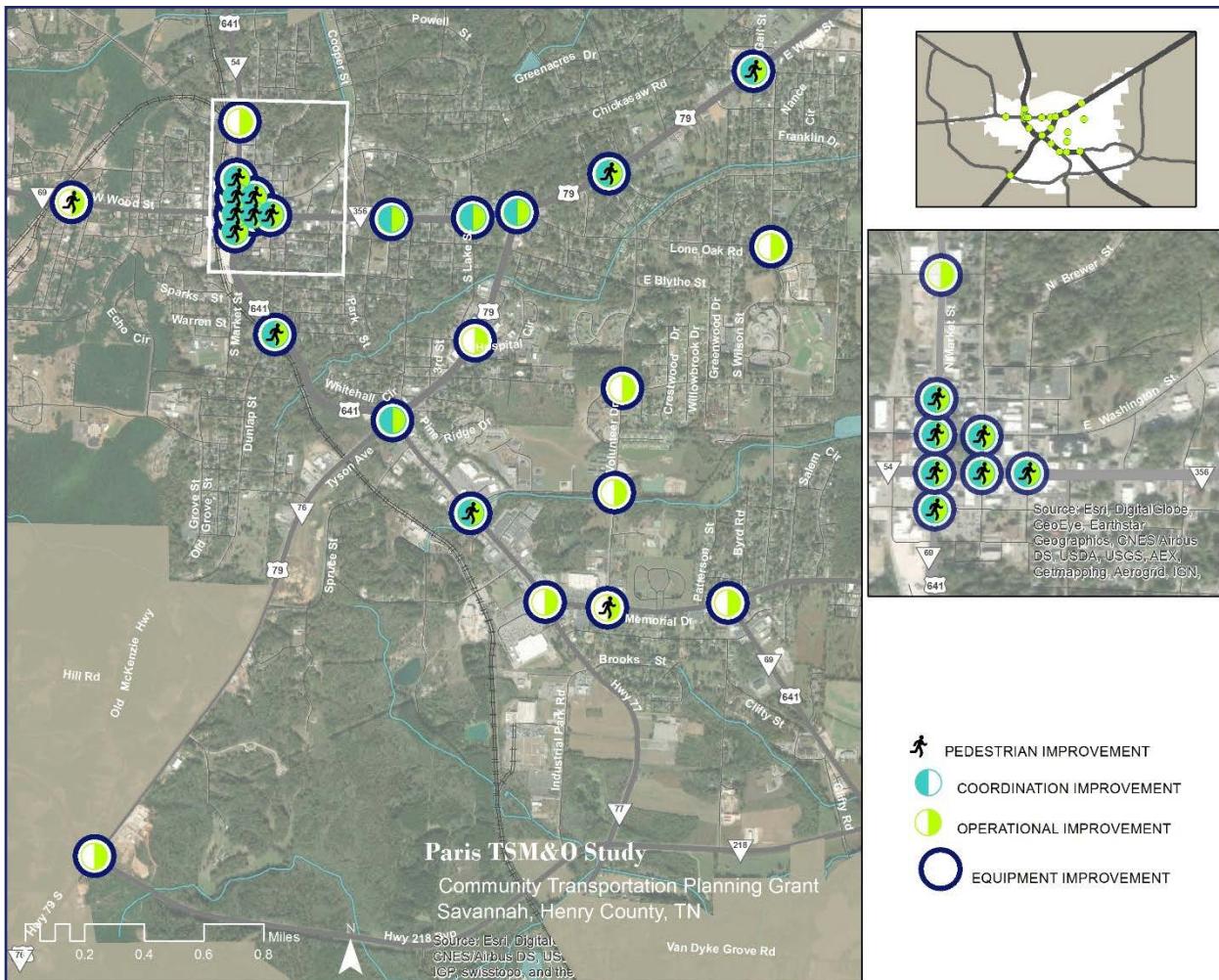
**Veterans Drive/Mineral Wells at Tyson Avenue** currently has an existing R10-10 ("Left Turn Signal") sign for the protected-permissive southbound left turn movement. This sign should only be used for protected-only left turn movements. It has been proposed to remove the R10-10 sign and install a R10-12 ("Left Turn Yield On Green") sign for the protected-permissive left turn movement.

**Mineral Wells Drive at Jim Adams Drive** and **Memorial Drive at Volunteer Drive** currently has "Walk"/"Don't Walk" pedestrian signal heads. It has been proposed to update the pedestrian signals to countdown-style displays and replace the pedestrian pushbuttons with Audible Pedestrian Signal (APS) pushbuttons, while installing longitudinal crosswalk pavement markings for all approaches.

**Lone Oak Road at Wilson Street, Wood Street at Irvine Street, and Wood Street at Lake Street** currently have electromechanical equipment. It has been proposed to install new signal cabinets, a new signal controller, GPS unit, and loop detection at these intersections. Because Lone Oak Road at Wilson Street and Wood Street at Irvine Street are isolated signals, it is recommended that they are fully-actuated vehicle detection for all approaches to reduce delay for all approaches. Wood Street at Lake Street has been proposed to have semi-actuated vehicle detection for the side-street only due to proximity of the intersection to nearby coordinated intersections on Wood Street.

In addition to individual intersection improvements, it has been proposed to have coordinated timings operate for the AM, Mid-day, and PM peak periods along E. Wood Street, Mineral Wells Drive, and the Downtown CBD area. E. Wood Street and Mineral Wells Drive serve as reliable corridors for coordination due to platoons within the peak periods of the day. Under existing conditions, all intersections within the corridors function under "Free" operation (non-coordinated), excluding the Downtown CBD area. Seven intersections within the downtown area have proposed coordinated timings. Although all seven intersections have coordinated timings, platoon progression was favored on Market Street and Wood Street. These seven intersections are proposed to run the same "Peak" coordinated pattern throughout the day with short cycle lengths that are similar to the current coordinated timings. The benefits of coordination will be further discussed within this chapter in "Time-Space Diagrams and Coordination" topic.

**Figure 4.1** below presents a summary of the proposed operational improvement by intersection.



**Figure 4.1** Paris TSM&O Proposed Improvements

#### 4.1.1 INTERSECTION CLEARANCE INTERVALS

The project team carefully reviewed vehicular and pedestrian clearance times for intersectional intersections' signal phases. The vehicle clearance intervals include the red and yellow time periods while the pedestrian intervals include the Walk and Flashing-Don't-Walk intervals. Using field data collected at each intersection, the clearance intervals were calculated using TDOT's Clearance Interval Policy Guidelines along with the standards set forth in the Manual on Uniform Traffic Control Devices (MUTCD).

Some vehicle clearance intervals increased due to geometric improvements at the intersection or the previous vehicle intervals did not meet current guidelines. The updated clearance intervals contribute to enhanced safety for pedestrians and motorists. Of the 25 intersections within the study area, twenty intersections had existing vehicular clearance intervals that required optimizing. As stated in Chapter 3, updating clearance intervals with careful analysis can prove beneficial to the safety of the public and motorists. Appendix E has a tabular comparison of both existing and proposed clearances.

#### 4.1.2 TIME-SPACE DIAGRAMS AND COORDINATION

Coordination is the concept of having signalized intersections that are in relative proximity operate with progressed movements along a corridor or arterial. A preliminary analysis tool called the “Coupling Index” was used to determine if coordination would be preferred along E. Wood Street and Mineral Wells Drive. The Coupling Index factors bi-directional volume and distance between intersections and produces a numerical value greater than zero. According to the Federal Highway Administration (FHWA), it is recommended to “link all intersections that have a value greater than 50, consider linking intersections that have a value of 1 to 50, and do not link intersections that have a value of less than 1.” **Tables 4.2, 4.3, and 4.4** show the Coupling Index values between signalized intersections along E. Wood Street for the AM, Mid-day, and PM peak periods. **Tables 4.5, 4.6, and 4.7** show the Coupling Index values between signalized intersections along Mineral Wells Drive for the AM, Mid-day, and PM peak periods.

**Table 4.2 Coupling Index (Coordinability) Analysis – E. Wood Street AM Peak**

Intersection Limits	Bi-Directional Volume (vph)	Distance (Miles)	Coupling Index (CI)
Highland St to Lake St	704	0.3	7.82
Lake St to Tyson Ave	753	0.2	18.83
Tyson Ave to Volunteer Dr	1159	0.3	12.88
Volunteer Dr to Fairground Rd	965	0.6	2.68

**Table 4.3 Coupling Index (Coordinability) Analysis – E. Wood Street Mid-Day Peak**

Intersection Limits	Bi-Directional Volume (vph)	Distance (Miles)	Coupling Index (CI)
Highland St to Lake St	720	0.3	8.00
Lake St to Tyson Ave	799	0.2	19.98
Tyson Ave to Volunteer Dr	965	0.3	10.72
Volunteer Dr to Fairground Rd	1055	0.6	2.93

**Table 4.4 Coupling Index (Coordinability) Analysis – E. Wood Street PM Peak**

Intersection Limits	Bi-Directional Volume (vph)	Distance (Miles)	Coupling Index (CI)
Highland St to Lake St	774	0.3	8.60
Lake St to Tyson Ave	889	0.2	22.23
Tyson Ave to Volunteer Dr	1340	0.3	14.89
Volunteer Dr to Fairground Rd	1144	0.6	3.18

NOTE: Coupling Index =  $V/(D^2)$

V = Bi-Directional Volume (Divided By 1000)

D = Distance between Intersections (Miles)

\* Main St EB Left Turns and WB Right Accounted for Coupling Index

**Table 4.5 Coupling Index (Coordinability) Analysis – Veterans Drive and Mineral Wells AM Peak**

Intersection Limits	Bi-Directional Volume (vph)	Distance (Miles)	Coupling Index (CI)
Dunlap St to Tyson Ave	1056	0.5	4.22
Tyson Ave to Jim Adams Dr	1220	0.4	7.63
Jim Adams Dr to Memorial Dr	1041	0.4	6.51

**Table 4.6 Coupling Index (Coordinability) Analysis – Veterans Drive and Mineral Wells Mid-Day Peak**

Intersection Limits	Bi-Directional Volume (vph)	Distance (Miles)	Coupling Index (CI)
Dunlap St to Tyson Ave	1047	0.5	4.19
Tyson Ave to Jim Adams Dr	1730	0.4	10.81
Jim Adams Dr to Memorial Dr	1698	0.4	10.61

**Table 4.7 Coupling Index (Coordinability) Analysis – Veterans Drive and Mineral Wells PM Peak**

Intersection Limits	Bi-Directional Volume (vph)	Distance (Miles)	Coupling Index (CI)
Dunlap St to Tyson Ave	1079	0.5	4.32
Tyson Ave to Jim Adams Dr	1705	0.4	10.66
Jim Adams Dr to Memorial Dr	1661	0.4	10.38

 NOTE: Coupling Index =  $V/(D^2)$ 

V = Bi-Directional Volume (Divided By 1000)

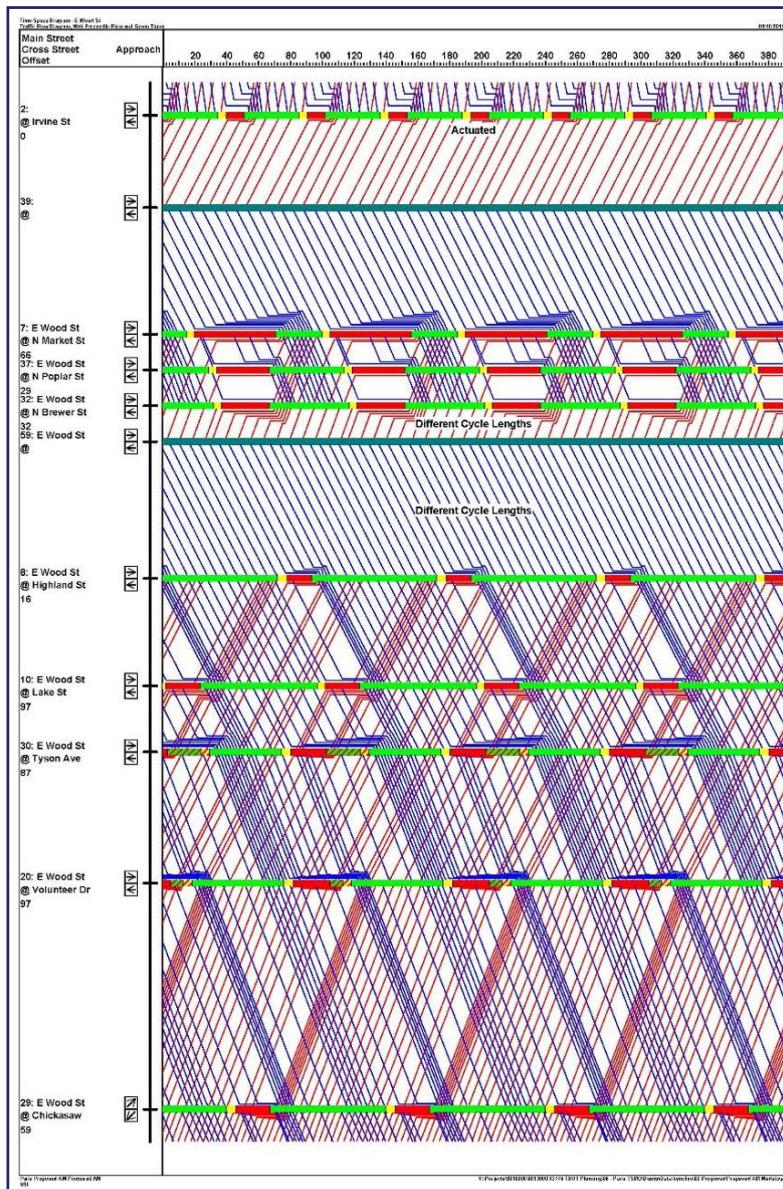
D = Distance between Intersections (Miles)

\* Main St EB Left Turns and WB Right Accounted for Coupling Index

According to the analysis results, coupling Index values verified that coordination would be advisable along E. Wood Street and Mineral Wells Drive for the AM, Mid-day, and PM peak periods.

When signals are coordinated, the overall goal is for platoons (reliable groups of vehicles) to move from one end of an arterial or corridor to the other with minimal stops. This is achieved by determining a suitable cycle length that achieves both “green-band” and reasonable delay for the side-street approaches at each intersection. Offsets are determined when defining a preferred direction of travel.

**Figure 4.2** shows these concepts for the proposed AM peak coordinated pattern along E. Wood Street. The red and blue groups of diagonal lines represent platoons. For this specific period, it is anticipated that a motorist could travel from Chickasaw Road/Fairgrounds Road to Highland Street in the westbound direction without being stopped. Appendix F provides time-space diagrams for proposed conditions.



**Figure 4.2** Time-Space Diagram – AM Peak

## 4.2 BEFORE/AFTER EVALUATION

### 4.2.1 INTERSECTION LEVELS OF SERVICE

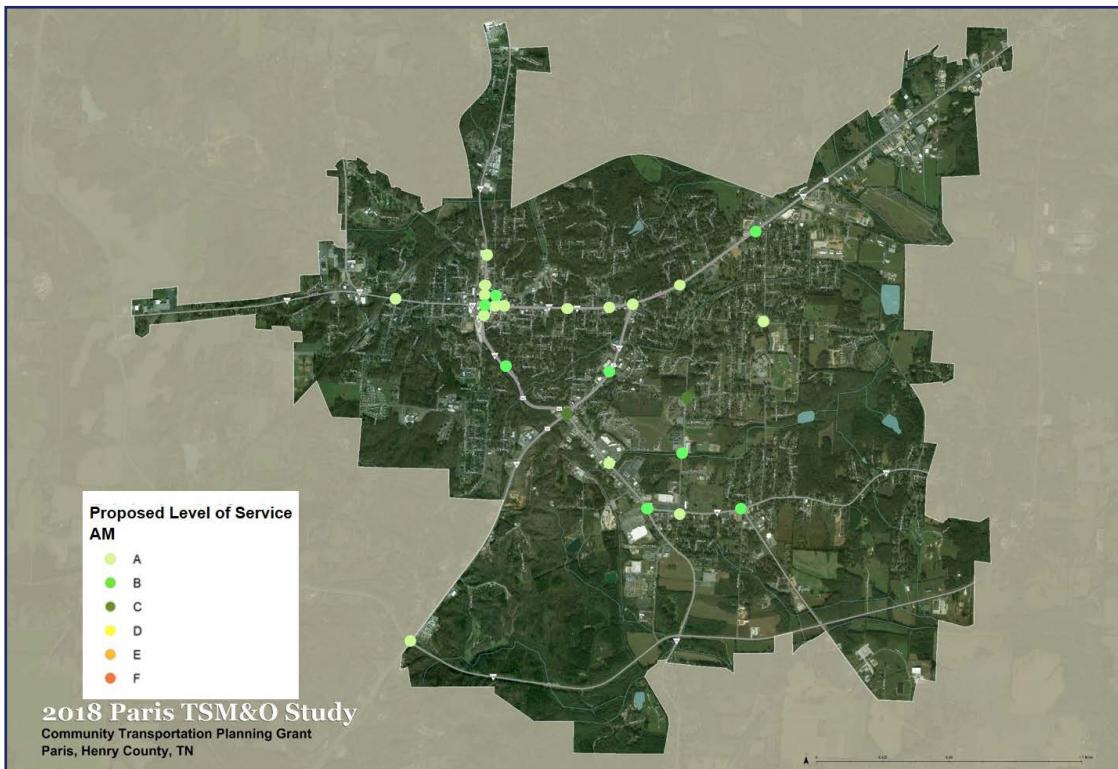
As discussed in Chapter 3, a LOS study was conducted to assess existing conditions for all intersections within the TSM&O study. In order to compare the benefit of updated timings and coordinated patterns, the same methodology was used for proposed conditions. As **Tables 4.8** and **4.9** show below, LOS conditions did not vary much between existing and proposed conditions. This can be attributed to several factors: low volumes during the peak periods at each intersection and/or intersections operate under unconstrained, unsaturated flow. The LOS for AM, Mid-day, and PM peaks is illustrated in **Figures 4.3, 4.4, and 4.5**. Appendix F provides LOS output reports for each intersection under proposed conditions.

**Table 4.8 Proposed Level of Service – Intersection Level of Service Analysis**

Intersection	EXISTING (2019)			PROPOSED (2019)			Comment
	PEAK PERIOD			AM	MD	PM	
Intersection	AM	MD	PM	AM	MD	PM	Comment
W Wood St & Irvine St	A	A	A	A	A	A	
W Wood St & Market St	B	B	B	B	B	B	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)
N Market St & Rison St	A	A	A	A	A	A	
N Market St & Ruff St	B	B	B	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)
N Market St & Washington St	A	A	B	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)
S Market St & Blythe St	A	A	B	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)
E Washington St & Poplar St	A	A	A	B	B	B	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)
E Wood St & Poplar St	A	A	A	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)
E Wood St & Brewer St	A	A	A	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)
E Wood St & Highland St	A	A	A	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)
E Wood St & Lake St	A	A	A	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)
E Wood St & Tyson Ave	B	B	B	A	A	B	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)
E Wood St & Volunteer Dr	B	B	B	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)
E Wood St & Fairgrounds Rd /Chickasaw Rd	A	A	A	B	A	B	Proposed Coordination for select hours Monday through Friday (AM,PM plans)
Veterans Dr & Dunlap St	A	A	A	B	A	B	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)
Veterans Dr/Mineral Wells Dr & Tyson Ave	B	B	C	C	C	C	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)
Mineral Wells Dr & Jim Adams Dr	B	B	B	A	B	B	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)
Mineral Wells Dr & Memorial Dr	B	B	B	B	C	C	
Memorial Dr & Volunteer Dr	A	B	B	A	A	A	

**Table 4.9 Proposed Level of Service – Intersection Level of Service Analysis (Continued)**

Intersection	EXISTING (2019)			PROPOSED (2019)			Comment	
	PEAK PERIOD							
	AM	MD	PM	AM	MD	PM		
Memorial Dr & SR-69/US-641	B	B	B	B	B	B		
Volunteer Dr & Patriot Ave	C	B	C	C	B	C		
Volunteer Dr & Jim Adams Dr	B	B	B	B	B	B		
Tyson Ave & Joy St	B	B	B	B	B	B		
SR-76/US-79 & SR-218	A	A	A	A	A	A		
Lone Oak Rd & Wilson St	A	A	A	A	A	A		


**Figure 4.3 Proposed Level of Service – AM Peak**

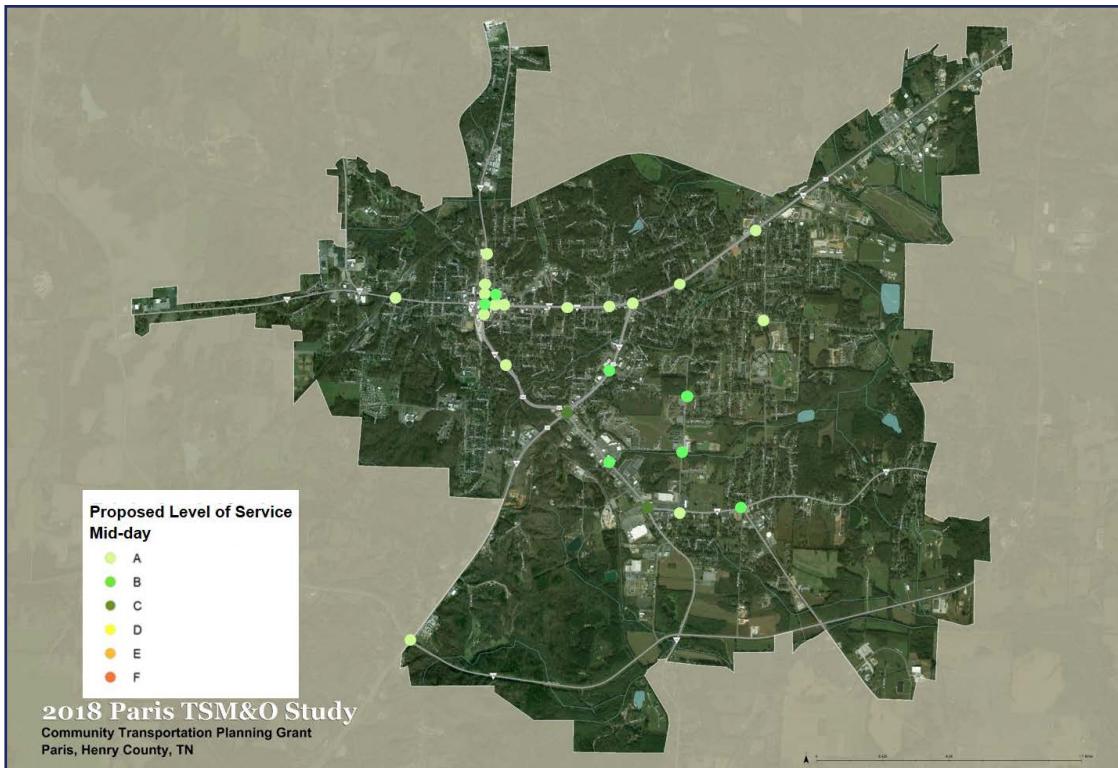


Figure 4.4 Proposed Level of Service – Mid-Day Peak

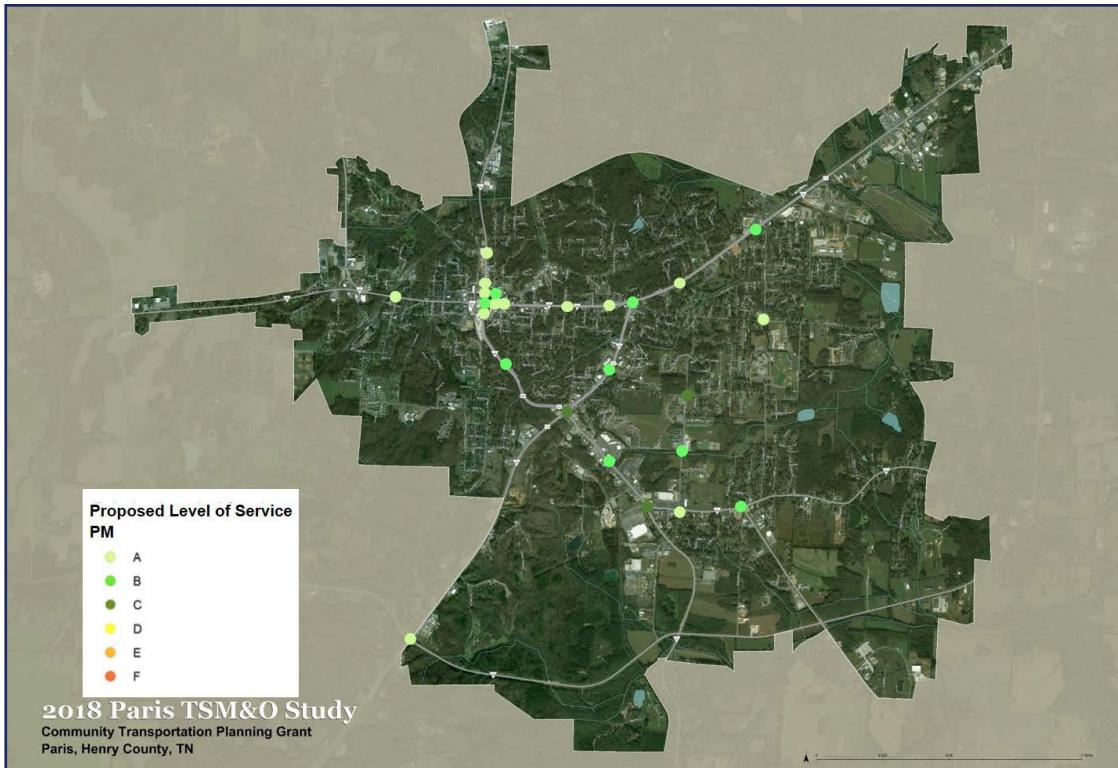


Figure 4.5 Proposed Level of Service – PM Peak

#### 4.2.2 CORRIDOR MEASURES OF EFFECTIVENESS (MOE'S)

Because Level of Service results did not vary much between existing and proposed conditions, the design team investigated Measures of Effectiveness (MOE's) for specific corridors that are proposed to have coordination.

According to the FHWA, "the purpose of computing one or more traffic performance measures of effectiveness is to quantify the achievement of a project's traffic operations objective." There are several basic Measures of Effectiveness, but this study specifically quantified:

- Average Travel Time (Seconds per Vehicle)
- Average Delay (Seconds per Vehicle)
- Average Travel Speed (MPH)
- Total Stops (All Vehicles, All Approaches)

Study methodology utilized the Synchro 9 software to quantify the results that could effectively compare existing and proposed conditions. The two arterials that have Measures of Effectiveness Results are E. Wood Street and Mineral Wells Drive. It should be noted that results from Synchro 9 are formulated from computer-generated estimates, and should only serve as generalized indicators of improvements with coordination. **Tables 4.10, and 4.11**, show MOE's for both directions of travel for each respective arterial. Appendix G provides output reports for measures of effectiveness under both existing and proposed conditions.

**Table 4.10 E. Wood Street - Measures of Effectiveness**

Peak Period	Direction	Average Travel Time (Seconds per Vehicle)			Average Delay (Seconds per Vehicle)			Average Travel Speed (MPH)			Total Stops (All Vehicles, All Approaches)		
		Existing	Proposed	% Change	Existing	Proposed	% Change	Existing	Proposed	% Change	Existing	Proposed	% Change
AM	Eastbound	186	204.7	10%	37.2	18.6	-50%	29	31	7%	727	381	-48%
	Westbound	161.9	143.3	-11%	31.1	18.7	-40%	28	31	11%	998	547	-45%
	Average	174	174	0%	34	19	-44%	29	31	7%	863	464	-46%
MD	Eastbound	150.3	82	-45%	27.3	13.7	-50%	30	29	-3%	807	382	-53%
	Westbound	143.2	130	-9%	20.5	6.8	-67%	30	32	7%	729	363	-50%
	Average	147	106	-28%	24	10	-58%	30	31	3%	768	373	-51%
PM	Eastbound	166.1	148.3	-11%	41.5	17.8	-57%	28	32	14%	1190	573	-52%
	Westbound	160.9	147.5	-8%	26.8	13.4	-50%	29	31	7%	874	503	-42%
	Average	164	148	-10%	34	16	-53%	29	32	10%	1032	538	-48%

<sup>1</sup> Measures of Effectiveness Results are taken from output reports within Synchro 9, and the Engineer shall not be held responsible for the accuracy of these results. The results are intended to show the improvement of implementing coordinated plans.

**Table 4.11 Mineral Wells Drive - Measures of Effectiveness**

Peak Period	Direction	Average Travel Time (Seconds per Vehicle)			Average Delay (Seconds per Vehicle)			Average Travel Speed (MPH)			Total Stops (All Vehicles, All Approaches)		
		Existing	Proposed	% Change	Existing	Proposed	% Change	Existing	Proposed	% Change	Existing	Proposed	% Change
AM	Northbound	148.4	137.4	-7%	44	22	-50%	25	30	20%	1055	557	-47%
	Southbound	133.8	121.1	-9%	31.9	19.1	-40%	26	31	19%	744	454	-39%
	Average	141	129	-9%	38	21	-45%	26	31	19%	900	506	-44%
MD	Northbound	154.5	146.2	-5%	50.1	33.4	-33%	22	26	18%	1419	748	-47%
	Southbound	136.9	107.8	-21%	45.6	20.7	-55%	21	29	38%	1189	707	-41%
	Average	146	127	-13%	48	27	-44%	22	28	27%	1304	728	-44%
PM	Northbound	156.5	147.6	-6%	44.7	35.8	-20%	23	26	13%	1297	987	-24%
	Southbound	144	120	-17%	48	20	-58%	21	29	38%	1322	674	-49%
	Average	150	134	-11%	46	28	-39%	22	28	27%	1310	831	-37%

<sup>1</sup> Measures of Effectiveness Results are taken from output reports within Synchro 9, and the Engineer shall not be held responsible for the accuracy of these results. The results are intended to show the improvement of implementing coordinated plans.

## 4.3 TRAFFIC SIGNAL TIMING SHEETS

The project team created customized documentation of proposed traffic signal timings to replicate the format of Paris' signal controllers. When conducting field inventory, the project team noticed that none of the controller cabinets within the city had coding sheets stored within them. The new sheets were developed to closely replicate the menus of the controllers making data entry by maintenance staff more efficient while minimizing coding errors. These sheets contain the proposed coordinated signal timings, the updated clearance interval information and the updated local controller settings. For those intersections not running coordinated patterns, "Max 1" and "Max 2" times were optimized for peak periods of travel. Most of the local controller information did not change, but project staff did review and update as needed. These sheets are also beneficial to technicians and staff that wish to make changes once timings are field implemented. Any changes to timing information can be documented and transparent to all staff to avoid confusion. In addition to updated timing information, Time-of-Day information was updated by using ADT information as explained in Chapter 3. ADT information let the project team identify the peak periods of travel along arterials. Appendix H has coding sheets for all intersections.

## 4.4 PLANNING LEVEL COST ESTIMATES

The project team tabulated preliminary quantities and estimates for the intersections with proposed operational improvements that are listed in Section 4.1. A contingency factor of 15% was assumed for the preliminary estimate, and cost estimates ranged from \$20,400 to \$150,300 for individual intersection projects. Appendix I provides cost estimates following the functional layouts.

Tabulation of the improvements provides an estimated total of approximately \$1,452,000 for the entire study area. This total assumes that all signalized intersections will have their controllers updated to current SEPAC models and GPS units installed to synchronize time clocks. Market Street at Rison Street currently has an updated controller due to a recent construction project being completed.

**Table 4.12** shows the overall estimate of the entire TSM&O project.

**Table 4.12 Paris TSM&O – Cost Estimate**

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	GRAND TOTAL
202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	670	\$20.00	\$13,400.00
701-01.01	CONCRETE SIDEWALK (4")	S.F.	3720	\$12.00	\$44,640.00
701-02.01	CONCRETE CURB RAMP (RETROFIT)	S.F.	2880	\$31.00	\$89,280.00
701-02.03	CONCRETE CURB RAMP	S.F.	520	\$24.00	\$12,480.00
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	31	\$390.00	\$12,090.00
712-01	TRAFFIC CONTROL	LS	17	\$2,500.00	\$42,500.00
712-06	SIGNS (CONSTRUCTION)	S.F.	114	\$9.00	\$1,026.00
713-16.20	SIGNS (R10-12)	EACH	1	\$300.00	\$300.00
713-16.50	REMOVE AND REPLACE SIGN (REMOVE R10-10, INSTALL R10-12)	EACH	1	\$200.00	\$200.00
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	915	\$15.00	\$13,731.90
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	2896	\$30.00	\$86,871.00
716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	L.F.	540	\$1.00	\$540.00
716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	4775	\$1.50	\$7,161.90
716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	715	\$6.00	\$4,289.70
716-08.06	REMOVAL OF PAVEMENT MARKING (TURN LANE ARROW)	EACH	4	\$50.00	\$200.00
717-01	MOBILIZATION	LS	16	\$3,600.00	\$57,600.00
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	LS	8	\$6,500.00	\$52,000.00
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	LS	2	\$4,500.00	\$9,000.00
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	LS	1	\$2,500.00	\$2,500.00
730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	54	\$1,200.00	\$64,800.00
730-02.17	SIGNAL HEAD ASSEMBLY (150A2H WITH BACKPLATE)	EACH	2	\$1,800.00	\$3,600.00
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	45	\$450.00	\$20,250.00
730-05.04	MODIFY EXISTING ELECTRICAL SERVICE CONNECTION	EACH	10	\$1,750.00	\$17,500.00
730-08.01	SIGNAL CABLE - 3 CONDUCTOR	L.F.	745	\$1.50	\$1,116.75
730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	4680	\$1.75	\$8,189.83
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	10305	\$2.00	\$20,610.40
730-13.05	VEHICLE DETECTOR (EXT. CALL - DELAY CALL)	EACH	25	\$250.00	\$6,250.00
730-14.01	SHIELDED DETECTOR CABLE	L.F.	1730	\$1.50	\$2,595.00
730-14.02	SAW SLOT	L.F.	3150	\$3.50	\$11,024.30
730-14.03	LOOP WIRE	L.F.	8895	\$1.00	\$8,895.30
730-12.01	CONDUIT 1" DIAMETER (PVC)	L.F.	105	\$8.00	\$836.00
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	1040	\$10.00	\$10,395.00
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	2755	\$24.00	\$66,127.20
730-12.30	TRENCHING	L.F.	580	\$15.00	\$8,703.00
730-15.07	CABINET (EIGHT PHASE POLE MOUNTED)	EACH	8	\$12,600.00	\$100,800.00
730-15.10	MODIFY CABINET (INSTALL COORDINATION UNIT)	EACH	15	\$3,500.00	\$52,500.00
730-15.11	MODIFY CABINET (INSTALL EIGHT PHASE ACTUATED CONTROLLER)	EACH	14	\$5,500.00	\$77,000.00
730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	10	\$5,000.00	\$50,000.00
730-19.01	TIME BASE COORDINATION UNIT	EACH	10	\$3,000.00	\$30,000.00
730-23.30	PEDESTAL POLE (8' POLE)	EACH	23	\$2,500.00	\$57,500.00
730-26.04	AUDIBLE PEDESTRIAN SIGNAL	EACH	2	\$1,500.00	\$3,000.00
730-26.11	COUNTDOWN PED SGNL HEAD W/AUDIBLE PUSHBUTTON & 15IN SIGN	EACH	74	\$2,500.00	\$185,000.00
773-26.60	WC RELASH EXISTING AERIAL CABLE STRAND	L.F.	1160	\$5.00	\$5,799.50
				SUBTOTAL	\$ 1,262,302.78
				CONTINGENCY (15%)	\$ 189,345.42
				TOTAL	\$ 1,451,648.19

## 4.5 IMPLEMENTATION GUIDANCE

The following guidance provides a step-by-step guide to implement proposed timings in the field:

1. Program initial timings (clearance intervals, vehicle extension times, minimum initial, etc.)
2. Program cycle length patterns, split times, offsets, and call out coordinated phases within controller
3. Program time-of-day plan that calls out coordinated patterns, Max 1 timings (“Free”), and Max 2 timings
4. Confirm cycle length and offsets with coding sheet and, if possible, another individual
5. Monitor vehicle splits
6. Observe progression and platooning of vehicles
7. Check for unexpected queuing
8. Drive the corridor during each peak period for multiple runs (at the beginning of the platoon, the middle of the platoon, and the trailing end of the platoon). Use the respective time-space diagram as a check that coordination is operating as anticipated
9. Make field changes as needed

These steps should be used for coordinated timings along E. Wood Street and Mineral Wells Drive. Intersections that are running non-coordinated should be field observed also to ensure that Max timings are appropriate for all approaches in order to minimize queuing and delay time.

## 4.6 ACTION PLAN

City of Paris staff and officials should have further discussion on a handful of topics that are related to the TSM&O goals. These include:

- **Standardization of Signal Controller Equipment** – Existing traffic signal equipment in the City of Paris includes twelve EPAC 300 controllers, ten intersections with electromechanical equipment, and three SEPAC m50 controllers. It is recommended to upgrade all EPAC 300 controllers to the SEPAC m50 model or better, along with removing electromechanical equipment and installing a cabinet and SEPAC m50 controller. The SEPAC m50 is highly compatible and user friendly for those that will be actively working on traffic signal related issues within the city.
- **Signal Timing Documentation** – As stated previously, coding sheets have been created and standardized for all intersections to reflect a proposed EPAC/SEPAC controller model. Standardization of these coding sheets makes it much easier for signal technicians and staff to know existing operations and to document any changes made in the field.
- **Alternative Vehicle Detection** – Inductive vehicle loops are being used primarily throughout the city, with a handful of intersections using video detection. There are three primary detection methods that could be utilized for future individual intersection projects. These include inductive loop, video, and radar detection. All detection methods have “pros” and “cons”, which include but are not limited to maintenance, cost, and reliability. City of Paris staff should assess which technology is best suited for its needs and the city’s maintenance resources.

- **Dedicated Funding Resource** – Individual projects shown previously should be included in a future Capital Improvement Plan in order to build consensus around the project and match funding where necessary. The City of Paris staff prioritized these projects within five different phases, with Downtown CBD phases being broken out based on future known grant opportunities. **Table 4.13** below identifies the five phases and estimated cost value for each phase.

**Table 4.13 Project Prioritization by Phase**

Phase Priority	Location of Phase	Planning Level Cost Estimate
Phase 1A	Downtown CBD Area - Market Street except Ruff/Market	\$395,323.13
Phase 1B	Downtown CBD Area - Remaining Intersections	\$535,803.98
Phase 2	Mineral Wells Ave/Veterans Drive	\$91,326.42
Phase 3	East Wood Street	\$238,835.54
Phase 4	Isolated Intersections (Lone Oak/Memorial/Irvine)	\$190,359.12
<b>Paris TSMO</b>	<b>Full Implementation of all Proposed Improvements</b>	<b>\$1,451,648.19</b>

It is recommended that the city coordinate development of a capital funding plan. Capital funding management should also be organized with TDOT to leverage costs or proposed design projects. Projects should be coordinated with regional planning and TDOT to ensure consistency and stakeholder involvement.



## Appendix A: TRAFFIC DATA

Prepared on behalf of the  
City of Paris, TN by:



in cooperation with



State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-54 at Ruff ST. in Paris TN  
Site Code: STA-1  
Start Date: 02/21/2019  
Page No: 1

### Turning Movement Data

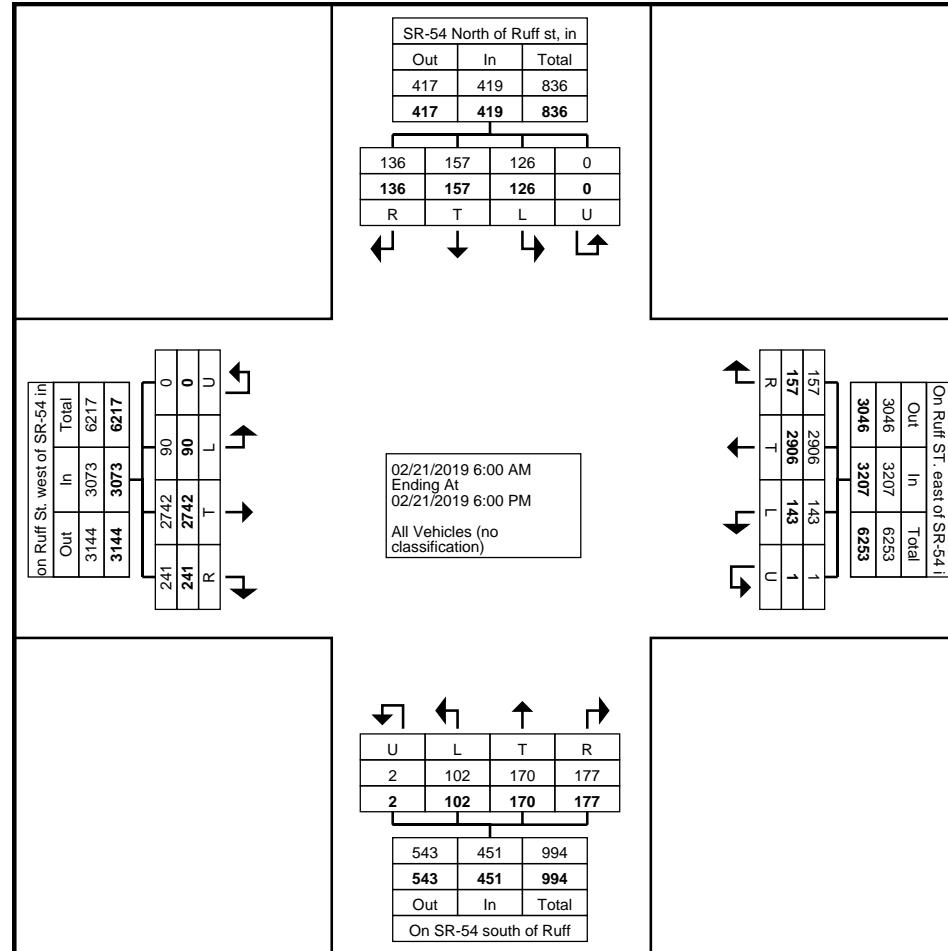
Start Time	SR-54 North of Ruff st, in Paris TN					On Ruff ST. east of SR-54 in Paris Tn					On SR-54 south of Ruff St, in Paris TN					on Ruff St. west of SR-54 in Paris TN					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
6:00 AM	0	0	0	0	0	1	33	0	0	34	1	0	0	0	1	1	28	0	0	29	64	
6:15 AM	0	0	0	0	0	0	27	1	0	28	3	1	0	0	4	1	26	0	0	27	59	
6:30 AM	0	1	3	0	4	1	45	1	0	47	2	0	1	0	3	1	40	1	0	42	96	
6:45 AM	0	1	2	0	3	1	58	3	0	62	2	2	1	0	5	1	42	1	0	44	114	
Hourly Total	0	2	5	0	7	3	163	5	0	171	8	3	2	0	13	4	136	2	0	142	333	
7:00 AM	0	0	0	0	0	1	59	3	0	63	4	0	0	0	4	1	29	0	0	30	97	
7:15 AM	2	0	4	0	6	3	73	0	0	76	4	1	1	0	6	2	24	1	0	27	115	
7:30 AM	0	4	3	0	7	8	85	2	0	95	5	5	1	0	11	3	45	1	0	49	162	
7:45 AM	0	3	2	0	5	6	69	3	1	79	1	1	0	0	2	4	53	2	0	59	145	
Hourly Total	2	7	9	0	18	18	286	8	1	313	14	7	2	0	23	10	151	4	0	165	519	
8:00 AM	1	2	1	0	4	2	40	1	0	43	4	2	0	0	6	4	41	1	0	46	99	
8:15 AM	0	3	3	0	6	3	48	2	0	53	5	6	0	0	11	3	41	1	0	45	115	
8:30 AM	1	2	2	0	5	3	53	1	0	57	3	3	1	0	7	4	48	2	0	54	123	
8:45 AM	0	4	1	0	5	4	59	2	0	65	2	5	1	0	8	5	40	4	0	49	127	
Hourly Total	2	11	7	0	20	12	200	6	0	218	14	16	2	0	32	16	170	8	0	194	464	
9:00 AM	4	4	0	0	8	8	52	2	0	62	5	4	1	0	10	2	40	2	0	44	124	
9:15 AM	4	6	0	0	10	4	56	3	0	63	2	5	0	0	7	4	42	7	0	53	133	
9:30 AM	2	3	4	0	9	2	56	1	0	59	1	1	3	0	5	7	34	2	0	43	116	
9:45 AM	4	1	2	0	7	0	47	1	0	48	2	0	3	0	5	7	54	3	0	64	124	
Hourly Total	14	14	6	0	34	14	211	7	0	232	10	10	7	0	27	20	170	14	0	204	497	
10:00 AM	0	2	2	0	4	4	49	2	0	55	0	1	1	0	2	5	53	2	0	60	121	
10:15 AM	0	2	0	0	2	2	46	1	0	49	0	4	1	0	5	5	54	2	0	61	117	
10:30 AM	5	2	0	0	7	5	53	1	0	59	2	7	5	0	14	5	59	4	0	68	148	
10:45 AM	3	3	0	0	6	5	56	1	0	62	3	7	2	0	12	5	63	0	0	68	148	
Hourly Total	8	9	2	0	19	16	204	5	0	225	5	19	9	0	33	20	229	8	0	257	534	
11:00 AM	7	2	3	0	12	4	74	1	0	79	3	3	3	1	10	6	71	0	0	77	178	
11:15 AM	3	4	3	0	10	0	56	5	0	61	2	2	4	0	8	6	39	0	0	45	124	
11:30 AM	5	7	1	0	13	8	69	7	0	84	2	7	4	0	13	6	57	3	0	66	176	
11:45 AM	7	0	3	0	10	6	54	2	0	62	4	8	2	0	14	9	54	5	0	68	154	
Hourly Total	22	13	10	0	45	18	253	15	0	286	11	20	13	1	45	27	221	8	0	256	632	
12:00 PM	4	8	5	0	17	2	59	6	0	67	2	7	1	0	10	9	59	3	0	71	165	
12:15 PM	1	5	1	0	7	1	43	1	0	45	2	2	7	0	11	8	71	3	0	82	145	
12:30 PM	4	0	2	0	6	3	64	1	0	68	6	0	2	0	8	7	73	3	0	83	165	
12:45 PM	5	2	6	0	13	7	56	3	0	66	0	6	1	0	7	14	68	1	0	83	169	
Hourly Total	14	15	14	0	43	13	222	11	0	246	10	15	11	0	36	38	271	10	0	319	644	
1:00 PM	11	11	4	0	26	4	53	3	0	60	6	6	1	0	13	9	60	4	0	73	172	
1:15 PM	3	5	3	0	11	2	62	3	0	67	2	5	5	0	12	5	67	1	0	73	163	
1:30 PM	5	0	2	0	7	4	53	5	0	62	3	3	1	0	7	6	63	3	0	72	148	
1:45 PM	2	4	6	0	12	2	66	1	0	69	6	5	2	0	13	4	58	2	0	64	158	
Hourly Total	21	20	15	0	56	12	234	12	0	258	17	19	9	0	45	24	248	10	0	282	641	
2:00 PM	4	1	4	0	9	4	63	7	0	74	3	8	4	0	15	7	64	1	0	72	170	

2:15 PM	1	4	4	0	9	2	69	3	0	74	2	3	4	0	9	7	56	0	0	63	155
2:30 PM	1	1	2	0	4	0	57	5	0	62	4	5	6	0	15	2	63	2	0	67	148
2:45 PM	0	4	5	0	9	3	72	3	0	78	5	2	2	0	9	1	48	4	0	53	149
Hourly Total	6	10	15	0	31	9	261	18	0	288	14	18	16	0	48	17	231	7	0	255	622
3:00 PM	3	7	0	0	10	2	58	5	0	65	5	2	0	0	7	5	83	1	0	89	171
3:15 PM	3	4	5	0	12	4	68	8	0	80	11	2	4	0	17	10	58	5	0	73	182
3:30 PM	0	5	5	0	10	4	81	5	0	90	4	4	10	0	18	5	73	0	0	78	196
3:45 PM	1	6	11	0	18	4	63	3	0	70	3	3	6	0	12	3	66	3	0	72	172
Hourly Total	7	22	21	0	50	14	270	21	0	305	23	11	20	0	54	23	280	9	0	312	721
4:00 PM	10	10	7	0	27	5	71	6	0	82	7	5	0	0	12	9	91	3	0	103	224
4:15 PM	5	7	1	0	13	4	75	4	0	83	6	8	4	1	19	5	80	0	0	85	200
4:30 PM	5	7	1	0	13	8	101	8	0	117	12	1	2	0	15	7	86	0	0	93	238
4:45 PM	2	4	4	0	10	2	77	7	0	86	3	4	2	0	9	5	84	2	0	91	196
Hourly Total	22	28	13	0	63	19	324	25	0	368	28	18	8	1	55	26	341	5	0	372	858
5:00 PM	11	4	4	0	19	5	67	4	0	76	9	3	0	0	12	7	82	1	0	90	197
5:15 PM	2	0	3	0	5	3	71	1	0	75	5	6	1	0	12	7	90	0	0	97	189
5:30 PM	5	1	1	0	7	1	74	4	0	79	4	4	1	0	9	1	58	2	0	61	156
5:45 PM	0	1	1	0	2	0	66	1	0	67	5	1	1	0	7	1	64	2	0	67	143
Hourly Total	18	6	9	0	33	9	278	10	0	297	23	14	3	0	40	16	294	5	0	315	685
Grand Total	136	157	126	0	419	157	2906	143	1	3207	177	170	102	2	451	241	2742	90	0	3073	7150
Approach %	32.5	37.5	30.1	0.0	-	4.9	90.6	4.5	0.0	-	39.2	37.7	22.6	0.4	-	7.8	89.2	2.9	0.0	-	-
Total %	1.9	2.2	1.8	0.0	5.9	2.2	40.6	2.0	0.0	44.9	2.5	2.4	1.4	0.0	6.3	3.4	38.3	1.3	0.0	43.0	-
All Vehicles (no classification)	136	157	126	0	419	157	2906	143	1	3207	177	170	102	2	451	241	2742	90	0	3073	7150
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-54 at Ruff ST. in Paris TN  
Site Code: STA-1  
Start Date: 02/21/2019  
Page No: 3



Turning Movement Data Plot

State Of Tennessee (TDOT)  
Address

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Count Name: SR-54 at Ruff ST. in Paris TN  
Site Code: STA-1  
Start Date: 02/21/2019  
Page No: 4

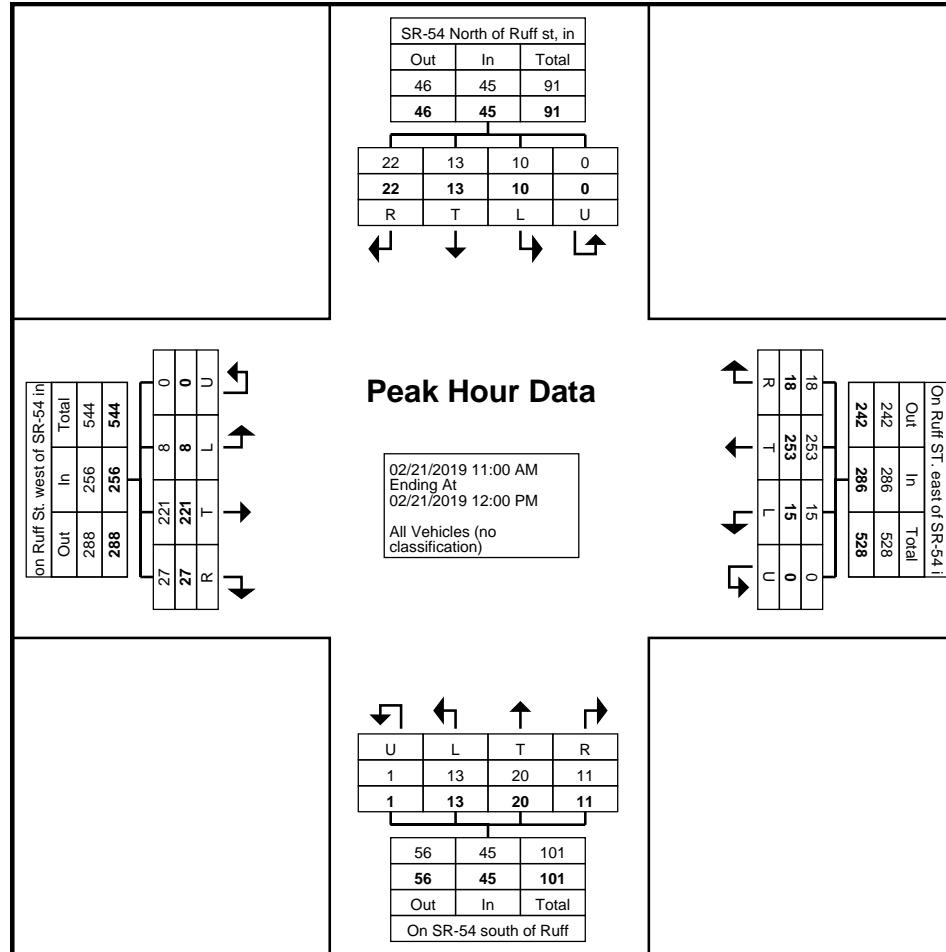
**Turning Movement Peak Hour Data (11:00 AM)**

Start Time	SR-54 North of Ruff st, in Paris TN					On Ruff ST. east of SR-54 in Paris Tn					On SR-54 south of Ruff St, in Paris TN					on Ruff St. west of SR-54 in Paris TN					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
11:00 AM	7	2	3	0	12	4	74	1	0	79	3	3	3	1	10	6	71	0	0	77	178	
11:15 AM	3	4	3	0	10	0	56	5	0	61	2	2	4	0	8	6	39	0	0	45	124	
11:30 AM	5	7	1	0	13	8	69	7	0	84	2	7	4	0	13	6	57	3	0	66	176	
11:45 AM	7	0	3	0	10	6	54	2	0	62	4	8	2	0	14	9	54	5	0	68	154	
Total	22	13	10	0	45	18	253	15	0	286	11	20	13	1	45	27	221	8	0	256	632	
Approach %	48.9	28.9	22.2	0.0	-	6.3	88.5	5.2	0.0	-	24.4	44.4	28.9	2.2	-	10.5	86.3	3.1	0.0	-	-	
Total %	3.5	2.1	1.6	0.0	7.1	2.8	40.0	2.4	0.0	45.3	1.7	3.2	2.1	0.2	7.1	4.3	35.0	1.3	0.0	40.5	-	
PHF	0.786	0.464	0.833	0.000	0.865	0.563	0.855	0.536	0.000	0.851	0.688	0.625	0.813	0.250	0.804	0.750	0.778	0.400	0.000	0.831	0.888	
All Vehicles (no classification)	22	13	10	0	45	18	253	15	0	286	11	20	13	1	45	27	221	8	0	256	632	
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	

State Of Tennessee (TDOT)  
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Count Name: SR-54 at Ruff ST. in Paris TN  
Site Code: STA-1  
Start Date: 02/21/2019  
Page No: 5



Turning Movement Peak Hour Data Plot (11:00 AM)

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-54 at Ruff ST. in Paris TN  
Site Code: STA-1  
Start Date: 02/21/2019  
Page No: 6

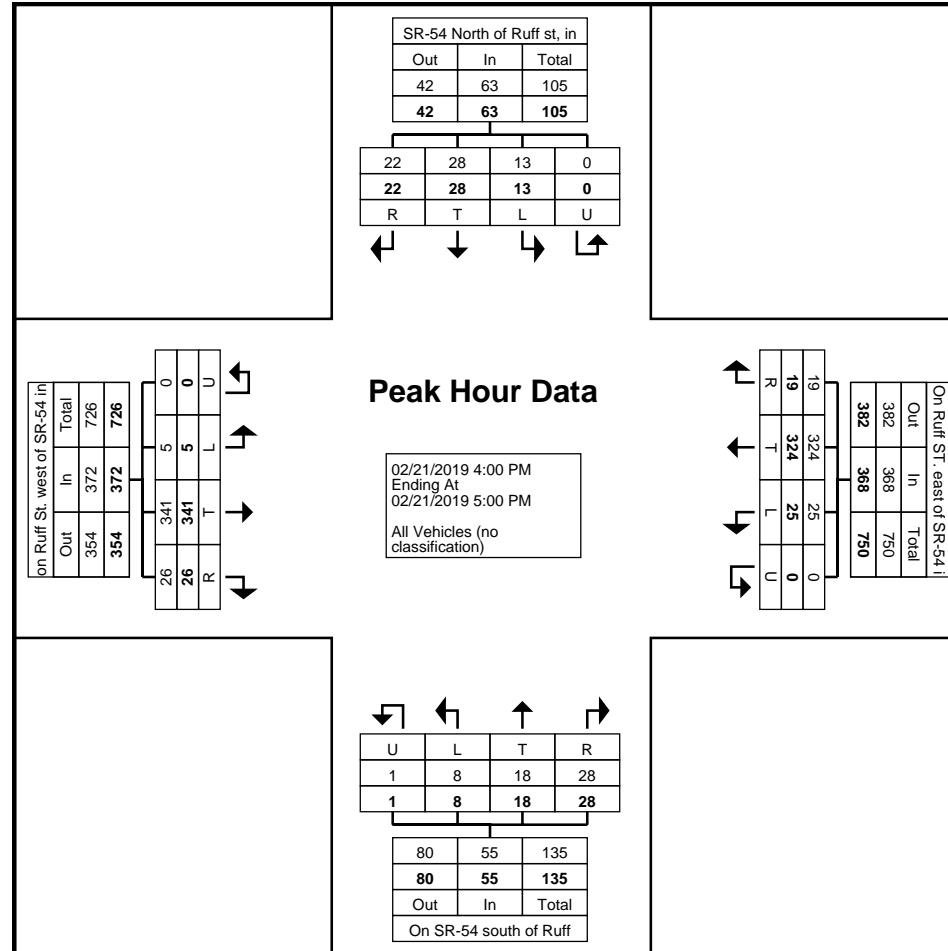
### Turning Movement Peak Hour Data (4:00 PM)

Start Time	SR-54 North of Ruff st, in Paris TN					On Ruff ST. east of SR-54 in Paris Tn					On SR-54 south of Ruff St, in Paris TN					on Ruff St. west of SR-54 in Paris TN					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:00 PM	10	10	7	0	27	5	71	6	0	82	7	5	0	0	12	9	91	3	0	103	224
4:15 PM	5	7	1	0	13	4	75	4	0	83	6	8	4	1	19	5	80	0	0	85	200
4:30 PM	5	7	1	0	13	8	101	8	0	117	12	1	2	0	15	7	86	0	0	93	238
4:45 PM	2	4	4	0	10	2	77	7	0	86	3	4	2	0	9	5	84	2	0	91	196
Total	22	28	13	0	63	19	324	25	0	368	28	18	8	1	55	26	341	5	0	372	858
Approach %	34.9	44.4	20.6	0.0	-	5.2	88.0	6.8	0.0	-	50.9	32.7	14.5	1.8	-	7.0	91.7	1.3	0.0	-	-
Total %	2.6	3.3	1.5	0.0	7.3	2.2	37.8	2.9	0.0	42.9	3.3	2.1	0.9	0.1	6.4	3.0	39.7	0.6	0.0	43.4	-
PHF	0.550	0.700	0.464	0.000	0.583	0.594	0.802	0.781	0.000	0.786	0.583	0.563	0.500	0.250	0.724	0.722	0.937	0.417	0.000	0.903	0.901
All Vehicles (no classification)	22	28	13	0	63	19	324	25	0	368	28	18	8	1	55	26	341	5	0	372	858
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0

State Of Tennessee (TDOT)  
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Count Name: SR-54 at Ruff ST. in Paris TN  
Site Code: STA-1  
Start Date: 02/21/2019  
Page No: 7



Turning Movement Peak Hour Data Plot (4:00 PM)

State Of Tennessee (TDOT)  
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Phone karen.watts@tn.gov

Count Name: SR-54 at Ruff ST. in Paris TN  
Site Code: STA-1  
Start Date: 02/21/2019  
Page No: 8

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-54 at Washington St. in Paris  
TN  
Site Code: STA-2  
Start Date: 02/21/2019  
Page No: 1

### Turning Movement Data

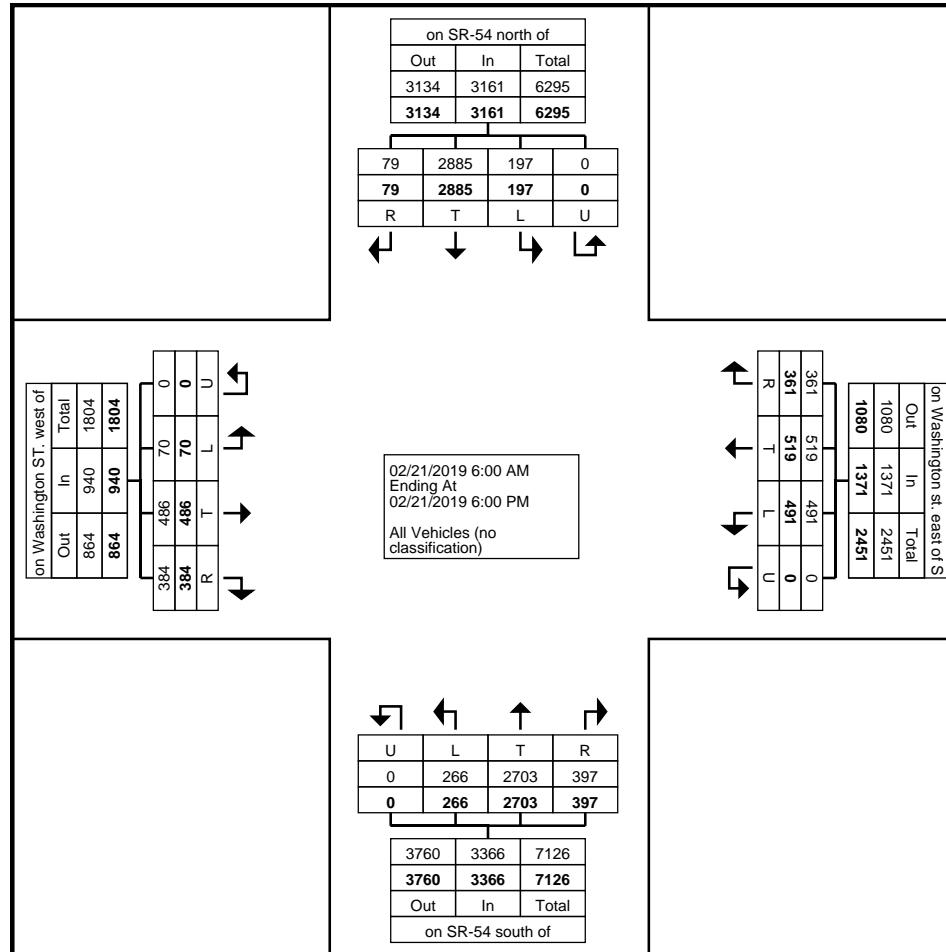
Start Time	on SR-54 north of Washington ST in Paris TN					on Washington st. east of SR-54					on SR-54 south of Washington ST					on Washington ST. west of SR-54					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
6:00 AM	0	33	0	0	33	3	1	0	0	4	0	26	0	0	26	1	3	0	0	4	67	
6:15 AM	1	27	0	0	28	2	2	2	0	6	2	24	0	0	26	1	2	0	0	3	63	
6:30 AM	1	45	0	0	46	3	6	0	0	9	2	41	1	0	44	4	8	2	0	14	113	
6:45 AM	2	54	3	0	59	2	8	2	0	12	1	42	0	0	43	3	1	0	0	4	118	
Hourly Total	4	159	3	0	166	10	17	4	0	31	5	133	1	0	139	9	14	2	0	25	361	
7:00 AM	1	54	3	0	58	1	3	2	0	6	1	30	1	0	32	3	4	0	0	7	103	
7:15 AM	2	70	4	0	76	3	12	6	0	21	1	25	1	0	27	2	6	0	0	8	132	
7:30 AM	2	81	2	0	85	12	9	5	0	26	8	43	1	0	52	5	9	0	0	14	177	
7:45 AM	1	60	8	0	69	12	9	6	0	27	7	53	1	0	61	3	14	1	0	18	175	
Hourly Total	6	265	17	0	288	28	33	19	0	80	17	151	4	0	172	13	33	1	0	47	587	
8:00 AM	0	38	4	0	42	8	11	4	0	23	6	39	3	0	48	9	5	1	0	15	128	
8:15 AM	1	46	2	0	49	4	14	8	0	26	11	41	5	0	57	5	10	3	0	18	150	
8:30 AM	1	50	5	0	56	5	9	3	0	17	15	53	1	0	69	5	9	2	0	16	158	
8:45 AM	2	49	6	0	57	9	6	16	0	31	19	37	3	0	59	5	11	0	0	16	163	
Hourly Total	4	183	17	0	204	26	40	31	0	97	51	170	12	0	233	24	35	6	0	65	599	
9:00 AM	1	50	3	0	54	11	5	7	0	23	7	36	7	0	50	7	5	0	0	12	139	
9:15 AM	2	60	1	0	63	6	12	5	0	23	10	47	8	0	65	6	7	3	0	16	167	
9:30 AM	3	56	1	0	60	11	11	7	0	29	8	32	5	0	45	9	8	2	0	19	153	
9:45 AM	1	48	7	0	56	10	10	5	0	25	8	53	2	0	63	9	13	2	0	24	168	
Hourly Total	7	214	12	0	233	38	38	24	0	100	33	168	22	0	223	31	33	7	0	71	627	
10:00 AM	1	47	4	0	52	6	7	11	0	24	7	51	6	0	64	4	8	1	0	13	153	
10:15 AM	0	41	5	0	46	6	13	10	0	29	12	56	12	0	80	5	6	0	0	11	166	
10:30 AM	2	58	5	0	65	10	12	14	0	36	6	56	6	0	68	12	12	2	0	26	195	
10:45 AM	1	56	4	0	61	9	20	6	0	35	8	57	7	0	72	16	18	3	0	37	205	
Hourly Total	4	202	18	0	224	31	52	41	0	124	33	220	31	0	284	37	44	6	0	87	719	
11:00 AM	2	76	5	0	83	4	12	16	0	32	6	68	5	0	79	3	9	1	0	13	207	
11:15 AM	0	63	2	0	65	11	10	15	0	36	16	37	12	0	65	5	7	1	0	13	179	
11:30 AM	1	71	4	0	76	6	12	13	0	31	17	57	3	0	77	10	12	2	0	24	208	
11:45 AM	1	55	3	0	59	7	26	15	0	48	12	60	10	0	82	13	14	3	0	30	219	
Hourly Total	4	265	14	0	283	28	60	59	0	147	51	222	30	0	303	31	42	7	0	80	813	
12:00 PM	5	55	2	0	62	14	8	18	0	40	19	57	3	0	79	17	18	1	0	36	217	
12:15 PM	0	48	3	0	51	3	14	15	0	32	10	80	4	0	94	13	10	2	0	25	202	
12:30 PM	2	57	8	0	67	12	16	13	0	41	9	72	10	0	91	6	12	1	0	19	218	
12:45 PM	2	61	3	0	66	13	17	14	0	44	14	68	3	0	85	5	7	1	0	13	208	
Hourly Total	9	221	16	0	246	42	55	60	0	157	52	277	20	0	349	41	47	5	0	93	845	
1:00 PM	0	57	6	0	63	11	12	9	0	32	14	60	10	0	84	13	27	1	0	41	220	
1:15 PM	4	64	4	0	72	3	9	13	0	25	18	67	12	0	97	11	10	3	0	24	218	
1:30 PM	2	56	3	0	61	10	10	14	0	34	7	59	8	0	74	11	9	3	0	23	192	
1:45 PM	2	69	1	0	72	15	11	12	0	38	8	49	11	0	68	14	8	1	0	23	201	
Hourly Total	8	246	14	0	268	39	42	48	0	129	47	235	41	0	323	49	54	8	0	111	831	
2:00 PM	2	63	6	0	71	5	15	18	0	38	7	69	6	0	82	10	12	3	0	25	216	

2:15 PM	1	66	2	0	69	10	9	11	0	30	5	50	8	0	63	4	6	1	0	11	173
2:30 PM	1	62	5	0	68	7	6	11	0	24	10	59	5	0	74	4	8	0	0	12	178
2:45 PM	2	67	5	0	74	2	11	9	0	22	10	51	14	0	75	8	12	1	0	21	192
Hourly Total	6	258	18	0	282	24	41	49	0	114	32	229	33	0	294	26	38	5	0	69	759
3:00 PM	2	53	6	0	61	11	18	10	0	39	9	78	5	0	92	13	9	3	0	25	217
3:15 PM	2	69	4	0	75	13	14	14	0	41	8	61	8	0	77	11	13	1	0	25	218
3:30 PM	7	79	9	0	95	11	16	17	0	44	10	63	2	0	75	8	22	3	0	33	247
3:45 PM	5	52	5	0	62	6	11	19	0	36	12	69	17	0	98	14	18	0	0	32	228
Hourly Total	16	253	24	0	293	41	59	60	0	160	39	271	32	0	342	46	62	7	0	115	910
4:00 PM	3	75	8	0	86	8	16	17	0	41	2	88	8	0	98	18	10	5	0	33	258
4:15 PM	3	76	8	0	87	13	9	16	0	38	7	68	5	0	80	8	10	2	0	20	225
4:30 PM	3	98	4	0	105	7	14	17	0	38	11	90	6	0	107	15	23	1	0	39	289
4:45 PM	0	80	7	0	87	6	7	13	0	26	5	83	5	0	93	9	10	1	0	20	226
Hourly Total	9	329	27	0	365	34	46	63	0	143	25	329	24	0	378	50	53	9	0	112	998
5:00 PM	1	75	6	0	82	8	13	9	0	30	4	82	7	0	93	15	9	3	0	27	232
5:15 PM	0	72	4	0	76	7	9	5	0	21	6	86	2	0	94	2	7	3	0	12	203
5:30 PM	1	73	4	0	78	4	10	11	0	25	2	61	2	0	65	4	8	1	0	13	181
5:45 PM	0	70	3	0	73	1	4	8	0	13	0	69	5	0	74	6	7	0	0	13	173
Hourly Total	2	290	17	0	309	20	36	33	0	89	12	298	16	0	326	27	31	7	0	65	789
Grand Total	79	2885	197	0	3161	361	519	491	0	1371	397	2703	266	0	3366	384	486	70	0	940	8838
Approach %	2.5	91.3	6.2	0.0	-	26.3	37.9	35.8	0.0	-	11.8	80.3	7.9	0.0	-	40.9	51.7	7.4	0.0	-	-
Total %	0.9	32.6	2.2	0.0	35.8	4.1	5.9	5.6	0.0	15.5	4.5	30.6	3.0	0.0	38.1	4.3	5.5	0.8	0.0	10.6	-
All Vehicles (no classification)	79	2885	197	0	3161	361	519	491	0	1371	397	2703	266	0	3366	384	486	70	0	940	8838
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
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Count Name: SR-54 at Washington St. in Paris  
TN  
Site Code: STA-2  
Start Date: 02/21/2019  
Page No: 3



Turning Movement Data Plot

State Of Tennessee (TDOT)  
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Count Name: SR-54 at Washington St. in Paris  
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Site Code: STA-2  
Start Date: 02/21/2019  
Page No: 4

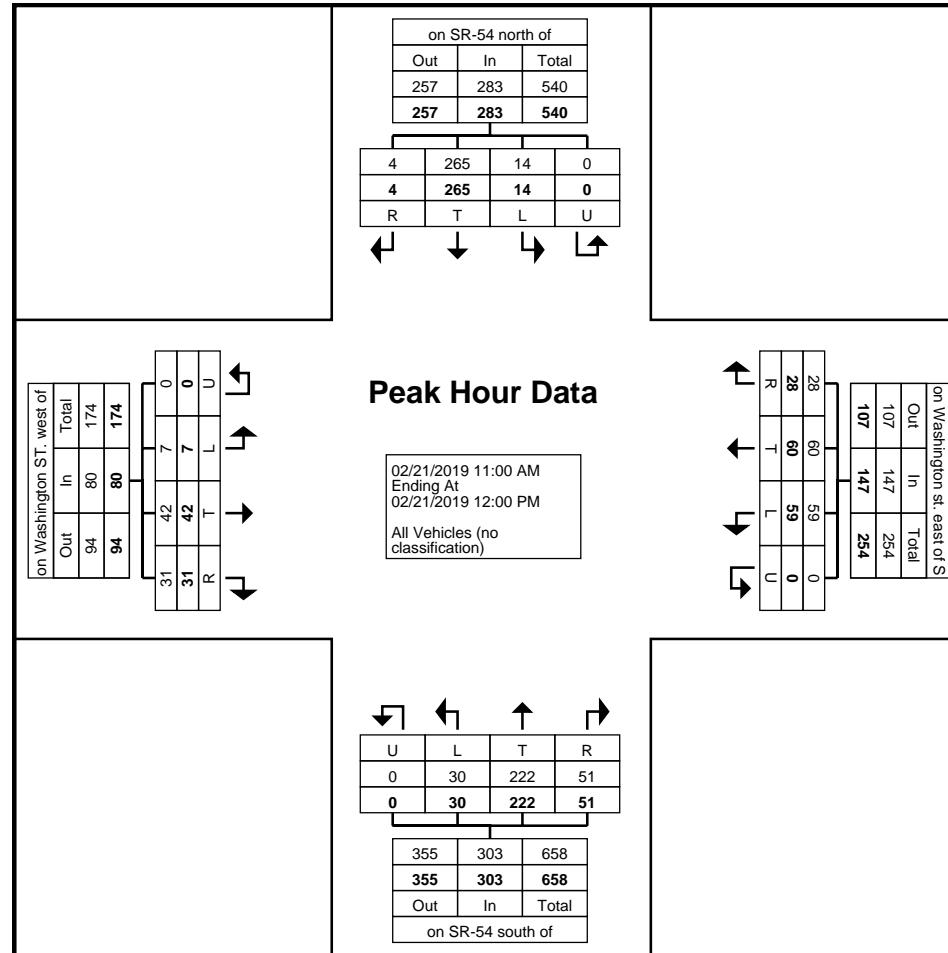
### Turning Movement Peak Hour Data (11:00 AM)

Start Time	on SR-54 north of Washington ST in Paris TN					on Washington st. east of SR-54					on SR-54 south of Washington ST					on Washington ST. west of SR-54					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
11:00 AM	2	76	5	0	83	4	12	16	0	32	6	68	5	0	79	3	9	1	0	13	207	
11:15 AM	0	63	2	0	65	11	10	15	0	36	16	37	12	0	65	5	7	1	0	13	179	
11:30 AM	1	71	4	0	76	6	12	13	0	31	17	57	3	0	77	10	12	2	0	24	208	
11:45 AM	1	55	3	0	59	7	26	15	0	48	12	60	10	0	82	13	14	3	0	30	219	
Total	4	265	14	0	283	28	60	59	0	147	51	222	30	0	303	31	42	7	0	80	813	
Approach %	1.4	93.6	4.9	0.0	-	19.0	40.8	40.1	0.0	-	16.8	73.3	9.9	0.0	-	38.8	52.5	8.8	0.0	-	-	
Total %	0.5	32.6	1.7	0.0	34.8	3.4	7.4	7.3	0.0	18.1	6.3	27.3	3.7	0.0	37.3	3.8	5.2	0.9	0.0	9.8	-	
PHF	0.500	0.872	0.700	0.000	0.852	0.636	0.577	0.922	0.000	0.766	0.750	0.816	0.625	0.000	0.924	0.596	0.750	0.583	0.000	0.667	0.928	
All Vehicles (no classification)	4	265	14	0	283	28	60	59	0	147	51	222	30	0	303	31	42	7	0	80	813	
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0		

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Count Name: SR-54 at Washington St. in Paris  
TN  
Site Code: STA-2  
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Turning Movement Peak Hour Data Plot (11:00 AM)

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Count Name: SR-54 at Washington St. in Paris  
TN  
Site Code: STA-2  
Start Date: 02/21/2019  
Page No: 6

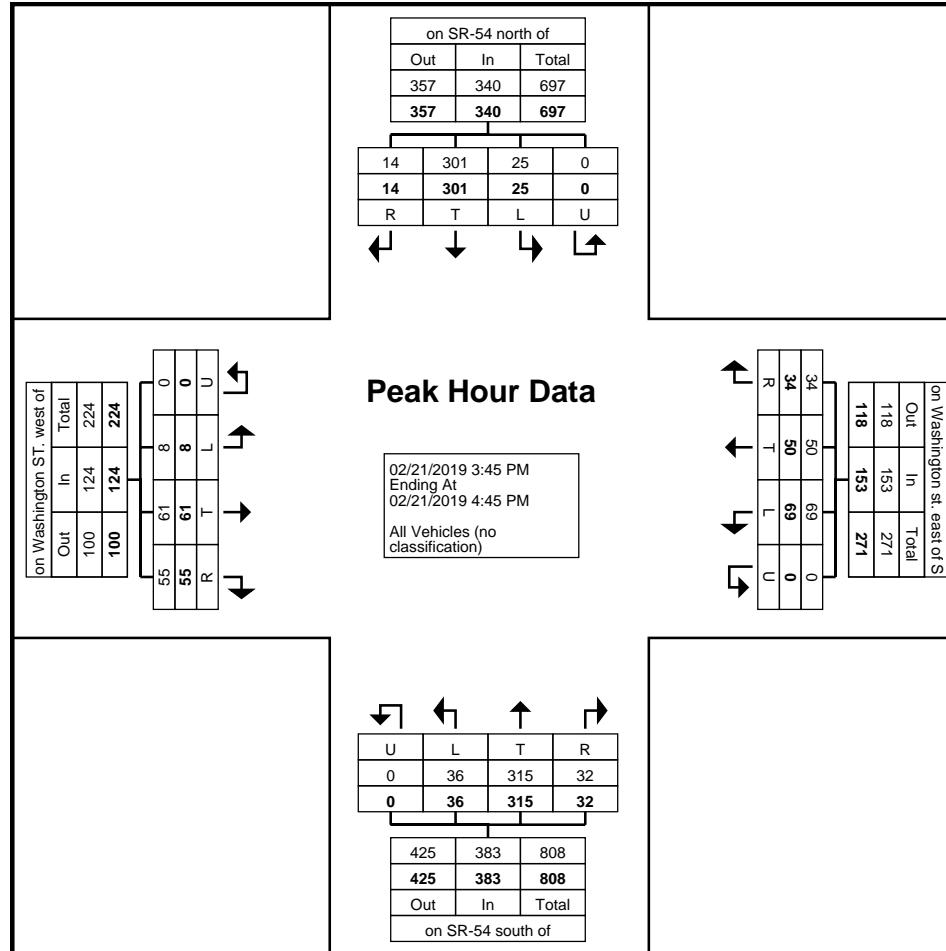
### Turning Movement Peak Hour Data (3:45 PM)

Start Time	on SR-54 north of Washington ST in Paris TN					on Washington st. east of SR-54					on SR-54 south of Washington ST					on Washington ST. west of SR-54					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
3:45 PM	5	52	5	0	62	6	11	19	0	36	12	69	17	0	98	14	18	0	0	32	228
4:00 PM	3	75	8	0	86	8	16	17	0	41	2	88	8	0	98	18	10	5	0	33	258
4:15 PM	3	76	8	0	87	13	9	16	0	38	7	68	5	0	80	8	10	2	0	20	225
4:30 PM	3	98	4	0	105	7	14	17	0	38	11	90	6	0	107	15	23	1	0	39	289
Total	14	301	25	0	340	34	50	69	0	153	32	315	36	0	383	55	61	8	0	124	1000
Approach %	4.1	88.5	7.4	0.0	-	22.2	32.7	45.1	0.0	-	8.4	82.2	9.4	0.0	-	44.4	49.2	6.5	0.0	-	-
Total %	1.4	30.1	2.5	0.0	34.0	3.4	5.0	6.9	0.0	15.3	3.2	31.5	3.6	0.0	38.3	5.5	6.1	0.8	0.0	12.4	-
PHF	0.700	0.768	0.781	0.000	0.810	0.654	0.781	0.908	0.000	0.933	0.667	0.875	0.529	0.000	0.895	0.764	0.663	0.400	0.000	0.795	0.865
All Vehicles (no classification)	14	301	25	0	340	34	50	69	0	153	32	315	36	0	383	55	61	8	0	124	1000
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	

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Count Name: SR-54 at Washington St. in Paris  
TN  
Site Code: STA-2  
Start Date: 02/21/2019  
Page No: 7



Turning Movement Peak Hour Data Plot (3:45 PM)

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Count Name: SR-54 at Washington St. in Paris  
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Site Code: STA-2  
Start Date: 02/21/2019  
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Count Name: SR-69 and Dunlap ST.  
Site Code: STA-4  
Start Date: 02/20/2019  
Page No: 1

**Turning Movement Data**

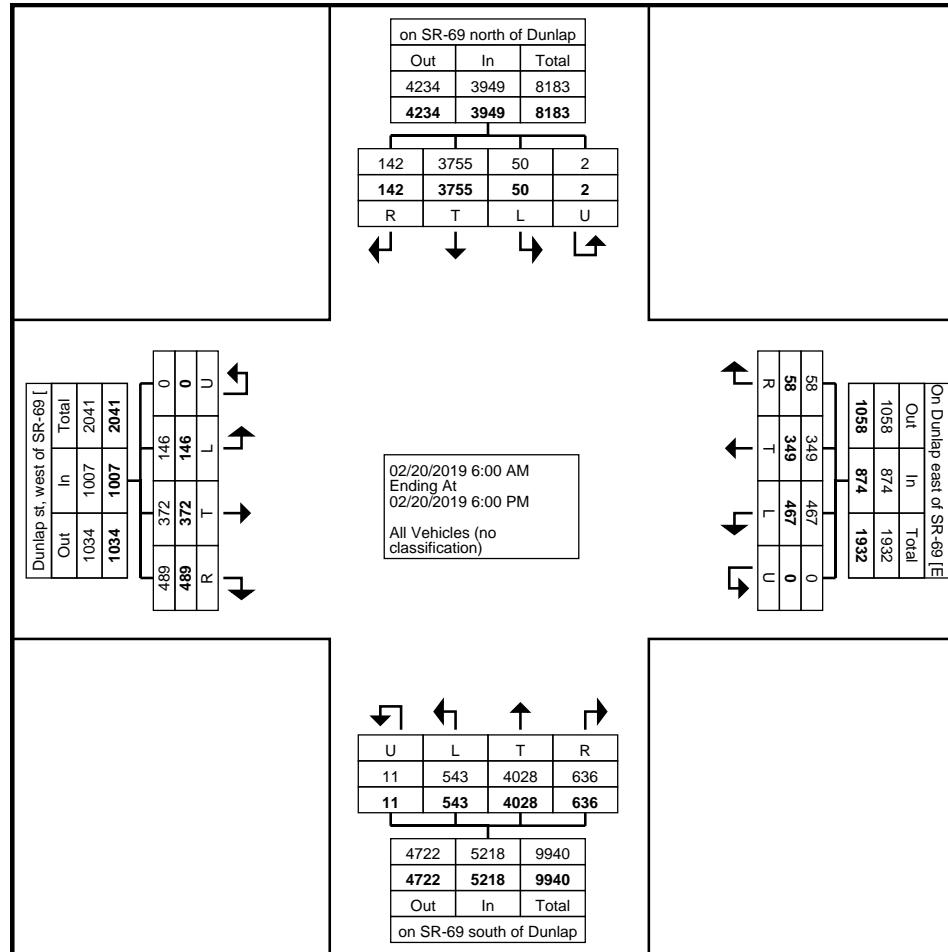
Start Time	on SR-69 north of Dunlap					On Dunlap east of SR-69					on SR-69 south of Dunlap ST.					Dunlap st, west of SR-69					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
6:00 AM	0	22	0	0	22	0	1	2	0	3	2	26	1	0	29	5	4	2	0	11	65	
6:15 AM	0	43	0	0	43	1	1	1	0	3	5	32	1	0	38	2	1	1	0	4	88	
6:30 AM	1	39	1	0	41	1	3	2	0	6	7	43	5	0	55	5	0	2	0	7	109	
6:45 AM	0	74	0	0	74	1	6	10	0	17	5	52	12	0	69	4	5	0	0	9	169	
Hourly Total	1	178	1	0	180	3	11	15	0	29	19	153	19	0	191	16	10	5	0	31	431	
7:00 AM	1	56	0	0	57	1	8	1	0	10	10	56	14	0	80	5	3	1	0	9	156	
7:15 AM	8	74	0	0	82	1	12	3	0	16	8	60	20	0	88	13	13	1	0	27	213	
7:30 AM	5	77	0	0	82	1	39	8	0	48	19	61	43	0	123	21	10	1	0	32	285	
7:45 AM	6	80	3	0	89	3	23	3	0	29	33	84	32	0	149	32	22	6	0	60	327	
Hourly Total	20	287	3	0	310	6	82	15	0	103	70	261	109	0	440	71	48	9	0	128	981	
8:00 AM	2	46	0	0	48	3	3	6	0	12	19	88	9	0	116	8	12	0	0	20	196	
8:15 AM	0	67	0	0	67	0	7	5	0	12	14	80	2	0	96	4	4	1	0	9	184	
8:30 AM	1	61	0	0	62	1	1	12	0	14	11	59	4	0	74	6	2	4	0	12	162	
8:45 AM	2	67	1	0	70	1	5	5	0	11	12	74	6	0	92	7	6	1	0	14	187	
Hourly Total	5	241	1	0	247	5	16	28	0	49	56	301	21	0	378	25	24	6	0	55	729	
9:00 AM	2	69	1	0	72	1	0	13	0	14	18	82	3	0	103	3	0	1	0	4	193	
9:15 AM	3	64	0	0	67	3	3	10	0	16	13	78	7	0	98	6	5	2	0	13	194	
9:30 AM	5	52	2	0	59	3	2	4	0	9	15	83	7	1	106	7	4	3	0	14	188	
9:45 AM	2	57	3	0	62	0	4	10	0	14	10	64	5	0	79	2	2	3	0	7	162	
Hourly Total	12	242	6	0	260	7	9	37	0	53	56	307	22	1	386	18	11	9	0	38	737	
10:00 AM	1	66	1	0	68	1	1	11	0	13	9	74	6	0	89	4	11	3	0	18	188	
10:15 AM	3	81	1	0	85	0	3	8	0	11	13	82	5	1	101	6	3	2	0	11	208	
10:30 AM	4	96	1	0	101	0	5	13	0	18	7	77	6	0	90	3	3	3	0	9	218	
10:45 AM	2	82	1	0	85	0	8	25	0	33	15	77	5	2	99	13	6	2	0	21	238	
Hourly Total	10	325	4	0	339	1	17	57	0	75	44	310	22	3	379	26	23	10	0	59	852	
11:00 AM	4	86	0	0	90	0	5	4	0	9	6	92	6	0	104	12	6	5	0	23	226	
11:15 AM	2	88	1	0	91	0	4	11	0	15	24	88	10	0	122	7	8	4	0	19	247	
11:30 AM	4	106	1	0	111	2	5	18	0	25	19	84	6	0	109	8	5	1	0	14	259	
11:45 AM	5	92	3	0	100	1	4	7	0	12	16	112	7	0	135	9	9	2	0	20	267	
Hourly Total	15	372	5	0	392	3	18	40	0	61	65	376	29	0	470	36	28	12	0	76	999	
12:00 PM	5	96	0	0	101	0	10	13	0	23	16	116	14	0	146	9	8	7	0	24	294	
12:15 PM	3	94	1	0	98	4	4	13	0	21	17	116	22	0	155	5	7	2	0	14	288	
12:30 PM	2	91	0	1	94	1	7	12	0	20	16	105	12	1	134	6	8	1	0	15	263	
12:45 PM	0	93	2	0	95	1	5	12	0	18	20	86	11	0	117	9	6	3	0	18	248	
Hourly Total	10	374	3	1	388	6	26	50	0	82	69	423	59	1	552	29	29	13	0	71	1093	
1:00 PM	1	96	0	0	97	1	6	11	0	18	11	92	10	1	114	10	10	5	0	25	254	
1:15 PM	2	80	0	0	82	1	4	11	0	16	11	96	7	0	114	9	5	3	0	17	229	
1:30 PM	0	67	2	0	69	1	11	8	0	20	12	101	3	0	116	7	8	5	0	20	225	
1:45 PM	4	70	0	0	74	1	8	15	0	24	10	82	11	0	103	22	8	8	0	38	239	
Hourly Total	7	313	2	0	322	4	29	45	0	78	44	371	31	1	447	48	31	21	0	100	947	
2:00 PM	1	82	1	0	84	0	5	10	0	15	11	83	12	0	106	12	10	5	0	27	232	

2:15 PM	1	89	1	1	92	3	7	13	0	23	14	92	8	0	114	12	5	5	0	22	251
2:30 PM	5	81	5	0	91	2	7	8	0	17	6	86	8	1	101	7	4	2	0	13	222
2:45 PM	2	76	0	0	78	1	15	11	0	27	8	93	28	0	129	4	8	2	0	14	248
Hourly Total	9	328	7	1	345	6	34	42	0	82	39	354	56	1	450	35	27	14	0	76	953
3:00 PM	1	70	0	0	71	0	14	5	0	19	5	90	27	1	123	7	2	4	0	13	226
3:15 PM	4	97	5	0	106	1	13	8	0	22	9	98	26	0	133	43	29	6	0	78	339
3:30 PM	4	87	0	0	91	3	5	9	0	17	9	118	13	0	140	16	11	2	0	29	277
3:45 PM	5	100	1	0	106	2	9	10	0	21	15	94	17	1	127	17	9	2	0	28	282
Hourly Total	14	354	6	0	374	6	41	32	0	79	38	400	83	2	523	83	51	14	0	148	1124
4:00 PM	7	123	1	0	131	2	17	14	0	33	9	116	18	1	144	13	8	4	0	25	333
4:15 PM	6	96	2	0	104	0	4	12	0	16	12	98	13	0	123	23	16	3	0	42	285
4:30 PM	6	127	1	0	134	2	8	16	0	26	20	101	9	0	130	14	17	5	0	36	326
4:45 PM	4	91	2	0	97	2	5	14	0	21	21	90	13	0	124	8	5	5	0	18	260
Hourly Total	23	437	6	0	466	6	34	56	0	96	62	405	53	1	521	58	46	17	0	121	1204
5:00 PM	4	117	1	0	122	1	9	16	0	26	28	101	10	1	140	15	15	3	0	33	321
5:15 PM	1	64	2	0	67	1	14	13	0	28	12	104	14	0	130	17	11	6	0	34	259
5:30 PM	4	51	1	0	56	1	6	11	0	18	17	104	6	0	127	8	12	4	0	24	225
5:45 PM	7	72	2	0	81	2	3	10	0	15	17	58	9	0	84	4	6	3	0	13	193
Hourly Total	16	304	6	0	326	5	32	50	0	87	74	367	39	1	481	44	44	16	0	104	998
Grand Total	142	3755	50	2	3949	58	349	467	0	874	636	4028	543	11	5218	489	372	146	0	1007	11048
Approach %	3.6	95.1	1.3	0.1	-	6.6	39.9	53.4	0.0	-	12.2	77.2	10.4	0.2	-	48.6	36.9	14.5	0.0	-	-
Total %	1.3	34.0	0.5	0.0	35.7	0.5	3.2	4.2	0.0	7.9	5.8	36.5	4.9	0.1	47.2	4.4	3.4	1.3	0.0	9.1	-
All Vehicles (no classification)	142	3755	50	2	3949	58	349	467	0	874	636	4028	543	11	5218	489	372	146	0	1007	11048
% All Vehicles (no classification)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	

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Count Name: SR-69 and Dunlap ST.  
Site Code: STA-4  
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Turning Movement Data Plot

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Count Name: SR-69 and Dunlap ST.  
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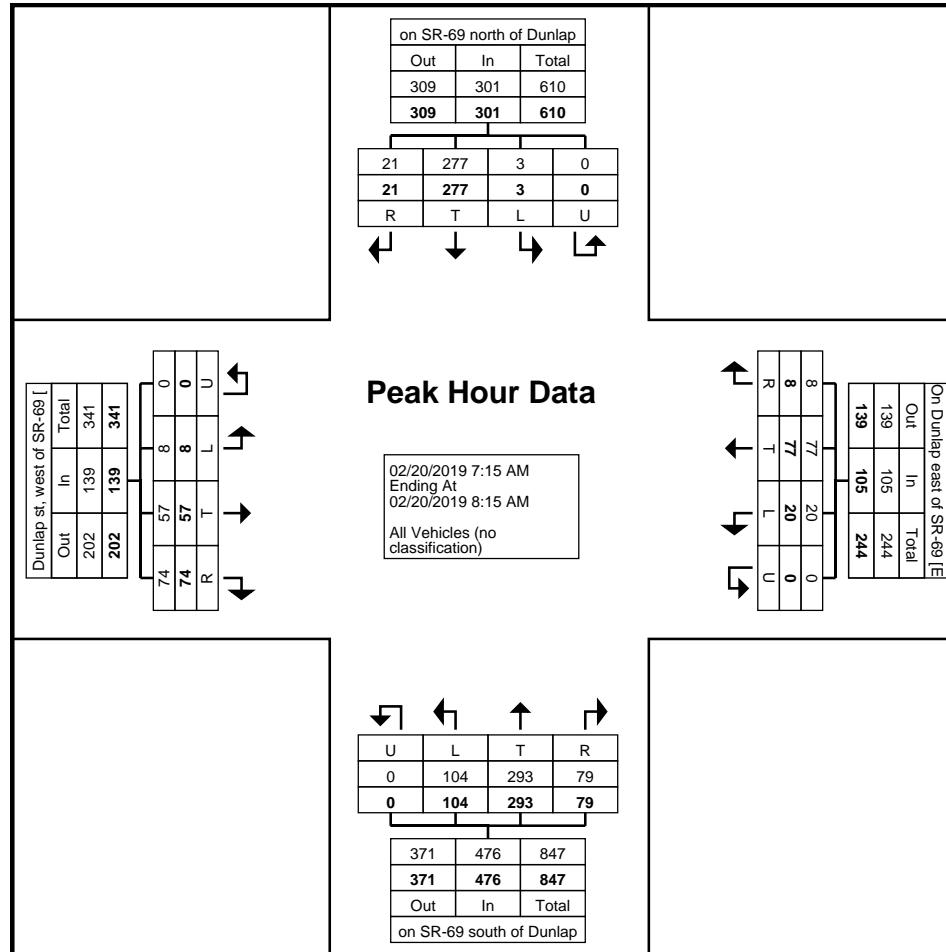
**Turning Movement Peak Hour Data (7:15 AM)**

Start Time	on SR-69 north of Dunlap					On Dunlap east of SR-69					on SR-69 south of Dunlap ST.					Dunlap st, west of SR-69					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:15 AM	8	74	0	0	82	1	12	3	0	16	8	60	20	0	88	13	13	1	0	27	213
7:30 AM	5	77	0	0	82	1	39	8	0	48	19	61	43	0	123	21	10	1	0	32	285
7:45 AM	6	80	3	0	89	3	23	3	0	29	33	84	32	0	149	32	22	6	0	60	327
8:00 AM	2	46	0	0	48	3	3	6	0	12	19	88	9	0	116	8	12	0	0	20	196
Total	21	277	3	0	301	8	77	20	0	105	79	293	104	0	476	74	57	8	0	139	1021
Approach %	7.0	92.0	1.0	0.0	-	7.6	73.3	19.0	0.0	-	16.6	61.6	21.8	0.0	-	53.2	41.0	5.8	0.0	-	-
Total %	2.1	27.1	0.3	0.0	29.5	0.8	7.5	2.0	0.0	10.3	7.7	28.7	10.2	0.0	46.6	7.2	5.6	0.8	0.0	13.6	-
PHF	0.656	0.866	0.250	0.000	0.846	0.667	0.494	0.625	0.000	0.547	0.598	0.832	0.605	0.000	0.799	0.578	0.648	0.333	0.000	0.579	0.781
All Vehicles (no classification)	21	277	3	0	301	8	77	20	0	105	79	293	104	0	476	74	57	8	0	139	1021
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

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Count Name: SR-69 and Dunlap ST.  
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Turning Movement Peak Hour Data Plot (7:15 AM)

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Count Name: SR-69 and Dunlap ST.  
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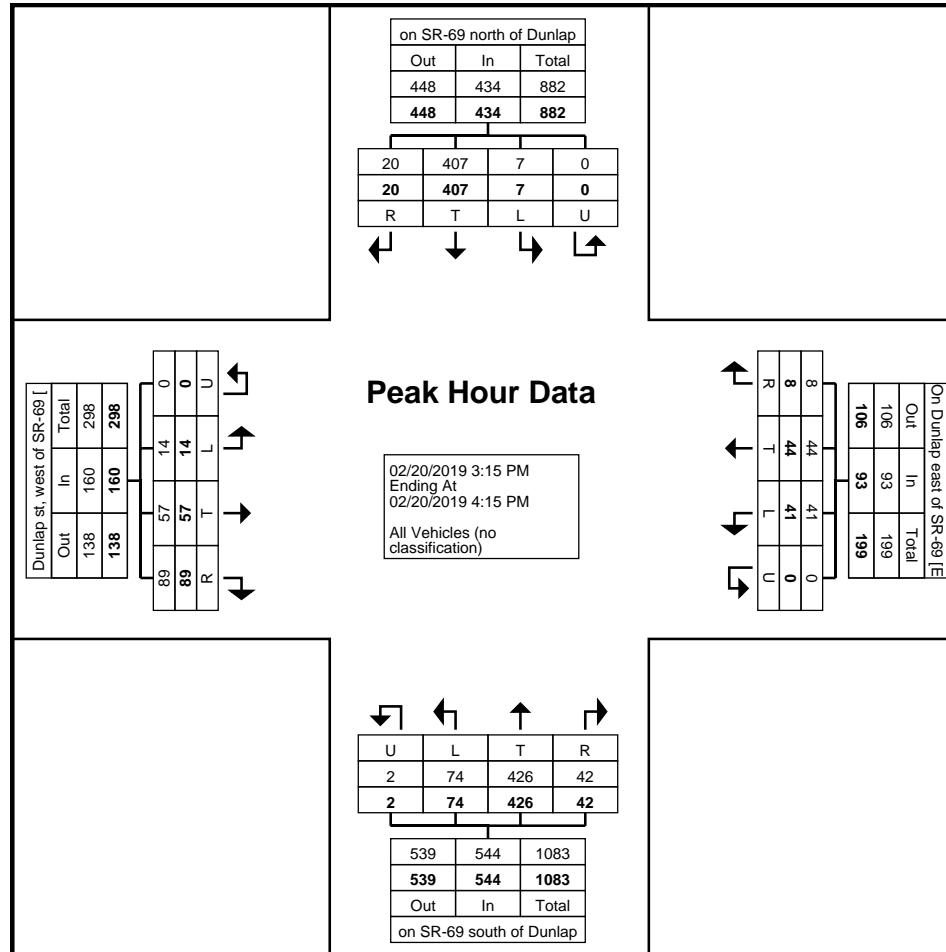
### Turning Movement Peak Hour Data (3:15 PM)

Start Time	on SR-69 north of Dunlap					On Dunlap east of SR-69					on SR-69 south of Dunlap ST.					Dunlap st, west of SR-69					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
3:15 PM	4	97	5	0	106	1	13	8	0	22	9	98	26	0	133	43	29	6	0	78	339	
3:30 PM	4	87	0	0	91	3	5	9	0	17	9	118	13	0	140	16	11	2	0	29	277	
3:45 PM	5	100	1	0	106	2	9	10	0	21	15	94	17	1	127	17	9	2	0	28	282	
4:00 PM	7	123	1	0	131	2	17	14	0	33	9	116	18	1	144	13	8	4	0	25	333	
Total	20	407	7	0	434	8	44	41	0	93	42	426	74	2	544	89	57	14	0	160	1231	
Approach %	4.6	93.8	1.6	0.0	-	8.6	47.3	44.1	0.0	-	7.7	78.3	13.6	0.4	-	55.6	35.6	8.8	0.0	-	-	
Total %	1.6	33.1	0.6	0.0	35.3	0.6	3.6	3.3	0.0	7.6	3.4	34.6	6.0	0.2	44.2	7.2	4.6	1.1	0.0	13.0	-	
PHF	0.714	0.827	0.350	0.000	0.828	0.667	0.647	0.732	0.000	0.705	0.700	0.903	0.712	0.500	0.944	0.517	0.491	0.583	0.000	0.513	0.908	
All Vehicles (no classification)	20	407	7	0	434	8	44	41	0	93	42	426	74	2	544	89	57	14	0	160	1231	
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0		

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Count Name: SR-69 and Dunlap ST.  
Site Code: STA-4  
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Turning Movement Peak Hour Data Plot (3:15 PM)

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Count Name: SR-69 and Dunlap ST.  
Site Code: STA-4  
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Count Name: SR-69 and Memorial Dr  
Site Code: STA-6  
Start Date: 02/20/2019  
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### Turning Movement Data

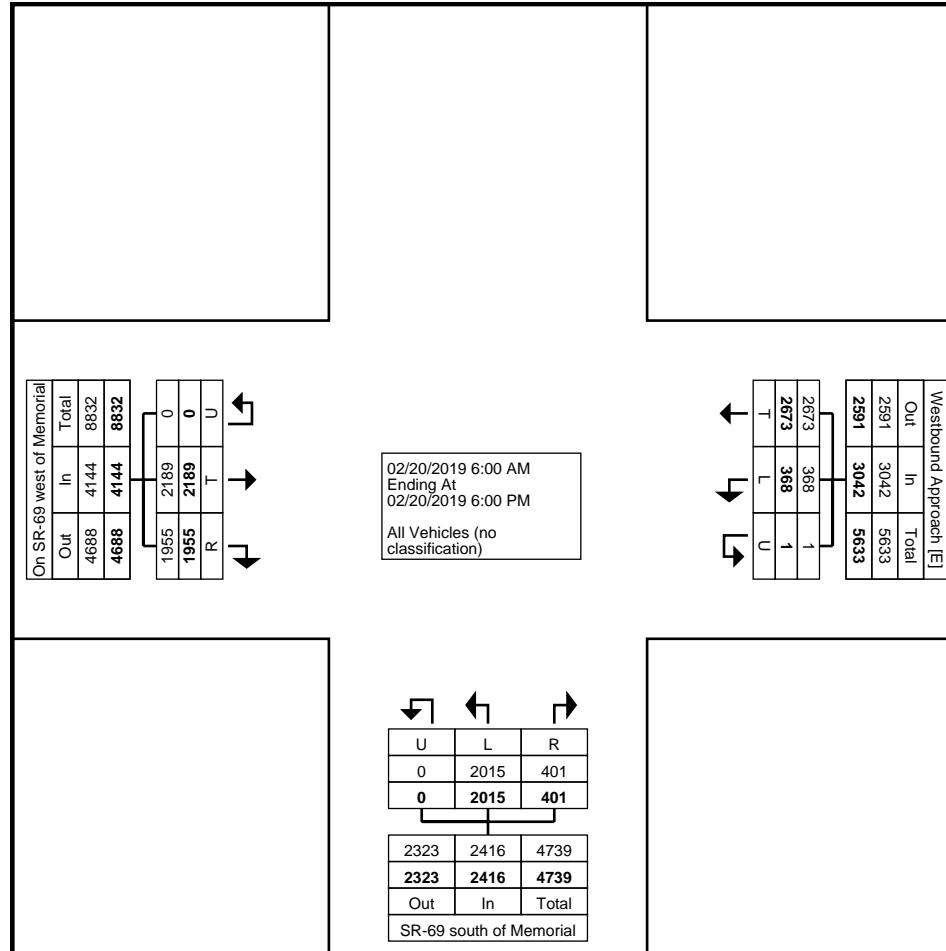
Start Time	Westbound Approach				SR-69 south of Memorial Dr.				On SR-69 west of Memorial Dr.				Int. Total	
	Westbound				Northbound				Eastbound					
	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total		
6:00 AM	22	6	0	28	5	14	0	19	14	11	0	25	72	
6:15 AM	35	7	1	43	3	20	0	23	30	13	0	43	109	
6:30 AM	40	9	0	49	3	28	0	31	30	10	0	40	120	
6:45 AM	63	6	0	69	8	34	0	42	53	13	0	66	177	
Hourly Total	160	28	1	189	19	96	0	115	127	47	0	174	478	
7:00 AM	47	6	0	53	6	36	0	42	25	16	0	41	136	
7:15 AM	71	11	0	82	24	39	0	63	26	35	0	61	206	
7:30 AM	141	23	0	164	25	62	0	87	17	36	0	53	304	
7:45 AM	110	13	0	123	15	55	0	70	30	33	0	63	256	
Hourly Total	369	53	0	422	70	192	0	262	98	120	0	218	902	
8:00 AM	52	7	0	59	7	50	0	57	22	35	0	57	173	
8:15 AM	47	4	0	51	4	32	0	36	21	26	0	47	134	
8:30 AM	57	3	0	60	11	50	0	61	24	30	0	54	175	
8:45 AM	62	6	0	68	6	45	0	51	24	22	0	46	165	
Hourly Total	218	20	0	238	28	177	0	205	91	113	0	204	647	
9:00 AM	63	7	0	70	7	23	0	30	30	37	0	67	167	
9:15 AM	52	5	0	57	7	24	0	31	31	31	0	62	150	
9:30 AM	52	3	0	55	6	33	0	39	29	26	0	55	149	
9:45 AM	51	4	0	55	3	39	0	42	26	32	0	58	155	
Hourly Total	218	19	0	237	23	119	0	142	116	126	0	242	621	
10:00 AM	36	3	0	39	3	35	0	38	26	39	0	65	142	
10:15 AM	51	2	0	53	1	40	0	41	34	41	0	75	169	
10:30 AM	48	4	0	52	5	46	0	51	42	37	0	79	182	
10:45 AM	53	7	0	60	4	48	0	52	53	41	0	94	206	
Hourly Total	188	16	0	204	13	169	0	182	155	158	0	313	699	
11:00 AM	53	7	0	60	5	55	0	60	41	36	0	77	197	
11:15 AM	61	4	0	65	6	43	0	49	39	38	0	77	191	
11:30 AM	62	6	0	68	6	41	0	47	57	41	0	98	213	
11:45 AM	58	4	0	62	4	37	0	41	49	52	0	101	204	
Hourly Total	234	21	0	255	21	176	0	197	186	167	0	353	805	
12:00 PM	56	4	0	60	14	45	0	59	56	57	0	113	232	
12:15 PM	61	5	0	66	8	43	0	51	40	44	0	84	201	
12:30 PM	53	8	0	61	2	38	0	40	46	46	0	92	193	
12:45 PM	53	9	0	62	7	34	0	41	58	54	0	112	215	
Hourly Total	223	26	0	249	31	160	0	191	200	201	0	401	841	
1:00 PM	53	11	0	64	4	40	0	44	32	60	0	92	200	
1:15 PM	51	4	0	55	10	43	0	53	57	52	0	109	217	
1:30 PM	61	7	0	68	11	36	0	47	34	48	0	82	197	
1:45 PM	52	6	0	58	8	49	0	57	42	45	0	87	202	
Hourly Total	217	28	0	245	33	168	0	201	165	205	0	370	816	
2:00 PM	58	17	0	75	7	46	0	53	36	65	0	101	229	

2:15 PM	56	9	0	65	11	37	0	48	53	51	0	104	217
2:30 PM	65	24	0	89	10	35	0	45	51	49	0	100	234
2:45 PM	70	15	0	85	6	41	0	47	47	53	0	100	232
Hourly Total	249	65	0	314	34	159	0	193	187	218	0	405	912
3:00 PM	41	14	0	55	7	57	0	64	40	51	0	91	210
3:15 PM	63	9	0	72	10	46	0	56	55	54	0	109	237
3:30 PM	68	5	0	73	11	95	0	106	70	67	0	137	316
3:45 PM	59	9	0	68	13	53	0	66	51	60	0	111	245
Hourly Total	231	37	0	268	41	251	0	292	216	232	0	448	1008
4:00 PM	41	3	0	44	12	49	0	61	60	67	0	127	232
4:15 PM	49	3	0	52	8	43	0	51	43	92	0	135	238
4:30 PM	42	7	0	49	10	46	0	56	46	82	0	128	233
4:45 PM	41	5	0	46	16	30	0	46	63	66	0	129	221
Hourly Total	173	18	0	191	46	168	0	214	212	307	0	519	924
5:00 PM	50	6	0	56	18	61	0	79	66	88	0	154	289
5:15 PM	42	9	0	51	17	44	0	61	46	89	0	135	247
5:30 PM	55	16	0	71	4	45	0	49	48	54	0	102	222
5:45 PM	46	6	0	52	3	30	0	33	42	64	0	106	191
Hourly Total	193	37	0	230	42	180	0	222	202	295	0	497	949
Grand Total	2673	368	1	3042	401	2015	0	2416	1955	2189	0	4144	9602
Approach %	87.9	12.1	0.0	-	16.6	83.4	0.0	-	47.2	52.8	0.0	-	-
Total %	27.8	3.8	0.0	31.7	4.2	21.0	0.0	25.2	20.4	22.8	0.0	43.2	-
All Vehicles (no classification)	2673	368	1	3042	401	2015	0	2416	1955	2189	0	4144	9602
% All Vehicles (no classification)	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0

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Count Name: SR-69 and Memorial Dr  
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Turning Movement Data Plot

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Count Name: SR-69 and Memorial Dr  
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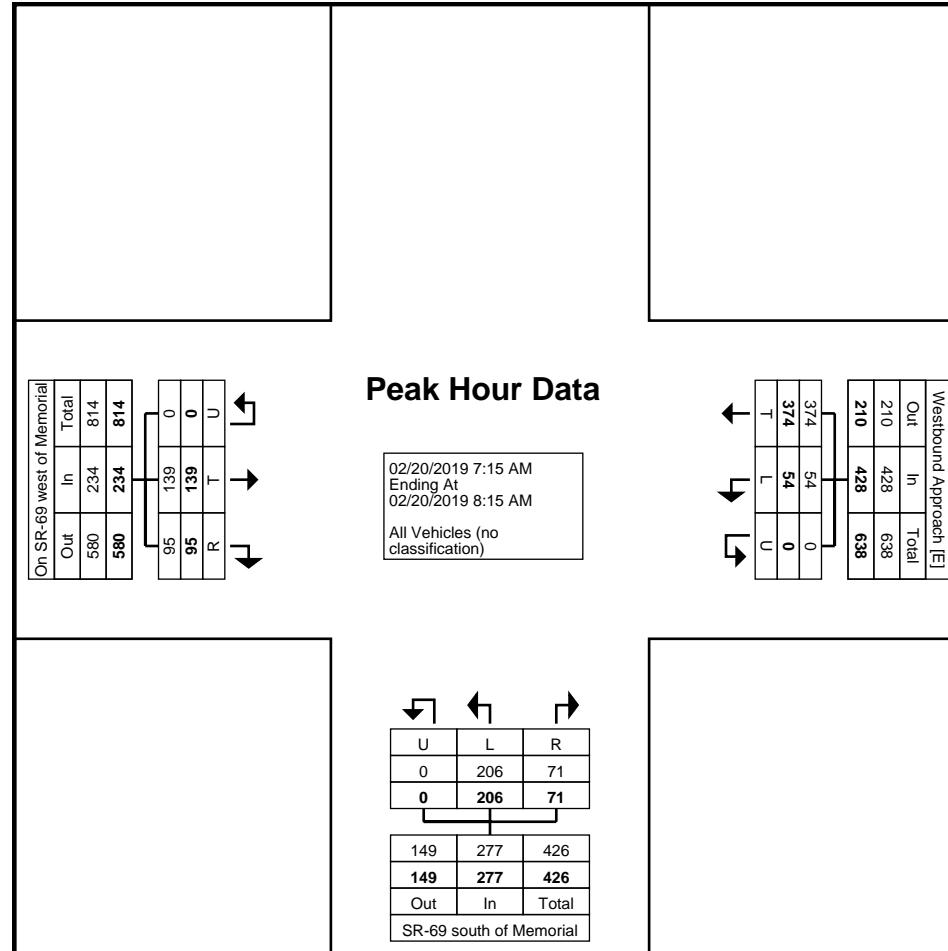
### Turning Movement Peak Hour Data (7:15 AM)

Start Time	Westbound Approach					SR-69 south of Memorial Dr.				On SR-69 west of Memorial Dr.				Int. Total
	Westbound		Northbound		Eastbound									
	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total		
7:15 AM	71	11	0	82	24	39	0	63	26	35	0	61	206	
7:30 AM	141	23	0	164	25	62	0	87	17	36	0	53	304	
7:45 AM	110	13	0	123	15	55	0	70	30	33	0	63	256	
8:00 AM	52	7	0	59	7	50	0	57	22	35	0	57	173	
Total	374	54	0	428	71	206	0	277	95	139	0	234	939	
Approach %	87.4	12.6	0.0	-	25.6	74.4	0.0	-	40.6	59.4	0.0	-	-	
Total %	39.8	5.8	0.0	45.6	7.6	21.9	0.0	29.5	10.1	14.8	0.0	24.9	-	
PHF	0.663	0.587	0.000	0.652	0.710	0.831	0.000	0.796	0.792	0.965	0.000	0.929	0.772	
All Vehicles (no classification)	374	54	0	428	71	206	0	277	95	139	0	234	939	
% All Vehicles (no classification)	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

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Count Name: SR-69 and Memorial Dr  
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Count Name: SR-69 and Memorial Dr  
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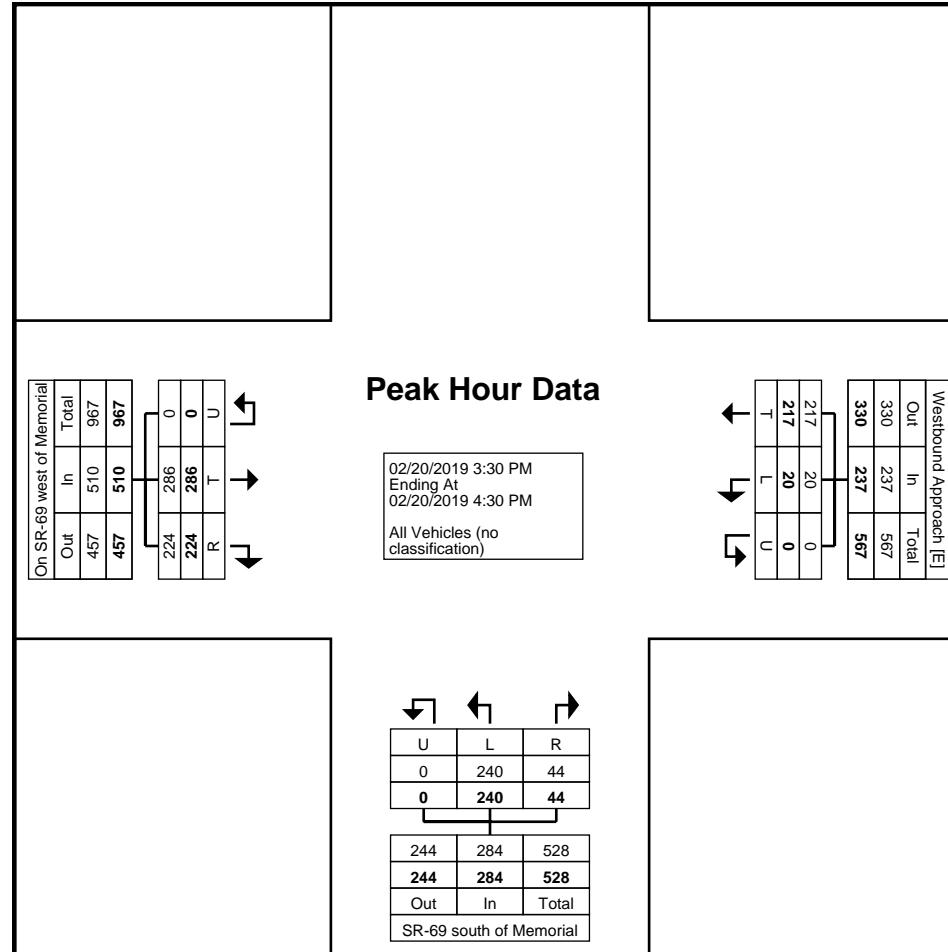
Turning Movement Peak Hour Data (3:30 PM)

Start Time	Westbound Approach					SR-69 south of Memorial Dr.				On SR-69 west of Memorial Dr.				Int. Total
	Westbound		Northbound		Eastbound									
	Thru	Left	U-Turn	App. Total	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total		
3:30 PM	68	5	0	73	11	95	0	106	70	67	0	137	316	
3:45 PM	59	9	0	68	13	53	0	66	51	60	0	111	245	
4:00 PM	41	3	0	44	12	49	0	61	60	67	0	127	232	
4:15 PM	49	3	0	52	8	43	0	51	43	92	0	135	238	
Total	217	20	0	237	44	240	0	284	224	286	0	510	1031	
Approach %	91.6	8.4	0.0	-	15.5	84.5	0.0	-	43.9	56.1	0.0	-	-	
Total %	21.0	1.9	0.0	23.0	4.3	23.3	0.0	27.5	21.7	27.7	0.0	49.5	-	
PHF	0.798	0.556	0.000	0.812	0.846	0.632	0.000	0.670	0.800	0.777	0.000	0.931	0.816	
All Vehicles (no classification)	217	20	0	237	44	240	0	284	224	286	0	510	1031	
% All Vehicles (no classification)	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

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Count Name: SR-69 and Volunteer DR. in Paris  
Tn  
Site Code: STA-10  
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### Turning Movement Data

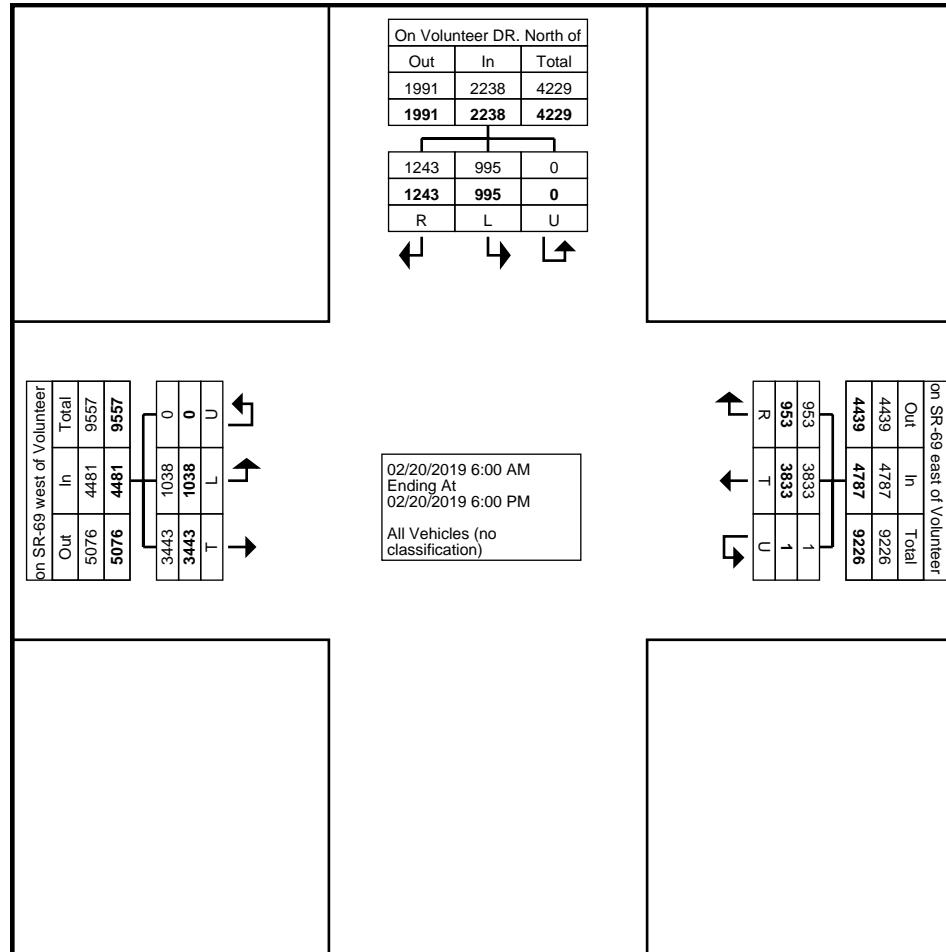
Start Time	On Volunteer DR. North of SR-69				on SR-69 east of Volunteer DR. in Paris TN				on SR-69 west of Volunteer DR. in Paris TN				Int. Total	
	Southbound				Westbound				Eastbound					
	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total		
6:00 AM	3	2	0	5	2	35	0	37	26	2	0	28	70	
6:15 AM	4	6	0	10	6	46	0	52	32	3	0	35	97	
6:30 AM	7	10	0	17	13	53	0	66	32	8	0	40	123	
6:45 AM	11	19	0	30	18	72	0	90	42	13	0	55	175	
Hourly Total	25	37	0	62	39	206	0	245	132	26	0	158	465	
7:00 AM	6	7	0	13	22	64	0	86	39	12	0	51	150	
7:15 AM	2	3	0	5	35	82	0	117	58	16	0	74	196	
7:30 AM	15	10	0	25	37	151	0	188	49	18	0	67	280	
7:45 AM	27	10	0	37	45	120	0	165	72	22	0	94	296	
Hourly Total	50	30	0	80	139	417	0	556	218	68	0	286	922	
8:00 AM	17	17	0	34	19	91	1	111	40	9	0	49	194	
8:15 AM	15	14	0	29	16	66	0	82	39	16	0	55	166	
8:30 AM	13	16	0	29	10	88	0	98	52	17	0	69	196	
8:45 AM	21	12	0	33	16	83	0	99	47	11	0	58	190	
Hourly Total	66	59	0	125	61	328	1	390	178	53	0	231	746	
9:00 AM	15	14	0	29	18	68	0	86	57	16	0	73	188	
9:15 AM	20	12	0	32	11	64	0	75	50	9	0	59	166	
9:30 AM	22	16	0	38	18	71	0	89	40	11	0	51	178	
9:45 AM	30	14	0	44	23	62	0	85	49	19	0	68	197	
Hourly Total	87	56	0	143	70	265	0	335	196	55	0	251	729	
10:00 AM	23	12	0	35	7	57	0	64	55	17	0	72	171	
10:15 AM	22	22	0	44	18	79	0	97	60	22	0	82	223	
10:30 AM	21	14	0	35	20	76	0	96	59	14	0	73	204	
10:45 AM	29	26	0	55	19	89	0	108	91	26	0	117	280	
Hourly Total	95	74	0	169	64	301	0	365	265	79	0	344	878	
11:00 AM	36	19	0	55	24	88	0	112	67	21	0	88	255	
11:15 AM	38	24	0	62	22	99	0	121	62	19	0	81	264	
11:30 AM	44	32	0	76	22	86	0	108	79	28	0	107	291	
11:45 AM	27	14	0	41	16	83	0	99	99	36	0	135	275	
Hourly Total	145	89	0	234	84	356	0	440	307	104	0	411	1085	
12:00 PM	37	31	0	68	16	88	0	104	86	31	0	117	289	
12:15 PM	38	22	0	60	23	77	0	100	68	28	0	96	256	
12:30 PM	34	27	0	61	25	70	0	95	78	33	0	111	267	
12:45 PM	33	29	0	62	18	75	0	93	92	34	0	126	281	
Hourly Total	142	109	0	251	82	310	0	392	324	126	0	450	1093	
1:00 PM	29	20	0	49	21	72	0	93	73	27	0	100	242	
1:15 PM	32	27	0	59	29	89	0	118	83	25	0	108	285	
1:30 PM	35	21	0	56	16	75	0	91	66	21	0	87	234	
1:45 PM	23	17	0	40	20	82	0	102	75	25	0	100	242	
Hourly Total	119	85	0	204	86	318	0	404	297	98	0	395	1003	
2:00 PM	26	20	0	46	30	79	0	109	98	27	0	125	280	

2:15 PM	32	21	0	53	21	73	0	94	82	29	0	111	258
2:30 PM	22	25	0	47	20	88	0	108	76	31	0	107	262
2:45 PM	31	27	0	58	20	92	0	112	71	16	0	87	257
Hourly Total	111	93	0	204	91	332	0	423	327	103	0	430	1057
3:00 PM	36	23	0	59	20	83	0	103	81	18	0	99	261
3:15 PM	33	26	0	59	15	86	0	101	88	20	0	108	268
3:30 PM	32	33	0	65	37	124	0	161	99	27	0	126	352
3:45 PM	34	34	0	68	22	82	0	104	89	32	0	121	293
Hourly Total	135	116	0	251	94	375	0	469	357	97	0	454	1174
4:00 PM	38	28	0	66	24	84	0	108	109	22	0	131	305
4:15 PM	31	26	0	57	16	81	0	97	127	22	0	149	303
4:30 PM	25	37	0	62	21	82	0	103	108	34	0	142	307
4:45 PM	33	34	0	67	18	64	0	82	101	35	0	136	285
Hourly Total	127	125	0	252	79	311	0	390	445	113	0	558	1200
5:00 PM	40	39	0	79	18	97	0	115	121	40	0	161	355
5:15 PM	37	27	0	64	14	67	0	81	114	28	0	142	287
5:30 PM	37	33	0	70	15	77	0	92	84	20	0	104	266
5:45 PM	27	23	0	50	17	73	0	90	78	28	0	106	246
Hourly Total	141	122	0	263	64	314	0	378	397	116	0	513	1154
Grand Total	1243	995	0	2238	953	3833	1	4787	3443	1038	0	4481	11506
Approach %	55.5	44.5	0.0	-	19.9	80.1	0.0	-	76.8	23.2	0.0	-	-
Total %	10.8	8.6	0.0	19.5	8.3	33.3	0.0	41.6	29.9	9.0	0.0	38.9	-
All Vehicles (no classification)	1243	995	0	2238	953	3833	1	4787	3443	1038	0	4481	11506
% All Vehicles (no classification)	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0

State Of Tennessee (TDOT)  
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Count Name: SR-69 and Volunteer DR. in Paris  
Tn  
Site Code: STA-10  
Start Date: 02/20/2019  
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Turning Movement Data Plot

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Count Name: SR-69 and Volunteer DR. in Paris  
Tn  
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Start Date: 02/20/2019  
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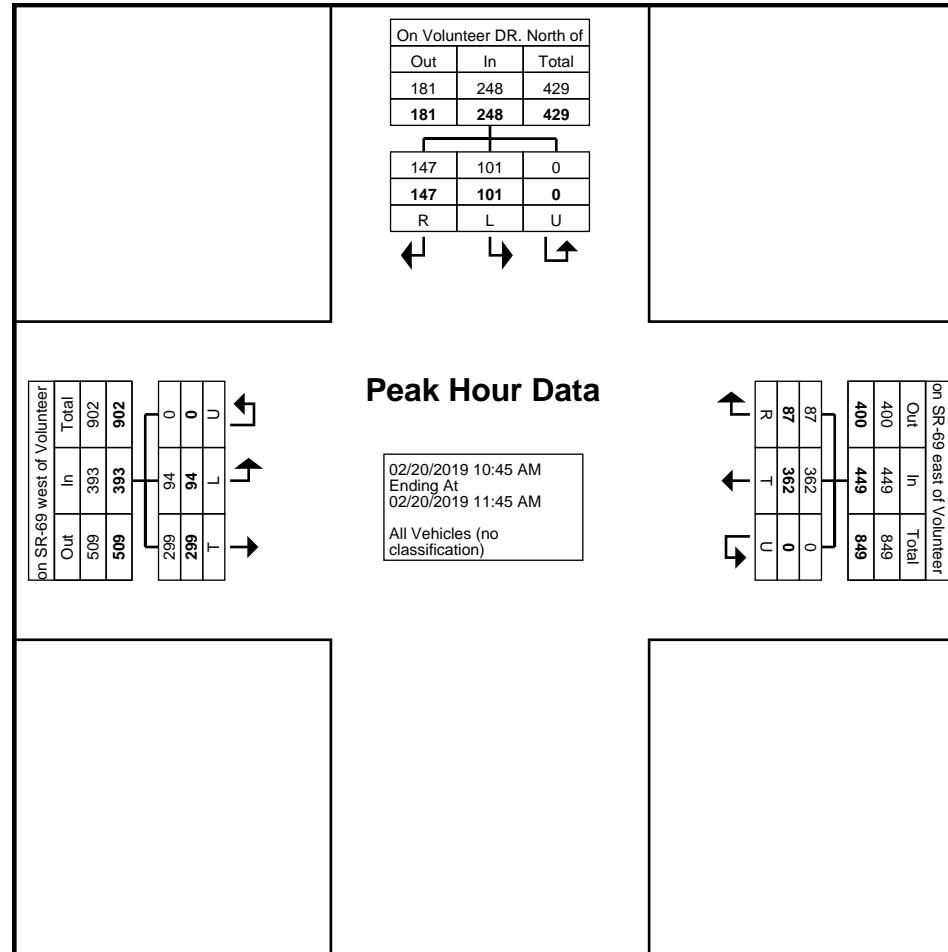
### Turning Movement Peak Hour Data (10:45 AM)

Start Time	On Volunteer DR. North of SR-69				on SR-69 east of Volunteer DR. in Paris TN				on SR-69 west of Volunteer DR. in Paris TN				Int. Total
	Southbound				Westbound				Eastbound				
	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	
10:45 AM	29	26	0	55	19	89	0	108	91	26	0	117	280
11:00 AM	36	19	0	55	24	88	0	112	67	21	0	88	255
11:15 AM	38	24	0	62	22	99	0	121	62	19	0	81	264
11:30 AM	44	32	0	76	22	86	0	108	79	28	0	107	291
Total	147	101	0	248	87	362	0	449	299	94	0	393	1090
Approach %	59.3	40.7	0.0	-	19.4	80.6	0.0	-	76.1	23.9	0.0	-	-
Total %	13.5	9.3	0.0	22.8	8.0	33.2	0.0	41.2	27.4	8.6	0.0	36.1	-
PHF	0.835	0.789	0.000	0.816	0.906	0.914	0.000	0.928	0.821	0.839	0.000	0.840	0.936
All Vehicles (no classification)	147	101	0	248	87	362	0	449	299	94	0	393	1090
% All Vehicles (no classification)	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-69 and Volunteer DR. in Paris  
Tn  
Site Code: STA-10  
Start Date: 02/20/2019  
Page No: 5



Turning Movement Peak Hour Data Plot (10:45 AM)

State Of Tennessee (TDOT)  
Address

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Count Name: SR-69 and Volunteer DR. in Paris  
Tn  
Site Code: STA-10  
Start Date: 02/20/2019  
Page No: 6

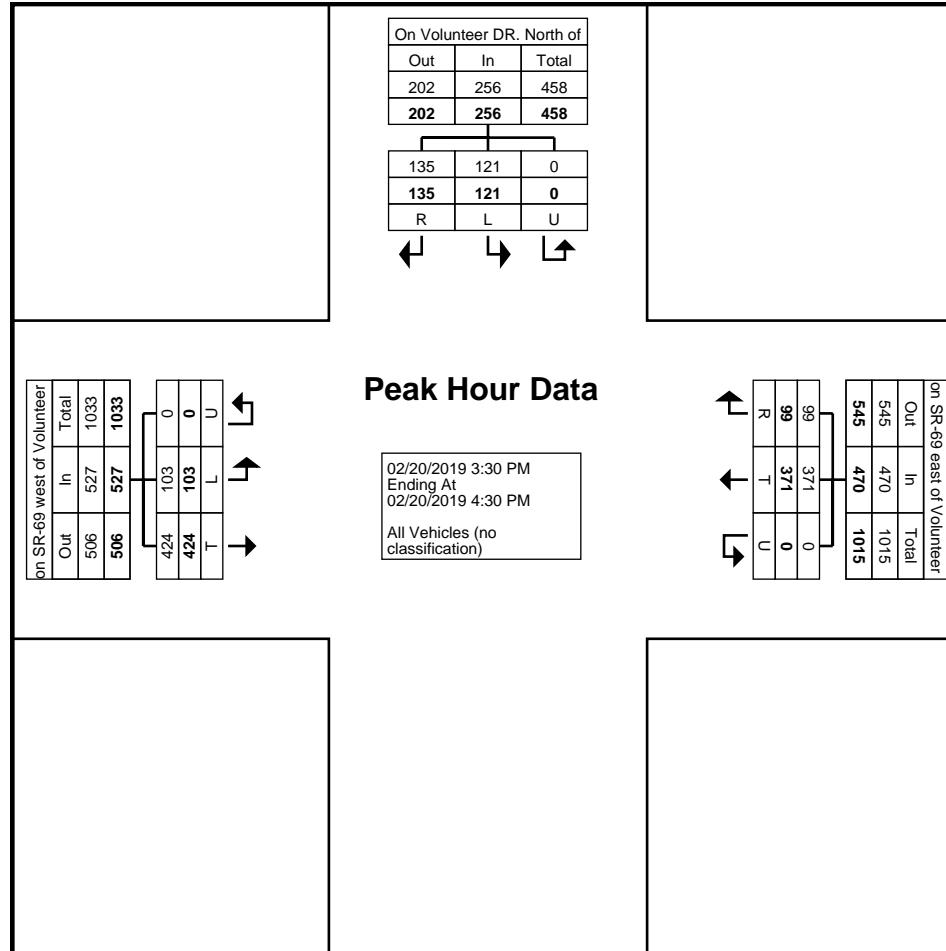
### Turning Movement Peak Hour Data (3:30 PM)

Start Time	On Volunteer DR. North of SR-69 Southbound				on SR-69 east of Volunteer DR. in Paris TN Westbound				on SR-69 west of Volunteer DR. in Paris TN Eastbound				Int. Total
	Right	Left	U-Turn	App. Total	Right	Thru	U-Turn	App. Total	Thru	Left	U-Turn	App. Total	
3:30 PM	32	33	0	65	37	124	0	161	99	27	0	126	352
3:45 PM	34	34	0	68	22	82	0	104	89	32	0	121	293
4:00 PM	38	28	0	66	24	84	0	108	109	22	0	131	305
4:15 PM	31	26	0	57	16	81	0	97	127	22	0	149	303
Total	135	121	0	256	99	371	0	470	424	103	0	527	1253
Approach %	52.7	47.3	0.0	-	21.1	78.9	0.0	-	80.5	19.5	0.0	-	-
Total %	10.8	9.7	0.0	20.4	7.9	29.6	0.0	37.5	33.8	8.2	0.0	42.1	-
PHF	0.888	0.890	0.000	0.941	0.669	0.748	0.000	0.730	0.835	0.805	0.000	0.884	0.890
All Vehicles (no classification)	135	121	0	256	99	371	0	470	424	103	0	527	1253
% All Vehicles (no classification)	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0

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Count Name: SR-69 and Volunteer DR. in Paris  
Tn  
Site Code: STA-10  
Start Date: 02/20/2019  
Page No: 7



Turning Movement Peak Hour Data Plot (3:30 PM)

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Address

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Count Name: SR-69 and Volunteer DR. in Paris  
Tn  
Site Code: STA-10  
Start Date: 02/20/2019  
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State Of Tennessee (TDOT)  
Address

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Phone karen.watts@tn.gov

Count Name: SR-69 and Wood St. in Paris TN  
Site Code: STA 11  
Start Date: 02/21/2019  
Page No: 1

**Turning Movement Data**

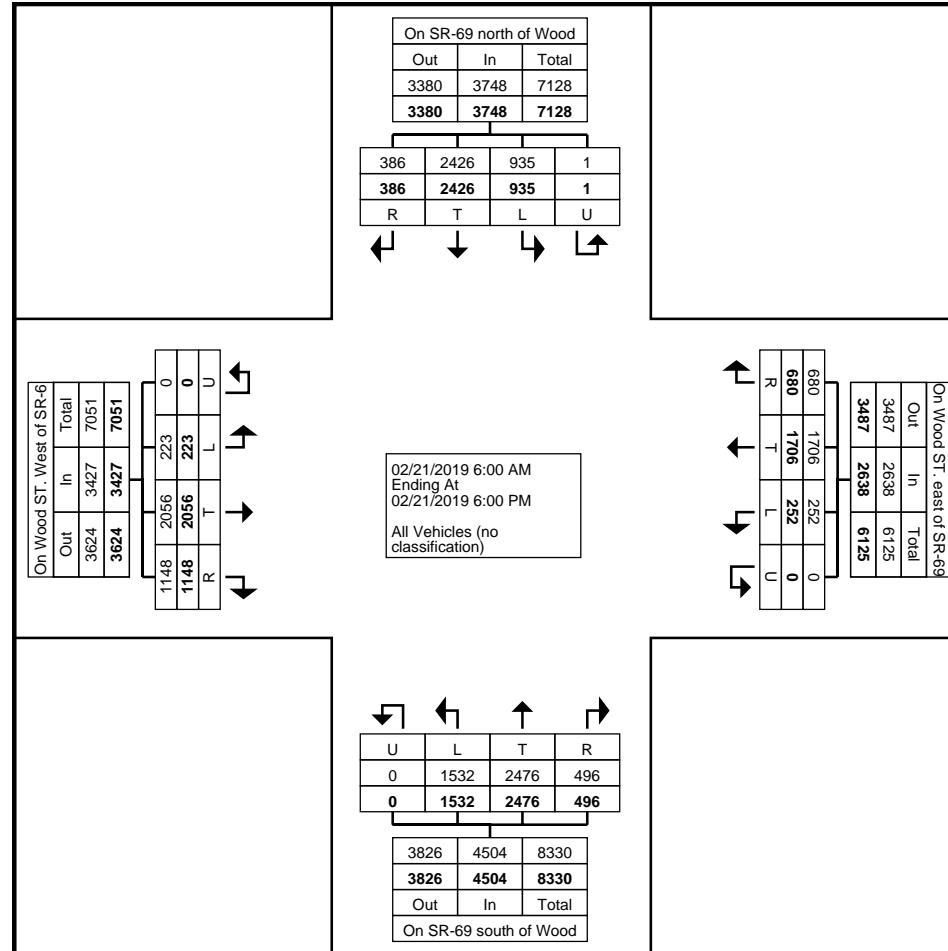
Start Time	On SR-69 north of Wood ST.					On Wood ST. east of SR-69					On SR-69 south of Wood ST.					On Wood ST. West of SR-69					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
6:00 AM	5	21	9	0	35	4	14	2	0	20	2	19	12	0	33	14	16	1	0	31	119	
6:15 AM	6	17	8	0	31	6	34	0	0	40	2	21	15	0	38	13	23	0	0	36	145	
6:30 AM	5	34	9	0	48	7	27	1	0	35	2	34	25	0	61	15	36	2	0	53	197	
6:45 AM	4	40	16	0	60	7	35	1	0	43	2	33	12	0	47	20	38	3	0	61	211	
Hourly Total	20	112	42	0	174	24	110	4	0	138	8	107	64	0	179	62	113	6	0	181	672	
7:00 AM	6	33	20	0	59	8	29	4	0	41	3	25	19	0	47	14	36	1	0	51	198	
7:15 AM	8	43	24	0	75	2	41	1	0	44	11	30	27	0	68	26	59	0	0	85	272	
7:30 AM	8	56	25	0	89	10	42	4	0	56	7	36	21	0	64	20	74	1	0	95	304	
7:45 AM	8	39	21	0	68	15	43	4	0	62	7	46	34	0	87	21	58	3	0	82	299	
Hourly Total	30	171	90	0	291	35	155	13	0	203	28	137	101	0	266	81	227	5	0	313	1073	
8:00 AM	9	37	5	1	52	9	35	2	0	46	8	38	24	0	70	19	44	4	0	67	235	
8:15 AM	8	31	19	0	58	4	26	1	0	31	8	46	32	0	86	25	30	7	0	62	237	
8:30 AM	6	37	16	0	59	12	24	4	0	40	9	51	21	0	81	23	33	13	0	69	249	
8:45 AM	11	36	18	0	65	12	23	5	0	40	16	41	30	0	87	14	34	6	0	54	246	
Hourly Total	34	141	58	1	234	37	108	12	0	157	41	176	107	0	324	81	141	30	0	252	967	
9:00 AM	4	41	16	0	61	12	31	1	0	44	9	37	23	0	69	23	28	4	0	55	229	
9:15 AM	7	44	18	0	69	11	24	2	0	37	13	45	33	0	91	21	59	3	0	83	280	
9:30 AM	6	42	21	0	69	9	32	5	0	46	13	30	27	0	70	14	32	6	0	52	237	
9:45 AM	7	37	18	0	62	16	24	9	0	49	17	50	19	0	86	25	39	2	0	66	263	
Hourly Total	24	164	73	0	261	48	111	17	0	176	52	162	102	0	316	83	158	15	0	256	1009	
10:00 AM	10	40	14	0	64	12	23	5	0	40	16	46	18	0	80	24	42	5	0	71	255	
10:15 AM	7	40	9	0	56	20	34	1	0	55	17	57	36	0	110	18	36	1	0	55	276	
10:30 AM	10	44	25	0	79	15	33	6	0	54	13	54	26	0	93	18	43	9	0	70	296	
10:45 AM	11	48	25	0	84	15	30	6	0	51	10	44	30	0	84	23	48	7	0	78	297	
Hourly Total	38	172	73	0	283	62	120	18	0	200	56	201	110	0	367	83	169	22	0	274	1124	
11:00 AM	11	53	28	0	92	20	35	6	0	61	14	54	24	0	92	29	41	6	0	76	321	
11:15 AM	12	51	19	0	82	12	33	3	0	48	22	53	29	0	104	28	48	3	0	79	313	
11:30 AM	9	63	26	0	98	15	34	9	0	58	12	52	34	0	98	28	46	6	0	80	334	
11:45 AM	6	59	24	0	89	16	43	9	0	68	14	59	30	0	103	36	41	3	0	80	340	
Hourly Total	38	226	97	0	361	63	145	27	0	235	62	218	117	0	397	121	176	18	0	315	1308	
12:00 PM	12	60	21	0	93	13	25	4	0	42	7	63	41	0	111	37	34	2	0	73	319	
12:15 PM	8	45	20	0	73	10	31	5	0	46	8	75	39	0	122	26	50	8	0	84	325	
12:30 PM	4	48	23	0	75	14	36	7	0	57	17	74	28	0	119	30	34	5	0	69	320	
12:45 PM	11	42	19	0	72	23	43	7	0	73	6	55	38	0	99	29	37	6	0	72	316	
Hourly Total	35	195	83	0	313	60	135	23	0	218	38	267	146	0	451	122	155	21	0	298	1280	
1:00 PM	9	52	24	0	85	15	39	9	0	63	10	68	44	0	122	31	45	4	0	80	350	
1:15 PM	4	59	27	0	90	26	40	6	0	72	17	60	37	0	114	24	26	9	0	59	335	
1:30 PM	13	41	23	0	77	22	25	11	0	58	16	50	33	0	99	33	38	2	0	73	307	
1:45 PM	5	66	25	0	96	15	33	6	0	54	13	39	33	0	85	17	40	7	0	64	299	
Hourly Total	31	218	99	0	348	78	137	32	0	247	56	217	147	0	420	105	149	22	0	276	1291	
2:00 PM	9	57	24	0	90	18	37	10	0	65	13	66	34	0	113	21	49	4	0	74	342	

2:15 PM	3	54	22	0	79	13	43	6	0	62	7	47	37	0	91	17	41	1	0	59	291
2:30 PM	6	61	17	0	84	23	42	7	0	72	10	47	38	0	95	18	47	4	0	69	320
2:45 PM	4	64	15	0	83	12	56	4	0	72	10	57	39	0	106	29	48	2	0	79	340
Hourly Total	22	236	78	0	336	66	178	27	0	271	40	217	148	0	405	85	185	11	0	281	1293
3:00 PM	5	58	15	0	78	23	30	6	0	59	14	64	37	0	115	30	42	8	0	80	332
3:15 PM	8	67	15	0	90	13	38	12	0	63	15	57	44	0	116	27	49	7	0	83	352
3:30 PM	11	73	15	0	99	15	58	7	0	80	10	52	35	0	97	28	51	13	0	92	368
3:45 PM	11	59	17	0	87	16	44	7	0	67	5	75	32	0	112	39	52	10	0	101	367
Hourly Total	35	257	62	0	354	67	170	32	0	269	44	248	148	0	440	124	194	38	0	356	1419
4:00 PM	15	65	28	0	108	17	50	11	0	78	7	69	41	0	117	30	52	7	0	89	392
4:15 PM	7	70	24	0	101	12	42	1	0	55	16	61	43	0	120	24	63	8	0	95	371
4:30 PM	16	89	26	0	131	25	48	5	0	78	10	81	43	0	134	31	58	4	0	93	436
4:45 PM	15	63	29	0	107	18	42	10	0	70	7	69	39	0	115	23	48	2	0	73	365
Hourly Total	53	287	107	0	447	72	182	27	0	281	40	280	166	0	486	108	221	21	0	350	1564
5:00 PM	11	72	19	0	102	21	46	4	0	71	10	76	38	0	124	21	52	1	0	74	371
5:15 PM	4	57	18	0	79	18	50	9	0	77	9	70	37	0	116	25	44	4	0	73	345
5:30 PM	5	61	18	0	84	18	36	2	0	56	8	36	48	0	92	22	39	6	0	67	299
5:45 PM	6	57	18	0	81	11	23	5	0	39	4	64	53	0	121	25	33	3	0	61	302
Hourly Total	26	247	73	0	346	68	155	20	0	243	31	246	176	0	453	93	168	14	0	275	1317
Grand Total	386	2426	935	1	3748	680	1706	252	0	2638	496	2476	1532	0	4504	1148	2056	223	0	3427	14317
Approach %	10.3	64.7	24.9	0.0	-	25.8	64.7	9.6	0.0	-	11.0	55.0	34.0	0.0	-	33.5	60.0	6.5	0.0	-	-
Total %	2.7	16.9	6.5	0.0	26.2	4.7	11.9	1.8	0.0	18.4	3.5	17.3	10.7	0.0	31.5	8.0	14.4	1.6	0.0	23.9	-
All Vehicles (no classification)	386	2426	935	1	3748	680	1706	252	0	2638	496	2476	1532	0	4504	1148	2056	223	0	3427	14317
% All Vehicles (no classification)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-69 and Wood St. in Paris TN  
Site Code: STA 11  
Start Date: 02/21/2019  
Page No: 3



Turning Movement Data Plot

**State Of Tennessee (TDOT)  
Address**

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Phone karen.watts@tn.gov

Count Name: SR-69 and Wood St. in Paris TN  
Site Code: STA 11  
Start Date: 02/21/2019  
Page No: 4

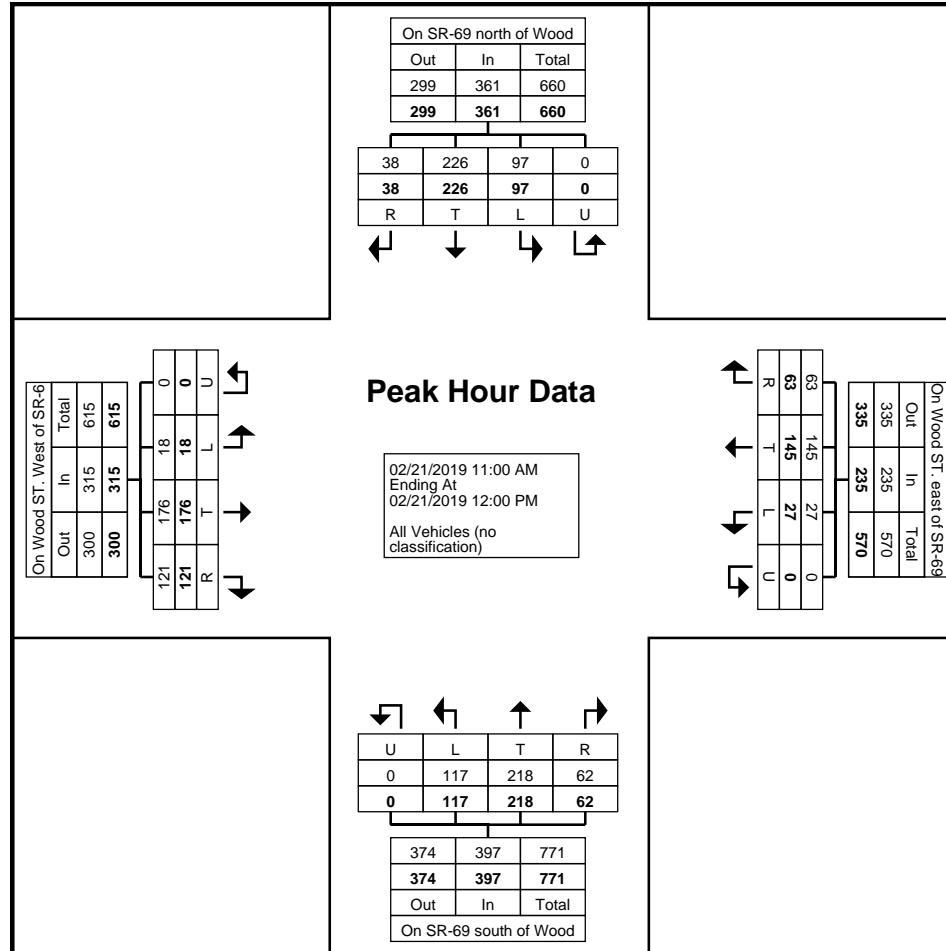
## Turning Movement Peak Hour Data (11:00 AM)

Start Time	On SR-69 north of Wood ST.					On Wood ST. east of SR-69					On SR-69 south of Wood ST.					On Wood ST. West of SR-69					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
11:00 AM	11	53	28	0	92	20	35	6	0	61	14	54	24	0	92	29	41	6	0	76	321	
11:15 AM	12	51	19	0	82	12	33	3	0	48	22	53	29	0	104	28	48	3	0	79	313	
11:30 AM	9	63	26	0	98	15	34	9	0	58	12	52	34	0	98	28	46	6	0	80	334	
11:45 AM	6	59	24	0	89	16	43	9	0	68	14	59	30	0	103	36	41	3	0	80	340	
Total	38	226	97	0	361	63	145	27	0	235	62	218	117	0	397	121	176	18	0	315	1308	
Approach %	10.5	62.6	26.9	0.0	-	26.8	61.7	11.5	0.0	-	15.6	54.9	29.5	0.0	-	38.4	55.9	5.7	0.0	-	-	
Total %	2.9	17.3	7.4	0.0	27.6	4.8	11.1	2.1	0.0	18.0	4.7	16.7	8.9	0.0	30.4	9.3	13.5	1.4	0.0	24.1	-	
PHF	0.792	0.897	0.866	0.000	0.921	0.788	0.843	0.750	0.000	0.864	0.705	0.924	0.860	0.000	0.954	0.840	0.917	0.750	0.000	0.984	0.962	
All Vehicles (no classification)	38	226	97	0	361	63	145	27	0	235	62	218	117	0	397	121	176	18	0	315	1308	
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0		

State Of Tennessee (TDOT)  
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Count Name: SR-69 and Wood St. in Paris TN  
Site Code: STA 11  
Start Date: 02/21/2019  
Page No: 5



Turning Movement Peak Hour Data Plot (11:00 AM)

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Count Name: SR-69 and Wood St. in Paris TN  
Site Code: STA 11  
Start Date: 02/21/2019  
Page No: 6

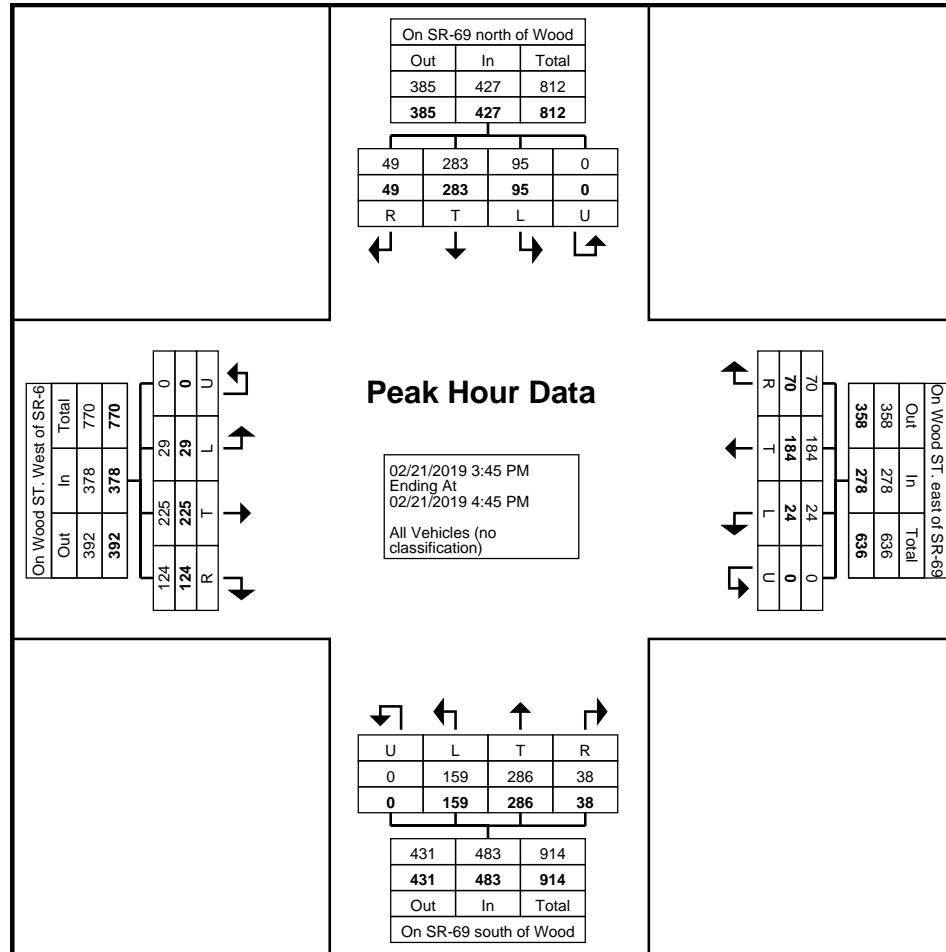
**Turning Movement Peak Hour Data (3:45 PM)**

Start Time	On SR-69 north of Wood ST.					On Wood ST. east of SR-69					On SR-69 south of Wood ST.					On Wood ST. West of SR-69					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
3:45 PM	11	59	17	0	87	16	44	7	0	67	5	75	32	0	112	39	52	10	0	101	367	
4:00 PM	15	65	28	0	108	17	50	11	0	78	7	69	41	0	117	30	52	7	0	89	392	
4:15 PM	7	70	24	0	101	12	42	1	0	55	16	61	43	0	120	24	63	8	0	95	371	
4:30 PM	16	89	26	0	131	25	48	5	0	78	10	81	43	0	134	31	58	4	0	93	436	
Total	49	283	95	0	427	70	184	24	0	278	38	286	159	0	483	124	225	29	0	378	1566	
Approach %	11.5	66.3	22.2	0.0	-	25.2	66.2	8.6	0.0	-	7.9	59.2	32.9	0.0	-	32.8	59.5	7.7	0.0	-	-	
Total %	3.1	18.1	6.1	0.0	27.3	4.5	11.7	1.5	0.0	17.8	2.4	18.3	10.2	0.0	30.8	7.9	14.4	1.9	0.0	24.1	-	
PHF	0.766	0.795	0.848	0.000	0.815	0.700	0.920	0.545	0.000	0.891	0.594	0.883	0.924	0.000	0.901	0.795	0.893	0.725	0.000	0.936	0.898	
All Vehicles (no classification)	49	283	95	0	427	70	184	24	0	278	38	286	159	0	483	124	225	29	0	378	1566	
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0		

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Count Name: SR-69 and Wood St. in Paris TN  
Site Code: STA 11  
Start Date: 02/21/2019  
Page No: 7



Turning Movement Peak Hour Data Plot (3:45 PM)

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Count Name: SR-69 and Wood St. in Paris TN  
Site Code: STA 11  
Start Date: 02/21/2019  
Page No: 8

State Of Tennessee (TDOT)  
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Count Name: SR-69 at Blythe ST. in Paris Tn  
Site Code: STA-3  
Start Date: 02/21/2019  
Page No: 1

### Turning Movement Data

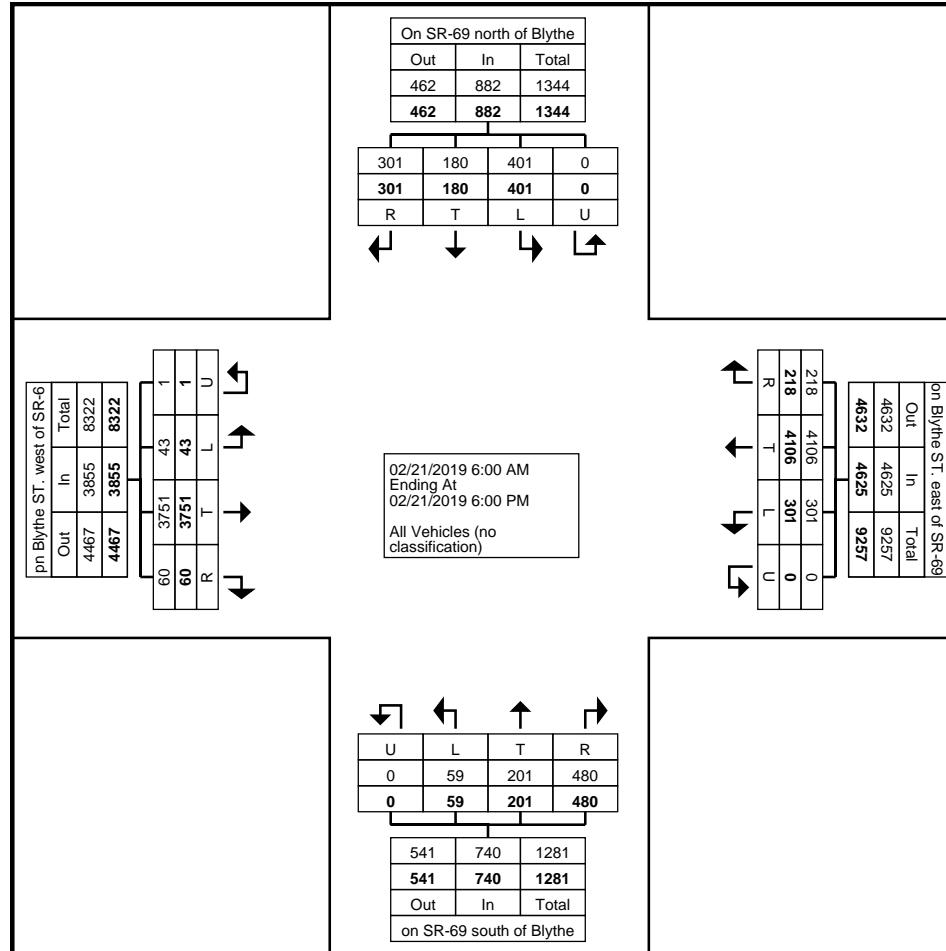
Start Time	On SR-69 north of Blythe ST.					on Blythe ST. east of SR-69					on SR-69 south of Blythe St.					pn Blythe ST. west of SR-69 in Paris Tn					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
6:00 AM	2	0	0	0	2	1	29	3	0	33	3	1	0	0	4	0	40	0	0	40	79	
6:15 AM	0	1	4	0	5	0	37	1	0	38	2	1	0	0	3	0	30	0	0	30	76	
6:30 AM	1	2	0	0	3	2	57	2	0	61	8	3	0	0	11	0	50	0	0	50	125	
6:45 AM	1	1	2	0	4	5	45	0	0	50	5	0	1	0	6	0	60	0	0	60	120	
Hourly Total	4	4	6	0	14	8	168	6	0	182	18	5	1	0	24	0	180	0	0	180	400	
7:00 AM	3	1	1	0	5	5	41	6	0	52	4	5	0	0	9	0	52	0	0	52	118	
7:15 AM	3	3	7	0	13	7	64	8	0	79	10	5	1	0	16	0	70	0	0	70	178	
7:30 AM	3	3	9	0	15	8	59	4	0	71	12	10	3	0	25	0	80	0	1	81	192	
7:45 AM	2	6	7	0	15	17	81	4	0	102	11	13	2	0	26	1	62	1	0	64	207	
Hourly Total	11	13	24	0	48	37	245	22	0	304	37	33	6	0	76	1	264	1	1	267	695	
8:00 AM	6	2	5	0	13	7	62	10	0	79	8	6	1	0	15	1	59	0	0	60	167	
8:15 AM	9	6	5	0	20	7	74	1	0	82	4	2	0	0	6	1	58	0	0	59	167	
8:30 AM	4	2	12	0	18	6	79	5	0	90	8	1	0	0	9	2	63	1	0	66	183	
8:45 AM	4	0	10	0	14	7	75	8	0	90	5	4	2	0	11	1	57	0	0	58	173	
Hourly Total	23	10	32	0	65	27	290	24	0	341	25	13	3	0	41	5	237	1	0	243	690	
9:00 AM	5	5	9	0	19	5	63	3	0	71	14	0	2	0	16	1	62	1	0	64	170	
9:15 AM	7	4	6	0	17	4	81	5	0	90	9	3	2	0	14	2	67	0	0	69	190	
9:30 AM	10	4	6	0	20	3	61	6	0	70	7	6	1	0	14	5	57	1	0	63	167	
9:45 AM	6	4	5	0	15	2	79	4	0	85	6	2	3	0	11	1	70	0	0	71	182	
Hourly Total	28	17	26	0	71	14	284	18	0	316	36	11	8	0	55	9	256	2	0	267	709	
10:00 AM	9	7	4	0	20	2	71	2	0	75	12	4	1	0	17	1	62	4	0	67	179	
10:15 AM	5	3	6	0	14	2	110	7	0	119	8	1	0	0	9	0	60	1	0	61	203	
10:30 AM	10	2	5	0	17	2	76	5	0	83	7	2	2	0	11	2	68	1	0	71	182	
10:45 AM	7	4	7	0	18	4	82	3	0	89	5	5	1	0	11	0	76	2	0	78	196	
Hourly Total	31	16	22	0	69	10	339	17	0	366	32	12	4	0	48	3	266	8	0	277	760	
11:00 AM	13	4	13	0	30	0	71	2	0	73	14	3	2	0	19	2	88	0	0	90	212	
11:15 AM	17	1	8	0	26	0	84	7	0	91	10	2	4	0	16	3	77	1	0	81	214	
11:30 AM	5	3	16	0	24	4	87	3	0	94	6	5	1	0	12	3	92	1	0	96	226	
11:45 AM	6	10	16	0	32	7	98	9	0	114	11	7	1	0	19	0	106	2	0	108	273	
Hourly Total	41	18	53	0	112	11	340	21	0	372	41	17	8	0	66	8	363	4	0	375	925	
12:00 PM	6	7	17	0	30	12	105	8	0	125	15	10	0	0	25	1	103	0	0	104	284	
12:15 PM	8	1	12	0	21	9	112	12	0	133	13	2	2	0	17	0	77	0	0	77	248	
12:30 PM	6	6	6	0	18	2	114	8	0	124	8	1	0	0	9	0	83	2	0	85	236	
12:45 PM	6	4	10	0	20	3	96	7	0	106	13	4	0	0	17	2	77	0	0	79	222	
Hourly Total	26	18	45	0	89	26	427	35	0	488	49	17	2	0	68	3	340	2	0	345	990	
1:00 PM	9	5	7	0	21	4	104	4	0	112	17	6	2	0	25	1	85	0	0	86	244	
1:15 PM	6	3	12	0	21	4	103	9	0	116	17	3	3	0	23	0	88	1	0	89	249	
1:30 PM	5	3	3	0	11	5	88	7	0	100	16	5	1	0	22	2	82	0	0	84	217	
1:45 PM	6	6	9	0	21	2	76	7	0	85	14	5	2	0	21	1	84	5	0	90	217	
Hourly Total	26	17	31	0	74	15	371	27	0	413	64	19	8	0	91	4	339	6	0	349	927	
2:00 PM	7	2	6	0	15	11	105	7	0	123	8	2	1	0	11	2	86	2	0	90	239	

2:15 PM	2	4	5	0	11	2	87	5	0	94	9	3	2	0	14	1	72	3	0	76	195
2:30 PM	8	6	4	0	18	4	90	7	0	101	6	3	0	0	9	2	79	0	0	81	209
2:45 PM	11	3	5	0	19	2	94	8	0	104	11	5	0	0	16	0	92	5	0	97	236
Hourly Total	28	15	20	0	63	19	376	27	0	422	34	13	3	0	50	5	329	10	0	344	879
3:00 PM	6	2	5	0	13	3	113	12	0	128	14	2	3	0	19	1	89	0	0	90	250
3:15 PM	11	4	10	0	25	5	98	8	0	111	11	2	2	0	15	2	106	1	0	109	260
3:30 PM	7	5	16	0	28	6	84	13	0	103	15	7	2	0	24	3	107	0	0	110	265
3:45 PM	4	4	12	0	20	3	106	11	0	120	18	10	0	0	28	3	105	0	0	108	276
Hourly Total	28	15	43	0	86	17	401	44	0	462	58	21	7	0	86	9	407	1	0	417	1051
4:00 PM	15	6	11	0	32	7	102	12	0	121	13	5	1	0	19	3	103	1	0	107	279
4:15 PM	12	5	9	0	26	4	110	8	0	122	11	5	2	0	18	1	92	0	0	93	259
4:30 PM	3	4	25	0	32	3	126	4	0	133	14	2	1	0	17	1	121	1	0	123	305
4:45 PM	5	6	12	0	23	2	105	5	0	112	10	5	3	0	18	1	93	1	0	95	248
Hourly Total	35	21	57	0	113	16	443	29	0	488	48	17	7	0	72	6	409	3	0	418	1091
5:00 PM	8	6	15	0	29	9	112	5	0	126	15	3	2	0	20	2	98	0	0	100	275
5:15 PM	6	4	12	0	22	1	112	10	0	123	12	6	0	0	18	0	91	3	0	94	257
5:30 PM	3	3	8	0	14	5	84	7	0	96	8	9	0	0	17	3	85	0	0	88	215
5:45 PM	3	3	7	0	13	3	114	9	0	126	3	5	0	0	8	2	87	2	0	91	238
Hourly Total	20	16	42	0	78	18	422	31	0	471	38	23	2	0	63	7	361	5	0	373	985
Grand Total	301	180	401	0	882	218	4106	301	0	4625	480	201	59	0	740	60	3751	43	1	3855	10102
Approach %	34.1	20.4	45.5	0.0	-	4.7	88.8	6.5	0.0	-	64.9	27.2	8.0	0.0	-	1.6	97.3	1.1	0.0	-	-
Total %	3.0	1.8	4.0	0.0	8.7	2.2	40.6	3.0	0.0	45.8	4.8	2.0	0.6	0.0	7.3	0.6	37.1	0.4	0.0	38.2	-
All Vehicles (no classification)	301	180	401	0	882	218	4106	301	0	4625	480	201	59	0	740	60	3751	43	1	3855	10102
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0	

State Of Tennessee (TDOT)  
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Count Name: SR-69 at Blythe ST. in Paris Tn  
Site Code: STA-3  
Start Date: 02/21/2019  
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Turning Movement Data Plot

State Of Tennessee (TDOT)  
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Count Name: SR-69 at Blythe ST. in Paris Tn  
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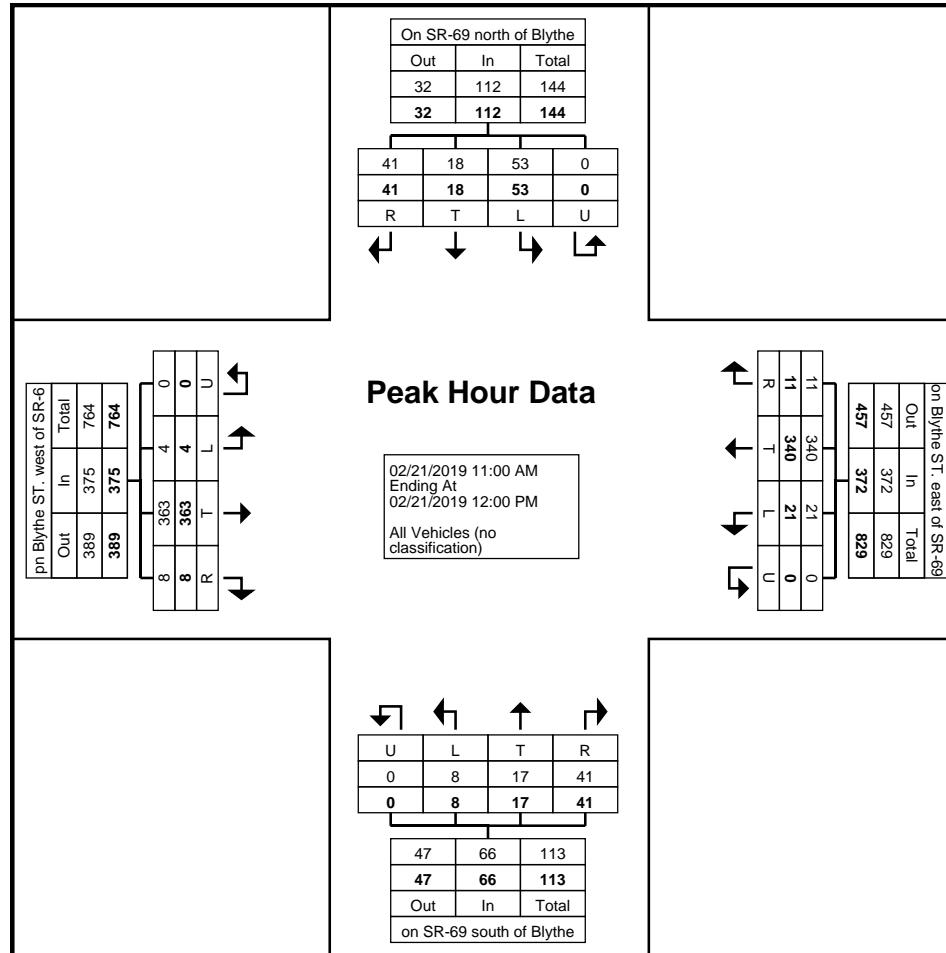
### Turning Movement Peak Hour Data (11:00 AM)

Start Time	On SR-69 north of Blythe ST.					on Blythe ST. east of SR-69					on SR-69 south of Blythe St.					pn Blythe ST. west of SR-69 in Paris Tn					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
11:00 AM	13	4	13	0	30	0	71	2	0	73	14	3	2	0	19	2	88	0	0	90	212
11:15 AM	17	1	8	0	26	0	84	7	0	91	10	2	4	0	16	3	77	1	0	81	214
11:30 AM	5	3	16	0	24	4	87	3	0	94	6	5	1	0	12	3	92	1	0	96	226
11:45 AM	6	10	16	0	32	7	98	9	0	114	11	7	1	0	19	0	106	2	0	108	273
Total	41	18	53	0	112	11	340	21	0	372	41	17	8	0	66	8	363	4	0	375	925
Approach %	36.6	16.1	47.3	0.0	-	3.0	91.4	5.6	0.0	-	62.1	25.8	12.1	0.0	-	2.1	96.8	1.1	0.0	-	-
Total %	4.4	1.9	5.7	0.0	12.1	1.2	36.8	2.3	0.0	40.2	4.4	1.8	0.9	0.0	7.1	0.9	39.2	0.4	0.0	40.5	-
PHF	0.603	0.450	0.828	0.000	0.875	0.393	0.867	0.583	0.000	0.816	0.732	0.607	0.500	0.000	0.868	0.667	0.856	0.500	0.000	0.868	0.847
All Vehicles (no classification)	41	18	53	0	112	11	340	21	0	372	41	17	8	0	66	8	363	4	0	375	925
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

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Count Name: SR-69 at Blythe ST. in Paris Tn  
Site Code: STA-3  
Start Date: 02/21/2019  
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Turning Movement Peak Hour Data Plot (11:00 AM)

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Count Name: SR-69 at Blythe ST. in Paris Tn  
Site Code: STA-3  
Start Date: 02/21/2019  
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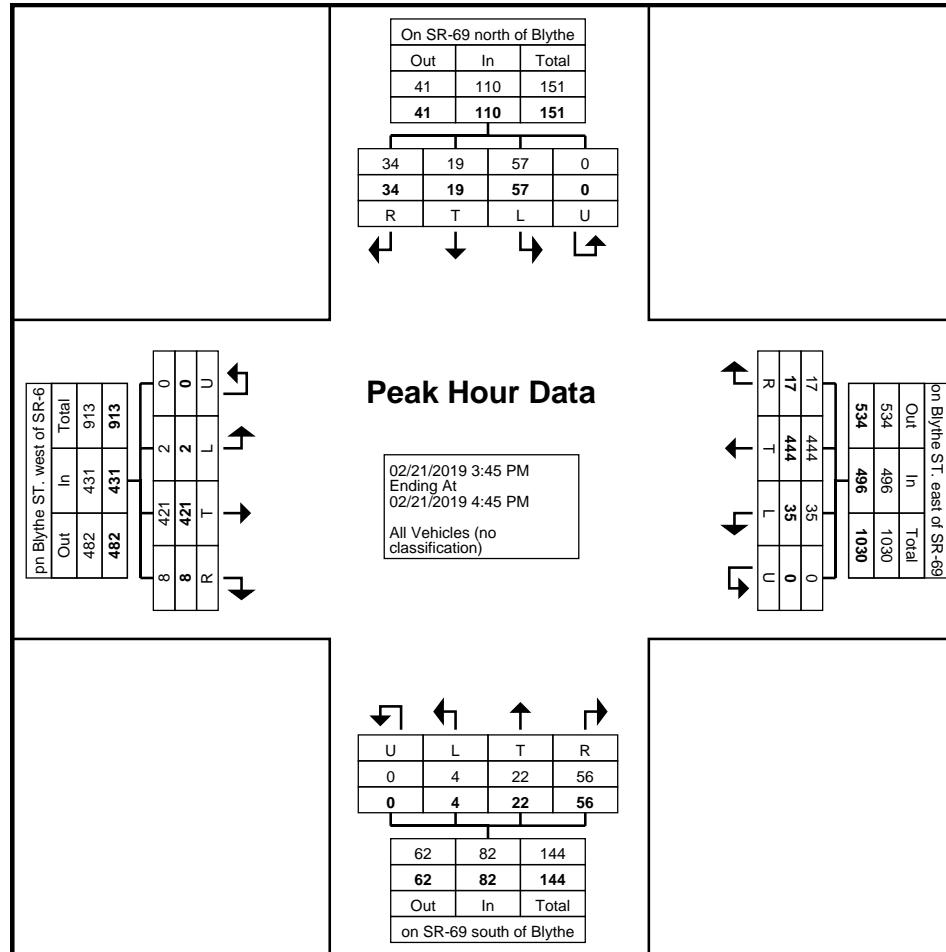
### Turning Movement Peak Hour Data (3:45 PM)

Start Time	On SR-69 north of Blythe ST.					on Blythe ST. east of SR-69					on SR-69 south of Blythe St.					pn Blythe ST. west of SR-69 in Paris Tn					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
3:45 PM	4	4	12	0	20	3	106	11	0	120	18	10	0	0	28	3	105	0	0	108	276
4:00 PM	15	6	11	0	32	7	102	12	0	121	13	5	1	0	19	3	103	1	0	107	279
4:15 PM	12	5	9	0	26	4	110	8	0	122	11	5	2	0	18	1	92	0	0	93	259
4:30 PM	3	4	25	0	32	3	126	4	0	133	14	2	1	0	17	1	121	1	0	123	305
Total	34	19	57	0	110	17	444	35	0	496	56	22	4	0	82	8	421	2	0	431	1119
Approach %	30.9	17.3	51.8	0.0	-	3.4	89.5	7.1	0.0	-	68.3	26.8	4.9	0.0	-	1.9	97.7	0.5	0.0	-	-
Total %	3.0	1.7	5.1	0.0	9.8	1.5	39.7	3.1	0.0	44.3	5.0	2.0	0.4	0.0	7.3	0.7	37.6	0.2	0.0	38.5	-
PHF	0.567	0.792	0.570	0.000	0.859	0.607	0.881	0.729	0.000	0.932	0.778	0.550	0.500	0.000	0.732	0.667	0.870	0.500	0.000	0.876	0.917
All Vehicles (no classification)	34	19	57	0	110	17	444	35	0	496	56	22	4	0	82	8	421	2	0	431	1119
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

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Count Name: SR-69 at Blythe ST. in Paris Tn  
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Turning Movement Peak Hour Data Plot (3:45 PM)

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Count Name: SR-69 at Blythe ST. in Paris Tn  
Site Code: STA-3  
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Count Name: SR-69 at Irvine ST. in Paris Tn  
Site Code: STA-5  
Start Date: 02/21/2019  
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**Turning Movement Data**

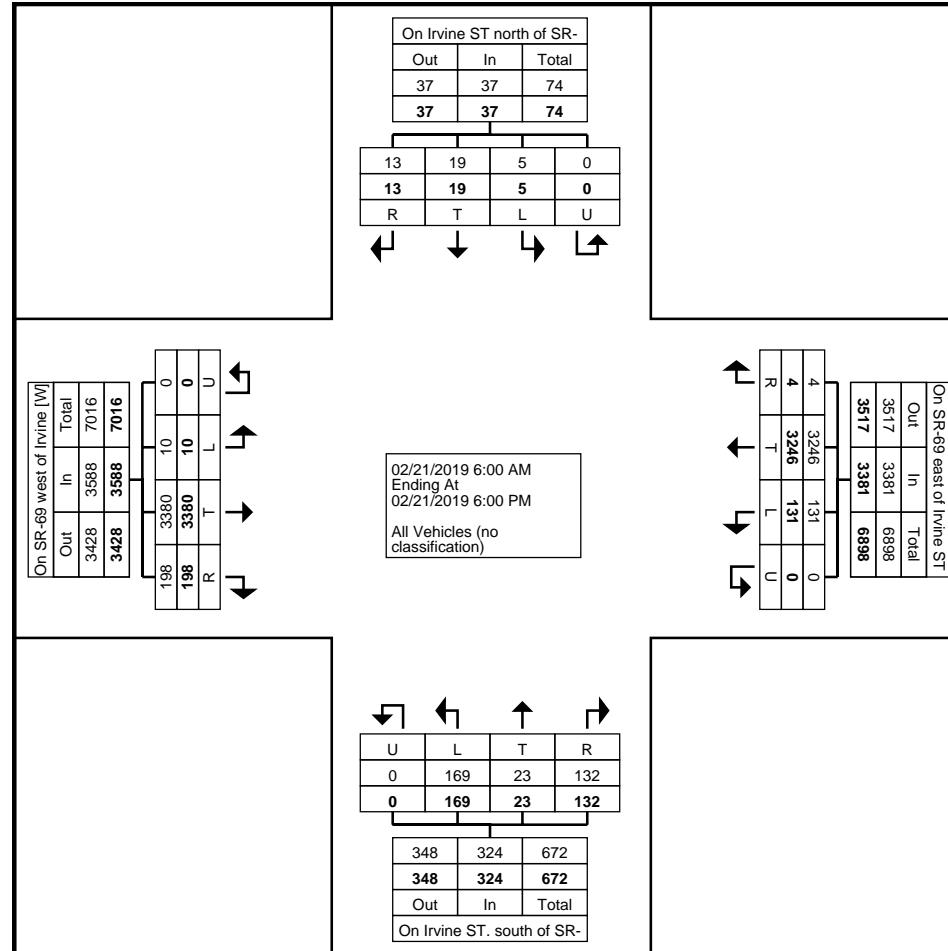
Start Time	On Irvine ST north of SR-69					On SR-69 east of Irvine ST					On Irvine ST. south of SR-69					On SR-69 west of Irvine					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
6:00 AM	0	0	0	0	0	0	32	0	0	32	2	0	0	0	2	0	31	0	0	31	65	
6:15 AM	0	0	0	0	0	0	49	1	0	50	0	1	1	0	2	0	35	0	0	35	87	
6:30 AM	0	1	0	0	1	0	57	3	0	60	2	2	0	0	4	0	63	0	0	63	128	
6:45 AM	0	0	0	0	0	0	50	3	0	53	0	0	1	0	1	5	63	1	0	69	123	
Hourly Total	0	1	0	0	1	0	188	7	0	195	4	3	2	0	9	5	192	1	0	198	403	
7:00 AM	0	0	0	0	0	0	48	1	0	49	2	0	3	0	5	4	69	0	0	73	127	
7:15 AM	0	0	0	0	0	0	64	4	0	68	1	0	5	0	6	2	87	0	0	89	163	
7:30 AM	0	0	0	0	0	0	57	5	0	62	3	0	2	0	5	10	108	0	0	118	185	
7:45 AM	0	1	0	0	1	0	72	2	0	74	1	0	3	0	4	9	96	0	0	105	184	
Hourly Total	0	1	0	0	1	0	241	12	0	253	7	0	13	0	20	25	360	0	0	385	659	
8:00 AM	0	1	0	0	1	0	57	3	0	60	1	0	2	0	3	5	74	0	0	79	143	
8:15 AM	0	0	0	0	0	0	52	3	0	55	3	1	2	0	6	4	63	0	0	67	128	
8:30 AM	0	0	0	0	0	0	44	5	0	49	3	0	2	0	5	1	69	0	0	70	124	
8:45 AM	0	0	0	0	0	0	44	5	0	49	5	0	4	0	9	4	55	0	0	59	117	
Hourly Total	0	1	0	0	1	0	197	16	0	213	12	1	10	0	23	14	261	0	0	275	512	
9:00 AM	0	0	0	0	0	1	53	1	0	55	4	0	4	0	8	5	61	0	0	66	129	
9:15 AM	0	1	0	0	1	0	57	0	0	57	2	1	3	0	6	3	73	1	0	77	141	
9:30 AM	0	1	0	0	1	0	54	1	0	55	1	1	1	0	3	7	53	0	0	60	119	
9:45 AM	0	1	0	0	1	0	51	3	0	54	3	0	4	0	7	5	55	0	0	60	122	
Hourly Total	0	3	0	0	3	1	215	5	0	221	10	2	12	0	24	20	242	1	0	263	511	
10:00 AM	0	0	0	0	0	0	37	0	0	37	4	0	1	0	5	0	59	1	0	60	102	
10:15 AM	0	0	0	0	0	0	66	4	0	70	3	1	2	0	6	4	53	0	0	57	133	
10:30 AM	0	0	0	0	0	0	56	1	0	57	1	0	3	0	4	4	66	0	0	70	131	
10:45 AM	1	0	1	0	2	0	60	1	0	61	1	1	1	0	3	5	66	1	0	72	138	
Hourly Total	1	0	1	0	2	0	219	6	0	225	9	2	7	0	18	13	244	2	0	259	504	
11:00 AM	1	0	0	0	1	0	63	2	0	65	5	1	6	0	12	3	71	0	0	74	152	
11:15 AM	0	0	0	0	0	0	52	3	0	55	4	0	1	0	5	4	68	0	0	72	132	
11:30 AM	0	0	1	0	1	0	71	2	0	73	1	0	3	0	4	3	77	0	0	80	158	
11:45 AM	2	1	0	0	3	0	67	4	0	71	2	0	3	0	5	5	78	0	0	83	162	
Hourly Total	3	1	1	0	5	0	253	11	0	264	12	1	13	0	26	15	294	0	0	309	604	
12:00 PM	0	1	0	0	1	0	70	1	0	71	2	2	5	0	9	5	72	0	0	77	158	
12:15 PM	0	0	0	0	0	0	76	3	0	79	3	1	2	0	6	2	71	0	0	73	158	
12:30 PM	1	0	0	0	1	0	68	2	0	70	0	1	3	0	4	4	63	0	0	67	142	
12:45 PM	2	0	0	0	2	0	70	2	0	72	2	1	11	0	14	6	76	0	0	82	170	
Hourly Total	3	1	0	0	4	0	284	8	0	292	7	5	21	0	33	17	282	0	0	299	628	
1:00 PM	0	2	0	0	2	0	80	4	0	84	6	0	4	0	10	3	73	0	0	76	172	
1:15 PM	0	0	0	0	0	0	66	5	0	71	5	1	5	0	11	7	59	0	0	66	148	
1:30 PM	0	0	0	0	0	0	63	3	0	66	4	0	2	0	6	7	71	0	0	78	150	
1:45 PM	0	1	0	0	1	0	65	2	0	67	5	0	4	0	9	3	59	0	0	62	139	
Hourly Total	0	3	0	0	3	0	274	14	0	288	20	1	15	0	36	20	262	0	0	282	609	
2:00 PM	0	0	0	0	0	1	73	4	0	78	1	0	1	0	2	4	70	1	0	75	155	

2:15 PM	0	1	0	0	1	0	67	2	0	69	5	0	4	0	9	1	45	0	0	46	125
2:30 PM	1	0	1	0	2	0	86	5	0	91	1	1	5	0	7	2	62	0	0	64	164
2:45 PM	0	0	0	0	0	0	77	3	0	80	1	0	4	0	5	4	76	0	0	80	165
Hourly Total	1	1	1	0	3	1	303	14	0	318	8	1	14	0	23	11	253	1	0	265	609
3:00 PM	1	1	0	0	2	1	69	6	0	76	8	0	5	0	13	10	74	0	0	84	175
3:15 PM	0	0	0	0	0	0	86	2	0	88	5	0	10	0	15	8	78	1	0	87	190
3:30 PM	0	1	0	0	1	0	110	2	0	112	5	0	4	0	9	4	93	1	0	98	220
3:45 PM	0	1	0	0	1	0	66	4	0	70	2	1	6	0	9	7	118	0	0	125	205
Hourly Total	1	3	0	0	4	1	331	14	0	346	20	1	25	0	46	29	363	2	0	394	790
4:00 PM	0	1	0	0	1	0	83	1	0	84	1	0	6	0	7	5	87	1	0	93	185
4:15 PM	1	0	0	0	1	0	106	5	0	111	3	1	7	0	11	3	92	0	0	95	218
4:30 PM	1	1	0	0	2	0	108	4	0	112	7	3	6	0	16	5	95	1	0	101	231
4:45 PM	0	1	1	0	2	0	95	3	0	98	3	0	4	0	7	4	78	0	0	82	189
Hourly Total	2	3	1	0	6	0	392	13	0	405	14	4	23	0	41	17	352	2	0	371	823
5:00 PM	2	0	0	0	2	0	94	4	0	98	3	0	2	0	5	4	78	0	0	82	187
5:15 PM	0	0	0	0	0	0	84	4	0	88	3	0	6	0	9	2	72	1	0	75	172
5:30 PM	0	1	0	0	1	1	87	1	0	89	1	1	4	0	6	3	54	0	0	57	153
5:45 PM	0	0	1	0	1	0	84	2	0	86	2	1	2	0	5	3	71	0	0	74	166
Hourly Total	2	1	1	0	4	1	349	11	0	361	9	2	14	0	25	12	275	1	0	288	678
Grand Total	13	19	5	0	37	4	3246	131	0	3381	132	23	169	0	324	198	3380	10	0	3588	7330
Approach %	35.1	51.4	13.5	0.0	-	0.1	96.0	3.9	0.0	-	40.7	7.1	52.2	0.0	-	5.5	94.2	0.3	0.0	-	-
Total %	0.2	0.3	0.1	0.0	0.5	0.1	44.3	1.8	0.0	46.1	1.8	0.3	2.3	0.0	4.4	2.7	46.1	0.1	0.0	48.9	-
All Vehicles (no classification)	13	19	5	0	37	4	3246	131	0	3381	132	23	169	0	324	198	3380	10	0	3588	7330
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-69 at Irvine ST. in Paris Tn  
Site Code: STA-5  
Start Date: 02/21/2019  
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Turning Movement Data Plot

State Of Tennessee (TDOT)  
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Count Name: SR-69 at Irvine ST. in Paris Tn  
Site Code: STA-5  
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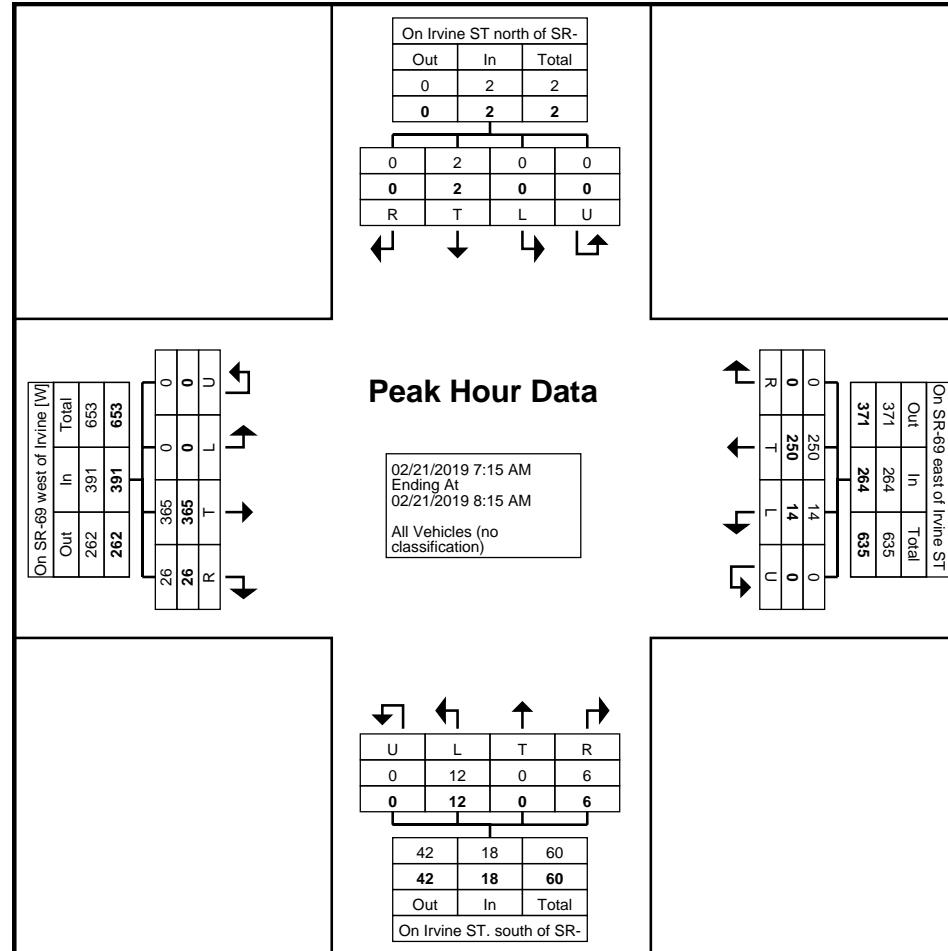
**Turning Movement Peak Hour Data (7:15 AM)**

Start Time	On Irvine ST north of SR-69					On SR-69 east of Irvine ST					On Irvine ST. south of SR-69					On SR-69 west of Irvine					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:15 AM	0	0	0	0	0	0	64	4	0	68	1	0	5	0	6	2	87	0	0	89	163
7:30 AM	0	0	0	0	0	0	57	5	0	62	3	0	2	0	5	10	108	0	0	118	185
7:45 AM	0	1	0	0	1	0	72	2	0	74	1	0	3	0	4	9	96	0	0	105	184
8:00 AM	0	1	0	0	1	0	57	3	0	60	1	0	2	0	3	5	74	0	0	79	143
Total	0	2	0	0	2	0	250	14	0	264	6	0	12	0	18	26	365	0	0	391	675
Approach %	0.0	100.0	0.0	0.0	-	0.0	94.7	5.3	0.0	-	33.3	0.0	66.7	0.0	-	6.6	93.4	0.0	0.0	-	-
Total %	0.0	0.3	0.0	0.0	0.3	0.0	37.0	2.1	0.0	39.1	0.9	0.0	1.8	0.0	2.7	3.9	54.1	0.0	0.0	57.9	-
PHF	0.000	0.500	0.000	0.000	0.500	0.000	0.868	0.700	0.000	0.892	0.500	0.000	0.600	0.000	0.750	0.650	0.845	0.000	0.000	0.828	0.912
All Vehicles (no classification)	0	2	0	0	2	0	250	14	0	264	6	0	12	0	18	26	365	0	0	391	675
% All Vehicles (no classification)	-	100.0	-	-	100.0	-	100.0	100.0	-	100.0	100.0	-	100.0	-	100.0	100.0	100.0	-	-	100.0	100.0

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Count Name: SR-69 at Irvine ST. in Paris Tn  
Site Code: STA-5  
Start Date: 02/21/2019  
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Turning Movement Peak Hour Data Plot (7:15 AM)

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Count Name: SR-69 at Irvine ST. in Paris Tn  
Site Code: STA-5  
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Page No: 6

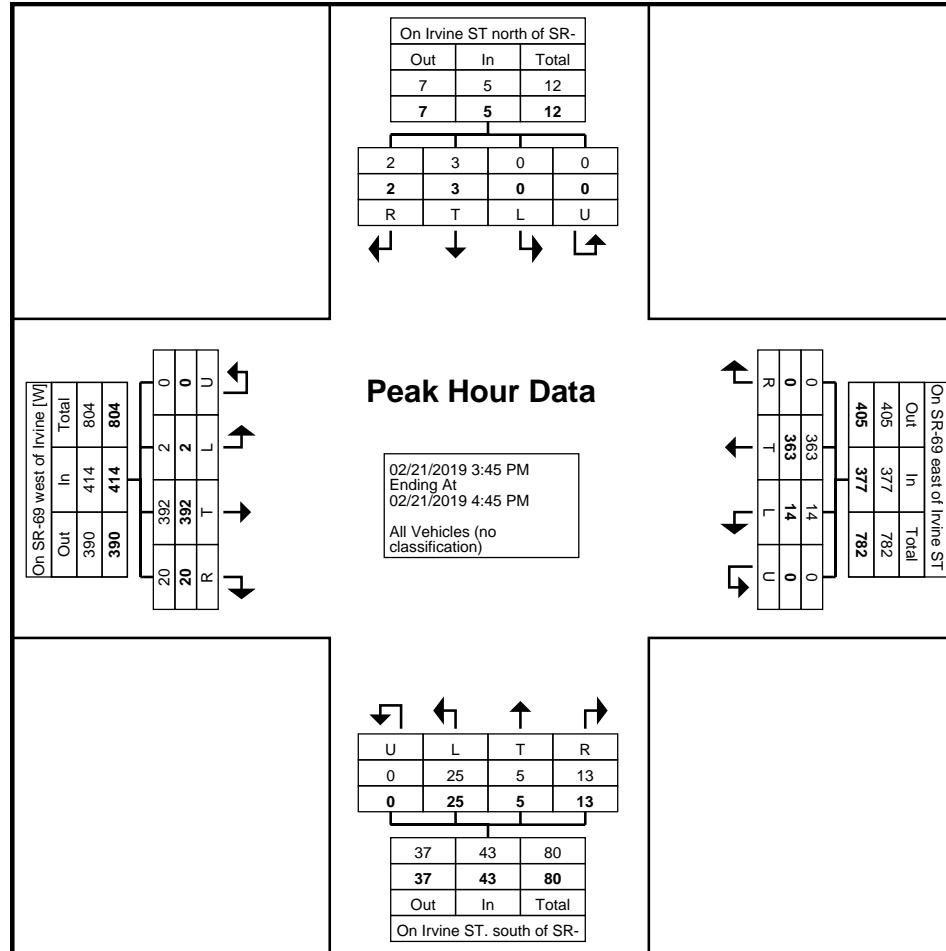
**Turning Movement Peak Hour Data (3:45 PM)**

Start Time	On Irvine ST north of SR-69					On SR-69 east of Irvine ST					On Irvine ST. south of SR-69					On SR-69 west of Irvine					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
3:45 PM	0	1	0	0	1	0	66	4	0	70	2	1	6	0	9	7	118	0	0	125	205
4:00 PM	0	1	0	0	1	0	83	1	0	84	1	0	6	0	7	5	87	1	0	93	185
4:15 PM	1	0	0	0	1	0	106	5	0	111	3	1	7	0	11	3	92	0	0	95	218
4:30 PM	1	1	0	0	2	0	108	4	0	112	7	3	6	0	16	5	95	1	0	101	231
Total	2	3	0	0	5	0	363	14	0	377	13	5	25	0	43	20	392	2	0	414	839
Approach %	40.0	60.0	0.0	0.0	-	0.0	96.3	3.7	0.0	-	30.2	11.6	58.1	0.0	-	4.8	94.7	0.5	0.0	-	-
Total %	0.2	0.4	0.0	0.0	0.6	0.0	43.3	1.7	0.0	44.9	1.5	0.6	3.0	0.0	5.1	2.4	46.7	0.2	0.0	49.3	-
PHF	0.500	0.750	0.000	0.000	0.625	0.000	0.840	0.700	0.000	0.842	0.464	0.417	0.893	0.000	0.672	0.714	0.831	0.500	0.000	0.828	0.908
All Vehicles (no classification)	2	3	0	0	5	0	363	14	0	377	13	5	25	0	43	20	392	2	0	414	839
% All Vehicles (no classification)	100.0	100.0	-	-	100.0	-	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	-	100.0	100.0

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Count Name: SR-69 at Irvine ST. in Paris Tn  
Site Code: STA-5  
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Turning Movement Peak Hour Data Plot (3:45 PM)

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Count Name: SR-69 at Irvine ST. in Paris Tn  
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Count Name: SR-69 at Jim Adams Dr in Paris  
TN  
Site Code: STA-6  
Start Date: 02/20/2019  
Page No: 1

### Turning Movement Data

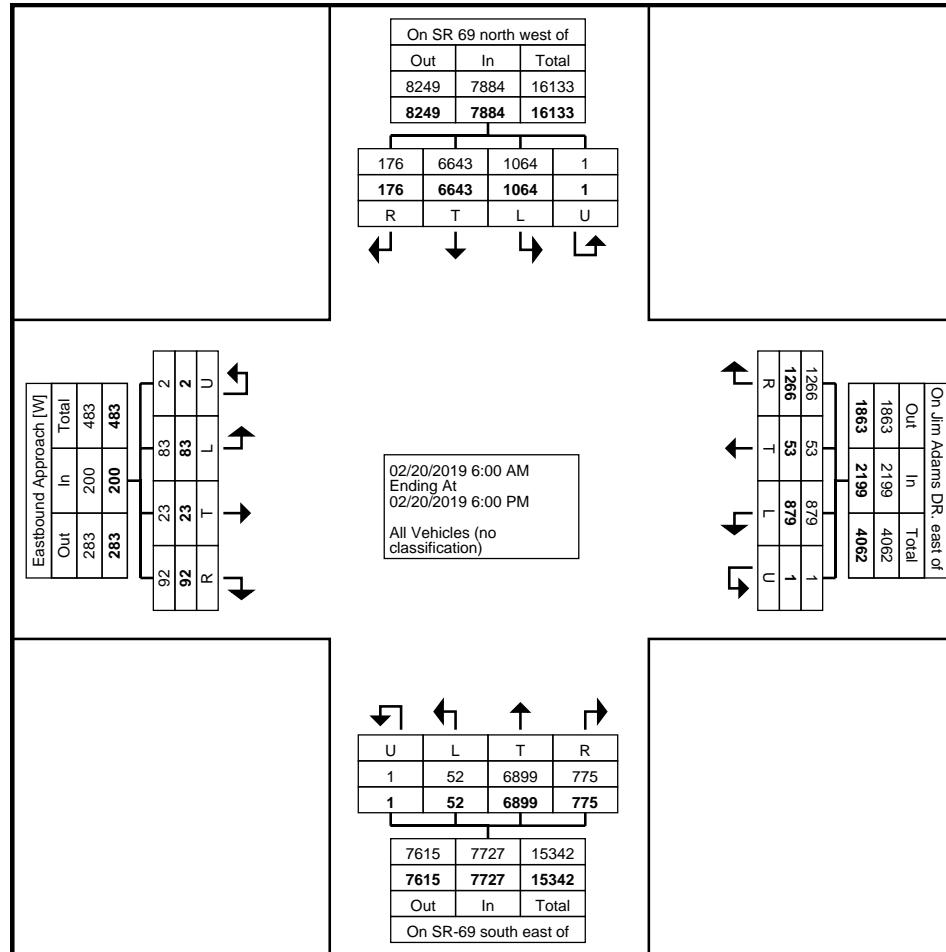
Start Time	On SR 69 north west of Jim Adams Dr.					On Jim Adams DR. east of SR-69					On SR-69 south east of Jim Adams DR.					Eastbound Approach					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
6:00 AM	0	25	7	0	32	8	2	1	1	12	3	47	0	0	50	0	0	1	0	1	95	
6:15 AM	1	37	7	0	45	4	0	0	0	4	3	55	1	0	59	0	0	0	0	0	108	
6:30 AM	4	49	9	0	62	12	0	2	0	14	3	79	2	0	84	0	1	1	0	2	162	
6:45 AM	5	81	18	0	104	13	2	5	0	20	4	93	0	0	97	0	0	1	0	1	222	
Hourly Total	10	192	41	0	243	37	4	8	1	50	13	274	3	0	290	0	1	3	0	4	587	
7:00 AM	4	61	23	0	88	9	1	2	0	12	5	80	1	0	86	1	0	1	0	2	188	
7:15 AM	4	66	38	0	108	25	3	2	0	30	2	94	1	0	97	2	0	0	0	2	237	
7:30 AM	3	113	50	0	166	30	2	2	0	34	5	161	0	0	166	0	0	0	0	0	366	
7:45 AM	9	117	48	0	174	28	2	10	0	40	6	154	0	0	160	2	1	0	0	3	377	
Hourly Total	20	357	159	0	536	92	8	16	0	116	18	489	2	0	509	5	1	1	0	7	1168	
8:00 AM	5	95	23	0	123	16	0	12	0	28	8	142	1	0	151	0	1	1	0	2	304	
8:15 AM	1	83	18	0	102	14	1	7	0	22	12	109	2	0	123	0	1	0	0	1	248	
8:30 AM	4	97	15	0	116	20	0	11	0	31	6	117	1	0	124	3	3	0	0	6	277	
8:45 AM	0	109	18	0	127	23	0	10	0	33	7	121	0	0	128	2	0	0	0	2	290	
Hourly Total	10	384	74	0	468	73	1	40	0	114	33	489	4	0	526	5	5	1	0	11	1119	
9:00 AM	3	105	20	0	128	20	2	11	0	33	16	119	0	0	135	0	1	3	0	4	300	
9:15 AM	2	104	26	0	132	24	2	15	0	41	11	107	1	0	119	1	0	0	0	1	293	
9:30 AM	2	106	16	0	124	21	2	11	0	34	7	112	2	0	121	2	1	1	0	4	283	
9:45 AM	5	106	22	0	133	31	1	18	0	50	12	121	0	0	133	1	0	3	0	4	320	
Hourly Total	12	421	84	0	517	96	7	55	0	158	46	459	3	0	508	4	2	7	0	13	1196	
10:00 AM	0	128	16	0	144	24	1	13	0	38	15	119	0	0	134	2	0	1	0	3	319	
10:15 AM	2	135	25	0	162	12	1	18	0	31	11	121	0	0	132	0	0	3	0	3	328	
10:30 AM	2	132	10	0	144	24	1	14	0	39	14	115	1	0	130	0	1	1	0	2	315	
10:45 AM	6	153	29	0	188	26	3	24	0	53	18	139	0	0	157	1	0	0	1	2	400	
Hourly Total	10	548	80	0	638	86	6	69	0	161	58	494	1	0	553	3	1	5	1	10	1362	
11:00 AM	3	164	14	0	181	25	1	30	0	56	19	175	0	0	194	7	0	0	0	7	438	
11:15 AM	6	144	14	0	164	41	2	32	0	75	22	151	1	0	174	3	0	4	0	7	420	
11:30 AM	13	189	24	0	226	36	3	32	0	71	24	173	2	0	199	5	0	1	0	6	502	
11:45 AM	6	175	30	0	211	27	0	35	0	62	22	172	1	0	195	4	0	1	0	5	473	
Hourly Total	28	672	82	0	782	129	6	129	0	264	87	671	4	0	762	19	0	6	0	25	1833	
12:00 PM	3	176	26	0	205	49	3	35	0	87	27	183	0	1	211	7	2	4	0	13	516	
12:15 PM	7	190	29	0	226	26	3	26	0	55	24	187	3	0	214	6	0	3	0	9	504	
12:30 PM	5	158	23	0	186	30	0	33	0	63	18	185	2	0	205	5	1	3	0	9	463	
12:45 PM	2	180	23	1	206	20	0	24	0	44	29	176	2	0	207	4	0	4	0	8	465	
Hourly Total	17	704	101	1	823	125	6	118	0	249	98	731	7	1	837	22	3	14	0	39	1948	
1:00 PM	1	173	26	0	200	40	1	19	0	60	27	168	1	0	196	1	0	3	0	4	460	
1:15 PM	2	149	25	0	176	21	1	20	0	42	15	188	0	0	203	0	0	1	0	1	422	
1:30 PM	3	155	29	0	187	24	0	15	0	39	19	154	0	0	173	0	0	2	0	2	401	
1:45 PM	0	144	29	0	173	35	4	19	0	58	27	153	0	0	180	0	0	0	0	0	411	
Hourly Total	6	621	109	0	736	120	6	73	0	199	88	663	1	0	752	1	0	6	0	7	1694	
2:00 PM	2	150	23	0	175	20	1	18	0	39	31	162	1	0	194	1	0	2	0	3	411	



State Of Tennessee (TDOT)  
Address

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Count Name: SR-69 at Jim Adams Dr in Paris  
TN  
Site Code: STA-6  
Start Date: 02/20/2019  
Page No: 3



Turning Movement Data Plot

State Of Tennessee (TDOT)  
Address

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Count Name: SR-69 at Jim Adams Dr in Paris  
TN  
Site Code: STA-6  
Start Date: 02/20/2019  
Page No: 4

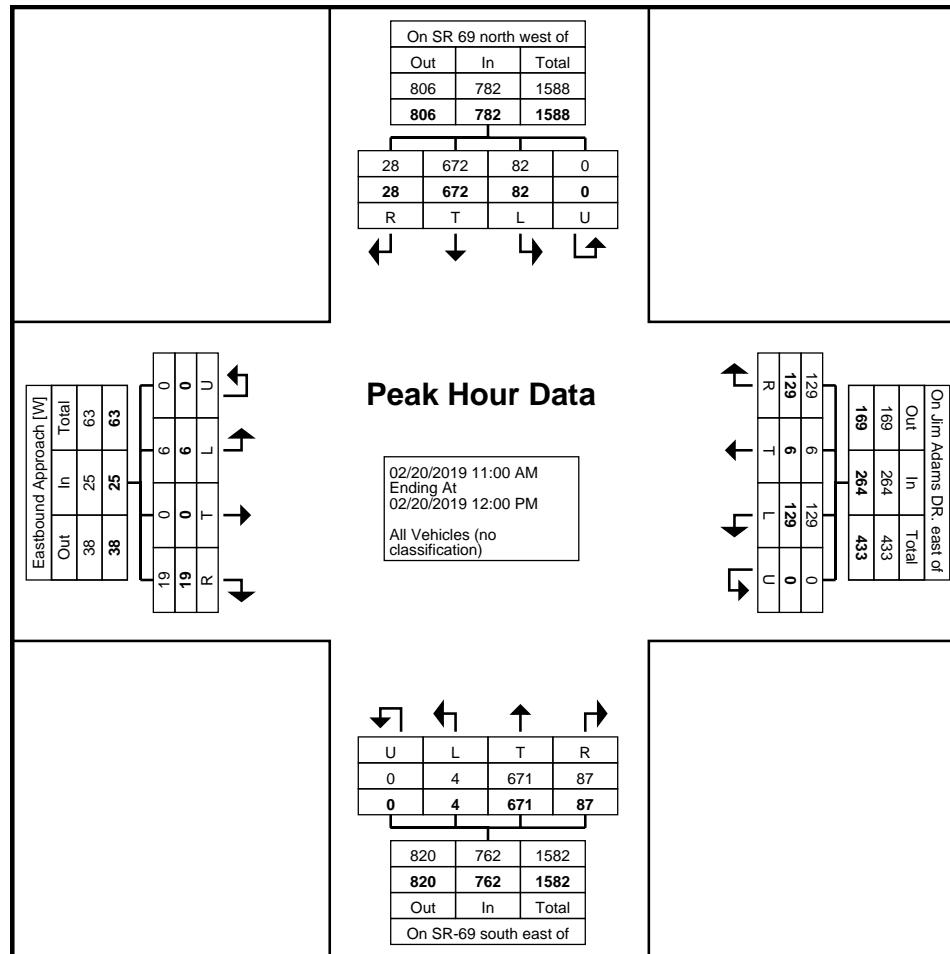
### Turning Movement Peak Hour Data (11:00 AM)

Start Time	On SR 69 north west of Jim Adams Dr.					On Jim Adams DR. east of SR-69					On SR-69 south east of Jim Adams DR.					Eastbound Approach					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
11:00 AM	3	164	14	0	181	25	1	30	0	56	19	175	0	0	194	7	0	0	0	7	438	
11:15 AM	6	144	14	0	164	41	2	32	0	75	22	151	1	0	174	3	0	4	0	7	420	
11:30 AM	13	189	24	0	226	36	3	32	0	71	24	173	2	0	199	5	0	1	0	6	502	
11:45 AM	6	175	30	0	211	27	0	35	0	62	22	172	1	0	195	4	0	1	0	5	473	
Total	28	672	82	0	782	129	6	129	0	264	87	671	4	0	762	19	0	6	0	25	1833	
Approach %	3.6	85.9	10.5	0.0	-	48.9	2.3	48.9	0.0	-	11.4	88.1	0.5	0.0	-	76.0	0.0	24.0	0.0	-	-	
Total %	1.5	36.7	4.5	0.0	42.7	7.0	0.3	7.0	0.0	14.4	4.7	36.6	0.2	0.0	41.6	1.0	0.0	0.3	0.0	1.4	-	
PHF	0.538	0.889	0.683	0.000	0.865	0.787	0.500	0.921	0.000	0.880	0.906	0.959	0.500	0.000	0.957	0.679	0.000	0.375	0.000	0.893	0.913	
All Vehicles (no classification)	28	672	82	0	782	129	6	129	0	264	87	671	4	0	762	19	0	6	0	25	1833	
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	-	100.0	-	100.0	100.0	100.0	

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Count Name: SR-69 at Jim Adams Dr in Paris  
TN  
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Start Date: 02/20/2019  
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Turning Movement Peak Hour Data Plot (11:00 AM)

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Count Name: SR-69 at Jim Adams Dr in Paris  
TN  
Site Code: STA-6  
Start Date: 02/20/2019  
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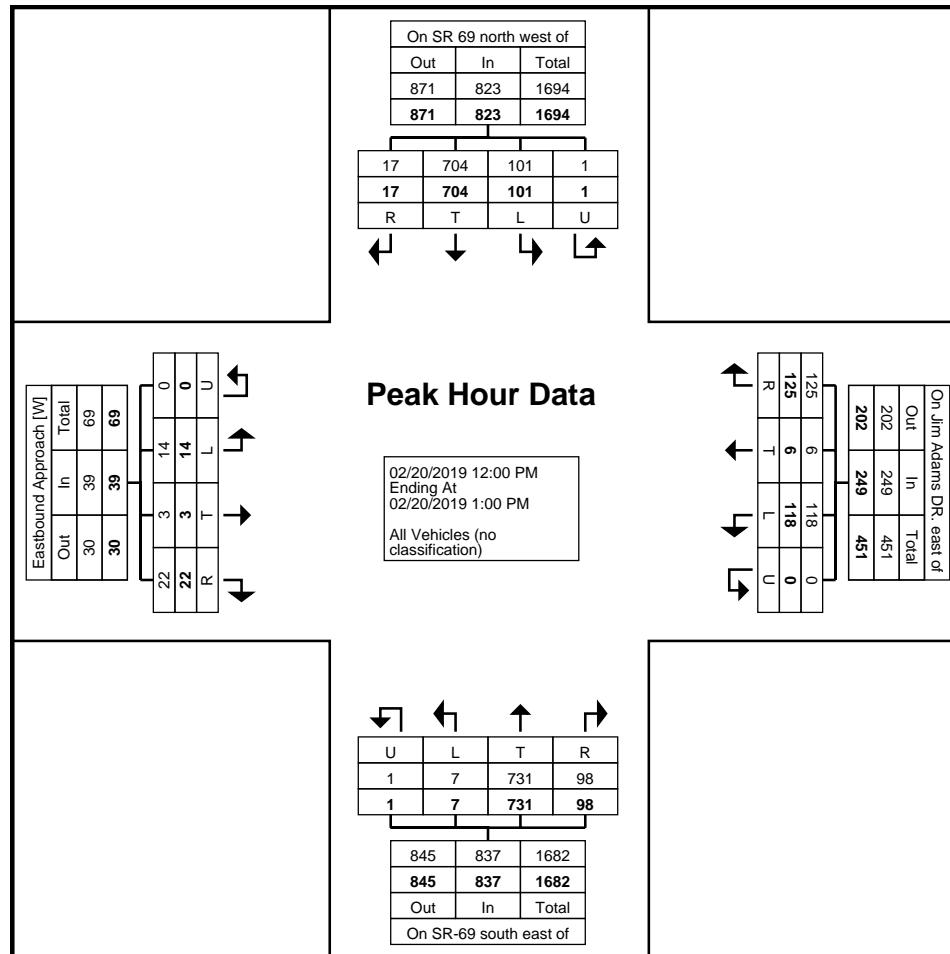
### Turning Movement Peak Hour Data (12:00 PM)

Start Time	On SR 69 north west of Jim Adams Dr.					On Jim Adams DR. east of SR-69					On SR-69 south east of Jim Adams DR.					Eastbound Approach					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
12:00 PM	3	176	26	0	205	49	3	35	0	87	27	183	0	1	211	7	2	4	0	13	516	
12:15 PM	7	190	29	0	226	26	3	26	0	55	24	187	3	0	214	6	0	3	0	9	504	
12:30 PM	5	158	23	0	186	30	0	33	0	63	18	185	2	0	205	5	1	3	0	9	463	
12:45 PM	2	180	23	1	206	20	0	24	0	44	29	176	2	0	207	4	0	4	0	8	465	
Total	17	704	101	1	823	125	6	118	0	249	98	731	7	1	837	22	3	14	0	39	1948	
Approach %	2.1	85.5	12.3	0.1	-	50.2	2.4	47.4	0.0	-	11.7	87.3	0.8	0.1	-	56.4	7.7	35.9	0.0	-	-	
Total %	0.9	36.1	5.2	0.1	42.2	6.4	0.3	6.1	0.0	12.8	5.0	37.5	0.4	0.1	43.0	1.1	0.2	0.7	0.0	2.0	-	
PHF	0.607	0.926	0.871	0.250	0.910	0.638	0.500	0.843	0.000	0.716	0.845	0.977	0.583	0.250	0.978	0.786	0.375	0.875	0.000	0.750	0.944	
All Vehicles (no classification)	17	704	101	1	823	125	6	118	0	249	98	731	7	1	837	22	3	14	0	39	1948	
% All Vehicles (no classification)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0		

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Count Name: SR-69 at Jim Adams Dr in Paris  
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Turning Movement Peak Hour Data Plot (12:00 PM)

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Count Name: SR-69 at Jim Adams Dr in Paris  
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Count Name: SR-69 at Mineral Wells  
Site Code: STA-8  
Start Date: 02/20/2019  
Page No: 1

**Turning Movement Data**

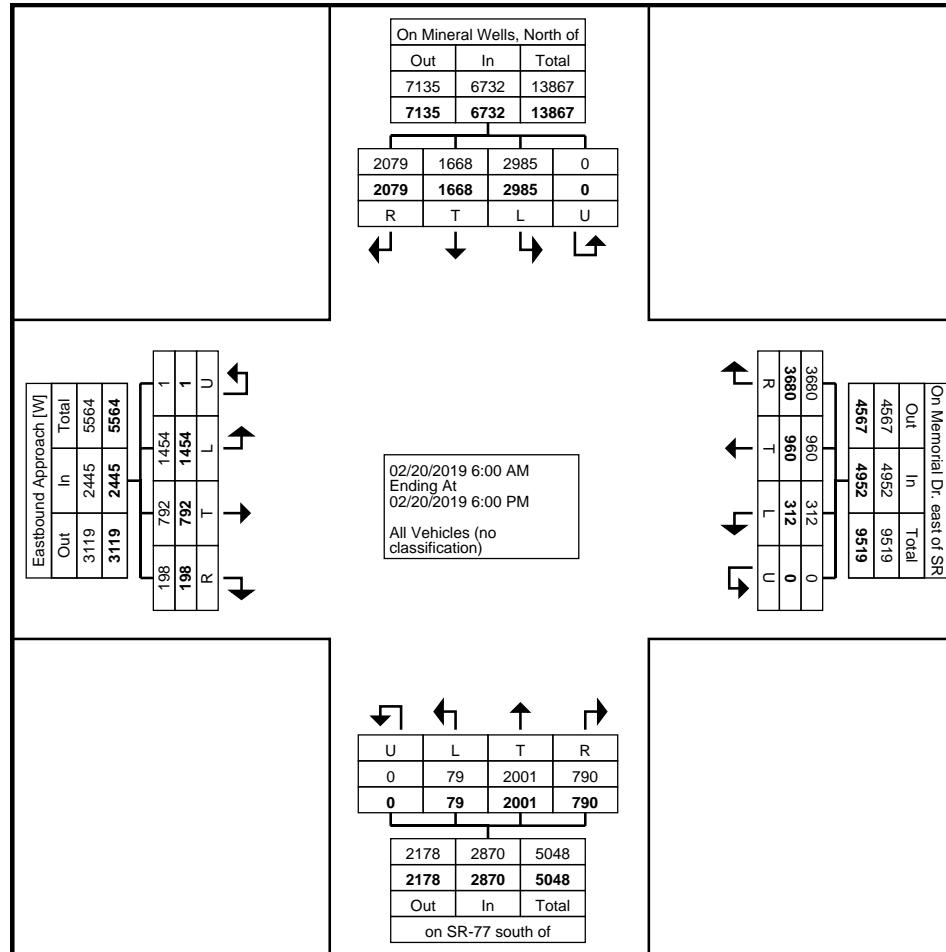
Start Time	On Mineral Wells, North of SR-77					On Memorial Dr. east of SR-77					on SR-77 south of Memorial Dr.					Eastbound Approach					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
6:00 AM	8	6	20	0	34	38	4	1	0	43	4	12	0	0	16	0	3	1	0	4	97	
6:15 AM	6	6	30	0	42	38	8	0	0	46	7	21	0	0	28	0	4	5	0	9	125	
6:30 AM	15	10	30	0	55	44	4	0	0	48	11	32	0	0	43	0	1	5	0	6	152	
6:45 AM	14	19	51	0	84	57	7	0	0	64	9	33	0	0	42	0	6	9	0	15	205	
Hourly Total	43	41	131	0	215	177	23	1	0	201	31	98	0	0	129	0	14	20	0	34	579	
7:00 AM	12	7	29	0	48	64	24	0	0	88	42	22	1	0	65	0	12	23	0	35	236	
7:15 AM	6	15	48	0	69	68	21	2	0	91	26	20	0	0	46	0	13	21	0	34	240	
7:30 AM	20	21	43	0	84	124	22	4	0	150	40	51	0	0	91	0	11	12	0	23	348	
7:45 AM	30	35	57	0	122	110	18	8	0	136	13	58	0	0	71	3	13	28	0	44	373	
Hourly Total	68	78	177	0	323	366	85	14	0	465	121	151	1	0	273	3	49	84	0	136	1197	
8:00 AM	26	26	38	0	90	90	16	5	0	111	8	47	0	0	55	0	10	11	0	21	277	
8:15 AM	19	21	26	0	66	66	7	7	0	80	17	26	1	0	44	0	16	14	0	30	220	
8:30 AM	27	14	53	0	94	90	12	4	0	106	14	27	0	0	41	1	14	14	0	29	270	
8:45 AM	31	27	38	0	96	84	10	4	0	98	14	22	2	0	38	2	17	17	0	36	268	
Hourly Total	103	88	155	0	346	330	45	20	0	395	53	122	3	0	178	3	57	56	0	116	1035	
9:00 AM	32	26	36	0	94	66	17	6	0	89	14	38	0	0	52	0	3	18	0	21	256	
9:15 AM	34	28	54	0	116	66	14	5	0	85	12	30	0	0	42	0	8	15	0	23	266	
9:30 AM	41	23	41	0	105	68	19	6	0	93	12	34	0	0	46	0	2	22	0	24	268	
9:45 AM	35	17	48	0	100	67	19	4	0	90	13	30	0	0	43	0	14	26	0	40	273	
Hourly Total	142	94	179	0	415	267	69	21	0	357	51	132	0	0	183	0	27	81	0	108	1063	
10:00 AM	44	30	47	0	121	50	20	4	0	74	12	43	1	0	56	4	10	23	0	37	288	
10:15 AM	49	25	61	0	135	69	18	5	0	92	17	28	4	0	49	2	9	24	0	35	311	
10:30 AM	40	22	49	0	111	75	15	4	0	94	19	40	3	0	62	2	14	26	0	42	309	
10:45 AM	44	29	93	0	166	87	16	7	0	110	13	38	3	0	54	2	17	31	0	50	380	
Hourly Total	177	106	250	0	533	281	69	20	0	370	61	149	11	0	221	10	50	104	0	164	1288	
11:00 AM	59	32	79	0	170	94	14	7	0	115	7	35	3	0	45	7	9	37	0	53	383	
11:15 AM	52	32	55	0	139	108	28	5	0	141	15	44	1	0	60	5	14	32	0	51	391	
11:30 AM	65	42	79	0	186	92	24	6	0	122	9	35	0	0	44	6	18	42	1	67	419	
11:45 AM	49	38	85	0	172	87	15	7	0	109	21	50	1	0	72	3	23	40	0	66	419	
Hourly Total	225	144	298	0	667	381	81	25	0	487	52	164	5	0	221	21	64	151	1	237	1612	
12:00 PM	71	28	70	0	169	98	27	5	0	130	18	70	3	0	91	4	26	30	0	60	450	
12:15 PM	71	50	75	0	196	91	31	7	0	129	21	40	3	0	64	8	18	44	0	70	459	
12:30 PM	49	30	67	0	146	72	23	12	0	107	15	44	2	0	61	7	28	45	0	80	394	
12:45 PM	48	57	75	0	180	75	21	9	0	105	17	51	0	0	68	8	26	35	0	69	422	
Hourly Total	239	165	287	0	691	336	102	33	0	471	71	205	8	0	284	27	98	154	0	279	1725	
1:00 PM	51	37	84	0	172	53	26	3	0	82	17	56	3	0	76	11	18	46	0	75	405	
1:15 PM	53	33	96	0	182	89	22	13	0	124	19	51	5	0	75	5	22	31	0	58	439	
1:30 PM	56	29	61	0	146	67	21	11	0	99	9	38	1	0	48	10	18	43	0	71	364	
1:45 PM	50	37	64	0	151	70	26	3	0	99	14	49	2	0	65	4	23	49	0	76	391	
Hourly Total	210	136	305	0	651	279	95	30	0	404	59	194	11	0	264	30	81	169	0	280	1599	
2:00 PM	40	31	73	0	144	83	17	5	0	105	22	41	0	0	63	0	22	31	0	53	365	



State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-69 at Mineral Wells  
Site Code: STA-8  
Start Date: 02/20/2019  
Page No: 3



Turning Movement Data Plot

**State Of Tennessee (TDOT)  
Address**

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

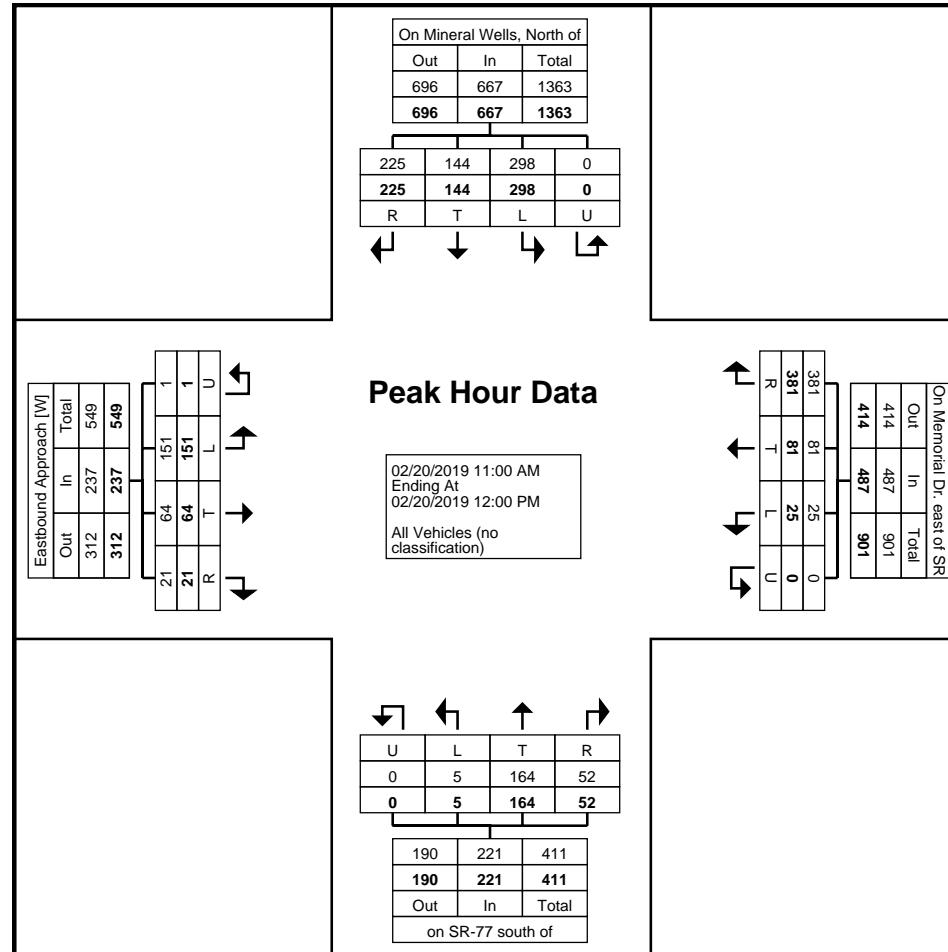
Count Name: SR-69 at Mineral Wells  
Site Code: STA-8  
Start Date: 02/20/2019  
Page No: 4

## Turning Movement Peak Hour Data (11:00 AM)

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-69 at Mineral Wells  
Site Code: STA-8  
Start Date: 02/20/2019  
Page No: 5



Turning Movement Peak Hour Data Plot (11:00 AM)

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-69 at Mineral Wells  
Site Code: STA-8  
Start Date: 02/20/2019  
Page No: 6

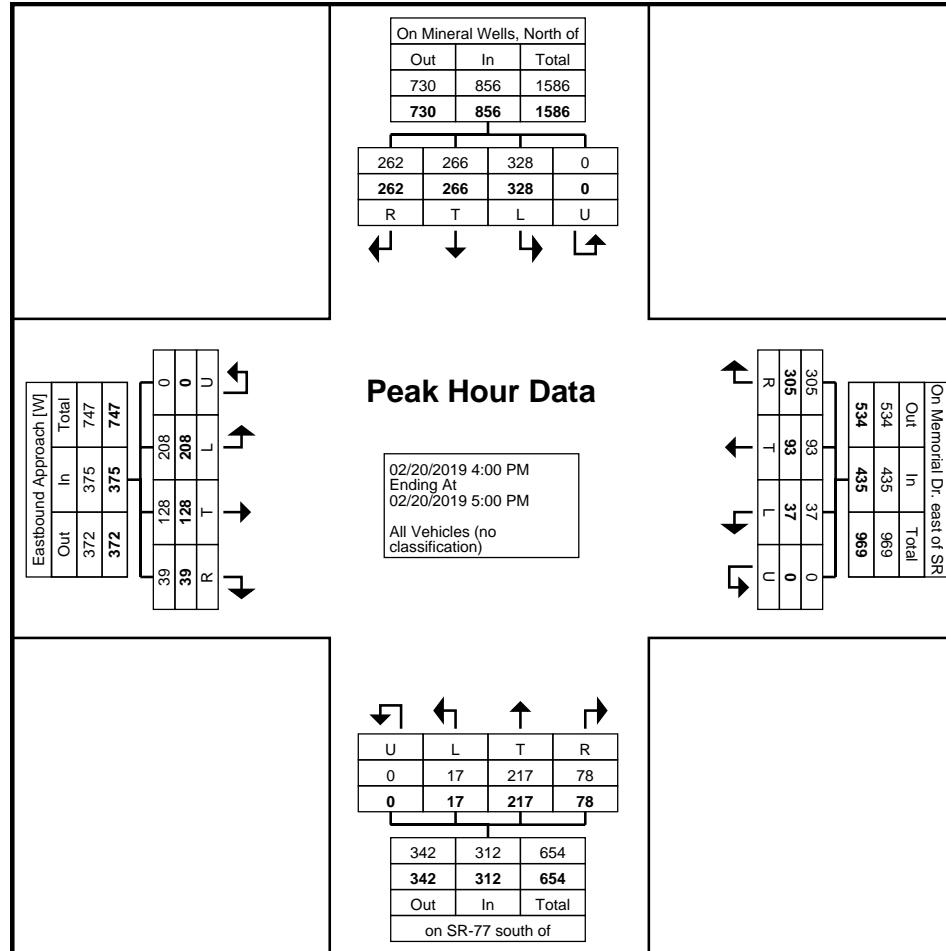
### Turning Movement Peak Hour Data (4:00 PM)

Start Time	On Mineral Wells, North of SR-77					On Memorial Dr. east of SR-77					on SR-77 south of Memorial Dr.					Eastbound Approach					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
4:00 PM	68	66	70	0	204	80	30	10	0	120	16	91	0	0	107	5	38	49	0	92	523	
4:15 PM	65	71	75	0	211	84	16	7	0	107	23	35	16	0	74	12	25	41	0	78	470	
4:30 PM	71	69	97	0	237	76	26	7	0	109	22	42	1	0	65	9	26	55	0	90	501	
4:45 PM	58	60	86	0	204	65	21	13	0	99	17	49	0	0	66	13	39	63	0	115	484	
Total	262	266	328	0	856	305	93	37	0	435	78	217	17	0	312	39	128	208	0	375	1978	
Approach %	30.6	31.1	38.3	0.0	-	70.1	21.4	8.5	0.0	-	25.0	69.6	5.4	0.0	-	10.4	34.1	55.5	0.0	-	-	
Total %	13.2	13.4	16.6	0.0	43.3	15.4	4.7	1.9	0.0	22.0	3.9	11.0	0.9	0.0	15.8	2.0	6.5	10.5	0.0	19.0	-	
PHF	0.923	0.937	0.845	0.000	0.903	0.908	0.775	0.712	0.000	0.906	0.848	0.596	0.266	0.000	0.729	0.750	0.821	0.825	0.000	0.815	0.946	
All Vehicles (no classification)	262	266	328	0	856	305	93	37	0	435	78	217	17	0	312	39	128	208	0	375	1978	
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0		

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Count Name: SR-69 at Mineral Wells  
Site Code: STA-8  
Start Date: 02/20/2019  
Page No: 7



Turning Movement Peak Hour Data Plot (4:00 PM)

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Count Name: SR-69 at Mineral Wells  
Site Code: STA-8  
Start Date: 02/20/2019  
Page No: 8

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-69 at Tyson Ave. in Paris tn  
Site Code: STA-9  
Start Date: 02/20/2019  
Page No: 1

**Lane 1 (Southbound)**

Start Time	All Vehicles (no classification)	Total
6:00 AM	19	19
6:15 AM	12	12
6:30 AM	29	29
6:45 AM	54	54
7:00 AM	42	42
7:15 AM	30	30
7:30 AM	49	49
7:45 AM	63	63
8:00 AM	51	51
8:15 AM	45	45
8:30 AM	46	46
8:45 AM	37	37
9:00 AM	43	43
9:15 AM	39	39
9:30 AM	24	24
9:45 AM	35	35
10:00 AM	43	43
10:15 AM	54	54
10:30 AM	40	40
10:45 AM	49	49
11:00 AM	52	52
11:15 AM	52	52
11:30 AM	46	46
11:45 AM	39	39
12:00 PM	46	46
12:15 PM	45	45
12:30 PM	46	46
12:45 PM	45	45
1:00 PM	50	50
1:15 PM	60	60
1:30 PM	44	44
1:45 PM	50	50
2:00 PM	50	50
2:15 PM	56	56
2:30 PM	55	55
2:45 PM	47	47
3:00 PM	55	55
3:15 PM	53	53
3:30 PM	57	57
3:45 PM	51	51
4:00 PM	94	94
4:15 PM	61	61

4:30 PM	75	75
4:45 PM	47	47
5:00 PM	117	117
5:15 PM	70	70
5:30 PM	41	41
5:45 PM	56	56
Total	2364	2364
Total %	100.0	100.0
AM Times	7:15 AM	7:15 AM
AM Peaks	193	193
PM Times	3:15 PM	3:15 PM
PM Peaks	255	255

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Count Name: SR-69 at Tyson Ave. in Paris tn  
Site Code: STA-9  
Start Date: 02/20/2019  
Page No: 3

**Lane 2 (Southbound)**

Start Time	All Vehicles (no classification)	Total
6:00 AM	4	4
6:15 AM	11	11
6:30 AM	9	9
6:45 AM	11	11
7:00 AM	17	17
7:15 AM	22	22
7:30 AM	42	42
7:45 AM	27	27
8:00 AM	23	23
8:15 AM	12	12
8:30 AM	22	22
8:45 AM	16	16
9:00 AM	22	22
9:15 AM	33	33
9:30 AM	16	16
9:45 AM	26	26
10:00 AM	27	27
10:15 AM	18	18
10:30 AM	25	25
10:45 AM	23	23
11:00 AM	25	25
11:15 AM	23	23
11:30 AM	30	30
11:45 AM	30	30
12:00 PM	39	39
12:15 PM	30	30
12:30 PM	39	39
12:45 PM	26	26
1:00 PM	27	27
1:15 PM	35	35
1:30 PM	32	32
1:45 PM	35	35
2:00 PM	46	46
2:15 PM	48	48
2:30 PM	46	46
2:45 PM	37	37
3:00 PM	36	36
3:15 PM	31	31
3:30 PM	40	40
3:45 PM	41	41
4:00 PM	29	29
4:15 PM	27	27

4:30 PM	51	51
4:45 PM	39	39
5:00 PM	30	30
5:15 PM	38	38
5:30 PM	23	23
5:45 PM	8	8
Total	1347	1347
Total %	100.0	100.0
AM Times	7:15 AM	7:15 AM
AM Peaks	114	114
PM Times	3:15 PM	3:15 PM
PM Peaks	141	141

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Count Name: SR-69 at Tyson Ave. in Paris tn  
Site Code: STA-9  
Start Date: 02/20/2019  
Page No: 5

**Lane 1 (Northbound)**

Start Time	All Vehicles (no classification)	Total
6:00 AM	28	28
6:15 AM	32	32
6:30 AM	39	39
6:45 AM	45	45
7:00 AM	39	39
7:15 AM	65	65
7:30 AM	75	75
7:45 AM	106	106
8:00 AM	64	64
8:15 AM	50	50
8:30 AM	54	54
8:45 AM	50	50
9:00 AM	41	41
9:15 AM	49	49
9:30 AM	51	51
9:45 AM	44	44
10:00 AM	42	42
10:15 AM	49	49
10:30 AM	53	53
10:45 AM	54	54
11:00 AM	49	49
11:15 AM	50	50
11:30 AM	58	58
11:45 AM	47	47
12:00 PM	71	71
12:15 PM	67	67
12:30 PM	49	49
12:45 PM	42	42
1:00 PM	51	51
1:15 PM	62	62
1:30 PM	59	59
1:45 PM	55	55
2:00 PM	57	57
2:15 PM	52	52
2:30 PM	68	68
2:45 PM	52	52
3:00 PM	53	53
3:15 PM	83	83
3:30 PM	77	77
3:45 PM	81	81
4:00 PM	54	54
4:15 PM	61	61

4:30 PM	64	64
4:45 PM	73	73
5:00 PM	61	61
5:15 PM	49	49
5:30 PM	67	67
5:45 PM	47	47
Total	2689	2689
Total %	100.0	100.0
AM Times	7:15 AM	7:15 AM
AM Peaks	310	310
PM Times	3:15 PM	3:15 PM
PM Peaks	295	295

State Of Tennessee (TDOT)  
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Count Name: SR-69 at Tyson Ave. in Paris tn  
Site Code: STA-9  
Start Date: 02/20/2019  
Page No: 7

**Lane 2 (Northbound)**

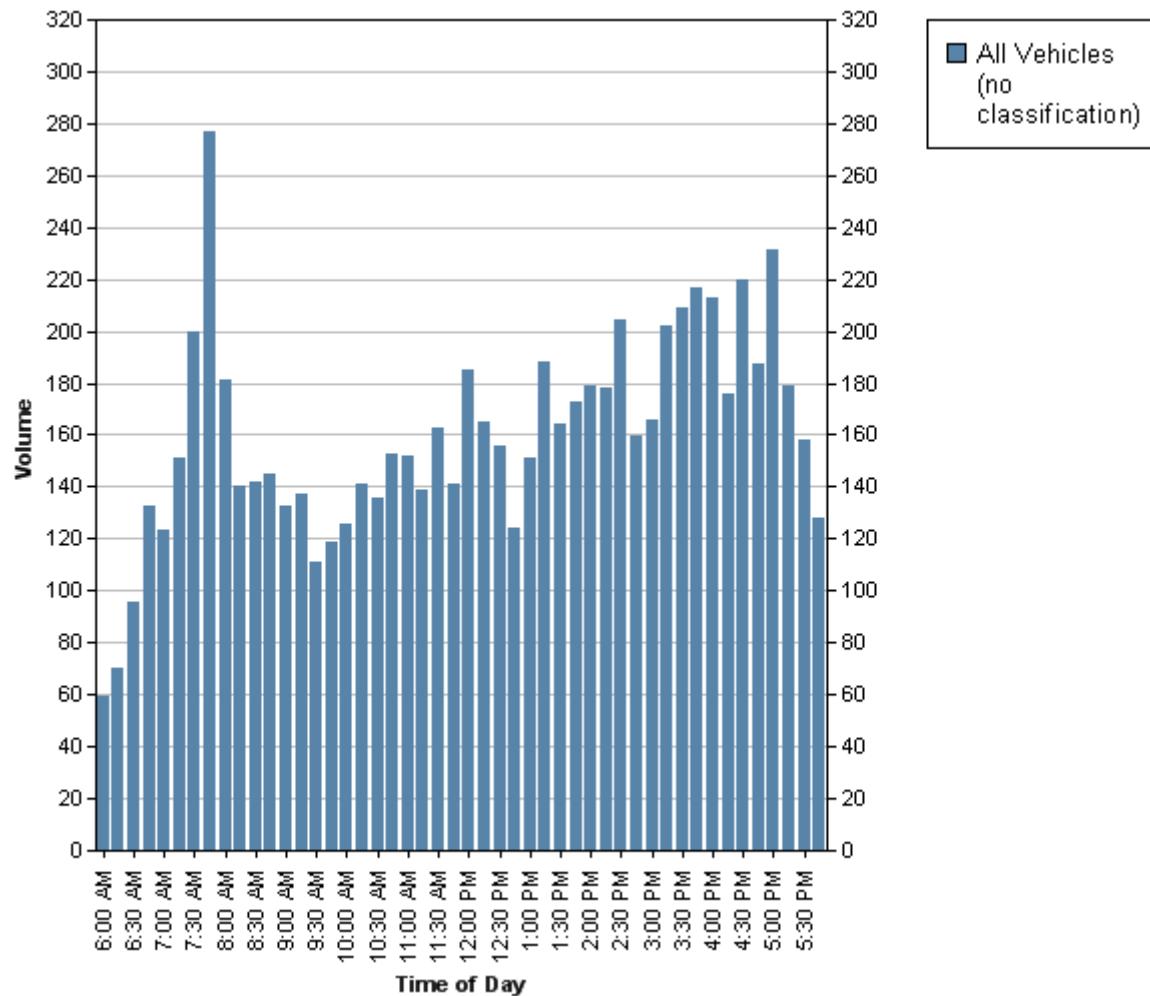
Start Time	All Vehicles (no classification)	Total
6:00 AM	8	8
6:15 AM	15	15
6:30 AM	19	19
6:45 AM	23	23
7:00 AM	25	25
7:15 AM	34	34
7:30 AM	34	34
7:45 AM	81	81
8:00 AM	43	43
8:15 AM	33	33
8:30 AM	20	20
8:45 AM	42	42
9:00 AM	27	27
9:15 AM	16	16
9:30 AM	20	20
9:45 AM	14	14
10:00 AM	14	14
10:15 AM	20	20
10:30 AM	18	18
10:45 AM	27	27
11:00 AM	26	26
11:15 AM	14	14
11:30 AM	29	29
11:45 AM	25	25
12:00 PM	29	29
12:15 PM	23	23
12:30 PM	22	22
12:45 PM	11	11
1:00 PM	23	23
1:15 PM	31	31
1:30 PM	29	29
1:45 PM	33	33
2:00 PM	26	26
2:15 PM	22	22
2:30 PM	35	35
2:45 PM	24	24
3:00 PM	22	22
3:15 PM	35	35
3:30 PM	35	35
3:45 PM	44	44
4:00 PM	36	36
4:15 PM	27	27

4:30 PM	30	30
4:45 PM	28	28
5:00 PM	23	23
5:15 PM	22	22
5:30 PM	27	27
5:45 PM	17	17
Total	1281	1281
Total %	100.0	100.0
AM Times	7:15 AM	7:15 AM
AM Peaks	192	192
PM Times	3:15 PM	3:15 PM
PM Peaks	150	150

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Count Name: SR-69 at Tyson Ave. in Paris tn  
Site Code: STA-9  
Start Date: 02/20/2019  
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State Of Tennessee (TDOT)  
Address

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Count Name: SR-69 at Tyson Ave. in Paris tn  
Site Code: STA-9  
Start Date: 02/20/2019  
Page No: 10

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-76 and Fairgrounds Rd.  
Site Code: STA-12  
Start Date: 02/20/2019  
Page No: 1

### Turning Movement Data

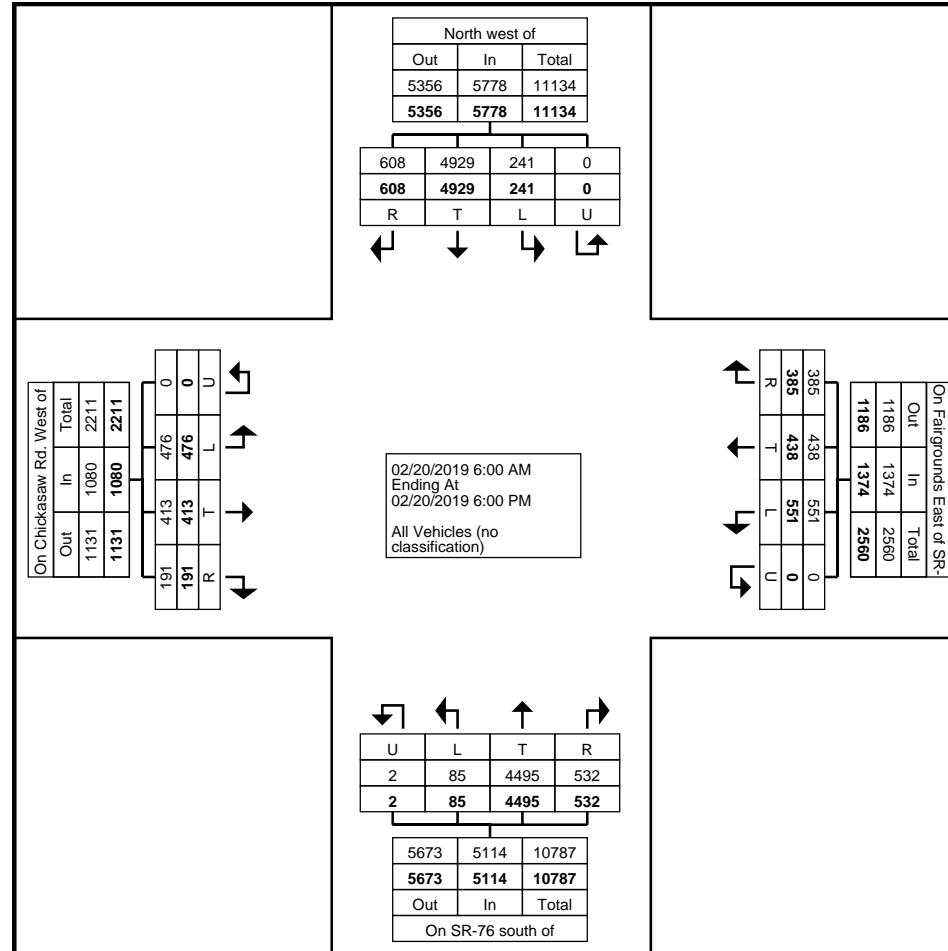
Start Time	North west of Fairgrounds/Chickasaw Rd on SR-76					On Fairgrounds East of SR-76					On SR-76 south of Fairgrounds and Chickasaw					On Chickasaw Rd. West of SR-76					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
6:00 AM	5	34	1	0	40	5	4	1	0	10	10	26	0	0	36	1	6	5	0	12	98	
6:15 AM	5	46	1	0	52	3	2	6	0	11	21	24	0	0	45	0	8	4	0	12	120	
6:30 AM	8	66	5	0	79	7	2	6	0	15	19	39	0	0	58	1	12	1	0	14	166	
6:45 AM	12	87	7	0	106	6	5	4	0	15	7	49	0	0	56	2	16	4	0	22	199	
Hourly Total	30	233	14	0	277	21	13	17	0	51	57	138	0	0	195	4	42	14	0	60	583	
7:00 AM	8	71	11	0	90	6	2	7	0	15	7	42	0	0	49	5	11	2	0	18	172	
7:15 AM	13	114	13	0	140	5	15	8	0	28	9	66	0	0	75	1	19	7	0	27	270	
7:30 AM	25	137	11	0	173	23	30	22	0	75	2	93	3	0	98	2	20	12	0	34	380	
7:45 AM	15	145	14	0	174	9	9	15	0	33	17	107	0	0	124	4	18	11	0	33	364	
Hourly Total	61	467	49	0	577	43	56	52	0	151	35	308	3	0	346	12	68	32	0	112	1186	
8:00 AM	18	117	1	0	136	1	12	11	0	24	6	82	2	0	90	2	7	10	0	19	269	
8:15 AM	13	100	3	0	116	9	4	7	0	20	5	72	0	0	77	5	8	6	0	19	232	
8:30 AM	13	98	1	0	112	3	4	12	0	19	6	72	3	0	81	2	6	9	0	17	229	
8:45 AM	6	117	6	0	129	7	6	1	0	14	8	62	1	0	71	5	7	11	0	23	237	
Hourly Total	50	432	11	0	493	20	26	31	0	77	25	288	6	0	319	14	28	36	0	78	967	
9:00 AM	7	92	2	0	101	7	2	3	0	12	7	88	0	0	95	4	5	9	0	18	226	
9:15 AM	9	89	8	0	106	10	5	6	0	21	8	72	2	0	82	2	2	9	0	13	222	
9:30 AM	12	97	4	0	113	6	8	16	0	30	5	73	4	0	82	2	3	12	0	17	242	
9:45 AM	13	115	3	0	131	4	7	9	0	20	6	100	2	0	108	3	6	5	0	14	273	
Hourly Total	41	393	17	0	451	27	22	34	0	83	26	333	8	0	367	11	16	35	0	62	963	
10:00 AM	6	100	2	0	108	5	7	6	0	18	13	79	1	0	93	5	2	8	0	15	234	
10:15 AM	11	90	1	0	102	5	8	6	0	19	3	88	2	0	93	4	6	8	0	18	232	
10:30 AM	4	100	2	0	106	3	4	8	0	15	8	71	1	0	80	6	7	7	0	20	221	
10:45 AM	8	75	2	0	85	8	8	2	0	18	9	98	1	0	108	4	3	8	0	15	226	
Hourly Total	29	365	7	0	401	21	27	22	0	70	33	336	5	0	374	19	18	31	0	68	913	
11:00 AM	10	126	6	0	142	11	7	11	0	29	9	83	3	0	95	5	1	9	0	15	281	
11:15 AM	12	129	5	0	146	13	6	11	0	30	8	118	2	0	128	4	7	7	0	18	322	
11:30 AM	18	98	3	0	119	8	10	16	0	34	13	105	2	0	120	4	7	19	0	30	303	
11:45 AM	10	94	7	0	111	8	9	17	0	34	7	115	1	0	123	4	6	14	0	24	292	
Hourly Total	50	447	21	0	518	40	32	55	0	127	37	421	8	0	466	17	21	49	0	87	1198	
12:00 PM	13	119	5	0	137	5	5	17	0	27	22	103	0	0	125	7	10	5	0	22	311	
12:15 PM	15	107	4	0	126	5	5	10	0	20	15	117	1	0	133	8	13	7	0	28	307	
12:30 PM	12	112	5	0	129	9	7	19	0	35	10	105	1	0	116	6	3	10	0	19	299	
12:45 PM	17	126	2	0	145	5	10	9	0	24	12	105	1	0	118	6	6	13	0	25	312	
Hourly Total	57	464	16	0	537	24	27	55	0	106	59	430	3	0	492	27	32	35	0	94	1229	
1:00 PM	15	115	5	0	135	8	3	8	0	19	11	124	2	0	137	3	1	17	0	21	312	
1:15 PM	15	110	2	0	127	3	5	7	0	15	19	122	0	1	142	2	7	13	0	22	306	
1:30 PM	12	124	5	0	141	4	8	16	0	28	12	116	3	0	131	2	10	9	0	21	321	
1:45 PM	19	104	4	0	127	6	11	7	0	24	13	107	4	0	124	2	8	12	0	22	297	
Hourly Total	61	453	16	0	530	21	27	38	0	86	55	469	9	1	534	9	26	51	0	86	1236	
2:00 PM	10	129	3	0	142	12	9	14	0	35	18	90	1	0	109	8	12	13	0	33	319	

2:15 PM	10	112	9	0	131	12	8	7	0	27	29	95	2	1	127	5	7	10	0	22	307
2:30 PM	19	80	7	0	106	21	19	16	0	56	8	88	2	0	98	3	16	10	0	29	289
2:45 PM	18	109	9	0	136	23	23	18	0	64	7	85	4	0	96	4	5	7	0	16	312
Hourly Total	57	430	28	0	515	68	59	55	0	182	62	358	9	1	430	20	40	40	0	100	1227
3:00 PM	9	100	5	0	114	15	9	8	0	32	10	110	3	0	123	5	4	14	0	23	292
3:15 PM	13	108	3	0	124	11	16	11	0	38	14	90	0	0	104	6	11	10	0	27	293
3:30 PM	14	99	4	0	117	5	13	26	0	44	11	121	2	0	134	7	6	11	0	24	319
3:45 PM	18	99	3	0	120	4	12	23	0	39	10	103	1	0	114	6	12	18	0	36	309
Hourly Total	54	406	15	0	475	35	50	68	0	153	45	424	6	0	475	24	33	53	0	110	1213
4:00 PM	9	108	6	0	123	6	22	25	0	53	9	119	4	0	132	2	4	8	0	14	322
4:15 PM	21	102	7	0	130	6	13	15	0	34	19	138	6	0	163	7	18	19	0	44	371
4:30 PM	19	113	6	0	138	8	11	8	0	27	11	136	3	0	150	5	13	17	0	35	350
4:45 PM	14	107	7	0	128	8	12	16	0	36	15	114	1	0	130	6	11	12	0	29	323
Hourly Total	63	430	26	0	519	28	58	64	0	150	54	507	14	0	575	20	46	56	0	122	1366
5:00 PM	16	133	5	0	154	9	18	23	0	50	10	151	3	0	164	2	14	15	0	31	399
5:15 PM	18	95	4	0	117	9	6	13	0	28	11	139	1	0	151	2	14	15	0	31	327
5:30 PM	10	81	7	0	98	9	15	12	0	36	10	104	5	0	119	5	6	7	0	18	271
5:45 PM	11	100	5	0	116	10	2	12	0	24	13	89	5	0	107	5	9	7	0	21	268
Hourly Total	55	409	21	0	485	37	41	60	0	138	44	483	14	0	541	14	43	44	0	101	1265
Grand Total	608	4929	241	0	5778	385	438	551	0	1374	532	4495	85	2	5114	191	413	476	0	1080	13346
Approach %	10.5	85.3	4.2	0.0	-	28.0	31.9	40.1	0.0	-	10.4	87.9	1.7	0.0	-	17.7	38.2	44.1	0.0	-	-
Total %	4.6	36.9	1.8	0.0	43.3	2.9	3.3	4.1	0.0	10.3	4.0	33.7	0.6	0.0	38.3	1.4	3.1	3.6	0.0	8.1	-
All Vehicles (no classification)	608	4929	241	0	5778	385	438	551	0	1374	532	4495	85	2	5114	191	413	476	0	1080	13346
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	

State Of Tennessee (TDOT)  
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Count Name: SR-76 and Fairgrounds Rd.  
Site Code: STA-12  
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Turning Movement Data Plot

State Of Tennessee (TDOT)  
Address

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Count Name: SR-76 and Fairgrounds Rd.  
Site Code: STA-12  
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Page No: 4

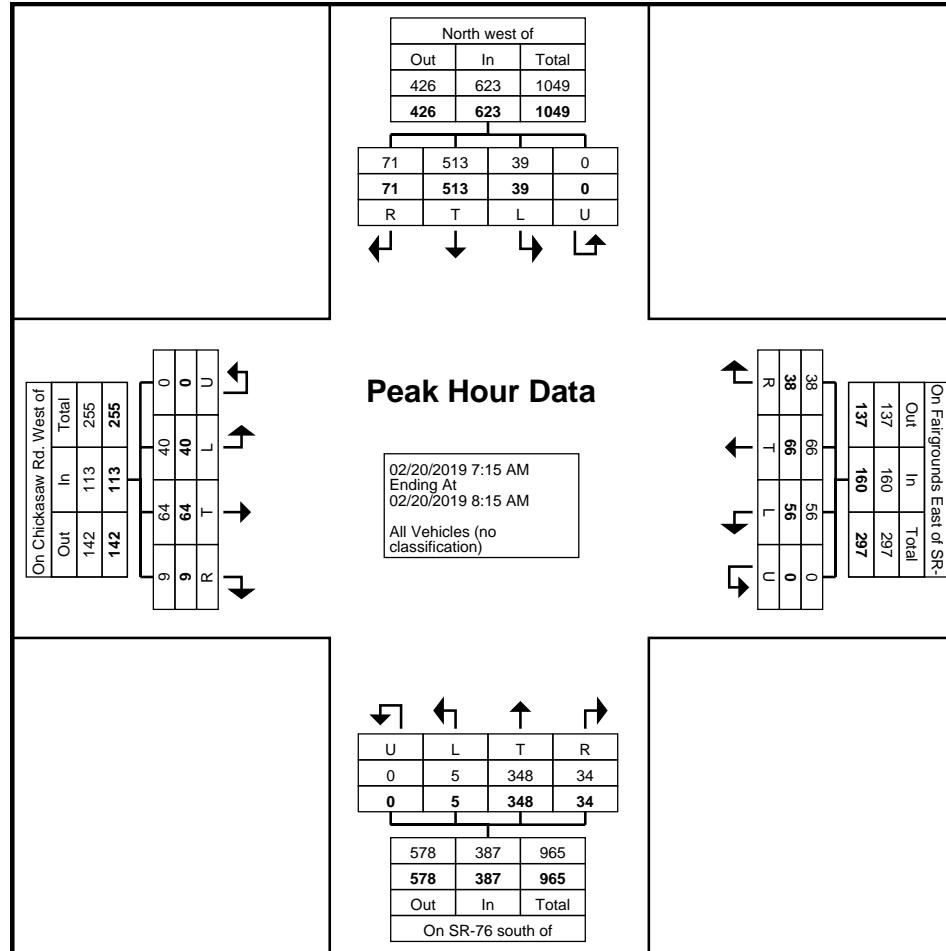
### Turning Movement Peak Hour Data (7:15 AM)

Start Time	North west of Fairgrounds/Chickasaw Rd on SR-76					On Fairgrounds East of SR-76				On SR-76 south of Fairgrounds and Chickasaw				On Chickasaw Rd. West of SR-76				Int. Total			
	Southbound					Westbound				Northbound				Eastbound							
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:15 AM	13	114	13	0	140	5	15	8	0	28	9	66	0	0	75	1	19	7	0	27	270
7:30 AM	25	137	11	0	173	23	30	22	0	75	2	93	3	0	98	2	20	12	0	34	380
7:45 AM	15	145	14	0	174	9	9	15	0	33	17	107	0	0	124	4	18	11	0	33	364
8:00 AM	18	117	1	0	136	1	12	11	0	24	6	82	2	0	90	2	7	10	0	19	269
Total	71	513	39	0	623	38	66	56	0	160	34	348	5	0	387	9	64	40	0	113	1283
Approach %	11.4	82.3	6.3	0.0	-	23.8	41.3	35.0	0.0	-	8.8	89.9	1.3	0.0	-	8.0	56.6	35.4	0.0	-	-
Total %	5.5	40.0	3.0	0.0	48.6	3.0	5.1	4.4	0.0	12.5	2.7	27.1	0.4	0.0	30.2	0.7	5.0	3.1	0.0	8.8	-
PHF	0.710	0.884	0.696	0.000	0.895	0.413	0.550	0.636	0.000	0.533	0.500	0.813	0.417	0.000	0.780	0.563	0.800	0.833	0.000	0.831	0.844
All Vehicles (no classification)	71	513	39	0	623	38	66	56	0	160	34	348	5	0	387	9	64	40	0	113	1283
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	

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Count Name: SR-76 and Fairgrounds Rd.  
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Turning Movement Peak Hour Data Plot (7:15 AM)

State Of Tennessee (TDOT)  
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Count Name: SR-76 and Fairgrounds Rd.  
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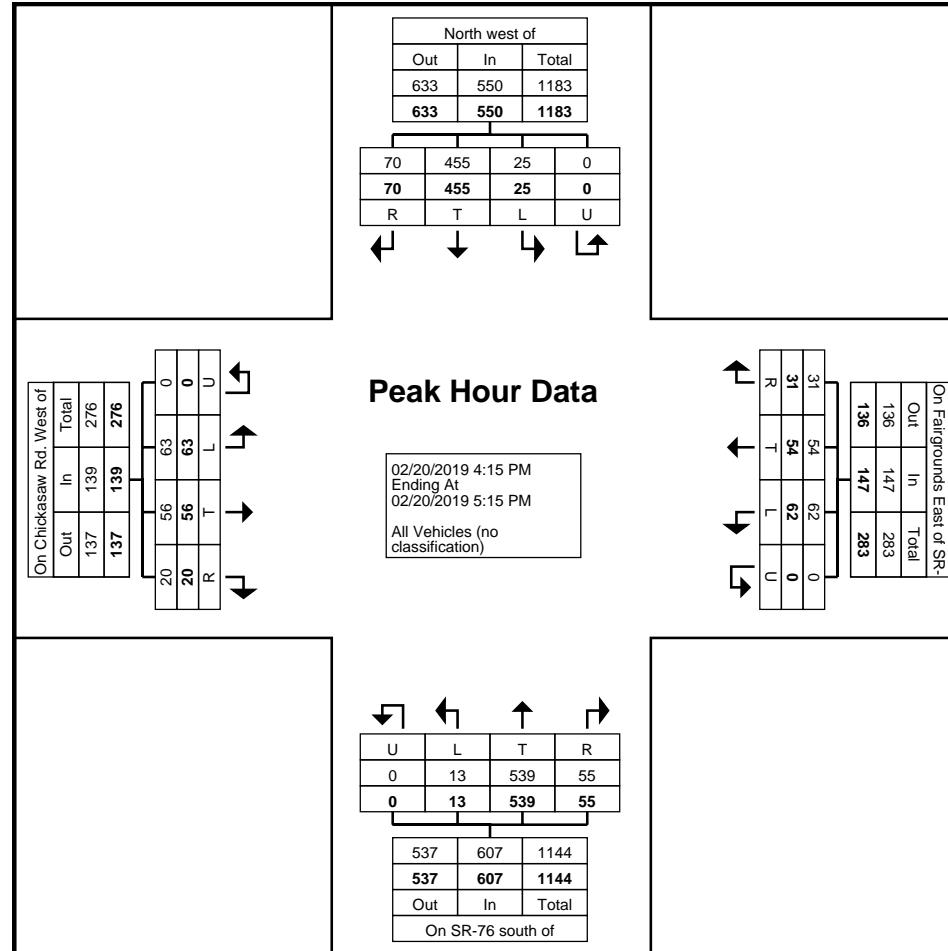
### Turning Movement Peak Hour Data (4:15 PM)

Start Time	North west of Fairgrounds/Chickasaw Rd on SR-76					On Fairgrounds East of SR-76				On SR-76 south of Fairgrounds and Chickasaw				On Chickasaw Rd. West of SR-76				Int. Total			
	Southbound					Westbound				Northbound				Eastbound							
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:15 PM	21	102	7	0	130	6	13	15	0	34	19	138	6	0	163	7	18	19	0	44	371
4:30 PM	19	113	6	0	138	8	11	8	0	27	11	136	3	0	150	5	13	17	0	35	350
4:45 PM	14	107	7	0	128	8	12	16	0	36	15	114	1	0	130	6	11	12	0	29	323
5:00 PM	16	133	5	0	154	9	18	23	0	50	10	151	3	0	164	2	14	15	0	31	399
Total	70	455	25	0	550	31	54	62	0	147	55	539	13	0	607	20	56	63	0	139	1443
Approach %	12.7	82.7	4.5	0.0	-	21.1	36.7	42.2	0.0	-	9.1	88.8	2.1	0.0	-	14.4	40.3	45.3	0.0	-	-
Total %	4.9	31.5	1.7	0.0	38.1	2.1	3.7	4.3	0.0	10.2	3.8	37.4	0.9	0.0	42.1	1.4	3.9	4.4	0.0	9.6	-
PHF	0.833	0.855	0.893	0.000	0.893	0.861	0.750	0.674	0.000	0.735	0.724	0.892	0.542	0.000	0.925	0.714	0.778	0.829	0.000	0.790	0.904
All Vehicles (no classification)	70	455	25	0	550	31	54	62	0	147	55	539	13	0	607	20	56	63	0	139	1443
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	

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Count Name: SR-76 and Fairgrounds Rd.  
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Turning Movement Peak Hour Data Plot (4:15 PM)

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Count Name: SR-76 and Fairgrounds Rd.  
Site Code: STA-12  
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State Of Tennessee (TDOT)  
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Count Name: SR-356 and Brewer ST.  
Site Code: STA 13  
Start Date: 02/21/2019  
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**Turning Movement Data**

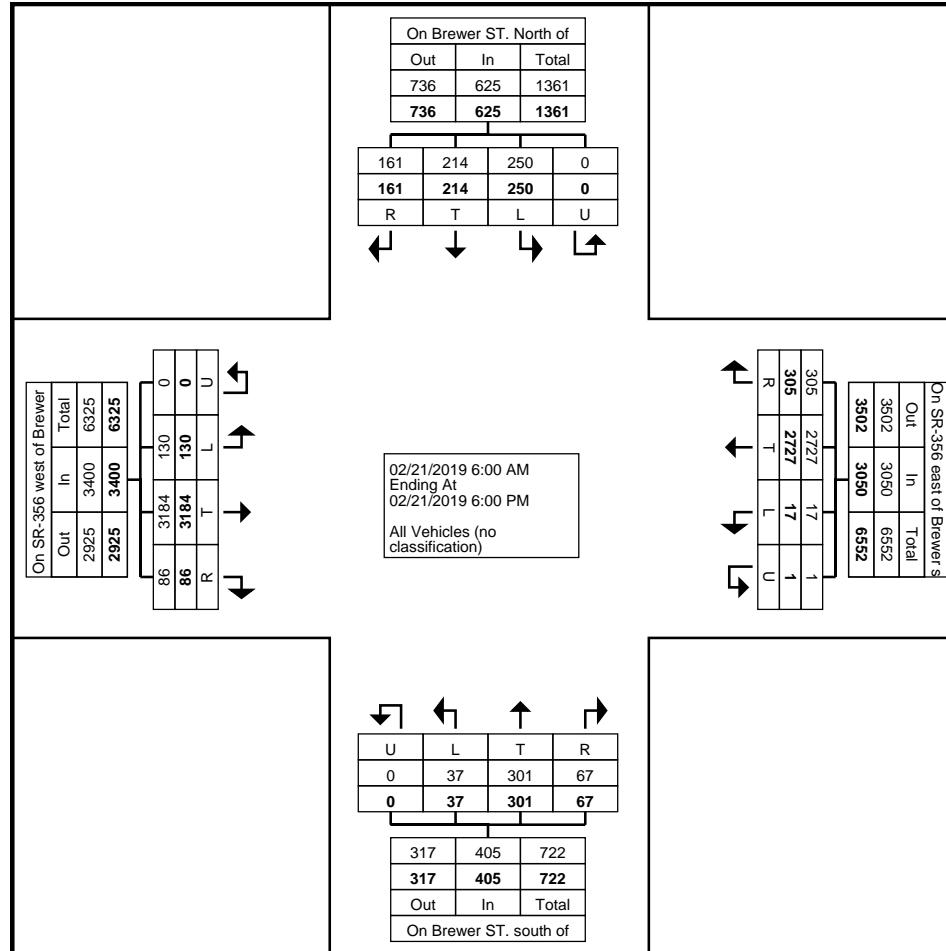
Start Time	On Brewer ST. North of SR-356					On SR-356 east of Brewer st.					On Brewer ST. south of SR -356					On SR-356 west of Brewer St.					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
6:00 AM	0	0	0	0	0	0	23	0	1	24	0	1	0	0	1	0	26	0	0	26	51	
6:15 AM	1	0	2	0	3	3	41	1	0	45	0	2	1	0	3	1	31	0	0	32	83	
6:30 AM	2	0	1	0	3	2	35	0	0	37	1	1	0	0	2	0	39	2	0	41	83	
6:45 AM	2	0	2	0	4	3	45	0	0	48	1	1	0	0	2	1	56	3	0	60	114	
Hourly Total	5	0	5	0	10	8	144	1	1	154	2	5	1	0	8	2	152	5	0	159	331	
7:00 AM	2	3	0	0	5	2	37	0	0	39	0	2	0	0	2	0	63	1	0	64	110	
7:15 AM	0	1	0	0	1	2	47	0	0	49	0	7	0	0	7	2	89	0	0	91	148	
7:30 AM	2	4	7	0	13	2	72	0	0	74	0	6	0	0	6	1	99	0	0	100	193	
7:45 AM	0	3	3	0	6	8	67	0	0	75	1	9	1	0	11	0	82	1	0	83	175	
Hourly Total	4	11	10	0	25	14	223	0	0	237	1	24	1	0	26	3	333	2	0	338	626	
8:00 AM	1	4	2	0	7	6	47	1	0	54	1	7	2	0	10	1	45	4	0	50	121	
8:15 AM	0	3	0	0	3	4	33	1	0	38	1	12	1	0	14	3	46	2	0	51	106	
8:30 AM	4	6	4	0	14	3	39	0	0	42	1	9	0	0	10	0	47	2	0	49	115	
8:45 AM	1	4	0	0	5	6	46	0	0	52	0	14	0	0	14	1	61	1	0	63	134	
Hourly Total	6	17	6	0	29	19	165	2	0	186	3	42	3	0	48	5	199	9	0	213	476	
9:00 AM	3	6	4	0	13	6	44	2	0	52	1	4	0	0	5	1	56	1	0	58	128	
9:15 AM	5	5	6	0	16	6	41	0	0	47	0	8	3	0	11	2	67	2	0	71	145	
9:30 AM	5	5	4	0	14	5	46	1	0	52	1	2	1	0	4	3	57	4	0	64	134	
9:45 AM	4	6	8	0	18	7	43	0	0	50	1	7	0	0	8	3	56	4	0	63	139	
Hourly Total	17	22	22	0	61	24	174	3	0	201	3	21	4	0	28	9	236	11	0	256	546	
10:00 AM	5	2	6	0	13	10	47	0	0	57	2	7	2	0	11	2	57	4	0	63	144	
10:15 AM	4	2	4	0	10	8	53	1	0	62	0	3	2	0	5	4	50	5	0	59	136	
10:30 AM	5	1	8	0	14	6	53	0	0	59	1	4	0	0	5	5	66	5	0	76	154	
10:45 AM	7	10	13	0	30	9	54	0	0	63	4	8	0	0	12	1	76	1	0	78	183	
Hourly Total	21	15	31	0	67	33	207	1	0	241	7	22	4	0	33	12	249	15	0	276	617	
11:00 AM	6	4	3	0	13	8	64	0	0	72	1	3	0	0	4	3	76	4	0	83	172	
11:15 AM	1	7	5	0	13	5	47	0	0	52	1	7	1	0	9	0	77	7	0	84	158	
11:30 AM	5	11	10	0	26	16	60	1	0	77	1	9	0	0	10	0	82	0	0	82	195	
11:45 AM	9	7	6	0	22	12	68	0	0	80	4	9	0	0	13	3	81	6	0	90	205	
Hourly Total	21	29	24	0	74	41	239	1	0	281	7	28	1	0	36	6	316	17	0	339	730	
12:00 PM	5	8	8	0	21	10	44	0	0	54	0	7	1	0	8	3	60	3	0	66	149	
12:15 PM	4	4	5	0	13	8	50	3	0	61	2	5	0	0	7	2	59	4	0	65	146	
12:30 PM	5	6	6	0	17	8	63	1	0	72	1	9	2	0	12	0	61	1	0	62	163	
12:45 PM	5	9	7	0	21	9	74	0	0	83	2	9	3	0	14	2	58	5	0	65	183	
Hourly Total	19	27	26	0	72	35	231	4	0	270	5	30	6	0	41	7	238	13	0	258	641	
1:00 PM	8	4	11	0	23	4	68	0	0	72	3	7	2	0	12	1	83	5	0	89	196	
1:15 PM	4	5	9	0	18	7	76	0	0	83	3	3	2	0	8	2	66	2	0	70	179	
1:30 PM	2	8	6	0	16	9	63	0	0	72	1	8	0	0	9	1	72	4	0	77	174	
1:45 PM	3	3	3	0	9	10	53	0	0	63	2	4	2	0	8	3	62	4	0	69	149	
Hourly Total	17	20	29	0	66	30	260	0	0	290	9	22	6	0	37	7	283	15	0	305	698	
2:00 PM	1	3	3	0	7	11	59	1	0	71	1	3	2	0	6	2	79	3	0	84	168	

2:15 PM	6	0	7	0	13	12	64	0	0	76	1	8	1	0	10	2	67	1	0	70	169
2:30 PM	3	5	3	0	11	6	71	0	0	77	1	9	0	0	10	1	69	4	0	74	172
2:45 PM	3	5	6	0	14	5	86	0	0	91	0	4	1	0	5	1	63	5	0	69	179
Hourly Total	13	13	19	0	45	34	280	1	0	315	3	24	4	0	31	6	278	13	0	297	688
3:00 PM	4	5	7	0	16	5	66	0	0	71	0	10	0	0	10	0	75	1	0	76	173
3:15 PM	10	4	10	0	24	3	58	0	0	61	4	11	0	0	15	5	65	1	0	71	171
3:30 PM	5	10	6	0	21	10	80	0	0	90	4	11	0	0	15	2	77	3	0	82	208
3:45 PM	2	10	9	0	21	4	72	0	0	76	1	2	0	0	3	3	71	1	0	75	175
Hourly Total	21	29	32	0	82	22	276	0	0	298	9	34	0	0	43	10	288	6	0	304	727
4:00 PM	3	5	8	0	16	6	83	1	0	90	1	4	1	0	6	2	76	3	0	81	193
4:15 PM	3	6	8	0	17	6	64	1	0	71	4	11	1	0	16	0	95	7	0	102	206
4:30 PM	3	2	11	0	16	9	67	0	0	76	4	6	1	0	11	3	103	4	0	110	213
4:45 PM	3	6	1	0	10	4	62	0	0	66	0	1	0	0	1	4	83	2	0	89	166
Hourly Total	12	19	28	0	59	25	276	2	0	303	9	22	3	0	34	9	357	16	0	382	778
5:00 PM	0	6	9	0	15	5	76	0	0	81	6	10	0	0	16	3	80	4	0	87	199
5:15 PM	2	1	4	0	7	4	67	1	0	72	3	9	1	0	13	2	67	2	0	71	163
5:30 PM	2	3	4	0	9	8	64	0	0	72	0	4	1	0	5	5	63	0	0	68	154
5:45 PM	1	2	1	0	4	3	45	1	0	49	0	4	2	0	6	0	45	2	0	47	106
Hourly Total	5	12	18	0	35	20	252	2	0	274	9	27	4	0	40	10	255	8	0	273	622
Grand Total	161	214	250	0	625	305	2727	17	1	3050	67	301	37	0	405	86	3184	130	0	3400	7480
Approach %	25.8	34.2	40.0	0.0	-	10.0	89.4	0.6	0.0	-	16.5	74.3	9.1	0.0	-	2.5	93.6	3.8	0.0	-	-
Total %	2.2	2.9	3.3	0.0	8.4	4.1	36.5	0.2	0.0	40.8	0.9	4.0	0.5	0.0	5.4	1.1	42.6	1.7	0.0	45.5	-
All Vehicles (no classification)	161	214	250	0	625	305	2727	17	1	3050	67	301	37	0	405	86	3184	130	0	3400	7480
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	

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Count Name: SR-356 and Brewer ST.  
Site Code: STA 13  
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Turning Movement Data Plot

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Count Name: SR-356 and Brewer ST.  
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Start Date: 02/21/2019  
Page No: 4

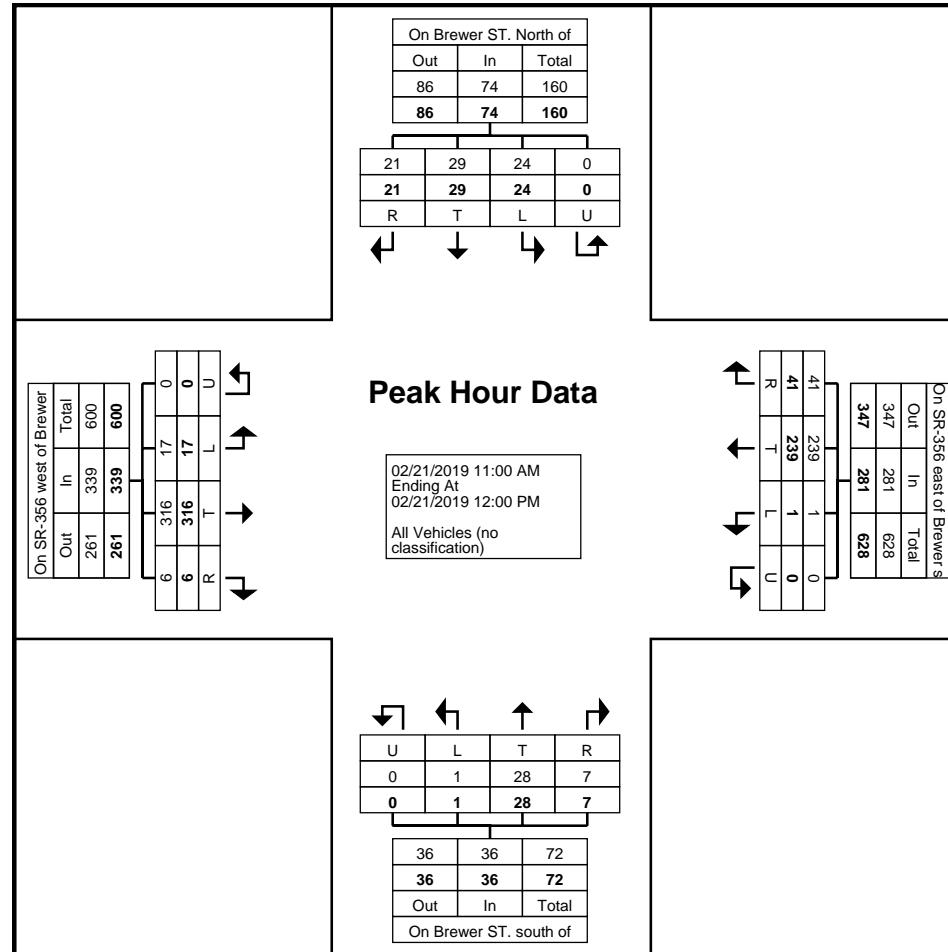
### Turning Movement Peak Hour Data (11:00 AM)

Start Time	On Brewer ST. North of SR-356					On SR-356 east of Brewer st.					On Brewer ST. south of SR -356					On SR-356 west of Brewer St.					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
11:00 AM	6	4	3	0	13	8	64	0	0	72	1	3	0	0	4	3	76	4	0	83	172	
11:15 AM	1	7	5	0	13	5	47	0	0	52	1	7	1	0	9	0	77	7	0	84	158	
11:30 AM	5	11	10	0	26	16	60	1	0	77	1	9	0	0	10	0	82	0	0	82	195	
11:45 AM	9	7	6	0	22	12	68	0	0	80	4	9	0	0	13	3	81	6	0	90	205	
Total	21	29	24	0	74	41	239	1	0	281	7	28	1	0	36	6	316	17	0	339	730	
Approach %	28.4	39.2	32.4	0.0	-	14.6	85.1	0.4	0.0	-	19.4	77.8	2.8	0.0	-	1.8	93.2	5.0	0.0	-	-	
Total %	2.9	4.0	3.3	0.0	10.1	5.6	32.7	0.1	0.0	38.5	1.0	3.8	0.1	0.0	4.9	0.8	43.3	2.3	0.0	46.4	-	
PHF	0.583	0.659	0.600	0.000	0.712	0.641	0.879	0.250	0.000	0.878	0.438	0.778	0.250	0.000	0.692	0.500	0.963	0.607	0.000	0.942	0.890	
All Vehicles (no classification)	21	29	24	0	74	41	239	1	0	281	7	28	1	0	36	6	316	17	0	339	730	
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0		

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-356 and Brewer ST.  
Site Code: STA 13  
Start Date: 02/21/2019  
Page No: 5



Turning Movement Peak Hour Data Plot (11:00 AM)

State Of Tennessee (TDOT)  
Address

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Count Name: SR-356 and Brewer ST.  
Site Code: STA 13  
Start Date: 02/21/2019  
Page No: 6

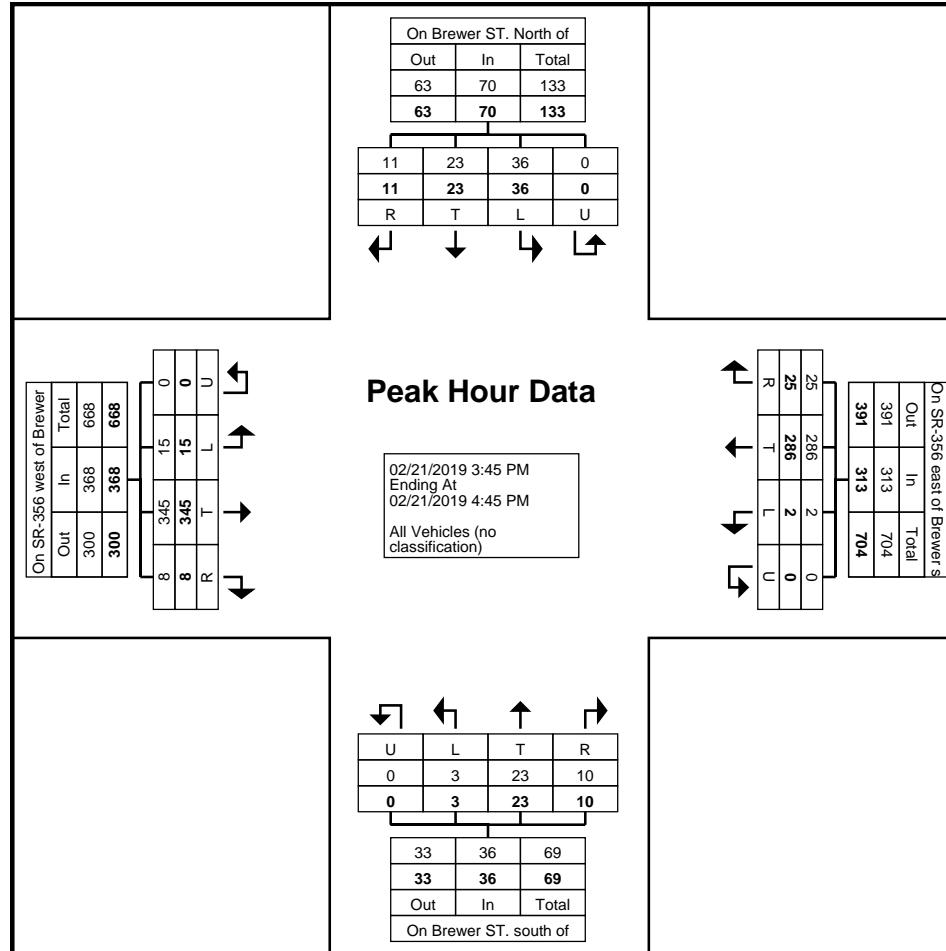
**Turning Movement Peak Hour Data (3:45 PM)**

Start Time	On Brewer ST. North of SR-356					On SR-356 east of Brewer st.					On Brewer ST. south of SR -356					On SR-356 west of Brewer St.					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
3:45 PM	2	10	9	0	21	4	72	0	0	76	1	2	0	0	3	3	71	1	0	75	175
4:00 PM	3	5	8	0	16	6	83	1	0	90	1	4	1	0	6	2	76	3	0	81	193
4:15 PM	3	6	8	0	17	6	64	1	0	71	4	11	1	0	16	0	95	7	0	102	206
4:30 PM	3	2	11	0	16	9	67	0	0	76	4	6	1	0	11	3	103	4	0	110	213
Total	11	23	36	0	70	25	286	2	0	313	10	23	3	0	36	8	345	15	0	368	787
Approach %	15.7	32.9	51.4	0.0	-	8.0	91.4	0.6	0.0	-	27.8	63.9	8.3	0.0	-	2.2	93.8	4.1	0.0	-	-
Total %	1.4	2.9	4.6	0.0	8.9	3.2	36.3	0.3	0.0	39.8	1.3	2.9	0.4	0.0	4.6	1.0	43.8	1.9	0.0	46.8	-
PHF	0.917	0.575	0.818	0.000	0.833	0.694	0.861	0.500	0.000	0.869	0.625	0.523	0.750	0.000	0.563	0.667	0.837	0.536	0.000	0.836	0.924
All Vehicles (no classification)	11	23	36	0	70	25	286	2	0	313	10	23	3	0	36	8	345	15	0	368	787
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

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Count Name: SR-356 and Brewer ST.  
Site Code: STA 13  
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Turning Movement Peak Hour Data Plot (3:45 PM)

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Count Name: SR-356 and Brewer ST.  
Site Code: STA 13  
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Count Name: SR.-356 and Highland ST.  
Site Code: STA 14  
Start Date: 02/20/2019  
Page No: 1

### Turning Movement Data

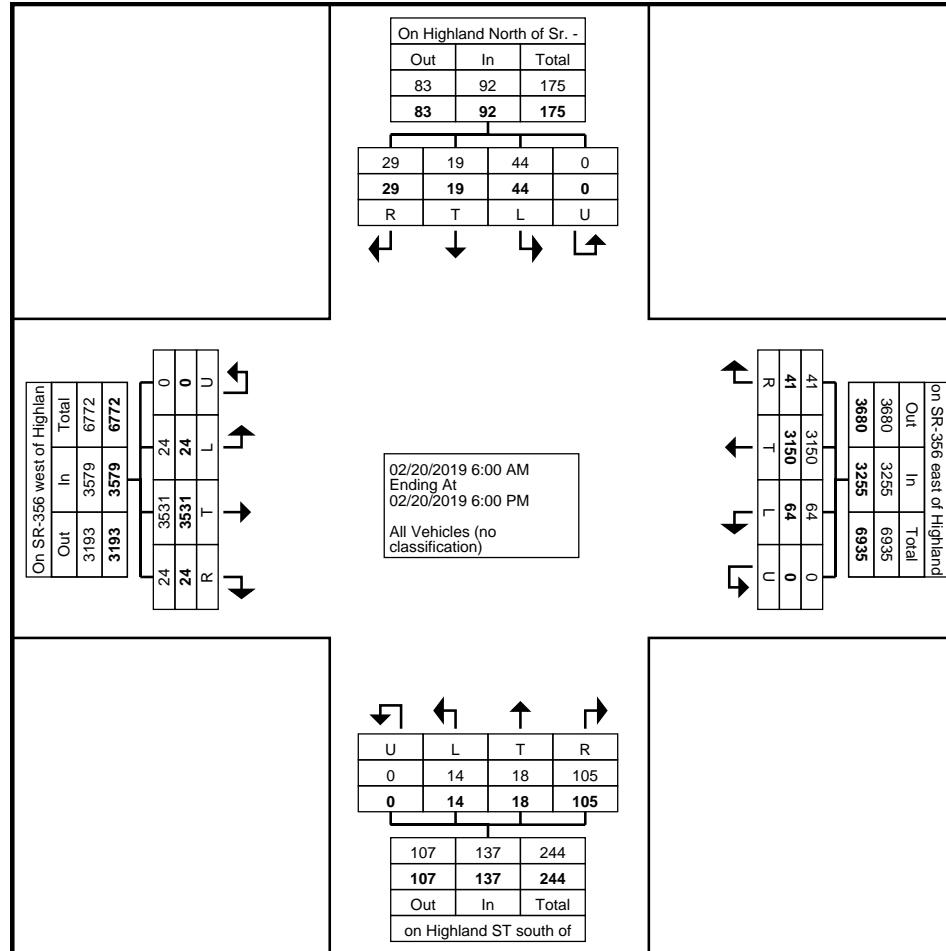
Start Time	On Highland North of Sr. -356					on SR-356 east of Highland ST.					on Highland ST south of SR-56					On SR-356 west of Highland St.					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
6:00 AM	0	0	1	0	1	0	22	0	0	22	2	0	1	0	3	0	22	1	0	23	49	
6:15 AM	1	0	3	0	4	2	39	1	0	42	2	0	0	0	2	1	27	0	0	28	76	
6:30 AM	0	0	1	0	1	0	50	1	0	51	1	0	0	0	1	1	45	1	0	47	100	
6:45 AM	1	0	1	0	2	0	62	1	0	63	2	0	0	0	2	0	48	0	0	48	115	
Hourly Total	2	0	6	0	8	2	173	3	0	178	7	0	1	0	8	2	142	2	0	146	340	
7:00 AM	2	0	1	0	3	2	43	0	0	45	3	0	0	0	3	0	42	0	0	42	93	
7:15 AM	0	0	0	0	0	1	48	1	0	50	1	0	0	0	1	2	83	0	0	85	136	
7:30 AM	1	1	1	0	3	0	92	1	0	93	3	2	2	0	7	0	94	0	0	94	197	
7:45 AM	0	0	3	0	3	0	79	1	0	80	2	2	0	0	4	0	113	0	0	113	200	
Hourly Total	3	1	5	0	9	3	262	3	0	268	9	4	2	0	15	2	332	0	0	334	626	
8:00 AM	0	0	2	0	2	2	71	2	0	75	1	0	0	0	1	0	64	1	0	65	143	
8:15 AM	1	0	2	0	3	1	52	3	0	56	0	1	1	0	2	0	50	0	0	50	111	
8:30 AM	0	0	1	0	1	0	54	0	0	54	2	0	0	0	2	0	52	0	0	52	109	
8:45 AM	1	0	0	0	1	1	67	0	0	68	4	0	0	0	4	2	53	0	0	55	128	
Hourly Total	2	0	5	0	7	4	244	5	0	253	7	1	1	0	9	2	219	1	0	222	491	
9:00 AM	1	1	1	0	3	0	47	2	0	49	0	0	0	0	0	0	40	1	0	41	93	
9:15 AM	0	0	0	0	0	0	60	1	0	61	3	0	0	0	3	1	64	0	0	65	129	
9:30 AM	1	1	1	0	3	0	52	1	0	53	2	0	1	0	3	0	62	0	0	62	121	
9:45 AM	0	0	2	0	2	1	68	3	0	72	5	0	1	0	6	0	83	0	0	83	163	
Hourly Total	2	2	4	0	8	1	227	7	0	235	10	0	2	0	12	1	249	1	0	251	506	
10:00 AM	2	1	1	0	4	0	60	3	0	63	3	0	0	0	3	1	77	0	0	78	148	
10:15 AM	1	0	1	0	2	3	73	0	0	76	4	0	0	0	4	0	54	1	0	55	137	
10:30 AM	0	2	0	0	2	0	62	4	0	66	0	0	1	0	1	1	63	1	0	65	134	
10:45 AM	0	0	0	0	0	1	62	0	0	63	2	1	0	0	3	0	80	2	0	82	148	
Hourly Total	3	3	2	0	8	4	257	7	0	268	9	1	1	0	11	2	274	4	0	280	567	
11:00 AM	1	0	2	0	3	0	68	0	0	68	4	0	0	0	4	0	74	0	0	74	149	
11:15 AM	1	0	1	0	2	2	84	1	0	87	4	0	1	0	5	0	89	0	0	89	183	
11:30 AM	1	0	0	0	1	1	59	0	0	60	4	0	1	0	5	0	86	2	0	88	154	
11:45 AM	0	0	0	0	0	0	57	2	0	59	0	0	1	0	1	0	92	1	0	93	153	
Hourly Total	3	0	3	0	6	3	268	3	0	274	12	0	3	0	15	0	341	3	0	344	639	
12:00 PM	1	2	1	0	4	2	72	3	0	77	1	0	1	0	2	0	85	0	0	85	168	
12:15 PM	0	1	1	0	2	1	72	1	0	74	4	2	0	0	6	1	83	0	0	84	166	
12:30 PM	2	2	1	0	5	1	82	3	0	86	0	0	0	0	0	0	83	0	0	83	174	
12:45 PM	2	0	0	0	2	1	65	1	0	67	4	1	0	0	5	0	72	0	0	72	146	
Hourly Total	5	5	3	0	13	5	291	8	0	304	9	3	1	0	13	1	323	0	0	324	654	
1:00 PM	0	0	1	0	1	1	73	3	0	77	3	1	0	0	4	1	81	3	0	85	167	
1:15 PM	0	2	1	0	3	0	84	0	0	84	2	0	1	0	3	1	72	0	0	73	163	
1:30 PM	0	0	0	0	0	0	70	3	0	73	0	1	0	0	1	1	86	0	0	87	161	
1:45 PM	0	0	0	0	0	0	70	2	0	72	5	0	0	0	5	2	88	0	0	90	167	
Hourly Total	0	2	2	0	4	1	297	8	0	306	10	2	1	0	13	5	327	3	0	335	658	
2:00 PM	0	1	0	0	1	0	74	0	0	74	4	1	0	0	5	0	90	0	0	90	170	

2:15 PM	0	0	0	0	0	0	66	0	0	66	2	1	0	0	3	0	81	0	0	81	150
2:30 PM	0	0	0	0	0	0	75	0	0	75	2	2	0	0	4	0	81	0	0	81	160
2:45 PM	0	2	1	0	3	0	83	0	0	83	0	0	0	0	0	0	66	0	0	66	152
Hourly Total	0	3	1	0	4	0	298	0	0	298	8	4	0	0	12	0	318	0	0	318	632
3:00 PM	2	0	0	0	2	0	77	0	0	77	3	0	0	0	3	0	62	0	0	62	144
3:15 PM	1	0	5	0	6	1	74	0	0	75	0	0	0	0	0	0	89	0	0	89	170
3:30 PM	1	0	0	0	1	1	69	1	0	71	1	0	0	0	1	0	115	0	0	115	188
3:45 PM	0	0	1	0	1	0	68	0	0	68	1	0	0	0	1	1	79	0	0	80	150
Hourly Total	4	0	6	0	10	2	288	1	0	291	5	0	0	0	5	1	345	0	0	346	652
4:00 PM	1	0	1	0	2	3	85	0	0	88	0	0	0	0	0	3	76	1	0	80	170
4:15 PM	1	0	0	0	1	2	55	5	0	62	3	1	0	0	4	1	106	1	0	108	175
4:30 PM	1	0	2	0	3	2	81	1	0	84	5	0	0	0	5	1	106	1	0	108	200
4:45 PM	0	0	2	0	2	2	58	3	0	63	1	0	2	0	3	1	85	0	0	86	154
Hourly Total	3	0	5	0	8	9	279	9	0	297	9	1	2	0	12	6	373	3	0	382	699
5:00 PM	0	0	0	0	0	1	91	4	0	96	3	1	0	0	4	0	107	4	0	111	211
5:15 PM	1	0	0	0	1	1	64	3	0	68	2	1	0	0	3	0	62	0	0	62	134
5:30 PM	1	1	0	0	2	2	59	2	0	63	3	0	0	0	3	1	73	1	0	75	143
5:45 PM	0	2	2	0	4	3	52	1	0	56	2	0	0	0	2	1	46	2	0	49	111
Hourly Total	2	3	2	0	7	7	266	10	0	283	10	2	0	0	12	2	288	7	0	297	599
Grand Total	29	19	44	0	92	41	3150	64	0	3255	105	18	14	0	137	24	3531	24	0	3579	7063
Approach %	31.5	20.7	47.8	0.0	-	1.3	96.8	2.0	0.0	-	76.6	13.1	10.2	0.0	-	0.7	98.7	0.7	0.0	-	-
Total %	0.4	0.3	0.6	0.0	1.3	0.6	44.6	0.9	0.0	46.1	1.5	0.3	0.2	0.0	1.9	0.3	50.0	0.3	0.0	50.7	-
All Vehicles (no classification)	29	19	44	0	92	41	3150	64	0	3255	105	18	14	0	137	24	3531	24	0	3579	7063
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

State Of Tennessee (TDOT)  
Address

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Count Name: SR.-356 and Highland ST.  
Site Code: STA 14  
Start Date: 02/20/2019  
Page No: 3



Turning Movement Data Plot

State Of Tennessee (TDOT)  
Address

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Phone karen.watts@tn.gov

Count Name: SR.-356 and Highland ST.  
Site Code: STA 14  
Start Date: 02/20/2019  
Page No: 4

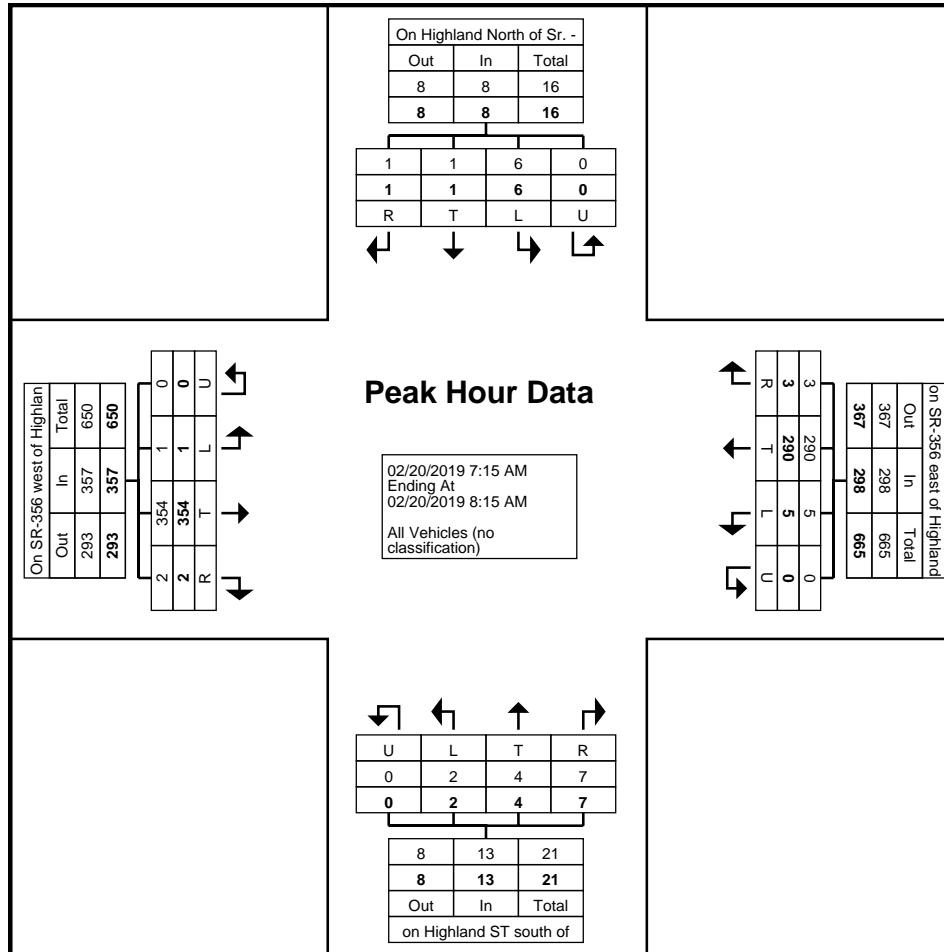
### Turning Movement Peak Hour Data (7:15 AM)

Start Time	On Highland North of Sr. -356					on SR-356 east of Highland ST.					on Highland ST south of SR-56					On SR-356 west of Highland St.					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
7:15 AM	0	0	0	0	0	1	48	1	0	50	1	0	0	0	1	2	83	0	0	85	136
7:30 AM	1	1	1	0	3	0	92	1	0	93	3	2	2	0	7	0	94	0	0	94	197
7:45 AM	0	0	3	0	3	0	79	1	0	80	2	2	0	0	4	0	113	0	0	113	200
8:00 AM	0	0	2	0	2	2	71	2	0	75	1	0	0	0	1	0	64	1	0	65	143
Total	1	1	6	0	8	3	290	5	0	298	7	4	2	0	13	2	354	1	0	357	676
Approach %	12.5	12.5	75.0	0.0	-	1.0	97.3	1.7	0.0	-	53.8	30.8	15.4	0.0	-	0.6	99.2	0.3	0.0	-	-
Total %	0.1	0.1	0.9	0.0	1.2	0.4	42.9	0.7	0.0	44.1	1.0	0.6	0.3	0.0	1.9	0.3	52.4	0.1	0.0	52.8	-
PHF	0.250	0.250	0.500	0.000	0.667	0.375	0.788	0.625	0.000	0.801	0.583	0.500	0.250	0.000	0.464	0.250	0.783	0.250	0.000	0.790	0.845
All Vehicles (no classification)	1	1	6	0	8	3	290	5	0	298	7	4	2	0	13	2	354	1	0	357	676
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

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Count Name: SR.-356 and Highland ST.  
Site Code: STA 14  
Start Date: 02/20/2019  
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Turning Movement Peak Hour Data Plot (7:15 AM)

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Count Name: SR.-356 and Highland ST.  
Site Code: STA 14  
Start Date: 02/20/2019  
Page No: 6

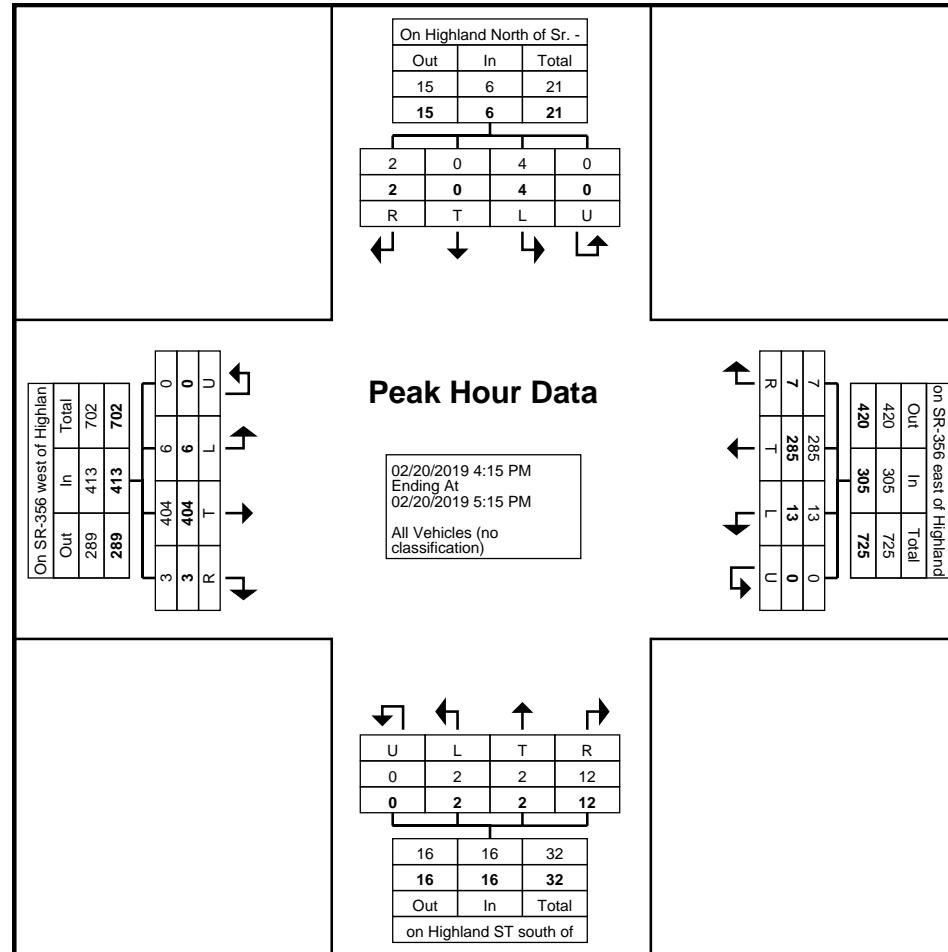
**Turning Movement Peak Hour Data (4:15 PM)**

Start Time	On Highland North of Sr. -356					on SR-356 east of Highland ST.					on Highland ST south of SR-56					On SR-356 west of Highland St.					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:15 PM	1	0	0	0	1	2	55	5	0	62	3	1	0	0	4	1	106	1	0	108	175
4:30 PM	1	0	2	0	3	2	81	1	0	84	5	0	0	0	5	1	106	1	0	108	200
4:45 PM	0	0	2	0	2	2	58	3	0	63	1	0	2	0	3	1	85	0	0	86	154
5:00 PM	0	0	0	0	0	1	91	4	0	96	3	1	0	0	4	0	107	4	0	111	211
Total	2	0	4	0	6	7	285	13	0	305	12	2	2	0	16	3	404	6	0	413	740
Approach %	33.3	0.0	66.7	0.0	-	2.3	93.4	4.3	0.0	-	75.0	12.5	12.5	0.0	-	0.7	97.8	1.5	0.0	-	-
Total %	0.3	0.0	0.5	0.0	0.8	0.9	38.5	1.8	0.0	41.2	1.6	0.3	0.3	0.0	2.2	0.4	54.6	0.8	0.0	55.8	-
PHF	0.500	0.000	0.500	0.000	0.500	0.875	0.783	0.650	0.000	0.794	0.600	0.500	0.250	0.000	0.800	0.750	0.944	0.375	0.000	0.930	0.877
All Vehicles (no classification)	2	0	4	0	6	7	285	13	0	305	12	2	2	0	16	3	404	6	0	413	740
% All Vehicles (no classification)	100.0	-	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

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Count Name: SR.-356 and Highland ST.  
Site Code: STA 14  
Start Date: 02/20/2019  
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Turning Movement Peak Hour Data Plot (4:15 PM)

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Count Name: SR.-356 and Highland ST.  
Site Code: STA 14  
Start Date: 02/20/2019  
Page No: 8

State Of Tennessee (TDOT)  
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Phone karen.watts@tn.gov

Count Name: SR-356 and Lake ST in Paris Tn  
Site Code: STA-15  
Start Date: 02/20/2019  
Page No: 1

**Turning Movement Data**

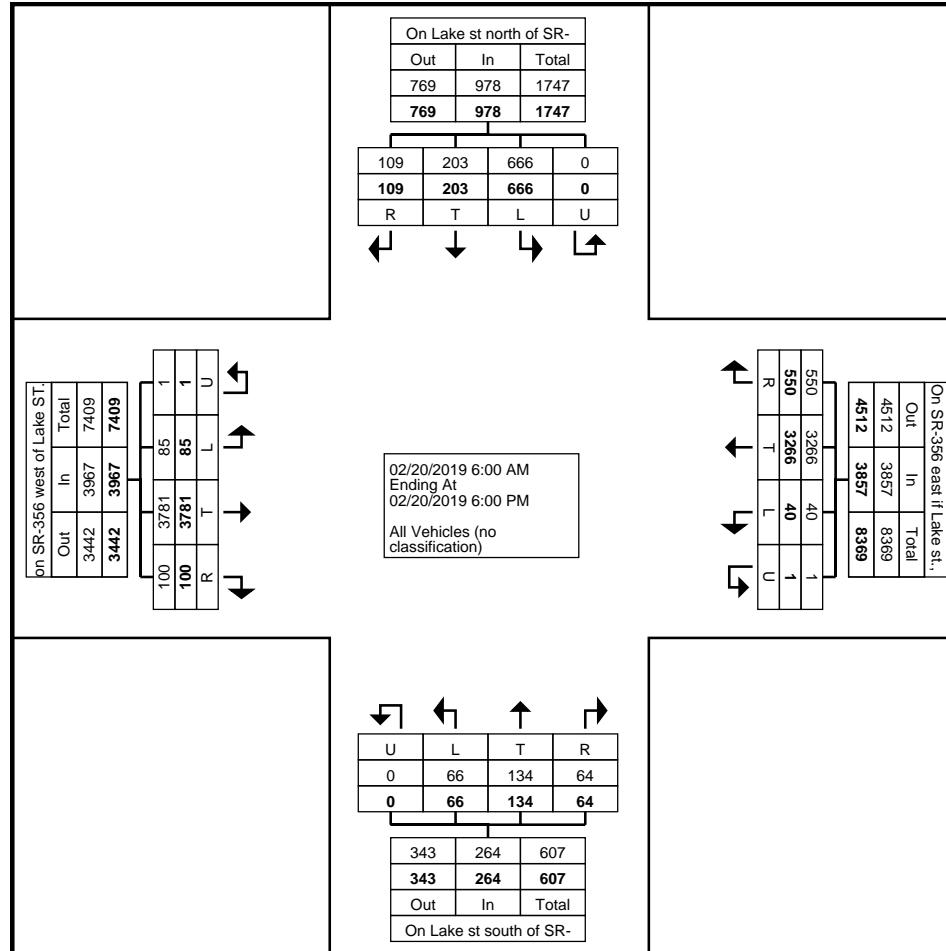
Start Time	On Lake st north of SR-356					On SR-356 east if Lake st.,					On Lake st south of SR-356					on SR-356 west of Lake ST.					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
6:00 AM	0	0	4	0	4	2	22	0	0	24	0	0	0	0	0	0	27	0	0	27	55	
6:15 AM	2	1	4	0	7	3	40	0	0	43	1	0	0	0	1	1	30	1	0	32	83	
6:30 AM	0	0	7	0	7	7	47	0	0	54	0	0	0	0	0	0	42	1	0	43	104	
6:45 AM	2	5	8	0	15	6	60	0	0	66	0	2	0	0	2	2	53	1	0	56	139	
Hourly Total	4	6	23	0	33	18	169	0	0	187	1	2	0	0	3	3	152	3	0	158	381	
7:00 AM	3	1	7	0	11	3	38	2	0	43	0	1	0	0	1	2	44	0	0	46	101	
7:15 AM	2	10	8	0	20	7	53	0	0	60	0	1	0	0	1	3	80	2	0	85	166	
7:30 AM	3	6	15	0	24	5	91	0	0	96	4	5	3	0	12	2	96	0	0	98	230	
7:45 AM	1	6	17	0	24	8	84	0	0	92	0	7	6	0	13	5	111	2	0	118	247	
Hourly Total	9	23	47	0	79	23	266	2	0	291	4	14	9	0	27	12	331	4	0	347	744	
8:00 AM	2	3	8	0	13	10	84	1	0	95	1	2	1	0	4	2	70	1	0	73	185	
8:15 AM	2	5	10	0	17	4	58	0	0	62	4	1	1	0	6	5	49	2	0	56	141	
8:30 AM	0	1	6	0	7	14	56	3	0	73	3	4	1	0	8	5	55	1	0	61	149	
8:45 AM	1	4	12	0	17	3	67	1	0	71	2	2	3	0	7	1	56	1	0	58	153	
Hourly Total	5	13	36	0	54	31	265	5	0	301	10	9	6	0	25	13	230	5	0	248	628	
9:00 AM	3	2	10	0	15	4	50	2	0	56	0	4	0	0	4	1	46	1	0	48	123	
9:15 AM	4	2	12	0	18	12	55	0	0	67	4	3	1	0	8	1	64	2	0	67	160	
9:30 AM	3	3	19	0	25	8	56	1	0	65	1	1	0	0	2	0	66	1	0	67	159	
9:45 AM	4	2	15	0	21	7	79	1	0	87	3	0	0	0	3	3	83	2	0	88	199	
Hourly Total	14	9	56	0	79	31	240	4	0	275	8	8	1	0	17	5	259	6	0	270	641	
10:00 AM	4	4	8	0	16	9	64	1	0	74	0	2	0	0	2	0	78	4	0	82	174	
10:15 AM	2	3	16	0	21	16	72	1	0	89	3	0	1	0	4	2	62	0	0	64	178	
10:30 AM	6	2	10	0	18	14	67	0	0	81	2	4	1	0	7	2	73	1	0	76	182	
10:45 AM	3	4	14	0	21	10	58	4	0	72	0	4	0	0	4	2	88	3	0	93	190	
Hourly Total	15	13	48	0	76	49	261	6	0	316	5	10	2	0	17	6	301	8	0	315	724	
11:00 AM	2	6	17	0	25	10	66	0	0	76	2	1	3	0	6	2	85	1	0	88	195	
11:15 AM	2	1	24	0	27	11	91	1	0	103	2	6	1	0	9	2	95	3	0	100	239	
11:30 AM	4	7	12	0	23	13	53	0	0	66	0	3	1	0	4	1	107	1	0	109	202	
11:45 AM	3	4	16	0	23	7	70	2	0	79	3	3	2	0	8	2	96	1	0	99	209	
Hourly Total	11	18	69	0	98	41	280	3	0	324	7	13	7	0	27	7	383	6	0	396	845	
12:00 PM	2	7	16	0	25	11	78	0	0	89	4	4	3	0	11	4	90	4	0	98	223	
12:15 PM	4	7	19	0	30	21	74	4	0	99	2	0	3	0	5	5	87	1	0	93	227	
12:30 PM	6	7	14	0	27	11	80	0	0	91	0	4	3	0	7	6	94	2	0	102	227	
12:45 PM	7	5	9	0	21	15	69	0	0	84	2	4	1	0	7	1	81	3	0	85	197	
Hourly Total	19	26	58	0	103	58	301	4	0	363	8	12	10	0	30	16	352	10	0	378	874	
1:00 PM	2	4	10	0	16	16	72	1	0	89	1	1	1	0	3	1	76	3	0	80	188	
1:15 PM	1	5	23	0	29	16	80	1	0	97	1	2	3	0	6	3	77	2	1	83	215	
1:30 PM	2	2	14	0	18	13	72	0	0	85	0	2	1	0	3	0	76	6	0	82	188	
1:45 PM	2	2	24	0	28	10	64	0	0	74	1	4	0	0	5	1	93	1	0	95	202	
Hourly Total	7	13	71	0	91	55	288	2	0	345	3	9	5	0	17	5	322	12	1	340	793	
2:00 PM	7	3	17	0	27	12	64	0	0	76	1	1	1	0	3	3	77	2	0	82	188	



State Of Tennessee (TDOT)  
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Count Name: SR-356 and Lake ST in Paris Tn  
Site Code: STA-15  
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Turning Movement Data Plot

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Count Name: SR-356 and Lake ST in Paris Tn  
Site Code: STA-15  
Start Date: 02/20/2019  
Page No: 4

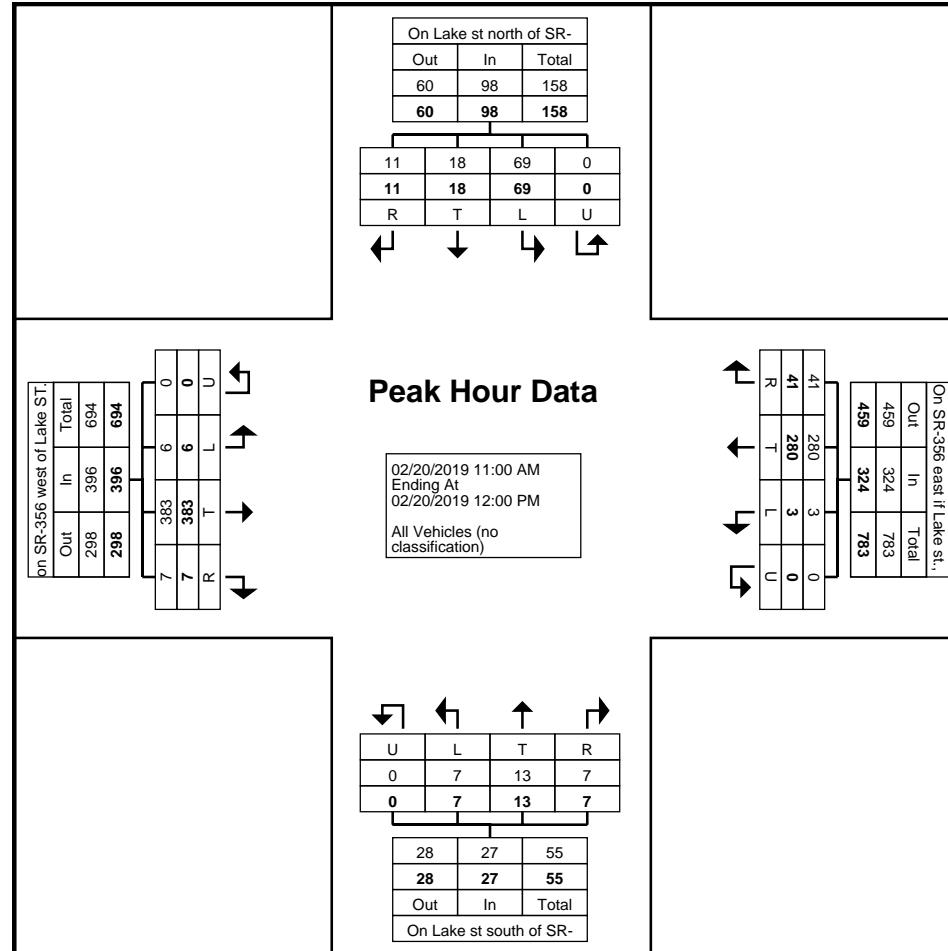
Turning Movement Peak Hour Data (11:00 AM)

Start Time	On Lake st north of SR-356					On SR-356 east if Lake st.,					On Lake st south of SR-356					on SR-356 west of Lake ST.					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
11:00 AM	2	6	17	0	25	10	66	0	0	76	2	1	3	0	6	2	85	1	0	88	195
11:15 AM	2	1	24	0	27	11	91	1	0	103	2	6	1	0	9	2	95	3	0	100	239
11:30 AM	4	7	12	0	23	13	53	0	0	66	0	3	1	0	4	1	107	1	0	109	202
11:45 AM	3	4	16	0	23	7	70	2	0	79	3	3	2	0	8	2	96	1	0	99	209
Total	11	18	69	0	98	41	280	3	0	324	7	13	7	0	27	7	383	6	0	396	845
Approach %	11.2	18.4	70.4	0.0	-	12.7	86.4	0.9	0.0	-	25.9	48.1	25.9	0.0	-	1.8	96.7	1.5	0.0	-	-
Total %	1.3	2.1	8.2	0.0	11.6	4.9	33.1	0.4	0.0	38.3	0.8	1.5	0.8	0.0	3.2	0.8	45.3	0.7	0.0	46.9	-
PHF	0.688	0.643	0.719	0.000	0.907	0.788	0.769	0.375	0.000	0.786	0.583	0.542	0.583	0.000	0.750	0.875	0.895	0.500	0.000	0.908	0.884
All Vehicles (no classification)	11	18	69	0	98	41	280	3	0	324	7	13	7	0	27	7	383	6	0	396	845
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

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Count Name: SR-356 and Lake ST in Paris Tn  
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Turning Movement Peak Hour Data Plot (11:00 AM)

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Count Name: SR-356 and Lake ST in Paris Tn  
Site Code: STA-15  
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Page No: 6

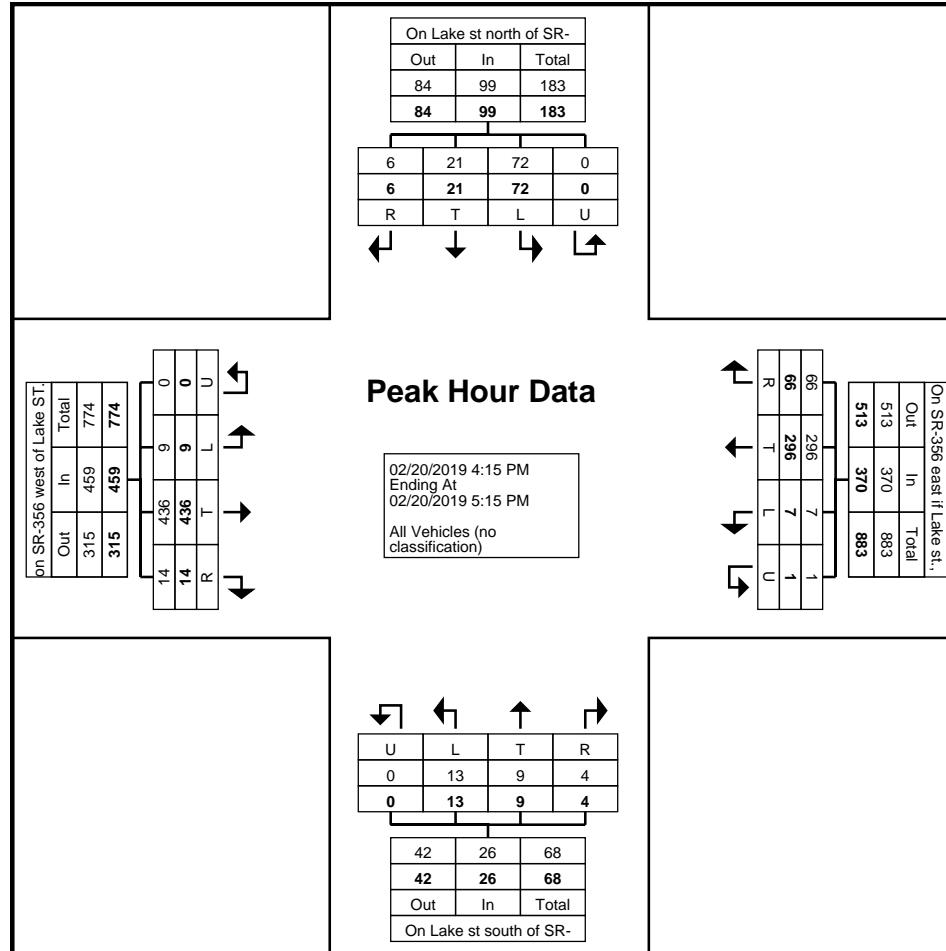
**Turning Movement Peak Hour Data (4:15 PM)**

Start Time	On Lake st north of SR-356					On SR-356 east if Lake st.,					On Lake st south of SR-356					on SR-356 west of Lake ST.					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:15 PM	1	4	16	0	21	16	65	2	1	84	3	2	2	0	7	3	109	3	0	115	227
4:30 PM	2	7	17	0	26	19	76	1	0	96	0	4	4	0	8	3	115	2	0	120	250
4:45 PM	2	4	15	0	21	13	61	0	0	74	1	2	6	0	9	0	93	3	0	96	200
5:00 PM	1	6	24	0	31	18	94	4	0	116	0	1	1	0	2	8	119	1	0	128	277
Total	6	21	72	0	99	66	296	7	1	370	4	9	13	0	26	14	436	9	0	459	954
Approach %	6.1	21.2	72.7	0.0	-	17.8	80.0	1.9	0.3	-	15.4	34.6	50.0	0.0	-	3.1	95.0	2.0	0.0	-	-
Total %	0.6	2.2	7.5	0.0	10.4	6.9	31.0	0.7	0.1	38.8	0.4	0.9	1.4	0.0	2.7	1.5	45.7	0.9	0.0	48.1	-
PHF	0.750	0.750	0.750	0.000	0.798	0.868	0.787	0.438	0.250	0.797	0.333	0.563	0.542	0.000	0.722	0.438	0.916	0.750	0.000	0.896	0.861
All Vehicles (no classification)	6	21	72	0	99	66	296	7	1	370	4	9	13	0	26	14	436	9	0	459	954
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

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Count Name: SR-356 and Lake ST in Paris Tn  
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Turning Movement Peak Hour Data Plot (4:15 PM)

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Count Name: SR-356 and Lake ST in Paris Tn  
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Count Name: SR-356 and Poplar ST in Paris Tn  
Site Code: STA 16  
Start Date: 02/21/2019  
Page No: 1

### Turning Movement Data

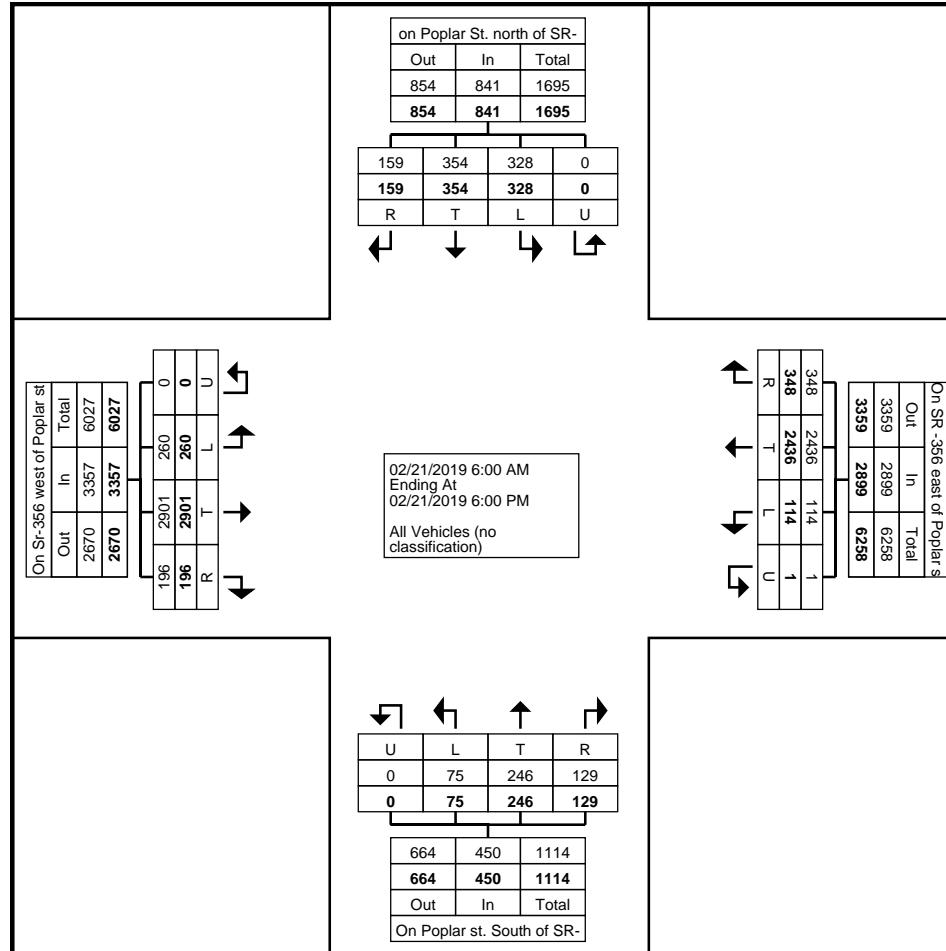
Start Time	on Poplar St. north of SR-356					On SR -356 east of Poplar st.					On Poplar st. South of SR-356					On Sr-356 west of Poplar st.					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
6:00 AM	1	0	1	0	2	1	20	1	1	23	0	2	0	0	2	0	25	1	0	26	53	
6:15 AM	0	1	2	0	3	0	40	1	0	41	0	0	0	0	0	1	30	0	0	31	75	
6:30 AM	1	1	0	0	2	3	33	0	0	36	0	2	1	0	3	1	41	1	0	43	84	
6:45 AM	0	1	6	0	7	3	43	0	0	46	2	3	0	0	5	0	54	1	0	55	113	
Hourly Total	2	3	9	0	14	7	136	2	1	146	2	7	1	0	10	2	150	3	0	155	325	
7:00 AM	1	0	3	0	4	1	38	0	0	39	2	0	1	0	3	0	59	2	0	61	107	
7:15 AM	2	5	2	0	9	2	40	1	0	43	1	4	1	0	6	5	87	0	0	92	150	
7:30 AM	2	7	3	0	12	6	54	3	0	63	0	5	1	0	6	2	95	4	0	101	182	
7:45 AM	1	7	6	0	14	5	59	2	0	66	2	7	1	0	10	7	74	4	0	85	175	
Hourly Total	6	19	14	0	39	14	191	6	0	211	5	16	4	0	25	14	315	10	0	339	614	
8:00 AM	3	2	2	0	7	4	42	1	0	47	2	4	0	0	6	2	45	5	0	52	112	
8:15 AM	3	6	4	0	13	4	27	1	0	32	0	4	0	0	4	5	45	6	0	56	105	
8:30 AM	4	4	3	0	11	6	35	2	0	43	0	6	2	0	8	4	46	8	0	58	120	
8:45 AM	7	11	6	0	24	7	35	4	0	46	0	1	1	0	2	4	53	6	0	63	135	
Hourly Total	17	23	15	0	55	21	139	8	0	168	2	15	3	0	20	15	189	25	0	229	472	
9:00 AM	8	6	4	0	18	10	38	1	0	49	5	1	1	0	7	5	44	3	0	52	126	
9:15 AM	6	5	7	0	18	5	38	1	0	44	2	2	1	0	5	6	73	8	0	87	154	
9:30 AM	2	6	5	0	13	9	39	5	0	53	1	6	2	0	9	7	50	4	0	61	136	
9:45 AM	7	4	4	0	15	8	37	3	0	48	4	5	1	0	10	7	61	2	0	70	143	
Hourly Total	23	21	20	0	64	32	152	10	0	194	12	14	5	0	31	25	228	17	0	270	559	
10:00 AM	1	6	6	0	13	12	33	6	0	51	2	3	5	0	10	7	47	10	0	64	138	
10:15 AM	9	9	7	0	25	5	48	1	0	54	0	5	1	0	6	6	52	8	0	66	151	
10:30 AM	2	15	9	0	26	8	49	1	0	58	1	7	2	0	10	5	65	6	0	76	170	
10:45 AM	9	3	6	0	18	15	47	3	0	65	3	1	2	0	6	3	70	9	0	82	171	
Hourly Total	21	33	28	0	82	40	177	11	0	228	6	16	10	0	32	21	234	33	0	288	630	
11:00 AM	4	12	9	0	25	12	57	4	0	73	8	11	1	0	20	13	64	5	0	82	200	
11:15 AM	3	8	8	0	19	5	40	6	0	51	5	13	1	0	19	6	69	9	0	84	173	
11:30 AM	4	11	11	0	26	10	51	0	0	61	7	5	3	0	15	5	68	11	0	84	186	
11:45 AM	4	11	14	0	29	8	61	6	0	75	7	4	1	0	12	4	69	6	0	79	195	
Hourly Total	15	42	42	0	99	35	209	16	0	260	27	33	6	0	66	28	270	31	0	329	754	
12:00 PM	3	13	13	0	29	7	38	3	0	48	8	9	1	0	18	1	50	4	0	55	150	
12:15 PM	2	7	7	0	16	11	46	0	0	57	2	9	1	0	12	3	59	4	0	66	151	
12:30 PM	1	6	5	0	12	6	60	2	0	68	2	5	0	0	7	7	54	11	0	72	159	
12:45 PM	4	18	9	0	31	9	68	1	0	78	4	9	0	0	13	1	50	4	0	55	177	
Hourly Total	10	44	34	0	88	33	212	6	0	251	16	32	2	0	50	12	213	23	0	248	637	
1:00 PM	4	6	14	0	24	13	60	6	0	79	9	4	0	0	13	4	67	11	0	82	198	
1:15 PM	1	11	11	0	23	8	70	1	0	79	6	6	1	0	13	6	55	4	0	65	180	
1:30 PM	3	7	9	0	19	5	57	2	0	64	2	5	2	0	9	6	65	6	0	77	169	
1:45 PM	4	7	8	0	19	7	51	3	0	61	3	9	3	0	15	6	58	8	0	72	167	
Hourly Total	12	31	42	0	85	33	238	12	0	283	20	24	6	0	50	22	245	29	0	296	714	
2:00 PM	6	4	6	0	16	8	55	0	0	63	1	8	2	0	11	2	75	7	0	84	174	

2:15 PM	3	6	6	0	15	11	56	3	0	70	0	6	4	0	10	0	61	10	0	71	166
2:30 PM	6	3	13	0	22	7	64	2	0	73	1	3	1	0	5	3	61	5	0	69	169
2:45 PM	3	10	4	0	17	16	68	7	0	91	2	6	3	0	11	1	61	3	0	65	184
Hourly Total	18	23	29	0	70	42	243	12	0	297	4	23	10	0	37	6	258	25	0	289	693
3:00 PM	3	7	10	0	20	9	60	3	0	72	3	8	1	0	12	1	64	5	0	70	174
3:15 PM	3	9	4	0	16	8	59	2	0	69	6	8	2	0	16	6	64	7	0	77	178
3:30 PM	2	8	12	0	22	7	76	4	0	87	5	10	4	0	19	4	68	5	0	77	205
3:45 PM	5	5	7	0	17	10	60	2	0	72	6	5	2	0	13	4	58	9	0	71	173
Hourly Total	13	29	33	0	75	34	255	11	0	300	20	31	9	0	60	15	254	26	0	295	730
4:00 PM	7	11	7	0	25	14	69	3	0	86	1	9	3	0	13	6	73	3	0	82	206
4:15 PM	1	6	8	0	15	9	52	4	0	65	4	3	3	0	10	6	85	9	0	100	190
4:30 PM	4	26	13	0	43	10	62	1	0	73	5	4	6	0	15	3	84	6	0	93	224
4:45 PM	4	12	9	0	25	3	65	1	0	69	0	2	1	0	3	3	73	6	0	82	179
Hourly Total	16	55	37	0	108	36	248	9	0	293	10	18	13	0	41	18	315	24	0	357	799
5:00 PM	1	13	8	0	22	2	73	2	0	77	2	7	2	0	11	3	75	1	0	79	189
5:15 PM	2	4	5	0	11	5	68	2	0	75	0	0	2	0	2	6	61	5	0	72	160
5:30 PM	0	4	11	0	15	6	57	3	0	66	2	5	2	0	9	3	53	5	0	61	151
5:45 PM	3	10	1	0	14	8	38	4	0	50	1	5	0	0	6	6	41	3	0	50	120
Hourly Total	6	31	25	0	62	21	236	11	0	268	5	17	6	0	28	18	230	14	0	262	620
Grand Total	159	354	328	0	841	348	2436	114	1	2899	129	246	75	0	450	196	2901	260	0	3357	7547
Approach %	18.9	42.1	39.0	0.0	-	12.0	84.0	3.9	0.0	-	28.7	54.7	16.7	0.0	-	5.8	86.4	7.7	0.0	-	-
Total %	2.1	4.7	4.3	0.0	11.1	4.6	32.3	1.5	0.0	38.4	1.7	3.3	1.0	0.0	6.0	2.6	38.4	3.4	0.0	44.5	-
All Vehicles (no classification)	159	354	328	0	841	348	2436	114	1	2899	129	246	75	0	450	196	2901	260	0	3357	7547
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	100.0	

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Count Name: SR-356 and Poplar ST in Paris Tn  
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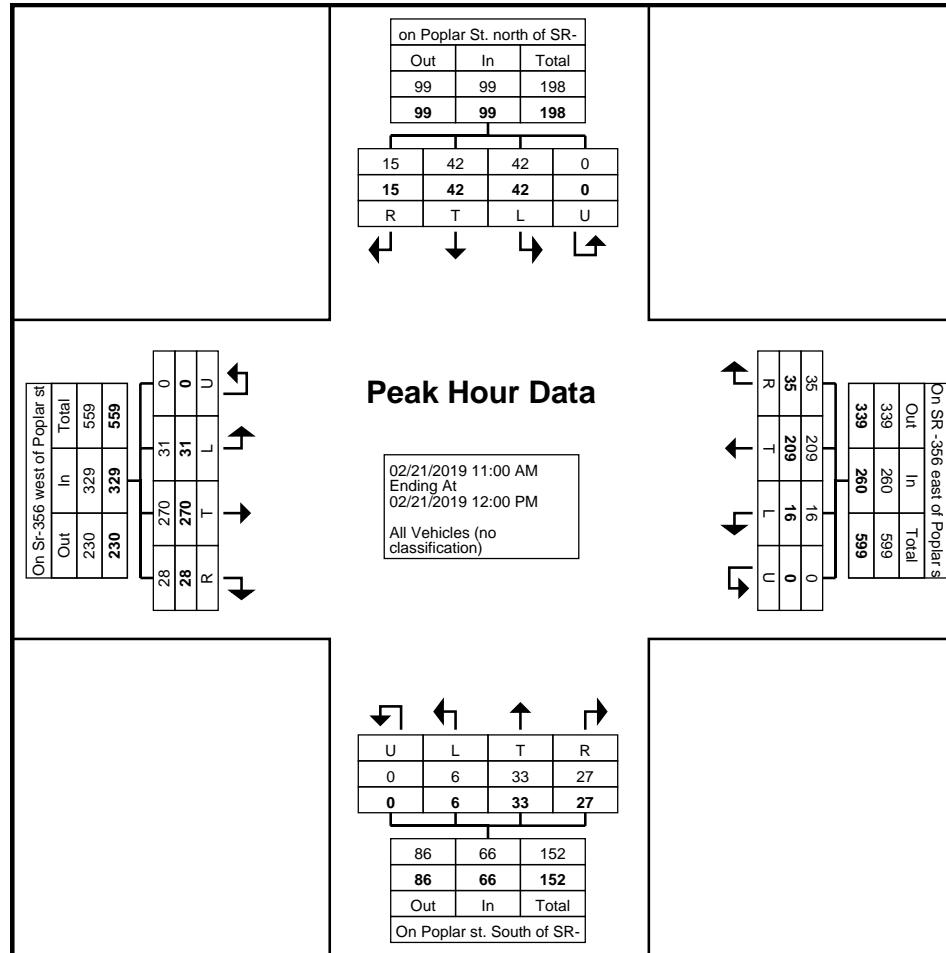
### Turning Movement Peak Hour Data (11:00 AM)

Start Time	on Poplar St. north of SR-356					On SR -356 east of Poplar st.					On Poplar st. South of SR-356					On Sr-356 west of Poplar st.					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
11:00 AM	4	12	9	0	25	12	57	4	0	73	8	11	1	0	20	13	64	5	0	82	200
11:15 AM	3	8	8	0	19	5	40	6	0	51	5	13	1	0	19	6	69	9	0	84	173
11:30 AM	4	11	11	0	26	10	51	0	0	61	7	5	3	0	15	5	68	11	0	84	186
11:45 AM	4	11	14	0	29	8	61	6	0	75	7	4	1	0	12	4	69	6	0	79	195
Total	15	42	42	0	99	35	209	16	0	260	27	33	6	0	66	28	270	31	0	329	754
Approach %	15.2	42.4	42.4	0.0	-	13.5	80.4	6.2	0.0	-	40.9	50.0	9.1	0.0	-	8.5	82.1	9.4	0.0	-	-
Total %	2.0	5.6	5.6	0.0	13.1	4.6	27.7	2.1	0.0	34.5	3.6	4.4	0.8	0.0	8.8	3.7	35.8	4.1	0.0	43.6	-
PHF	0.938	0.875	0.750	0.000	0.853	0.729	0.857	0.667	0.000	0.867	0.844	0.635	0.500	0.000	0.825	0.538	0.978	0.705	0.000	0.979	0.943
All Vehicles (no classification)	15	42	42	0	99	35	209	16	0	260	27	33	6	0	66	28	270	31	0	329	754
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-356 and Poplar ST in Paris Tn  
Site Code: STA 16  
Start Date: 02/21/2019  
Page No: 5



Turning Movement Peak Hour Data Plot (11:00 AM)

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-356 and Poplar ST in Paris Tn  
Site Code: STA 16  
Start Date: 02/21/2019  
Page No: 6

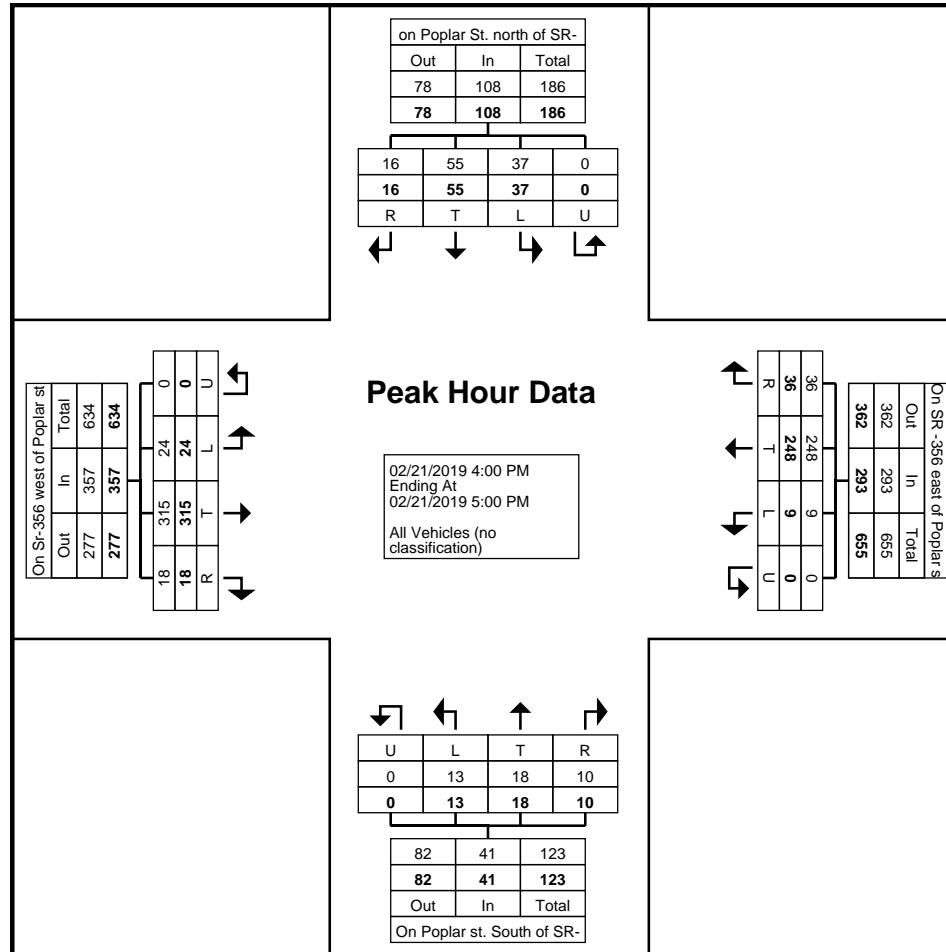
### Turning Movement Peak Hour Data (4:00 PM)

Start Time	on Poplar St. north of SR-356					On SR -356 east of Poplar st.					On Poplar st. South of SR-356					On Sr-356 west of Poplar st.					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
4:00 PM	7	11	7	0	25	14	69	3	0	86	1	9	3	0	13	6	73	3	0	82	206
4:15 PM	1	6	8	0	15	9	52	4	0	65	4	3	3	0	10	6	85	9	0	100	190
4:30 PM	4	26	13	0	43	10	62	1	0	73	5	4	6	0	15	3	84	6	0	93	224
4:45 PM	4	12	9	0	25	3	65	1	0	69	0	2	1	0	3	3	73	6	0	82	179
Total	16	55	37	0	108	36	248	9	0	293	10	18	13	0	41	18	315	24	0	357	799
Approach %	14.8	50.9	34.3	0.0	-	12.3	84.6	3.1	0.0	-	24.4	43.9	31.7	0.0	-	5.0	88.2	6.7	0.0	-	-
Total %	2.0	6.9	4.6	0.0	13.5	4.5	31.0	1.1	0.0	36.7	1.3	2.3	1.6	0.0	5.1	2.3	39.4	3.0	0.0	44.7	-
PHF	0.571	0.529	0.712	0.000	0.628	0.643	0.899	0.563	0.000	0.852	0.500	0.500	0.542	0.000	0.683	0.750	0.926	0.667	0.000	0.893	0.892
All Vehicles (no classification)	16	55	37	0	108	36	248	9	0	293	10	18	13	0	41	18	315	24	0	357	799
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

State Of Tennessee (TDOT)  
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Count Name: SR-356 and Poplar ST in Paris Tn  
Site Code: STA 16  
Start Date: 02/21/2019  
Page No: 7

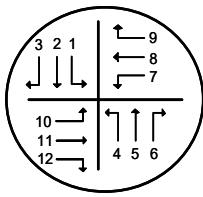


Turning Movement Peak Hour Data Plot (4:00 PM)

State Of Tennessee (TDOT)  
Address

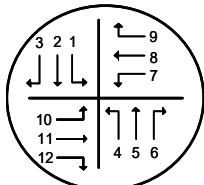
City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: SR-356 and Poplar ST in Paris Tn  
Site Code: STA 16  
Start Date: 02/21/2019  
Page No: 8



## INTERSECTION TRAFFIC VOLUME COUNTS

**LOCATION:** SR 356 & Tyson Ave  
**DATE:** 2/20/2019  
**RECORDER:** Zhiwar Rashid  
**NOTES:**



1

North

## INTERSECTION TRAFFIC VOLUME COUNTS

**LOCATION:** SR 69 & Tyson Ave  
**DATE:** 2/20/2019  
**RECORDER:** Zhiwar Rashid  
**NOTES:**

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: Washington ST at Poplar AVE in  
Paris TN  
Site Code: STA-18  
Start Date: 02/21/2019  
Page No: 1

### Turning Movement Data

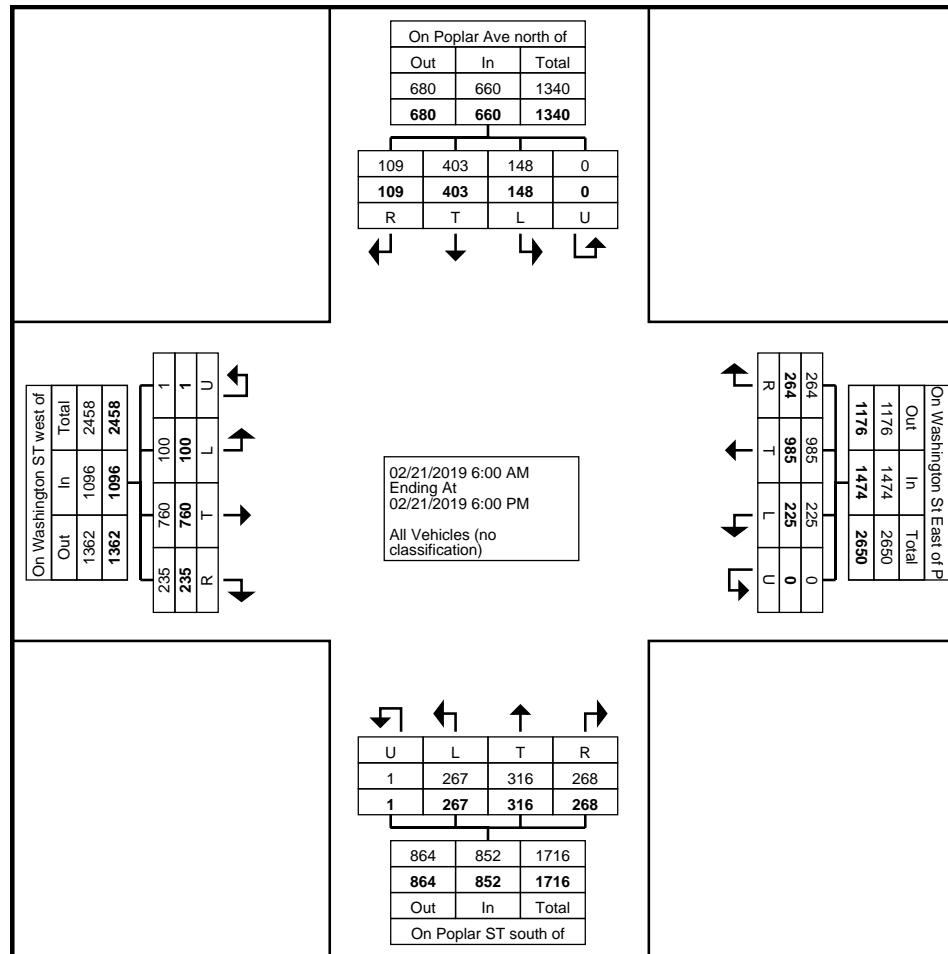
Start Time	On Poplar Ave north of Washington St					On Washington St East of Poplar Ave.					On Poplar ST south of Washington ST.					On Washington ST west of Poplar Ave					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
6:00 AM	0	1	0	0	1	1	3	1	0	5	0	1	1	0	2	0	3	0	0	3	11	
6:15 AM	1	4	0	0	5	0	5	0	0	5	1	0	0	0	1	0	4	0	0	4	15	
6:30 AM	0	2	1	0	3	0	9	0	0	9	1	3	0	0	4	0	8	2	0	10	26	
6:45 AM	1	7	1	0	9	3	10	2	0	15	3	4	0	0	7	0	5	0	0	5	36	
Hourly Total	2	14	2	0	18	4	27	3	0	34	5	8	1	0	14	0	20	2	0	22	88	
7:00 AM	1	4	0	0	5	2	5	1	0	8	0	1	0	0	1	0	7	1	0	8	22	
7:15 AM	1	7	2	0	10	5	18	2	0	25	1	2	3	0	6	0	11	0	0	11	52	
7:30 AM	1	9	4	0	14	5	19	3	0	27	6	4	6	0	16	2	15	1	0	18	75	
7:45 AM	1	8	2	0	11	2	24	7	0	33	3	10	1	0	14	5	17	3	0	25	83	
Hourly Total	4	28	8	0	40	14	66	13	0	93	10	17	10	0	37	7	50	5	0	62	232	
8:00 AM	2	4	0	0	6	3	18	5	0	26	2	7	4	0	13	2	10	2	0	14	59	
8:15 AM	2	6	6	0	14	8	22	4	0	34	2	5	3	0	10	5	13	0	0	18	76	
8:30 AM	3	7	0	0	10	3	19	3	0	25	6	5	4	0	15	5	17	3	0	25	75	
8:45 AM	0	6	1	0	7	6	21	4	0	31	1	5	9	0	15	14	11	5	0	30	83	
Hourly Total	7	23	7	0	37	20	80	16	0	116	11	22	20	0	53	26	51	10	0	87	293	
9:00 AM	3	9	1	0	13	7	18	6	0	31	6	4	6	0	16	6	13	3	0	22	82	
9:15 AM	1	6	2	0	9	4	19	5	0	28	10	5	1	0	16	5	10	4	0	19	72	
9:30 AM	2	7	7	0	16	4	19	3	0	26	9	5	7	0	21	4	13	1	0	18	81	
9:45 AM	0	5	2	0	7	4	15	2	0	21	7	2	7	0	16	10	18	0	0	28	72	
Hourly Total	6	27	12	0	45	19	71	16	0	106	32	16	21	0	69	25	54	8	0	87	307	
10:00 AM	1	6	4	0	11	6	18	3	0	27	11	7	7	0	25	2	13	4	0	19	82	
10:15 AM	3	9	6	0	18	4	19	6	0	29	8	7	4	0	19	9	10	1	0	20	86	
10:30 AM	3	12	5	0	20	9	22	7	0	38	7	6	7	0	20	4	17	6	0	27	105	
10:45 AM	6	5	5	0	16	7	23	2	0	32	10	7	7	0	24	7	21	1	0	29	101	
Hourly Total	13	32	20	0	65	26	82	18	0	126	36	27	25	0	88	22	61	12	0	95	374	
11:00 AM	3	7	5	0	15	4	22	8	0	34	15	9	6	0	30	8	11	2	0	21	100	
11:15 AM	1	11	7	0	19	7	25	5	0	37	6	8	4	0	18	6	13	4	0	23	97	
11:30 AM	2	6	7	0	15	15	21	8	0	44	10	6	9	0	25	13	22	3	0	38	122	
11:45 AM	7	12	5	0	24	4	33	11	0	48	11	4	8	0	23	8	21	2	0	31	126	
Hourly Total	13	36	24	0	73	30	101	32	0	163	42	27	27	0	96	35	67	11	0	113	445	
12:00 PM	4	16	9	0	29	5	26	5	0	36	3	8	7	0	18	9	32	3	0	44	127	
12:15 PM	3	4	1	0	8	8	20	9	0	37	9	9	8	0	26	5	18	2	0	25	96	
12:30 PM	1	6	3	0	10	7	31	3	0	41	7	7	10	0	24	4	21	2	1	28	103	
12:45 PM	4	14	6	0	24	7	28	10	0	45	9	7	8	0	24	8	14	3	0	25	118	
Hourly Total	12	40	19	0	71	27	105	27	0	159	28	31	33	0	92	26	85	10	1	122	444	
1:00 PM	4	11	3	0	18	8	23	6	0	37	11	8	5	0	24	10	34	1	0	45	124	
1:15 PM	2	9	1	0	12	3	14	3	0	20	5	7	8	0	20	8	24	2	0	34	86	
1:30 PM	3	14	2	0	19	7	29	1	0	37	5	5	5	0	15	2	17	1	0	20	91	
1:45 PM	1	7	1	0	9	7	29	10	0	46	11	8	4	1	24	4	11	2	0	17	96	
Hourly Total	10	41	7	0	58	25	95	20	0	140	32	28	22	1	83	24	86	6	0	116	397	
2:00 PM	6	6	6	0	18	8	25	7	0	40	4	13	9	0	26	5	19	0	0	24	108	



State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
Phone karen.watts@tn.gov

Count Name: Washington ST at Poplar AVE in  
Paris TN  
Site Code: STA-18  
Start Date: 02/21/2019  
Page No: 3



Turning Movement Data Plot

State Of Tennessee (TDOT)  
Address

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Count Name: Washington ST at Poplar AVE in  
Paris TN  
Site Code: STA-18  
Start Date: 02/21/2019  
Page No: 4

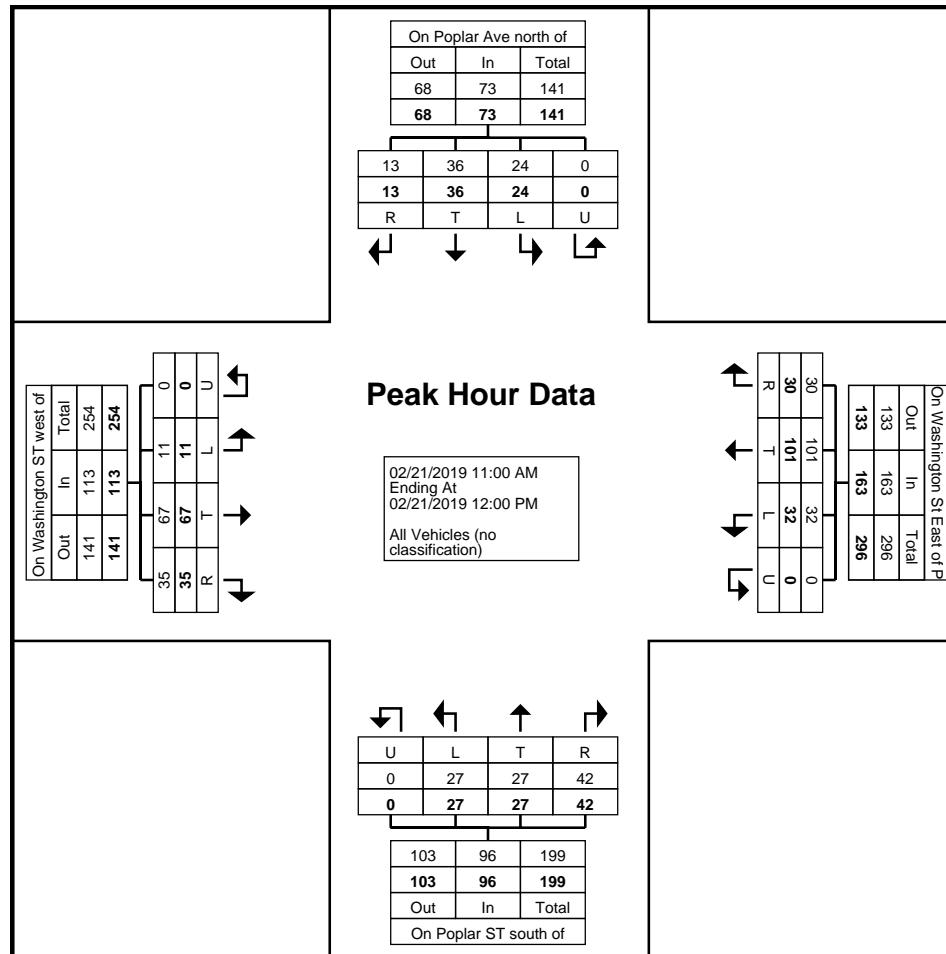
### Turning Movement Peak Hour Data (11:00 AM)

Start Time	On Poplar Ave north of Washington St					On Washington St East of Poplar Ave.					On Poplar ST south of Washington ST.					On Washington ST west of Poplar Ave					Int. Total	
	Southbound					Westbound					Northbound					Eastbound						
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total		
11:00 AM	3	7	5	0	15	4	22	8	0	34	15	9	6	0	30	8	11	2	0	21	100	
11:15 AM	1	11	7	0	19	7	25	5	0	37	6	8	4	0	18	6	13	4	0	23	97	
11:30 AM	2	6	7	0	15	15	21	8	0	44	10	6	9	0	25	13	22	3	0	38	122	
11:45 AM	7	12	5	0	24	4	33	11	0	48	11	4	8	0	23	8	21	2	0	31	126	
Total	13	36	24	0	73	30	101	32	0	163	42	27	27	0	96	35	67	11	0	113	445	
Approach %	17.8	49.3	32.9	0.0	-	18.4	62.0	19.6	0.0	-	43.8	28.1	28.1	0.0	-	31.0	59.3	9.7	0.0	-	-	
Total %	2.9	8.1	5.4	0.0	16.4	6.7	22.7	7.2	0.0	36.6	9.4	6.1	6.1	0.0	21.6	7.9	15.1	2.5	0.0	25.4	-	
PHF	0.464	0.750	0.857	0.000	0.760	0.500	0.765	0.727	0.000	0.849	0.700	0.750	0.750	0.000	0.800	0.673	0.761	0.688	0.000	0.743	0.883	
All Vehicles (no classification)	13	36	24	0	73	30	101	32	0	163	42	27	27	0	96	35	67	11	0	113	445	
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0		

State Of Tennessee (TDOT)  
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Count Name: Washington ST at Poplar AVE in  
Paris TN  
Site Code: STA-18  
Start Date: 02/21/2019  
Page No: 5



Turning Movement Peak Hour Data Plot (11:00 AM)

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
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Count Name: Washington ST at Poplar AVE in  
Paris TN  
Site Code: STA-18  
Start Date: 02/21/2019  
Page No: 6

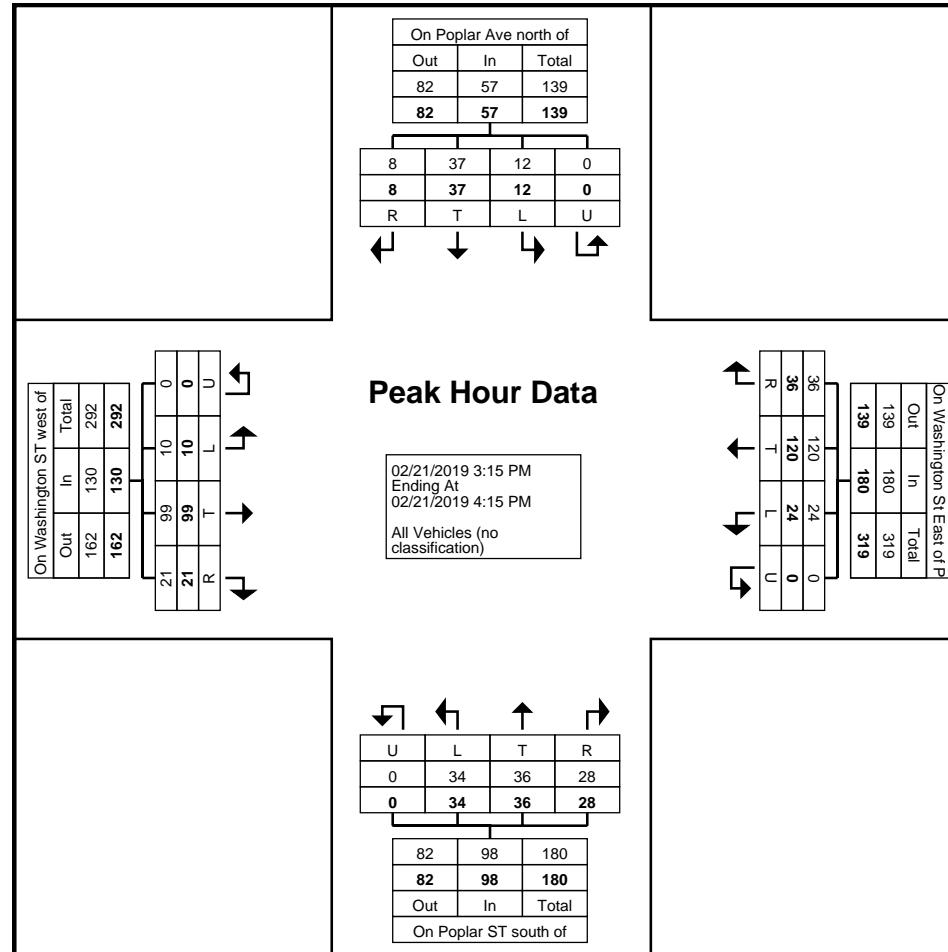
### Turning Movement Peak Hour Data (3:15 PM)

Start Time	On Poplar Ave north of Washington St					On Washington St East of Poplar Ave.					On Poplar ST south of Washington ST.					On Washington ST west of Poplar Ave					Int. Total
	Southbound					Westbound					Northbound					Eastbound					
	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	Right	Thru	Left	U-Turn	App. Total	
3:15 PM	1	8	4	0	13	12	33	6	0	51	7	9	9	0	25	4	23	1	0	28	117
3:30 PM	1	7	3	0	11	9	33	3	0	45	7	7	6	0	20	12	28	3	0	43	119
3:45 PM	2	8	3	0	13	7	27	9	0	43	8	8	7	0	23	3	23	6	0	32	111
4:00 PM	4	14	2	0	20	8	27	6	0	41	6	12	12	0	30	2	25	0	0	27	118
Total	8	37	12	0	57	36	120	24	0	180	28	36	34	0	98	21	99	10	0	130	465
Approach %	14.0	64.9	21.1	0.0	-	20.0	66.7	13.3	0.0	-	28.6	36.7	34.7	0.0	-	16.2	76.2	7.7	0.0	-	-
Total %	1.7	8.0	2.6	0.0	12.3	7.7	25.8	5.2	0.0	38.7	6.0	7.7	7.3	0.0	21.1	4.5	21.3	2.2	0.0	28.0	-
PHF	0.500	0.661	0.750	0.000	0.713	0.750	0.909	0.667	0.000	0.882	0.875	0.750	0.708	0.000	0.817	0.438	0.884	0.417	0.000	0.756	0.977
All Vehicles (no classification)	8	37	12	0	57	36	120	24	0	180	28	36	34	0	98	21	99	10	0	130	465
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0	

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Count Name: Washington ST at Poplar AVE in  
Paris TN  
Site Code: STA-18  
Start Date: 02/21/2019  
Page No: 7



Turning Movement Peak Hour Data Plot (3:15 PM)

State Of Tennessee (TDOT)  
Address

City, Tennessee, United States 12345  
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Count Name: Washington ST at Poplar AVE in  
Paris TN  
Site Code: STA-18  
Start Date: 02/21/2019  
Page No: 8

## COVERAGE COUNT DATA WITH 24 HOUR TOTALS

**Station Number:** 000057      **County:** 40 Henry  
**Start Date:** 07 / 30 / 2018      **End Date:** 07 / 31 / 2018  
**Start Time:** 11 : 00      **End Time:** 11 : 00  
**Direction:** 0      (Coverage)

### Time

11:00 - 12:00	1,292
12:00 - 13:00	1,444
13:00 - 14:00	1,471
14:00 - 15:00	1,233
15:00 - 16:00	1,336
16:00 - 17:00	1,217
17:00 - 18:00	1,161
18:00 - 19:00	848
19:00 - 20:00	633
20:00 - 21:00	584
21:00 - 22:00	334
22:00 - 23:00	213
23:00 - 24:00	123
24:00 - 01:00	60
01:00 - 02:00	36
02:00 - 03:00	36
03:00 - 04:00	67
04:00 - 05:00	162
05:00 - 06:00	279
06:00 - 07:00	578
07:00 - 08:00	987
08:00 - 09:00	1,011
09:00 - 10:00	983
10:00 - 11:00	1,101

---

**Total:** 17,189x Variation Factor: 0.98 = 16,845 x Truck Factor: 0.93 = AADT: 15,666.0

Peak AM	Peak Total	Peak Hour Factor	Peak PM	Peak Total	Peak Hour Factor
11:45 - 12:45	1423	0.97	12:45 - 13:45	1510	0.91
<b>Peak AM %</b>	<b>Dir Dist AM %</b>		<b>Peak PM %</b>	<b>Dir Dist PM %</b>	
8	65		9	65	
<b>Daily Peak %</b>	<b>Daily Dir Dist %</b>				
9	65				

## COVERAGE COUNT DATA WITH 24 HOUR TOTALS

**Station Number:** 000088      **County:** 40 Henry  
**Start Date:** 08 / 07 / 2018      **End Date:** 08 / 08 / 2018  
**Start Time:** 05 : 00      **End Time:** 05 : 00  
**Direction:** 0 (Coverage)

### Time

05:00 - 06:00	150
06:00 - 07:00	316
07:00 - 08:00	705
08:00 - 09:00	517
09:00 - 10:00	549
10:00 - 11:00	569
11:00 - 12:00	647
12:00 - 13:00	658
13:00 - 14:00	697
14:00 - 15:00	670
15:00 - 16:00	806
16:00 - 17:00	714
17:00 - 18:00	655
18:00 - 19:00	386
19:00 - 20:00	305
20:00 - 21:00	212
21:00 - 22:00	132
22:00 - 23:00	88
23:00 - 24:00	53
24:00 - 01:00	33
01:00 - 02:00	25
02:00 - 03:00	18
03:00 - 04:00	24
04:00 - 05:00	67

---

**Total:** 8,996x Variation Factor: 0.95 = 8,546 x Truck Factor: 0.98 = AADT: 8,375.28

Peak AM	Peak Total	Peak Hour Factor	Peak PM	Peak Total	Peak Hour Factor
07:15 - 08:15	707	0.87	15:15 - 16:15	814	0.93
Peak AM %	Dir Dist AM %		Peak PM %	Dir Dist PM %	Daily Peak %
8	65		9	65	9
					65

## COVERAGE COUNT DATA WITH 24 HOUR TOTALS

**Station Number:** 000106      **County:** 40 Henry  
**Start Date:** 07 / 31 / 2018      **End Date:** 08 / 01 / 2018  
**Start Time:** 07 : 00      **End Time:** 07 : 00  
**Direction:** 0 (Coverage)

### Time

07:00 - 08:00	125
08:00 - 09:00	125
09:00 - 10:00	108
10:00 - 11:00	106
11:00 - 12:00	143
12:00 - 13:00	177
13:00 - 14:00	135
14:00 - 15:00	164
15:00 - 16:00	165
16:00 - 17:00	160
17:00 - 18:00	189
18:00 - 19:00	102
19:00 - 20:00	121
20:00 - 21:00	100
21:00 - 22:00	38
22:00 - 23:00	18
23:00 - 24:00	17
24:00 - 01:00	8
01:00 - 02:00	4
02:00 - 03:00	1
03:00 - 04:00	3
04:00 - 05:00	4
05:00 - 06:00	29
06:00 - 07:00	62

---

**Total:** 2,104x Variation Factor: 0.95 = 1,999 x Truck Factor: 0.99 = AADT: 1,978.81

Peak AM	Peak Total	Peak Hour Factor	Peak PM	Peak Total	Peak Hour Factor
11:30 - 12:30	179	0.84	16:45 - 17:45	205	0.83
Peak AM %	Dir Dist AM %		Peak PM %	Dir Dist PM %	Daily Peak %
9	65		10	65	10
					65

## COVERAGE COUNT DATA WITH 24 HOUR TOTALS

**Station Number:** 000090      **County:** 40 Henry  
**Start Date:** 08 / 01 / 2018      **End Date:** 08 / 02 / 2018  
**Start Time:** 06 : 00      **End Time:** 06 : 00  
**Direction:** 6 (Coverage)

### Time

06:00 - 07:00	413
07:00 - 08:00	699
08:00 - 09:00	725
09:00 - 10:00	823
10:00 - 11:00	865
11:00 - 12:00	997
12:00 - 13:00	1,043
13:00 - 14:00	957
14:00 - 15:00	919
15:00 - 16:00	955
16:00 - 17:00	1,076
17:00 - 18:00	856
18:00 - 19:00	633
19:00 - 20:00	493
20:00 - 21:00	477
21:00 - 22:00	301
22:00 - 23:00	177
23:00 - 24:00	124
24:00 - 01:00	88
01:00 - 02:00	85
02:00 - 03:00	53
03:00 - 04:00	55
04:00 - 05:00	116
05:00 - 06:00	257

---

**Total:** 13,187x Variation Factor: 0.93 = 12,264 x Truck Factor: 0.93 = AADT: 11,405.4

Peak AM 11:15 - 12:15	Peak Total 1035	Peak Hour Factor 0.91	Peak PM 16:15 - 17:15	Peak Total 1103	Peak Hour Factor 0.95
Peak AM % 8	Dir Dist AM % 52		Peak PM % 8	Dir Dist PM % 52	

## COVERAGE COUNT DATA WITH 24 HOUR TOTALS

**Station Number:** 000090      **County:** 40 Henry  
**Start Date:** 08 / 01 / 2018      **End Date:** 08 / 02 / 2018  
**Start Time:** 06 : 00      **End Time:** 06 : 00  
**Direction:** 1 (Coverage)

### Time

06:00 - 07:00	180
07:00 - 08:00	324
08:00 - 09:00	372
09:00 - 10:00	414
10:00 - 11:00	425
11:00 - 12:00	458
12:00 - 13:00	536
13:00 - 14:00	483
14:00 - 15:00	504
15:00 - 16:00	463
16:00 - 17:00	510
17:00 - 18:00	441
18:00 - 19:00	321
19:00 - 20:00	263
20:00 - 21:00	258
21:00 - 22:00	182
22:00 - 23:00	98
23:00 - 24:00	70
24:00 - 01:00	45
01:00 - 02:00	43
02:00 - 03:00	29
03:00 - 04:00	30
04:00 - 05:00	58
05:00 - 06:00	140

---

**Total:** 6,647

---

Peak AM 11:15 - 12:15	Peak Total 1035	Peak Hour Factor 0.91	Peak PM 16:15 - 17:15	Peak Total 1103	Peak Hour Factor 0.95
Peak AM % 8	Dir Dist AM % 52		Peak PM % 8	Dir Dist PM % 52	
Daily Peak % 8	Daily Dir Dist % 52				

## COVERAGE COUNT DATA WITH 24 HOUR TOTALS

**Station Number:** 000090      **County:** 40 Henry  
**Start Date:** 08 / 01 / 2018      **End Date:** 08 / 02 / 2018  
**Start Time:** 06 : 00      **End Time:** 06 : 00  
**Direction:** 2 (Coverage)

### Time

06:00 - 07:00	233
07:00 - 08:00	375
08:00 - 09:00	353
09:00 - 10:00	409
10:00 - 11:00	440
11:00 - 12:00	539
12:00 - 13:00	507
13:00 - 14:00	474
14:00 - 15:00	415
15:00 - 16:00	492
16:00 - 17:00	566
17:00 - 18:00	415
18:00 - 19:00	312
19:00 - 20:00	230
20:00 - 21:00	219
21:00 - 22:00	119
22:00 - 23:00	79
23:00 - 24:00	54
24:00 - 01:00	43
01:00 - 02:00	42
02:00 - 03:00	24
03:00 - 04:00	25
04:00 - 05:00	58
05:00 - 06:00	117

---

**Total:** 6,540

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Peak AM 11:15 - 12:15	Peak Total 1035	Peak Hour Factor 0.91	Peak PM 16:15 - 17:15	Peak Total 1103	Peak Hour Factor 0.95
Peak AM % 8	Dir Dist AM % 52		Peak PM % 8	Dir Dist PM % 52	
Daily Peak % 8	Daily Dir Dist % 52				

## COVERAGE COUNT DATA WITH 24 HOUR TOTALS

**Station Number:** 000056      **County:** 40 Henry  
**Start Date:** 07 / 31 / 2018      **End Date:** 08 / 01 / 2018  
**Start Time:** 08 : 00      **End Time:** 08 : 00  
**Direction:** 0 (Coverage)

### Time

08:00 - 09:00	723
09:00 - 10:00	717
10:00 - 11:00	764
11:00 - 12:00	872
12:00 - 13:00	939
13:00 - 14:00	908
14:00 - 15:00	933
15:00 - 16:00	995
16:00 - 17:00	975
17:00 - 18:00	964
18:00 - 19:00	696
19:00 - 20:00	601
20:00 - 21:00	395
21:00 - 22:00	267
22:00 - 23:00	178
23:00 - 24:00	118
24:00 - 01:00	97
01:00 - 02:00	47
02:00 - 03:00	39
03:00 - 04:00	48
04:00 - 05:00	77
05:00 - 06:00	209
06:00 - 07:00	422
07:00 - 08:00	763

---

**Total:** 12,747x Variation Factor: 0.95 = 12,110 x Truck Factor: 0.90 = AADT: 10,898.6

Peak AM 11:30 - 12:30	Peak Total 919	Peak Hour Factor 0.95	Peak PM 16:30 - 17:30	Peak Total 1061	Peak Hour Factor 0.93
Peak AM % 7	Dir Dist AM % 65		Peak PM % 8	Dir Dist PM % 65	

## COVERAGE COUNT DATA WITH 24 HOUR TOTALS

**Station Number:** 000055      **County:** 40 Henry  
**Start Date:** 07 / 31 / 2018      **End Date:** 08 / 01 / 2018  
**Start Time:** 10 : 00      **End Time:** 10 : 00  
**Direction:** 0 (Coverage)

### Time

10:00 - 11:00	1,331
11:00 - 12:00	1,795
12:00 - 13:00	1,943
13:00 - 14:00	1,771
14:00 - 15:00	1,685
15:00 - 16:00	1,793
16:00 - 17:00	1,698
17:00 - 18:00	1,698
18:00 - 19:00	1,280
19:00 - 20:00	1,091
20:00 - 21:00	794
21:00 - 22:00	515
22:00 - 23:00	302
23:00 - 24:00	156
24:00 - 01:00	159
01:00 - 02:00	71
02:00 - 03:00	68
03:00 - 04:00	78
04:00 - 05:00	109
05:00 - 06:00	261
06:00 - 07:00	512
07:00 - 08:00	977
08:00 - 09:00	1,065
09:00 - 10:00	1,367

---

**Total:** 22,519x Variation Factor: 0.95 = 21,393 x Truck Factor: 0.95 = AADT: 20,323.4

Peak AM	Peak Total	Peak Hour Factor	Peak PM	Peak Total	Peak Hour Factor
11:45 - 12:45	1962	0.91	12:00 - 13:00	1943	0.90
<b>Peak AM %</b>	<b>Dir Dist AM %</b>		<b>Peak PM %</b>	<b>Dir Dist PM %</b>	
9	65		9	65	
<b>Daily Peak %</b>	<b>Daily Dir Dist %</b>				
9	65				

## COVERAGE COUNT DATA WITH 24 HOUR TOTALS

**Station Number:** 000155      **County:** 40 Henry  
**Start Date:** 07 / 31 / 2018      **End Date:** 08 / 01 / 2018  
**Start Time:** 08 : 00      **End Time:** 08 : 00  
**Direction:** 0 (Coverage)

### Time

08:00 - 09:00	416
09:00 - 10:00	520
10:00 - 11:00	603
11:00 - 12:00	747
12:00 - 13:00	832
13:00 - 14:00	765
14:00 - 15:00	706
15:00 - 16:00	793
16:00 - 17:00	857
17:00 - 18:00	840
18:00 - 19:00	714
19:00 - 20:00	698
20:00 - 21:00	325
21:00 - 22:00	202
22:00 - 23:00	67
23:00 - 24:00	61
24:00 - 01:00	25
01:00 - 02:00	13
02:00 - 03:00	10
03:00 - 04:00	15
04:00 - 05:00	31
05:00 - 06:00	77
06:00 - 07:00	151
07:00 - 08:00	441

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**Total:** 9,909x Variation Factor: 0.95 = 9,414 x Truck Factor: 0.99 = AADT: 9,319.41

Peak AM	Peak Total	Peak Hour Factor	Peak PM	Peak Total	Peak Hour Factor
11:30 - 12:30	844	0.91	16:30 - 17:30	898	0.89
<b>Peak AM %</b>	<b>Dir Dist AM %</b>		<b>Peak PM %</b>	<b>Dir Dist PM %</b>	
9	65		9	65	
<b>Daily Peak %</b>	<b>Daily Dir Dist %</b>				
9	65				



## Appendix B: FIELD INVENTORY

Prepared on behalf of the  
City of Paris, TN by:



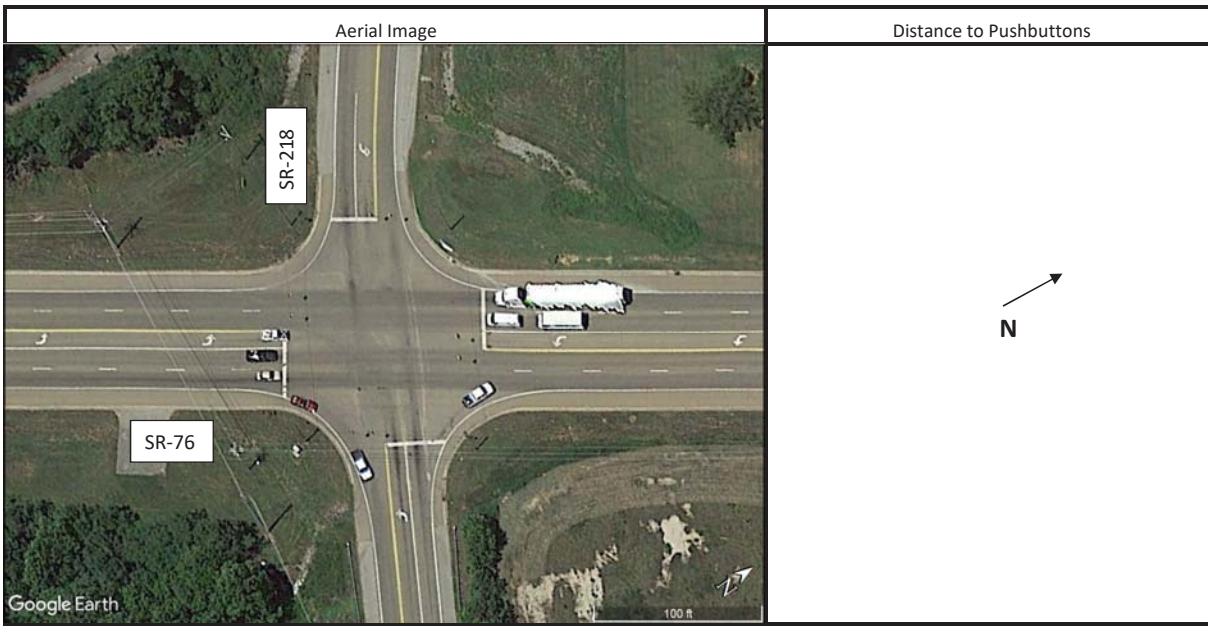
in cooperation with



# Field Inventory

ID Number:

Intersection: **SR-76 (US-79) (Austin Peay Memorial Hwy.)/SR-218 (Paris By-Pass)**

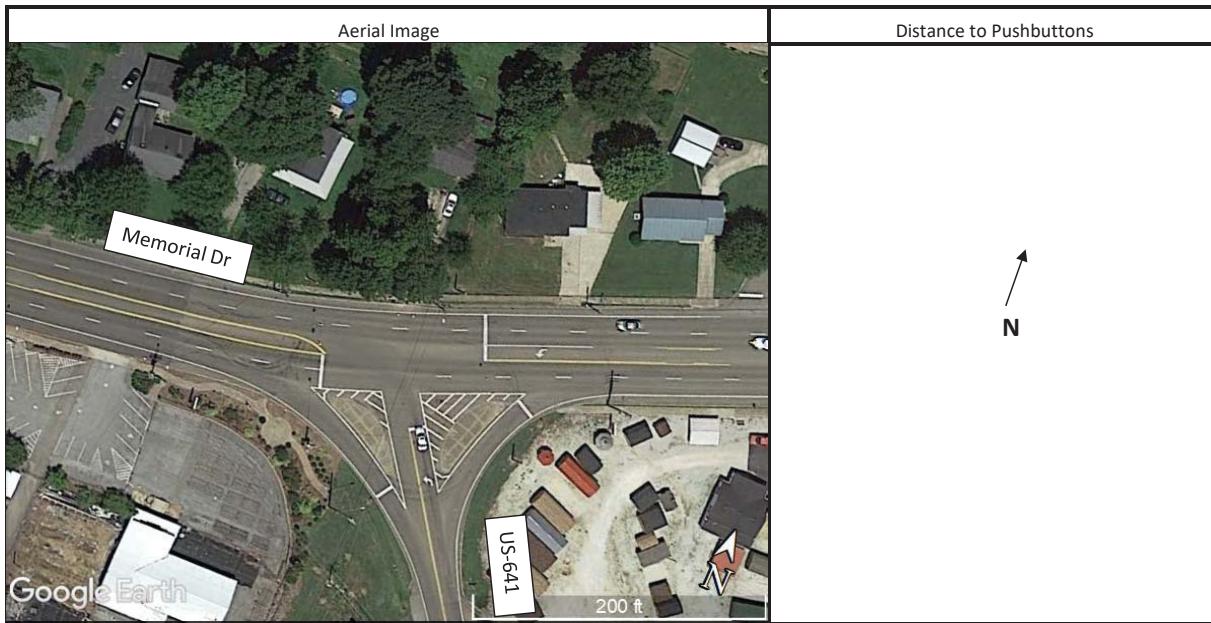


	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	SR-218	SR-218	SR-76	SR-76
	Speed Limits (mph)	40	40	50	50
	Lane Assignments	L-TR	L-TR	L-T-TR	L-T-TR
	Lane Widths (ft)	12-12	12-12	12-12-12	12-12-12
	Crosswalk width (ft)	n/a	n/a	n/a	n/a
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	+1.00	-0.50	-0.50	+0.50
	Storage Bay Length	170'	75'	TWLTL	TWLTL
	Right Turn on Red	Y	Y	Y	Y
Volume Settings	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	2-130	2-130	2-130	2-130
	Vehicle detection (Phase)	8	4	2	6
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width	135'	135'	120'	120'	
Signal Phasing					
Notes					

# Field Inventory

ID Number:

Intersection: **SR-69 (US-641) / SR-69A (Memorial Dr)**

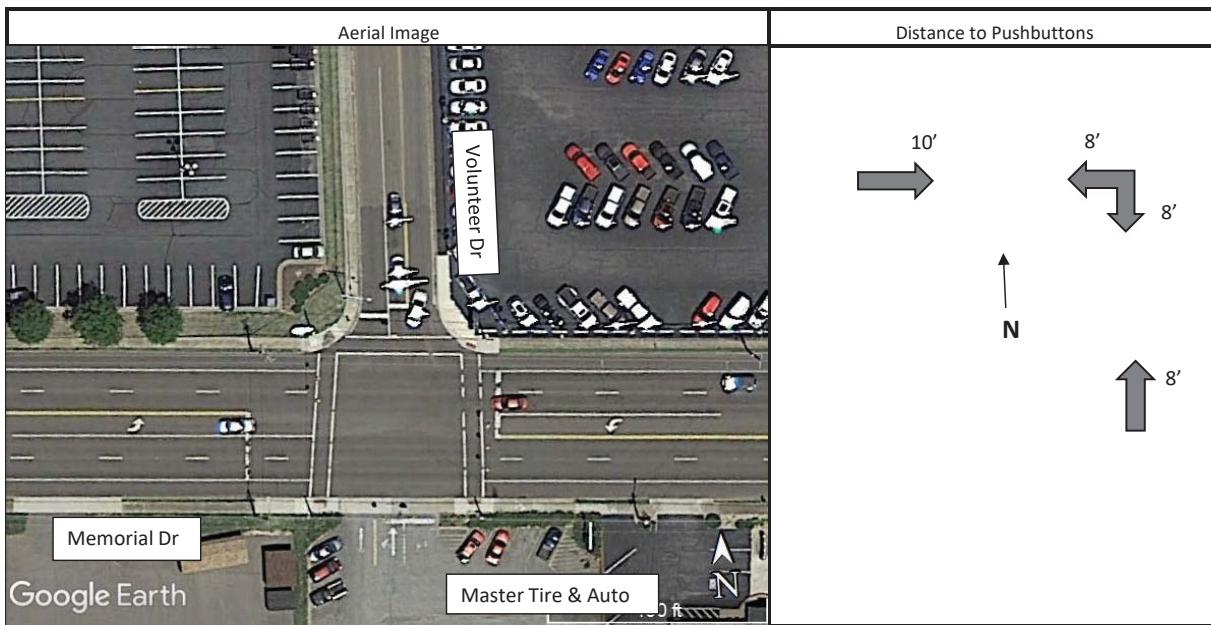


	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	US 641	n/a	Memorial Dr	Memorial Dr
	Speed Limits (mph)	40	n/a	40	40
	Lane Assignments	L-R	n/a	T-TR	L-T-T
	Lane Widths (ft)	11-14	n/a	12-12-13	12-12-12
	Crosswalk width (ft)	n/a	n/a	n/a	n/a
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	+1.50	n/a	+1.00	-1.00
	Storage Bay Length	CONT.	n/a	CONT.	TWLTL
	Right Turn on Red	Y	n/a	Y	N
Volume Settings	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	2-130	n/a	3-130	1-150A2L, 1-130
	Vehicle detection (Phase)	4	n/a	2	1,2
	Pedestrian Heads	N	n/a	N	N
	Ped Push Buttons	N	n/a	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
	I/S Width	78'	n/a	115'	107'
	Signal Phasing			 Memorial Dr	
	Notes				

## Field Inventory

ID Number:

Intersection: **SR-69 (US-641) Memorial Dr / Volunteer Dr**

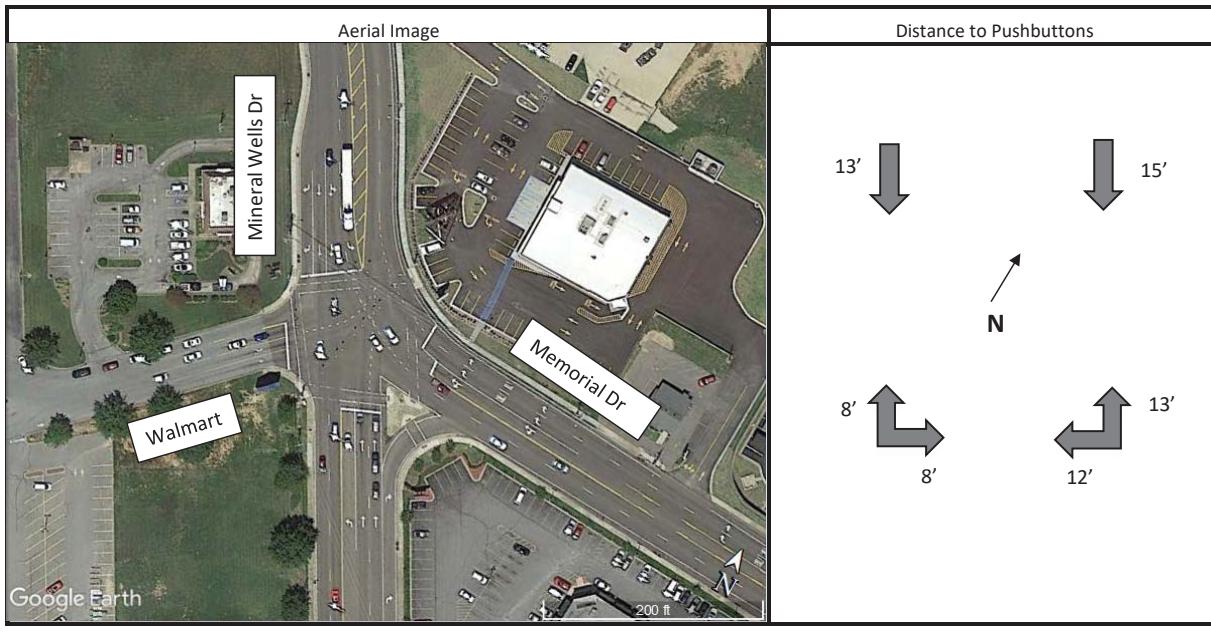


	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Master Tire & Auto	Volunteer Dr	Mmemorial Dr	Memorial Dr
	Speed Limits (mph)	25	40	40	40
	Lane Assignments	LT-R	L-TR	L-T-TR	L-T-TR
	Lane Widths (ft)	12-12	12-12	12-12-12	12-12-12
	Crosswalk width (ft)	68'	70'	n/a	63'
	Distance from Ped Push button to curb	n/a	See diagram	n/a	See diagram
	Approach Grade (%)	+2.00	+0.50	-1.00	0.00
	Storage Bay Length	30'	TWLTL	TWLTL	TWLTL
Volume Settings	Right Turn on Red	Y	Y	Y	Y
	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	1-150A2L,1-130	1-150A2L,1-130	1-150A2L,2-130	2-130
	Vehicle detection (Phase)	4	3	1,6	2
	Pedestrian Heads	Y	N	N	Y
	Ped Push Buttons	Y	N	N	Y
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width		100'	92'	112'	85'
Signal Phasing					
Notes		Split Phase for 3 & 4			

# Field Inventory

ID Number:

Intersection: **SR-69 (US-641) Memorial Dr/ SR-77 (Mineral Wells Dr)**

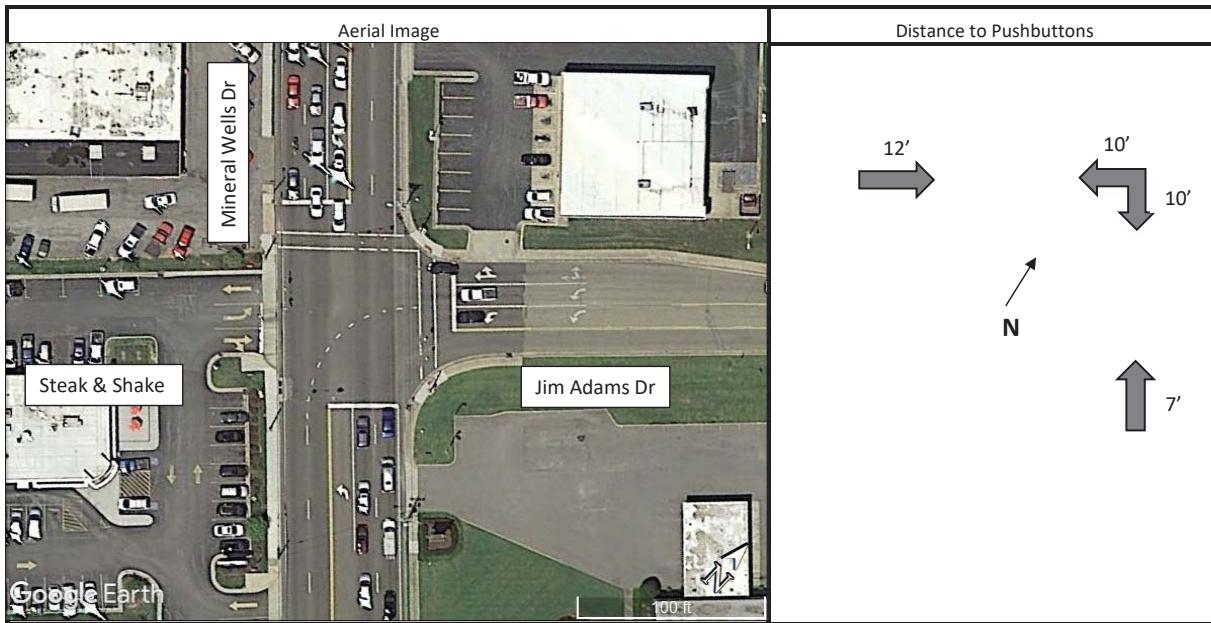


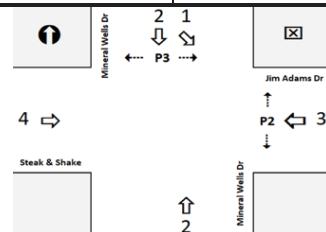
	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Mineral Wells Dr	Mineral Wells Dr	Walmart	Memorial Dr
	Speed Limits (mph)	40	40	35	40
	Lane Assignments	L-T-T-R	L-LT-T-R	L-L-TR	LT-R-R
	Lane Widths (ft)	12-12-12-14	12-12-12-12	12-12-12	12-13-13
	Crosswalk width (ft)	108	89	75	109
	Distance from Ped Push button to curb	See diagram	See diagram	See diagram	See diagram
	Approach Grade (%)	+1.50	-2.00	+1.50	+0.50
	Storage Bay Length	TWLTL, R=330'	L=115', R=95'	L=125'	TWLTL
Volume Settings	Right Turn on Red	Y	Y	Y	Y
	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	1-140A1L,1-130	1-130A2L,140A1L, 1-130	1-130A2L,1-140A1L, 1-130	1-140A1L,1-130, 2-130A2R
	Vehicle detection (Phase)	1	2	7	8, OL 1
	Pedestrian Heads	Y	Y	Y	N
	Ped Push Buttons	Y	Y	Y	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width		130'	120'	130'	125'
Signal Phasing					
Notes		Ped Heads Not Uniform, split phase everywhere, no push button for c/w			

## Field Inventory

ID Number:

Intersection: **SR-69 (US-641) Mineral Wells Dr / Jim Adams Dr**

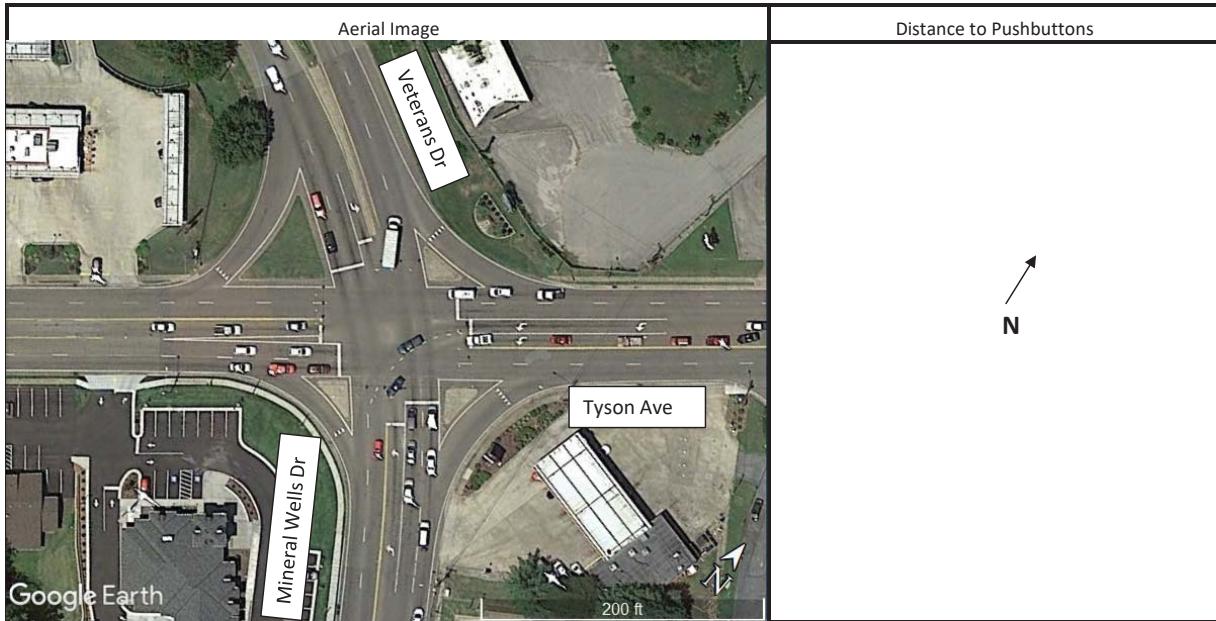


	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Mineral Wells Dr	Mineral Wells Dr	Steak & Shake	Jim Adams Dr
	Speed Limits (mph)	35	35	25	40
	Lane Assignments	L-T-TR	L-T-TR	L-TR	L-L-TR
	Lane Widths (ft)	12-12-12	12-12-12	12-12	11-12-12
	Crosswalk width (ft)	70	n/a	n/a	81
	Distance from Ped Push button to curb	n/a	See diagram	n/a	See diagram
	Approach Grade (%)	-0.50	-1.00	-1.50	-0.50
	Storage Bay Length	TWLTL	TWLTL	L=25'	TWLTL, L=70'
	Right Turn on Red	Y	Y	Y	Y
Volume Settings	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	2-130	1-150A2L,1-130	1-140A1L,1-130	1-130, 1-140A1L
	Vehicle detection (Phase)	2	1,2	4	3
	Pedestrian Heads	Y	N	N	N
	Ped Push Buttons	Y	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
	I/S Width	110'	110'	100'	100'
	Signal Phasing				
	Notes		Pedestrian Heads not uniform	Split Phase	

## Field Inventory

ID Number:

Intersection: SR-69 (US-641) Mineral Wells Dr / SR-76 (US-79) Tyson Ave



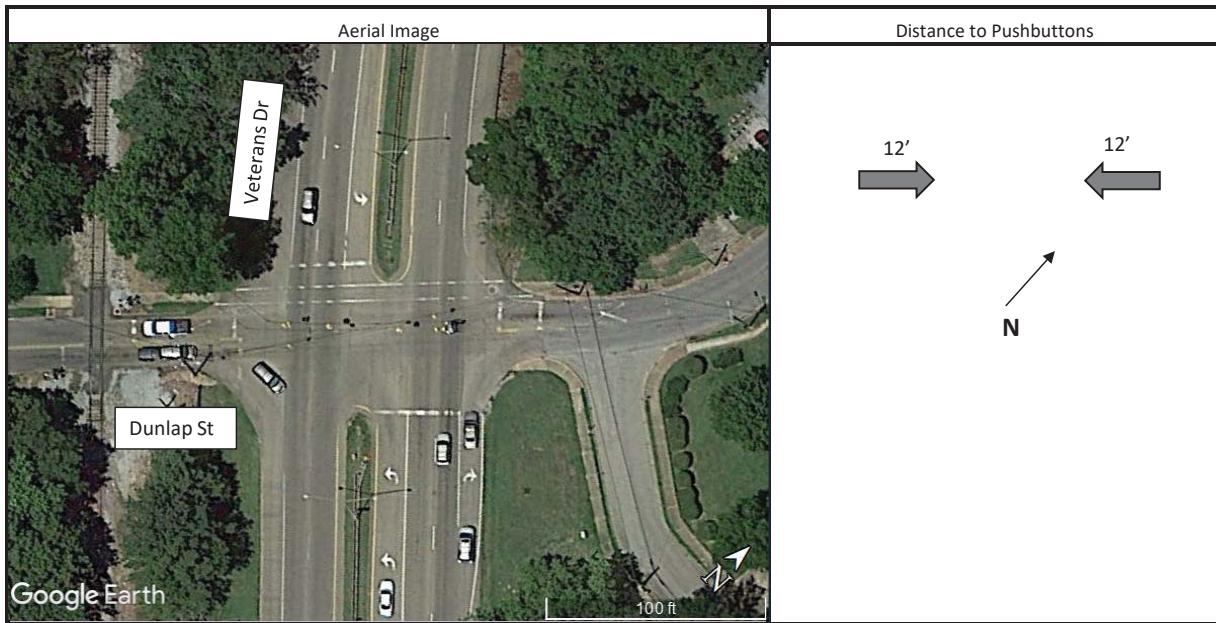
	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Mineral Wells Dr	Veterans Dr	Tyson Ave	Tyson Ave
	Speed Limits (mph)	40	40	40	40
	Lane Assignments	L-T-T-R	L-T-T-R	L-T-T-R	L-L-T-T-R
	Lane Widths (ft)	12-12-12-14	12-12-12-13	12-12-12-13	12-12-12-14
	Crosswalk width (ft)	n/a	n/a	n/a	n/a
	Distance from Ped	n/a	n/a	n/a	n/a
	Push button to curb				
	Approach Grade (%)	+4.00	+1.00	-2.00	-0.50
	Storage Bay Length	TWLTL, R=60'	L=55', R=100'	TWLTL, R=55'	TWLTL, L=135', R=60'
Volume Settings	Right Turn on Red	Y	Y	Y	Y
Timing / Phasing Settings	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
	Signal Heads (Number & type)	1-150A2L,2-130	1-150A2L,2-130	1-150A2L,2-130	1-150A2L,2-130
	Vehicle detection (Phase)	4,7	8,3	2,5	6,1
Misc. Info.	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
	I/S Width	115'	105'	95'	95'
Signal Phasing		<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>1 →</p> <p>2 →</p> <p>3 ↓</p> <p>4 ↑</p> </div> <div style="text-align: center;"> <p>5 ←</p> <p>6 ←</p> <p>7 ↓</p> <p>8 ↑</p> </div> </div>			
Notes					
		Protected only: left turn phase 1.			

Field Inventory Date: 2/14/2019

# Field Inventory

ID Number:

Intersection: **SR-69 (US641) Veterans Dr / Dunlap St**

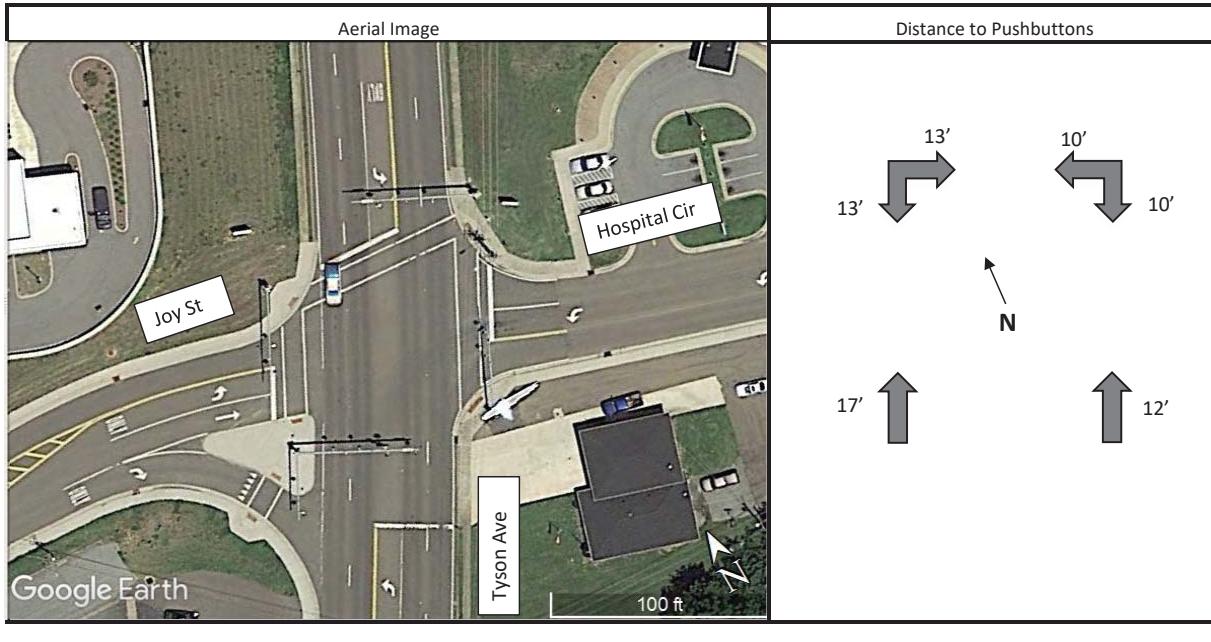


	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Veterans Dr	Veterans Dr	Dunlap St	Dunlap St
	Speed Limits (mph)	40	40	35	35
	Lane Assignments	L-T-T-R	L-T-TR	LTR	LTR
	Lane Widths (ft)	11-12-12-11	11-12-12	12	12
	Crosswalk width (ft)	n/a	n/a	n/a	138
	Distance from Ped Push button to curb	n/a	n/a	n/a	See diagram
	Approach Grade (%)	-1.00	+1.00	+2.50	-1.00
	Storage Bay Length	L=100', R=55'	L=110'	CONT.	CONT.
Volume Settings	Right Turn on Red	Y	Y	Y	Y
	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	1-150A2L,1-130	1-150A2L,1-130	2-130	2-130
	Vehicle detection (Phase)	2,5	6,1	3	3
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	Y
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	At grade railroad crossing	n/a
I/S Width	70'	70'	115'	115'	
Signal Phasing		 Veterans Dr ← P3 →	 Dunlap St		
Notes	Ped button stops Veterans Dr and gives green to Dunlap St.	Ped push button on cabinet.	Ped push button on utility pole.		

# Field Inventory

ID Number:

Intersection: **SR-76 (US-79) Tyson Ave / Hospital Cir**

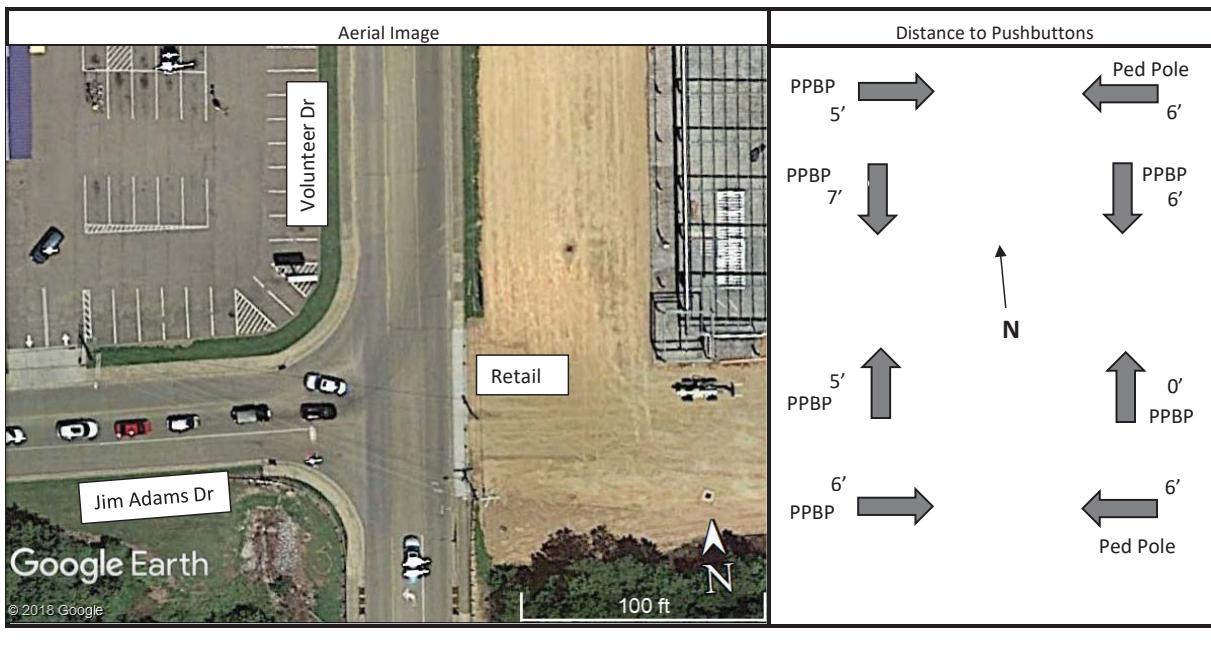


	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Tyson Ave	Tyson Ave	Joy St	Hospital Cir
	Speed Limits (mph)	40	40	35	35
	Lane Assignments	L-T-TR	L-T-TR	L-T-R	L-TR
	Lane Widths (ft)	12-12-12	12-12-12	13-11-12	12-12
	Crosswalk width (ft)	78	54	n/a	85
	Distance from Ped Push button to curb	n/a	See diagram	See diagram	See diagram
	Approach Grade (%)	-1.50	+1.50	-1.00	0.50
	Storage Bay Length	TWLTL	TWLTL	L=85', R= 100	L=225'
Volume Settings	Right Turn on Red	Y	Y	Y	Y
	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	2-150A2L, 3-130, 1-150A2V	1-150A2L, 1-150A2V	3-130	5-130, 1-150A2V
	Vehicle detection (Phase)	2,5	6,1	4	8
	Pedestrian Heads	N	Y	Y	Y
	Ped Push Buttons	N	Y	Y	Y
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width		145'	130'	104'	110'
Signal Phasing					
Notes		Signal Preemption for Emergency Vehicles (Firestation)			

# Field Inventory

ID Number:

Intersection: **Volunteer Dr / Jim Adams Dr**

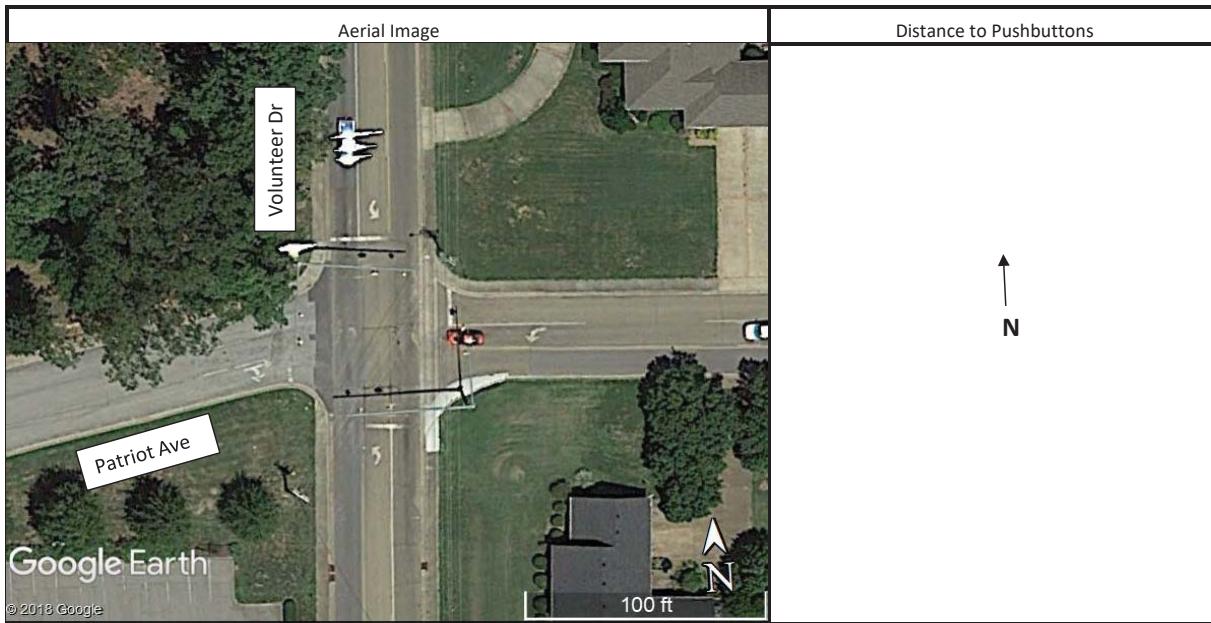


	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Volunteer Dr	Volunteer Dr	Jim Adams Dr	Retail
	Speed Limits (mph)	40	40	40	30
	Lane Assignments	L-TR	L-TR	L-TR	L-TR
	Lane Widths (ft)	12-12	12-12	12-12	12-12
	Crosswalk width (ft)	60	52	40	44
	Distance from Ped Push button to curb	See diagram	See diagram	See diagram	See diagram
	Approach Grade (%)	0.00	-1.00	-0.50	0.00
	Storage Bay Length	TWLTL	TWLTL	TWLTL	L=30'
Volume Settings	Right Turn on Red	Y	Y	Y	Y
	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	1-150A2L,1-130	2-130	1-140A1L,1-130	1-140A1L,1-130
	Vehicle detection (Phase)	6,1	2	3	4
	Pedestrian Heads	Y	Y	Y	Y
	Ped Push Buttons	Y	Y	Y	Y
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width	100'	100'	78'	78'	
Signal Phasing		   			
Notes	PPBP = PED PUSHBUTTON POST				

## Field Inventory

ID Number:

Intersection: **Volunteer Dr/ Patriot Ave**

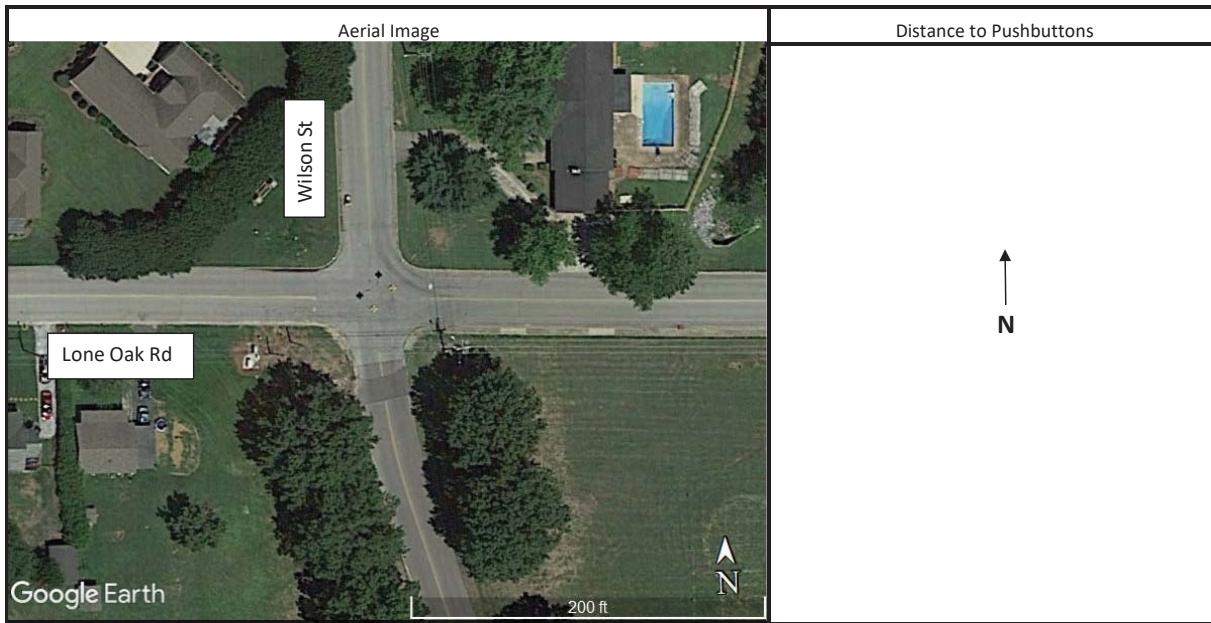


	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Volunteer Dr	Volunteer Dr	Patriot Ave	Patriot Ave
	Speed Limits (mph)	40	40	30	30
	Lane Assignments	L-TR	L-TR	L-TR	L-TR
	Lane Widths (ft)	12-12	12-12	12-12	12-12
	Crosswalk width (ft)	64	56	40	42
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	+3.00	-5.50	-3.00	+2.50
	Storage Bay Length	TWLTL	TWLTL	L=150'	TWLTL
Volume Settings	Right Turn on Red	Y	Y	Y	Y
	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	1-150A2L,1-130	1-150A2L,1-130	1-150A2L,1-130	1-150A2L,1-130
	Vehicle detection (Phase)	4,7	8,3	6,1	2,5
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width		78'	78'	60'	60'
Signal Phasing			<div style="text-align: center;"> </div>		
Notes		Crosswalks are present, but no pedestrian times.			

# Field Inventory

ID Number:

Intersection: **Lone Oak Rd / Wilson St**



	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Wilson St	Wilson St	Lone Oak Rd	Lone Oak Rd
	Speed Limits (mph)	35	35	35	35
	Lane Assignments	LTR	LTR	LTR	LTR
	Lane Widths (ft)	12	12	12	12
	Crosswalk width (ft)	n/a	n/a	n/a	n/a
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	+1.00	0.00	0.00	0.00
	Storage Bay Length	CONT.	CONT.	CONT.	CONT.
Volume Settings	Right Turn on Red	Y	Y	Y	Y
	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	2-130	2-130	2-130	2-130
	Vehicle detection (Phase)	4	4	2	2
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	No Left Turn 7:30 am-8:00 am 2:00 pm - 3:00 pm	n/a	n/a	n/a
I/S Width		65'	65'	65'	65'
Signal Phasing					
Notes		Stop bars are not present; Electromechanical Equipment			

## Field Inventory

ID Number:

Intersection: **SR-69 (W Wood St) / Irvine St**

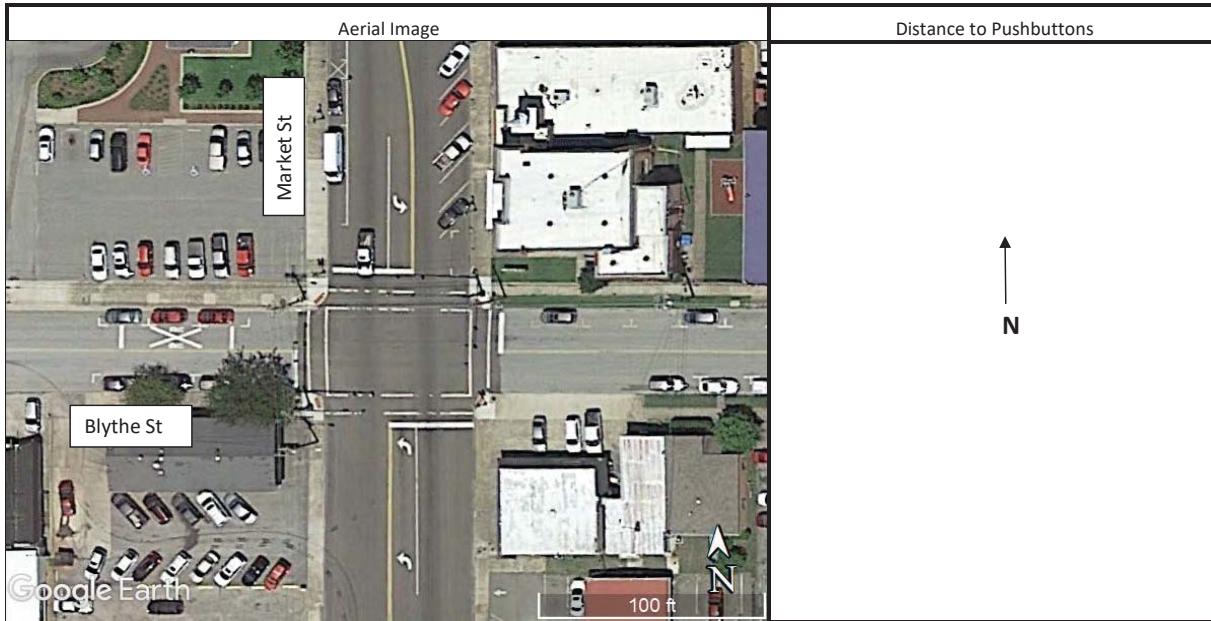


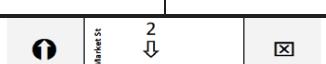
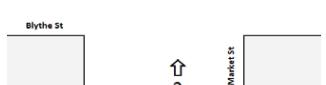
	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Irvine St	Irvine St	W Wood St	W Wood St
	Speed Limits (mph)	35	35	35	35
	Lane Assignments	LTR	LTR	L-TR	L-TR
	Lane Widths (ft)	12	14	12-12	12-12
	Crosswalk width (ft)	46	45	33	41
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	-1.00	+1.50	-4.50	-1.00
	Storage Bay Length	CONT.	CONT.	TWLTL	TWLTL
	Right Turn on Red	Y	Y	Y	Y
Volume Settings	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	2-130	2-130	2-130	2-130
	Vehicle detection (Phase)	4	4	2	2
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width		70'	70'	56'	56'
Signal Phasing					
Notes	Det. pres on NB approach, but constant call.		Electromechanical Equipment		

## Field Inventory

ID Number:

Intersection: **SR-69 (US-641) Market St /Blythe St**

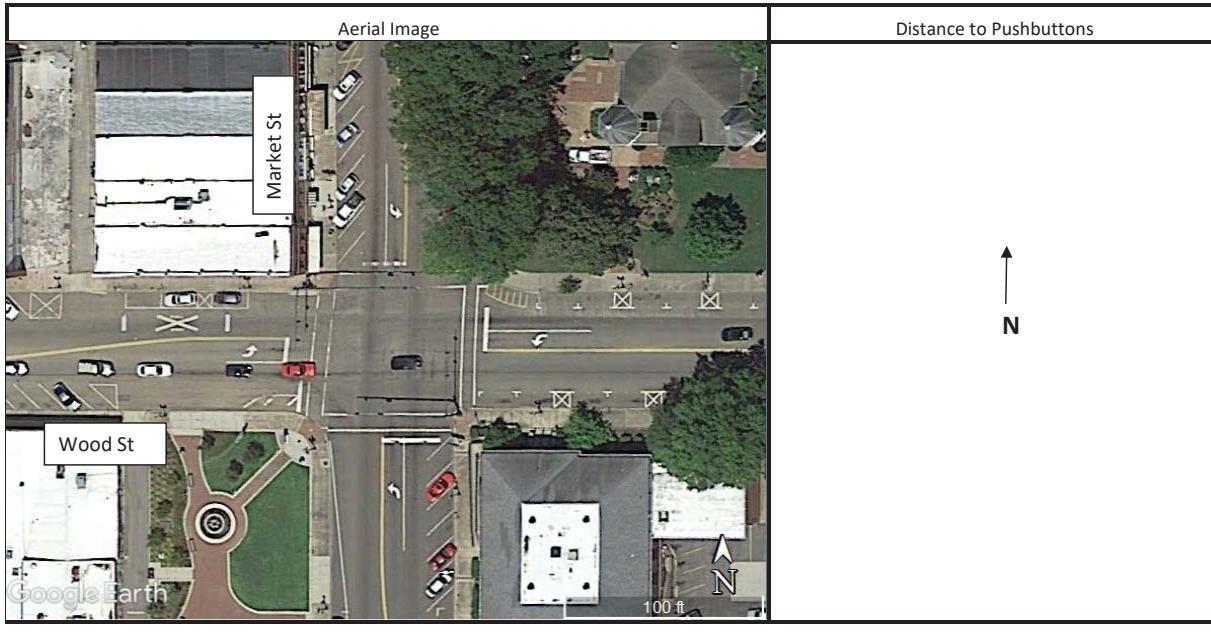


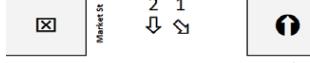
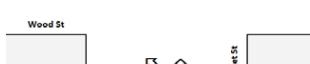
	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Market St	Market St	Blythe St	Blythe St
	Speed Limits (mph)	30	30	30	30
	Lane Assignments	L-TR	L-TR	LTR	LTR
	Lane Widths (ft)	12-14	12-14	13	13
	Crosswalk width (ft)	43	42	70	68
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	+0.50	-0.50	+1.00	-1.00
	Storage Bay Length	L=75'	L=60'	CONT.	CONT.
Volume Settings	Right Turn on Red	Y	Y	Y	Y
	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	Y	Y	Y
Timing / Phasing Settings	Signal Heads (Number & type)	2-130	2-130	2-130	2-130
	Vehicle detection (Phase)	2	2	4	4
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width		68'	68'	n/a	n/a
Signal Phasing		 4 ⇌	↴ 2  ↪ 4		
Notes		Electromechanical Equipment			

# Field Inventory

ID Number:

Intersection: **SR-69 (US-641) Market St / SR-54/354 Wood St**

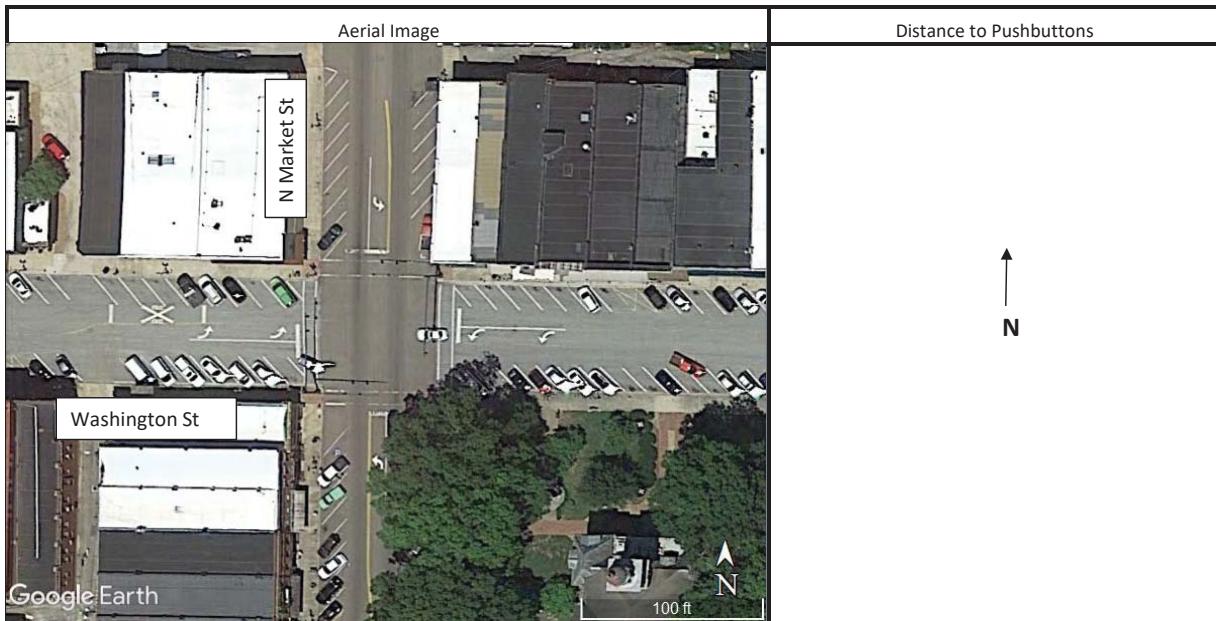


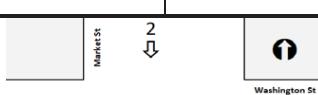
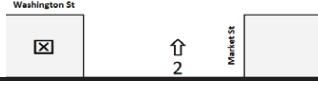
	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Market St	Market St	Wood St	Wood St
	Speed Limits (mph)	30	30	30	30
	Lane Assignments	L-TR	L-TR	L-TR	L-TR
	Lane Widths (ft)	12-12	12-12	12-13	12-13
	Crosswalk width (ft)	76	67	68	76
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	-0.50	+0.50	+1.00	-1.00
	Storage Bay Length	L=60'	L=50'	L=30'	L=55'
Volume Settings	Right Turn on Red	Y	Y	Y	Y
	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	Y	Y	Y	Y
Timing / Phasing Settings	Signal Heads (Number & type)	1-150A2L,1-130	1-150A2L,1-130	2-130	2-130
	Vehicle detection (Phase)	1,2	1,2	4	4
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width		90'	90'	95'	95'
Signal Phasing		 4 ⇢	 ⇢ 4		
Notes		Electromechanical Equipment			

# Field Inventory

ID Number:

Intersection: **SR-54 (US-641) N Market St / Washington St**

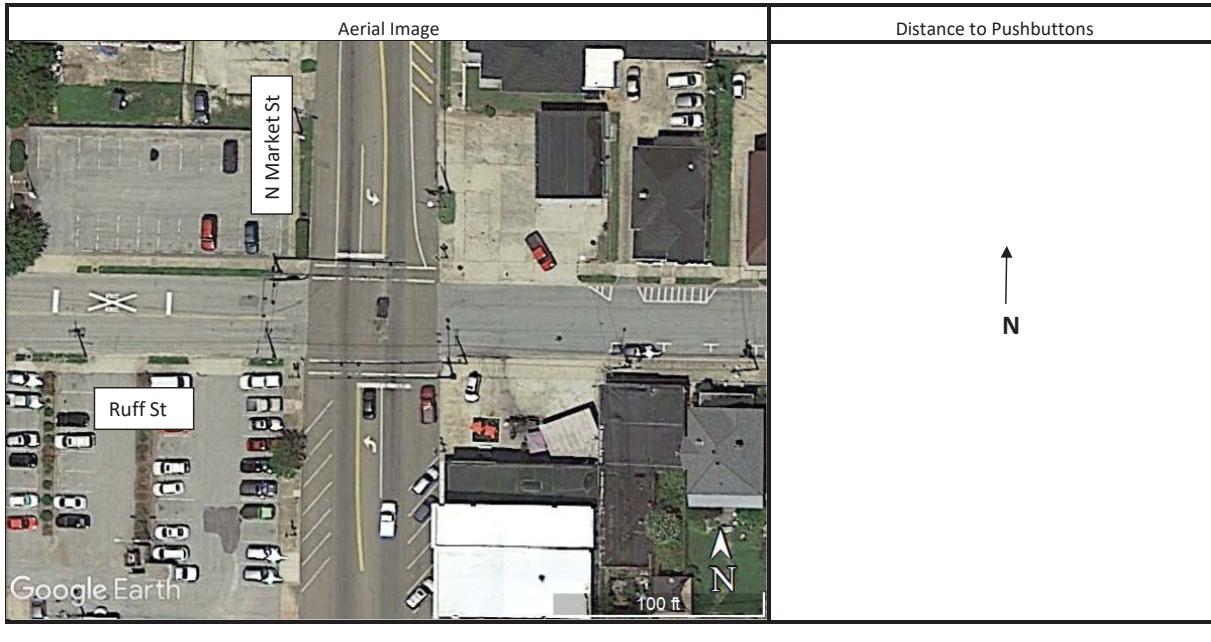


	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	N Market St	N Market St	Washington St	Washington St
	Speed Limits (mph)	30	30	30	30
	Lane Assignments	L-TR	L-TR	L-TR	L-TR
	Lane Widths (ft)	12-12	12-12	12-12	12-12
	Crosswalk width (ft)	77	59	76	64
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	-1.00	+0.50	+0.50	-1.00
	Storage Bay Length	L=80'	L=55'	L=60'	L=60'
Volume Settings	Right Turn on Red	Y	Y	Y	Y
	Adjacent Bus Stops	N	N	N	N
Timing / Phasing Settings	Adjacent Parking	Y	Y	Y	Y
	Signal Heads (Number & type)	2-130	2-130	2-130	2-130
Pedestrian Heads	Vehicle detection (Phase)	2	2	4	4
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width	92'	92'	80'	80'	
Signal Phasing					
Notes	Electromechanical Equipment				

# Field Inventory

ID Number:

Intersection: **SR-54 (US-641) N Market St / Ruff St**

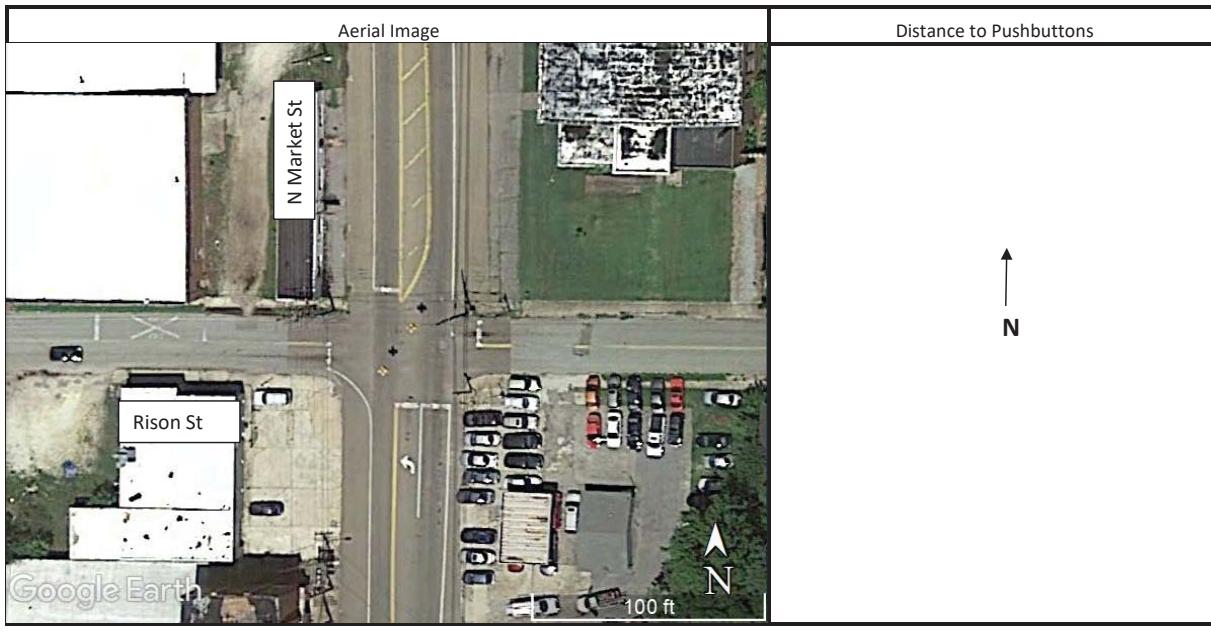


	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	N Market St	N Market St	Ruff St	Ruff St
	Speed Limits (mph)	30	30	30	30
	Lane Assignments	L-TR	L-TR	LTR	LTR
	Lane Widths (ft)	12-14	12-13	16	16
	Crosswalk width (ft)	36	38	65	61
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	-1.50	+1.00	-0.50	-2.00
	Storage Bay Length	L=50'	L=55'	CONT.	CONT.
	Right Turn on Red	Y	Y	Y	Y
Volume Settings	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	Y	Y	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	2-130	2-130	2-130	2-130
	Vehicle detection (Phase)	2	2	4	4
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width	65'	65'	80'	80'	
Signal Phasing		☒ Market St 2 ↓	4 ⇢	↔ 4 Ruff St 2 ↑	Market St
Notes	Electromechanical Equipment				

# Field Inventory

ID Number:

Intersection: **SR-54 (US-641) N Market St/Rison St**

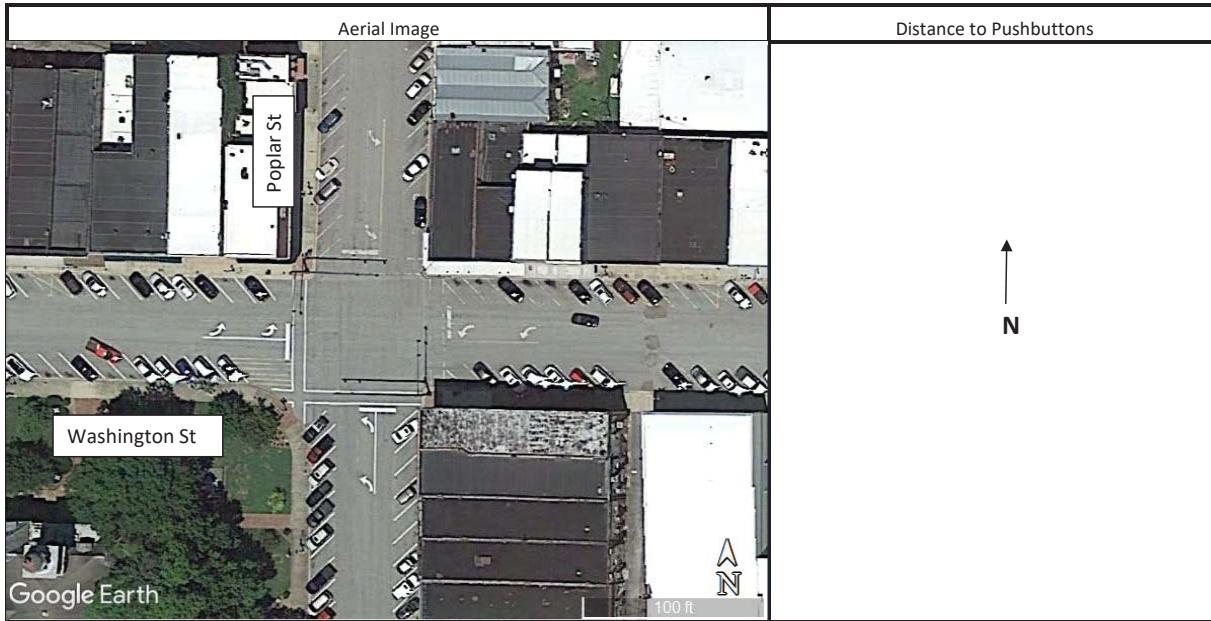


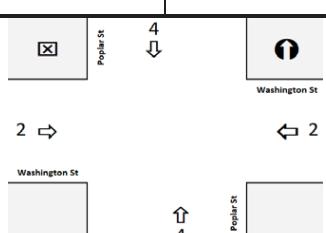
	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	N Market St	N Market St	Rison St	Rison St
	Speed Limits (mph)	35	35	30	30
	Lane Assignments	LTR	LTR	LTR	LTR
	Lane Widths (ft)	12	12	12	12
	Crosswalk width (ft)	n/a	n/a	n/a	n/a
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	+1.00	-0.50	-0.50	0.00
	Storage Bay Length	CONT.	CONT.	CONT.	CONT.
Volume Settings	Right Turn on Red	Y	Y	Y	Y
	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	2-130	2-130	2-130	2-130
	Vehicle detection (Phase)	2	2	4	4
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width		50'	50'	60'	60'
Signal Phasing		 Market St	 Rison St	 Market St	 Rison St
Notes	Construction to replace Electromechanical Equipment				

# Field Inventory

ID Number:

Intersection: Washington St/ Poplar St

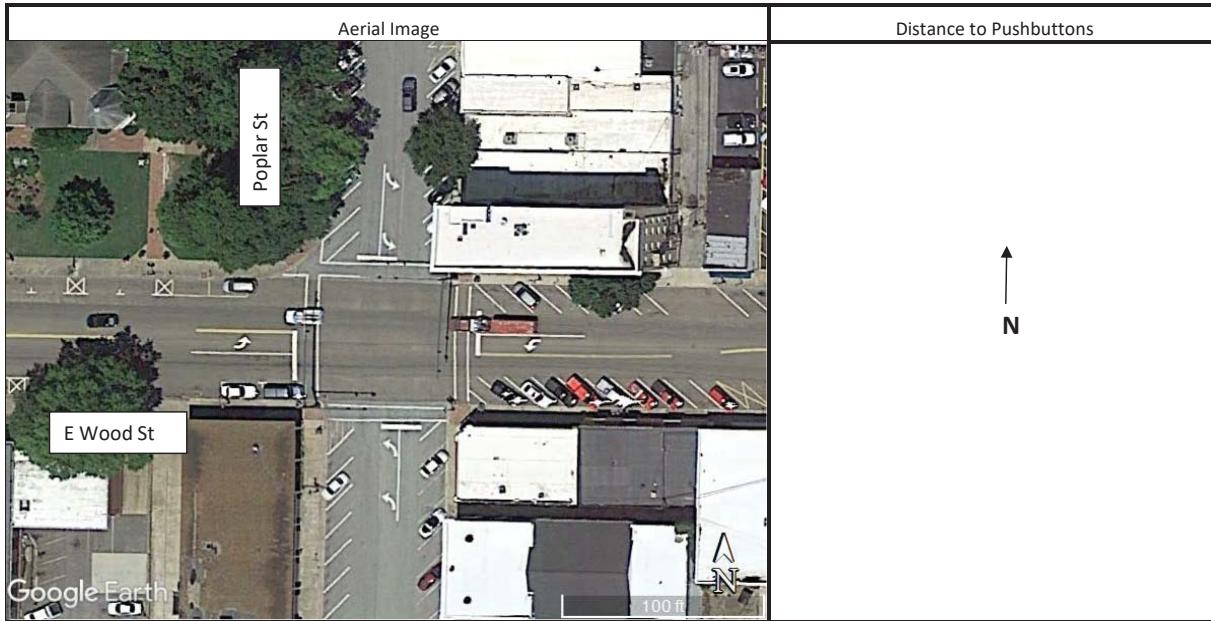


	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Poplar St	Poplar St	Washington St	Washington St
	Speed Limits (mph)	30	30	30	30
	Lane Assignments	L-TR	L-TR	L-TR	L-TR
	Lane Widths (ft)	12-12	12-12	12-12	12-12
	Crosswalk width (ft)	62	75	78	63
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	-1.00	+1.50	+0.50	-0.50
	Storage Bay Length	L=50'	L=75'	L=50'	L=55'
Volume Settings	Right Turn on Red	Y	Y	Y	Y
	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	Y	Y	Y	Y
Timing / Phasing Settings	Signal Heads (Number & type)	2-130	2-130	2-130	2-130
	Vehicle detection (Phase)	4	4	2	2
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width		90'	90'	86'	86'
Signal Phasing		 Washington St	2 →	← 2	
Notes		Electromechanical Equipment			

## Field Inventory

ID Number:

Intersection: **SR-356 E Wood St / Poplar St**



	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Poplar St	Poplar St	E Wood st	E Wood St
	Speed Limits (mph)	30	30	30	30
	Lane Assignments	L-TR	L-TR	L-TR	L-TR
	Lane Widths (ft)	12-12	12-12	12-14	12-13
	Crosswalk width (ft)	60	77	62	76
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	-0.50	+0.50	-0.50	-0.50
	Storage Bay Length	L=50'	L=45'	L=55'	L=55'
Volume Settings	Right Turn on Red	Y	Y	Y	Y
	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	Y	Y	Y	Y
Timing / Phasing Settings	Signal Heads (Number & type)	2-130	2-130	2-130	2-130
	Vehicle detection (Phase)	4	4	2	2
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width		85'	85'	90'	90'
Signal Phasing		 Poplar St 4 ↓	 E Wood St 2 ⇌ 2	 Poplar St 4 ↑	 E Wood St 2 ⇌ 2
Notes	Electromechanical Equipment				

# Field Inventory

ID Number:

Intersection: **SR-356 E Wood St/ Brewer St**

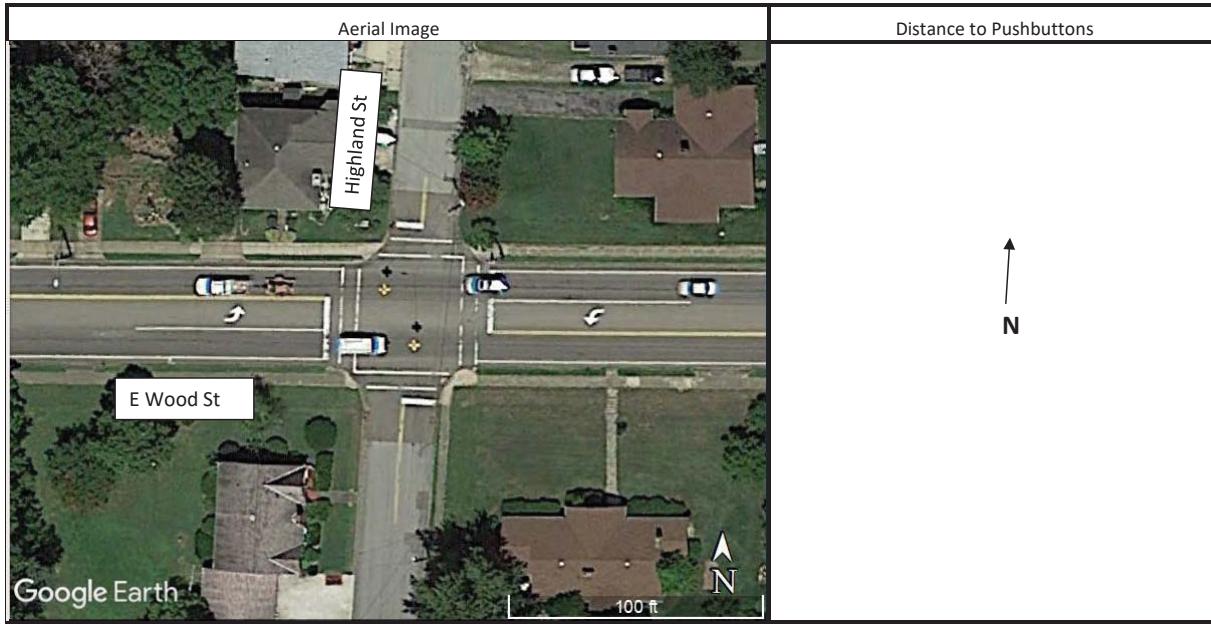


	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Brewer St	Brewer St	E Wood St	E Wood St
	Speed Limits (mph)	30	30	30	30
	Lane Assignments	LTR	LTR	L-TR	LTR
	Lane Widths (ft)	13	14	11-12	12
	Crosswalk width (ft)	38	61	42	49
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	-1.50	+0.50	-0.50	+1.00
	Storage Bay Length	CONT.	CONT.	L=40'	CONT.
Volume Settings	Right Turn on Red	Y	N	Y	Y
	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	Y	Y	Y	N
Timing / Phasing Settings	Signal Heads (Number & type)	2-130	2-130	2-130	2-130
	Vehicle detection (Phase)	4	4	2	2
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width		84'	84'	60'	60'
Signal Phasing		 Brewer St	 E Wood St	 E Wood St	
Notes	WB crosswalk sight issue for cars turning RT to NB Brewer St; Electromechanical Equipment				

# Field Inventory

ID Number:

Intersection: **SR-356 (E Wood St)/Highland St**



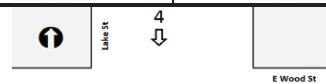
	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Highland St	Highland St	E Wood St	E Wood St
	Speed Limits (mph)	35	35	40	40
	Lane Assignments	LTR	LTR	L-TR	L-TR
	Lane Widths (ft)	13	13	12-12	12-12
	Crosswalk width (ft)	42	45	33	36
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	-3.50	-2.50	+2.00	-1.00
	Storage Bay Length	CONT.	CONT.	TWLTL	TWLTL
Volume Settings	Right Turn on Red	Y	Y	Y	Y
	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	2-130	2-130	2-130	2-130
	Vehicle detection (Phase)	2	2	1	1
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width		63'	63'	70'	70'
Signal Phasing					
Notes					

# Field Inventory

ID Number:

Intersection: **SR-356 (E Wood St)/Lake St**

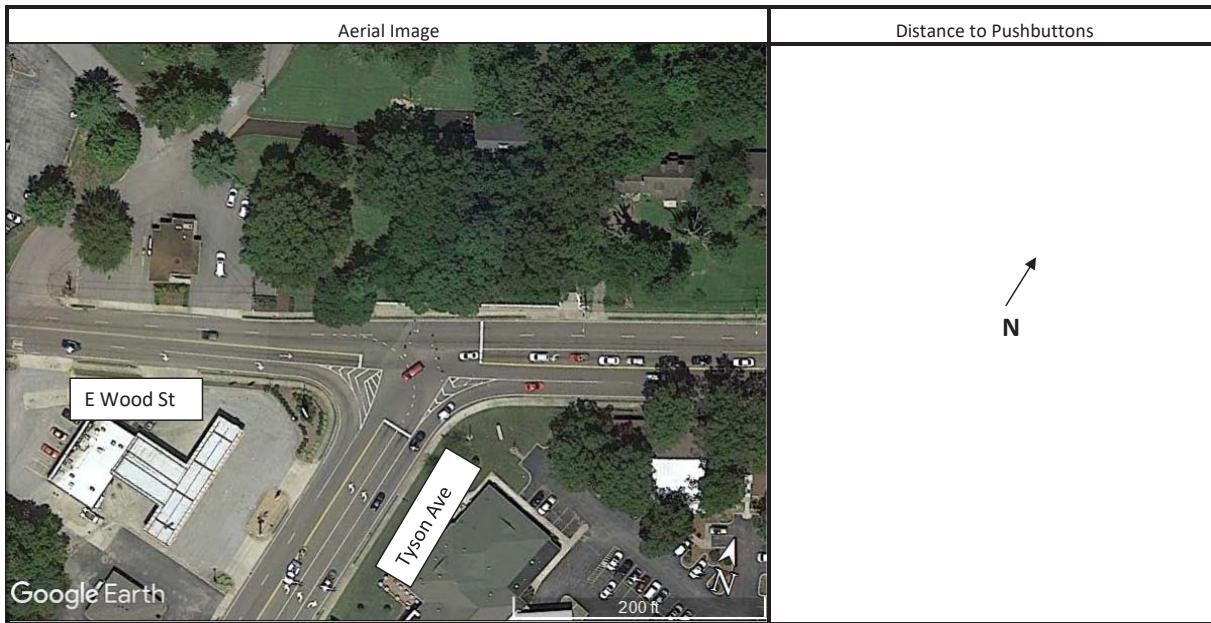


	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Lake St	Lake St	E Wood St	E Wood St
	Speed Limits (mph)	35	35	40	40
	Lane Assignments	LTR	LTR	L-TR	L-T-R
	Lane Widths (ft)	12	12	12-12	12-12
	Crosswalk width (ft)	n/a	n/a	n/a	n/a
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	+5.00	-1.50	-1.00	+0.50
	Storage Bay Length	CONT.	CONT.	TWTL	L=75', R=75'
	Right Turn on Red	Y	Y	Y	Y
Volume Settings	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	2-130	2-130	2-130	2-130
	Vehicle detection (Phase)	4	4	2	2
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width	56'	56'	70'	70'	
Signal Phasing		 2 ⇨ 4 ↓			
Notes	Electromechanical Equipment				

# Field Inventory

ID Number:

Intersection: **SR-356 (E Wood St)/SR-76 (US-79) Tyson Ave**

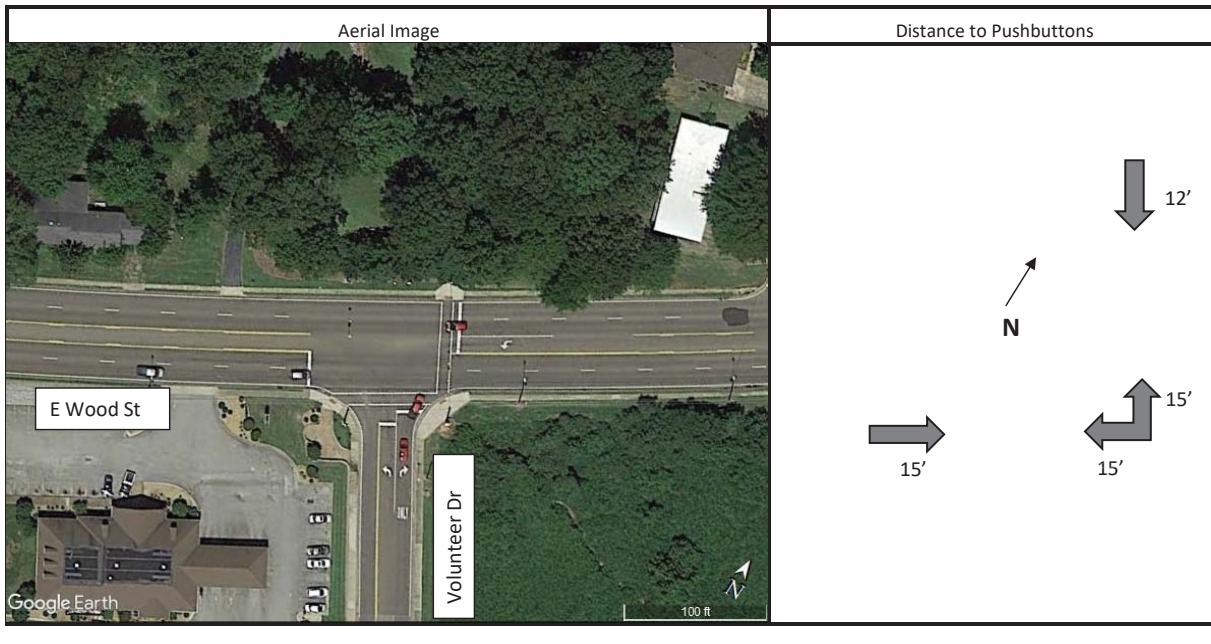


	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Tyson Ave	n/a	E Wood St	E Wood St
	Speed Limits (mph)	40	n/a	40	40
	Lane Assignments	L-L-R	n/a	T-R	L-T-T
	Lane Widths (ft)	12-12-13	n/a	12-12	12-12-12
	Crosswalk width (ft)	n/a	n/a	n/a	n/a
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	+0.50	n/a	+0.50	-0.50
	Storage Bay Length	TWLTL, L=190', R=190'	n/a	R=175'	TWLTL
	Right Turn on Red	Y	n/a	Y	Y
Volume Settings	Adjacent Bus Stops	N	n/a	N	N
	Adjacent Parking	N	n/a	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	2-130A2L	n/a	2-130	1-150A2L,2-130
	Vehicle detection (Phase)	4	n/a	1	2,1
	Pedestrian Heads	N	n/a	N	N
	Ped Push Buttons	N	n/a	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width	105'	n/a	95'	95'	
Signal Phasing					
Notes					

# Field Inventory

ID Number:

Intersection: **SR-76 (US-79) E Wood St/Volunteer Dr**



	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	Volunteer Dr	n/a	E Wood St	E Wood St
	Speed Limits (mph)	35	n/a	40	40
	Lane Assignments	L-R	n/a	T-TR	L-T-T
	Lane Widths (ft)	12-12	n/a	12-12-12	12-12-12
	Crosswalk width (ft)	72	n/a	n/a	74
	Distance from Ped Push button to curb	See diagram	n/a	n/a	See diagram
	Approach Grade (%)	+0.50	n/a	-4.00	+2.00
	Storage Bay Length	L=65', R=75'	n/a	CONT.	TWLTL
	Right Turn on Red	Y	n/a	Y	N
Volume Settings	Adjacent Bus Stops	N	n/a	N	N
	Adjacent Parking	N	n/a	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	1-130A2L, 1-150A2R	n/a	2-130	1-150A2L, 1-130
	Vehicle detection (Phase)	4,OL 1	n/a	2	1,5
	Pedestrian Heads	Y	n/a	Y	N
	Ped Push Buttons	Y	n/a	Y	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width	85'	n/a	105'	105'	
Signal Phasing					
Notes		Overlap: Phase 1 and Phase 4.			

# Field Inventory

ID Number:

Intersection: **E Wood St/Chickasaw Rd & Fairgrounds Rd**



	Notes / Direction	NB	SB	EB	WB
Lane Settings	Street Name	E Wood St	E Wood St	Chickasaw Rd	Fairgrounds Rd
	Speed Limits (mph)	40	40	35	35
	Lane Assignments	L-T-R	L-T-R	L-T-R	L-T-R
	Lane Widths (ft)	12-12-12	12-12-12	12-12-16	12-12-16
	Crosswalk width (ft)	n/a	n/a	n/a	n/a
	Distance from Ped Push button to curb	n/a	n/a	n/a	n/a
	Approach Grade (%)	-1.50	+1.50	+1.00	+1.50
	Storage Bay Length	TWLTL	TWLTL	L=35'	L=30'
	Right Turn on Red	Y	Y	Y	Y
Volume Settings	Adjacent Bus Stops	N	N	N	N
	Adjacent Parking	N	N	N	N
Timing / Phasing Settings	Signal Heads (Number & type)	2-130	2-130	2-130	2-130
	Vehicle detection (Phase)	1	1	2	2
	Pedestrian Heads	N	N	N	N
	Ped Push Buttons	N	N	N	N
Misc. Info.	Signing / Restrictions / School Zone	n/a	n/a	n/a	n/a
I/S Width		185'	185'	185'	185'
Signal Phasing					
Notes		Constant call Phase 2 confirmed.			



## Appendix C: CRASH DATA

Prepared on behalf of the  
City of Paris, TN by:

 **NEEL-SCHAFFER**  
Solutions you can build upon

in cooperation with

 **TN** **TDOT**  
Department of  
Transportation

# PARIS TSMO

## CRASH DATA ANALYSIS (2016-2018)

LOCATION	CRASH TYPE				MANNER OF COLLISION				VOLUME	STATISTICAL COMPUTATIONS			
	Total Number of Crashes	Property Damage	Injury	Fatal	Rear-End	Angle	HeadOn	Sideswipe		Crash Rate	Critical Crash Rate	TN Statewide Avg Crash Rate	Equiv PDO Rating <sup>1</sup>
Intersection													
W Wood St & Irvine St	5	2	3	0	3	2	0	0	9,152	0.499	0.674	0.666	35
Wood St & Market St	4	3	1	0	3	1	0	0	19,966	0.183	0.672	0.666	14
N Market St & Rison St	0	0	0	0	0	0	0	0	9,101	0.000	0.674	0.666	0
N Market St & Ruff St	0	0	0	0	0	0	0	0	12,563	0.000	0.673	0.666	0
N Market St & Washington St	3	3	0	0	1	2	0	0	12,596	0.218	0.673	0.666	3
S Market St & Blythe St	10	8	2	0	2	7	1	0	12,568	0.727	0.673	0.666	30
E Washington St & N Poplar St	2	2	0	0	1	1	0	0	2,950	0.619	0.680	0.666	2
E Wood St & Poplar St	0	0	0	0	0	0	0	0	9,897	0.000	0.674	0.666	0
E Wood St & Brewer St	1	1	0	0	0	1	0	0	9,861	0.093	0.674	0.666	1
E Wood St & Highland St	2	1	1	0	2	0	0	0	8,627	0.212	0.674	0.666	12
E Wood St & Lake St	4	2	2	0	1	3	0	0	9,942	0.367	0.674	0.666	24
E Wood St & Tyson Ave	10	8	2	0	3	4	1	2	18,577	0.492	0.778	0.772	30
E Wood St & Volunteer Dr	8	5	3	0	3	4	1	0	20,140	0.363	0.778	0.772	38

<sup>1</sup> EPDO Weighted Factors have come from HSM and AASHTO (2010). Fatal = 542, Injury = 11, PDO = 1

# PARIS TSMO

## CRASH DATA ANALYSIS (2016-2018)

LOCATION	CRASH TYPE				MANNER OF COLLISION				VOLUME	STATISTICAL COMPUTATIONS			
	Total Number of Crashes	Property Damage	Injury	Fatal	Rear-End	Angle	HeadOn	Sideswipe		Crash Rate	Critical Crash Rate	TN Statewide Avg Crash Rate	Equiv PDO Rating <sup>1</sup>
Intersection													
E Wood St & Fairground Rd /Chickasaw Rd	14	9	5	0	5	8	1	0	20,815	0.614	0.778	0.772	64
Veterans Dr & Dunlap St	12	5	7	0	3	8	1	0	14,518	0.755	0.779	0.772	82
Veterans Dr/ Mineral Wells Dr & Tyson Ave	37	22	15	0	12	21	0	4	25,308	1.335	0.777	0.772	187
Mineral Wells Dr & Jim Adams Dr	20	11	9	0	9	9	0	2	20,442	0.894	0.778	0.772	110
Mineral Wells Dr & Memorial Dr	11	11	0	0	2	6	0	3	17,015	0.590	0.778	0.772	11
Memorial Dr & Volunteer Dr	5	2	3	0	0	5	0	0	15,307	0.298	0.779	0.772	35
Memorial Dr & SR-69/US-641	10	8	2	0	1	6	1	2	11,688	0.781	0.780	0.772	30
Volunteer Dr & Patriot Ave*	3	1	1	1	2	1	0	0	13,068	0.210	0.779	0.772	554
Volunteer Dr & Jim Adams Dr	1	1	0	0	0	0	0	1	11,935	0.077	0.780	0.772	1
Tyson Ave & Joy St	3	1	2	0	0	3	0	0	13,187	0.208	0.779	0.772	23
SR-76/US-79 & SR-218	13	11	2	0	4	7	1	1	13,090	0.907	0.779	0.772	33
Lone Oak Rd & Wilson St	1	0	1	0	0	1	0	0	3,987	0.229	0.851	0.837	11

<sup>1</sup> EPDO Weighted Factors have come from HSM and AASHTO (2010). Fatal = 542, Injury = 11, PDO = 1

\* FATALITY OCCURRED IN 2017

Query: SR54 Crashes																						
CR_CRASH.County = HENRY																						
CR_CRASH.Route = SR064																						
CR_CRASH.Log_Mile <= 9.6 And CR_CRASH.Log_Mile <= 12.964																						
CR_CRASH.Date_of_Crash >= 12/31/2018 And CR_CRASH.Date_of_Crash >= 1/1/2016																						
BLM																						
10.44 NON_JUNCTION	On Roadway	--	HENRY	SR064	O-NONE	1	10779243	Along Roadway	2017	9/7/2017	1705 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic	
10.453 NON_JUNCTION	On Roadway	--	HENRY	SR064	O-NONE	1	10715202	Along Roadway	2017	5/23/2017	1705 Suspected Minor Injury	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic	
10.841 NON_JUNCTION	On Roadway	--	HENRY	SR064	O-NONE	1	10779243	Along Roadway	2017	10/21/2017	1105 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic	
11.335 NON_JUNCTION	On Roadway	--	HENRY	SR064	O-NONE	1	10785662	Along Roadway	2017	10/8/2017	1204 Suspected Minor Injury	0	1	0	1	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic	
11.646 NON_JUNCTION	On Roadway	--	HENRY	SR064	O-NONE	1	10760746	Along Roadway	2017	12/16/2017	749 Prop Damage (under)	0	0	0	0	0	2 Vehicle in Transport	ANOTHER	Clear	Daylight	Automatic	
11.693 NON_JUNCTION	On Roadway	--	HENRY	SR064	O-NONE	1	10760746	Along Roadway	2017	4/20/2018	1655 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic	
12.396 NON_JUNCTION	On Roadway	--	HENRY	SR064	O-NONE	1	10594890	Along Roadway	2017	3/3/2017	1517 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic	
12.716 NON_JUNCTION	On Roadway	--	HENRY	SR064	O-NONE	1	10791580	Along Roadway	2016	9/25/2016	1612 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic	
12.734 NON_JUNCTION	On Roadway	--	HENRY	SR064	O-NONE	1	10224281	Along Roadway	2018	12/11/2018	714 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	SIDESWIPE, SAME DIR	Clear	Daylight	Automatic	
12.753 NON_JUNCTION	On Roadway	--	HENRY	SR064	O-NONE	1	10779243	Along Roadway	2017	4/14/2018	1241 Suspected Minor Injury	0	2	0	2	0	2 Vehicle in Transport	REAR-END	Rain	Daylight	Automatic	
12.79 NON_JUNCTION	On Roadway	--	HENRY	SR064	O-NONE	1	10210305	Along Roadway	2018	8/7/2018	1205 Suspected Serious Injury	0	1	1	1	0	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic	
12.794 NON_JUNCTION	On Roadway	--	HENRY	SR064	O-NONE	1	10166317	Along Roadway	2016	4/8/2016	1406 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic	
10.117 NON_JUNCTION	Shoulder	--	HENRY	SR064	O-NONE	1	10779243	Along Roadway	2017	10/21/2017	834 Suspected Minor Injury	0	1	0	1	0	1 Other Vehicle, Pole, Supports	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic	
11.855 NON_JUNCTION	Shoulder	--	HENRY	SR064	O-NONE	1	10205671	Along Roadway	2018	8/27/2018	1848 Suspected Minor Injury	0	1	0	1	0	1 Guardrail Face	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic	
12.605 NON_JUNCTION	Shoulder	--	HENRY	SR064	O-NONE	1	10154467	Along Roadway	2016	5/13/2016	1540 Prop Damage (over)	0	0	0	0	0	1 Standing Tree	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic	
9.809 NON_JUNCTION	Roadside - Left	--	HENRY	SR064	O-NONE	1	10155677	Along Roadway	2016	3/9/2016	632 Suspected Serious Injury	0	1	1	0	0	1 Utility Pole	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic	
12.071 NON_JUNCTION	Roadside - Left	--	HENRY	SR064	O-NONE	1	10481038	Along Roadway	2017	12/17/2016	2112 Suspected Minor Injury	0	1	0	1	0	1 Ditch	NO COLLISION W/ VEHICLE	Rain	Dark-lighted	Automatic	
12.712 NON_JUNCTION	Roadside - Left	--	HENRY	SR064	O-NONE	1	10152392	Along Roadway	2017	4/27/2017	611 Prop Damage (over)	0	0	0	0	0	1 Standing Tree	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic	
10.666 NON_JUNCTION	Roadside - Right	--	HENRY	SR064	O-NONE	1	10152392	Along Roadway	2017	1/3/2017	610 Prop Damage (over)	0	0	0	0	0	1 Utility Pole	NO COLLISION W/ VEHICLE	Clear	Dark-lighted	Automatic	
11.398 NON_JUNCTION	Roadside - Right	--	HENRY	SR064	O-NONE	1	10142436	Along Roadway	2016	10/27/2016	1600 Prop Damage (over)	0	0	0	0	0	1 Utility Pole	NO COLLISION W/ VEHICLE	Cloudy	Daylight	Automatic	
11.792 NON_JUNCTION	Roadside - Right	--	HENRY	SR064	O-NONE	1	10221382	Along Roadway	2017	11/15/2017	713 Suspected Minor Injury	0	1	0	1	0	1 Concrete Traffic Barrier	NO COLLISION W/ VEHICLE	Cloudy	Daylight	Automatic	
12.816 NON_JUNCTION	Off Roadway - Location Unknown	--	HENRY	SR064	O-NONE	1	10717162	Along Roadway	2017	7/25/2017	1806 Prop Damage (over)	0	0	0	0	0	1 Fire Hydrant	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic	
12.844 NON_JUNCTION	In Parking Lot	--	HENRY	SR064	O-NONE	1	10186140	Along Roadway	2017	10/21/2016	834 Suspected Minor Injury	0	1	0	1	0	1 Utility Pole	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic	
10.923 NON_JUNCTION	Shoulder	--	HENRY	SR064	O-NONE	1	10816340	Along Roadway	2017	12/17/2017	955 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Rain	Daylight	Automatic	
11.078 NON_JUNCTION	Shoulder	--	HENRY	SR064	O-NONE	1	10188349	Along Roadway	2018	1/10/2018	1741 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Cloudy	Dark-lighted	Automatic	
11.135 NON_JUNCTION	Shoulder	--	HENRY	SR064	O-NONE	1	10154673	Along Roadway	2017	2/24/2017	1537 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR TO SIDE	Clear	Daylight	Automatic	
11.151 NON_JUNCTION	Shoulder	--	HENRY	SR064	O-NONE	1	10154673	Along Roadway	2017	12/25/2017	1257 Prop Damage (over)	0	0	0	0	0	1 Utility Pole	NO COLLISION W/ VEHICLE	Cloudy	Daylight	Automatic	
11.179 NON_JUNCTION	Shoulder	--	HENRY	SR064	O-NONE	1	10123392	Along Roadway	2016	5/24/2016	1305 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic	
11.262 NON_JUNCTION	Shoulder	--	HENRY	SR064	O-NONE	1	10211747	Along Roadway	2018	8/21/2018	811 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic	
11.309 NON_JUNCTION	Shoulder	--	HENRY	SR064	O-NONE	1	10123280	Along Roadway	2018	8/21/2018	838 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic	
11.355 NON_JUNCTION	Shoulder	--	HENRY	SR064	O-NONE	1	10152629	Along Roadway	2016	5/29/2016	1955 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Rain	Daylight	Automatic	
11.851 NON_JUNCTION	Shoulder	--	HENRY	SR064	O-NONE	1	10261629	Along Roadway	2017	12/30/2017	1303 Prop Damage (over)	0	0	0	0	0	1 Guardrail Face	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic	
10.249 INTERSECTION	On Roadway	--	HENRY	SR064	O-NONE	1	101877418	At an Intersection	2018	1/4/2018	702 Suspected Minor Injury	0	2	0	2	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic	
10.56 INTERSECTION	On Roadway	--	HENRY	SR064	O-NONE	1	101326549	At an Intersection	2016	8/12/2016	1927 Suspected Minor Injury	0	1	0	1	0	1 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic	
10.58 INTERSECTION	On Roadway	--	HENRY	SR064	O-NONE	1	10154673	At an Intersection	2017	12/25/2017	955 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic	
10.56 INTERSECTION	On Roadway	--	HENRY	SR064	O-NONE	1	10205642	At an Intersection	2018	6/7/2018	1005 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic	
11.001 INTERSECTION	On Roadway	--	HENRY	SR064	O-NONE	1	10355766	At an Intersection	2016	9/7/2016	1035 Suspected Minor Injury	0	1	0	1	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic	
11.006 INTERSECTION	On Roadway	--	HENRY	SR064	O-NONE	1	101436417	At an Intersection	2016	11/10/2016	1528 Suspected Minor Injury	0	1	0	1	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic	
11.006 INTERSECTION	On Roadway	--	HENRY	SR064	O-NONE	1	101436417	At an Intersection	2017	6/27/2017	1240 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic	
11.12 INTERSECTION	On Roadway	--	HENRY	SR064	O-NONE	1	101709493	At an Intersection	2016	8/18/2017	811 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic	
11.12 INTERSECTION	On Roadway	--	HENRY	SR064	O-NONE	1	101664948	At an Intersection	2017	6/7/2017	750 Suspected Minor Injury	0	1	0	1	0	1 Pedestrian	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic	
11.12 INTERSECTION	On Roadway	--	HENRY	SR064	O-NONE	1	101781990	At an Intersection	2017	10/9/2017	1015 Suspected Serious Injury	0	1	0	1	0	1 Pedestrian	NO COLLISION W/ VEHICLE	Cloudy	Daylight	Automatic	
11.333 INTERSECTION	On Roadway	--	HENRY	SR064	O-NONE	1	101208214	At an Intersection	2016	5/5/2016	1710 Fatal	1	0	0	0	0	1 Standing Tree	NO COLLISION W/ VEHICLE	Cloudy	Dark-lighted	Automatic	
11.12 INTERSECTION	On Roadway	--	HENRY	SR064	O-NONE	1	101670001	At an Intersection	2018	5/17/2018	1021 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic	
11.13 INTERSECTION	On Roadway	--	HENRY	SR064	O-NONE	1	101093324	At an Intersection	2017	5/20/2017	955 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Rain	Dark-lighted	Automatic	
10.56 INTERSECTION RELATED	On Roadway	--	HENRY	SR064	O-NONE	1	10159282	At an Intersection	2017	3/3/2017	1948 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic	
10.56 INTERSECTION RELATED	On Roadway	--	HENRY	SR064	O-NONE	1	101637174	At an Intersection	2016	7/30/2016	1037 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic	
12.255 INTERSECTION RELATED	On Roadway	--	HENRY	SR064	O-NONE	1	101637174	At an Intersection	2017	5/24/2017	1404 Suspected Minor Injury	0	1	0	1	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic	
12.293 INTERSECTION RELATED	On Roadway	--	HENRY	SR064	O-NONE	1	101351213	At an Intersection	2016	8/21/2016	1422 Suspected Minor Injury	0	3	0	3	0	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic	
11.12 INTERSECTION RELATED	On Roadway	--	HENRY	SR064	O-NONE	1	101223399	At an Intersection	2016	3/7/2016	1301 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic	
11.12 INTERSECTION RELATED	On Roadway	--	HENRY	SR064	O-NONE	1	101398893	At an Intersection	2016	10/8/2016	1422 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic	
11.18 --	--	--	HENRY	SR064	O-NONE	1	102178324	At an Intersection	2018	10/13/2018	1048 Prop Damage (under)	0	0	0	0	0	2 --	--	--	--	Automatic	
Query: Memorial Dr Crashes																						
CR_CRASH.County = HENRY																						
CR_CRASH.Route = SR069																						
CR_CRASH.Log_Mile >= 11.24 And CR_CRASH.Log_Mile <= 12.05																						
CR_CRASH.Date_of_Crash >= 12/31/2018 And CR_CRASH.Date_of_Crash >= 1/1/2016																						
BLM																						
11.273 NON_JUNCTION	On Roadway	--	HENRY	SR069	O-NONE	1	10128563	Along Roadway	2016	7/14/2016	2104 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	SIDESWIPE, SAME DIR	Clear	Daylight	Automatic	
11.298 NON_JUNCTION	On Roadway	--	HENRY	SR069	O-NONE	1	10206580	Along Roadway	2017	7/9/2016	1717 Suspected Minor Injury	0	2	0	2	0	2 Vehicle in Transport	REAR-END	OTHER	Clear	Daylight	Automatic
11.308 NON_JUNCTION	On Roadway	--	HENRY	SR069	O-NONE	1	101725502	Along Roadway	2017	4/20/2017	1537 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic	
11.332 NON_JUNCTION	On Roadway	--	HENRY	SR069	O-NONE	1	101725502	Along Roadway	2017	8/1/2017	1115 Suspected Minor Injury	0	1	0	1	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic	
11.337 NON_JUNCTION	On Roadway	--	HENRY	SR069	O-NONE	1	101853244	Along Roadway	2017	12/8/2017	1116 Suspected Minor Injury	0	1	0	1	0	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic	
11.344 NON_JUNCTION	On Roadway	--	HENRY	SR069	O-NONE	1	101591494	Along Roadway	2017	3/3/2017	1445 Prop Damage (over)	0	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic	



14.542 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101463967 Along Roadway	2016	11/30/2016	1602 Suspected Minor Injury	0	1	0	1	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic
14.603 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101535320 Along Roadway	2017	1/26/2017	1517 Suspected Minor Injury	0	2	0	2	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic
14.737 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101634785 Along Roadway	2017	12/23/2017	2310 Suspected Serious Injury	0	2	1	1	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic
14.843 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101657493 Along Roadway	2017	6/4/2017	1003 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic
14.882 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101687483 Along Roadway	2017	1/23/2017	953 Suspected Minor Injury	0	1	0	1	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic
15.257 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101149203 Along Roadway	2016	3/23/2016	708 Suspected Serious Injury	0	3	1	2	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic
15.511 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101204462 Along Roadway	2016	3/23/2016	751 Suspected Minor Injury	0	0	0	0	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic
15.625 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101204463 Along Roadway	2016	3/23/2016	751 Suspected Minor Injury	0	0	0	0	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic
15.85 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101426659 Along Roadway	2016	10/30/2016	0 Suspected Minor Injury	0	0	0	0	1 Deer (Animal)	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic
15.999 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101884340 Along Roadway	2018	1/1/2018	854 Suspected Minor Injury	0	1	0	1	2 Vehicle in Transport	ANGLE	Rain	Daylight	Automatic
16.311 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101134243 Along Roadway	2016	3/14/2016	1607 Suspected Serious Injury	0	1	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic
16.443 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101730346 Along Roadway	2017	10/3/2017	1812 Prop Damage (under)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic
16.447 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101633109 Along Roadway	2017	4/30/2017	1446 Suspected Minor Injury	0	0	0	0	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic
16.554 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101953805 Along Roadway	2017	3/23/2017	1446 Suspected Minor Injury	0	1	0	1	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic
16.566 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101424600 Along Roadway	2016	10/27/2016	2123 Suspected Serious Injury	0	2	0	0	2 Vehicle in Transport	ANGLE	Clear	Dark-Lighted	Automatic
16.606 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101204464 Along Roadway	2017	4/9/2017	1151 Suspected Serious Injury	0	1	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic
16.616 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	102262596 Along Roadway	2017	12/13/2017	1342 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic
16.636 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101278655 Along Roadway	2016	7/2/2016	2012 Suspected Minor Injury	0	2	0	2	3 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic
16.662 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101424624 Along Roadway	2018	7/23/2018	1602 Suspected Minor Injury	0	2	0	2	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic
16.699 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101424624 Along Roadway	2018	7/23/2018	1602 Suspected Minor Injury	0	2	0	0	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic
16.874 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	102071378 Along Roadway	2018	7/1/2018	1316 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic
17.1 NON_JUNCTION	On Roadway	--	HENRY	SR076	O-NONE	1	101737771 Along Roadway	2017	3/5/2017	759 Suspected Minor Injury	0	1	0	1	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic
17.544 NON_JUNCTION	Roadside -- Right	--	HENRY	SR076	O-NONE	1	101729671 Along Roadway	2017	8/3/2017	1537 Prop Damage (over)	0	0	0	0	1 Bridge Rail	NO COLLISION W/ VEHICLE	Cloudy	Daylight	Automatic
17.559 NON_JUNCTION	Outside Trafficway	--	HENRY	SR076	O-NONE	1	101385447 Along Roadway	2016	11/29/2016	1341 Suspected Minor Injury	0	2	0	0	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic
16.456 NON_JUNCTION	Outside Trafficway	--	HENRY	SR076	O-NONE	1	102095228 Along Roadway	2018	8/1/2018	1550 Fatal	1	0	0	0	1 Other (Object) (not fixed)	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic
14.733 NON_JUNCTION	--	--	HENRY	SR076	O-NONE	1	101126302 Along Roadway	2017	3/2/2016	1040 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic
15.688 NON_JUNCTION	--	--	HENRY	SR076	O-NONE	1	101693733 Along Roadway	2017	7/6/2017	738 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic
15.689 NON_JUNCTION	--	--	HENRY	SR076	O-NONE	1	101693733 Along Roadway	2017	7/6/2017	2205 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	SIDESWIPE, SAME DIR	Rain	Dark-Lighted	Automatic
15.719 NON_JUNCTION	--	--	HENRY	SR076	O-NONE	1	101094297 Along Roadway	2016	1/2/2016	137 Prop Damage (over)	0	0	0	0	1 Overturn	NO COLLISION W/ VEHICLE	Sleet/Hail	Dark-Lighted	Automatic
14.42 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	101473673 At an Intersection	2016	11/9/2016	0 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Day-Lighted	Automatic
14.42 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	101589338 At an Intersection	2017	3/21/2017	1600 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	SIDESWIPE, OPP DIR	Clear	Day-Lighted	Automatic
14.42 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	101589338 At an Intersection	2017	3/21/2017	508 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Day-Lighted	Automatic
14.42 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	102387172 At an Intersection	2018	12/7/2018	2527 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic
14.48 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	101841062 At an Intersection	2017	11/27/2017	1647 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic
14.75 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	101184412 At an Intersection	2016	4/29/2016	1644 Suspected Minor Injury	0	2	0	0	2 Vehicle in Transport	ANGLE	Rain	Daylight	Automatic
14.75 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	101184412 At an Intersection	2016	11/23/2016	1607 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic
14.75 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	101782019 At an Intersection	2017	10/4/2017	1604 Suspected Minor Injury	0	1	0	0	1 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic
14.75 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	101882019 At an Intersection	2018	1/8/2018	1507 Prop Damage (over)	0	0	0	0	3 Vehicle in Transport	REAR-END	Rain	Daylight	Automatic
14.982 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	101653388 At an Intersection	2016	4/16/2016	1207 Suspected Serious Injury	0	1	0	0	1 Vehicle in Transport	SIDESWIPE, OPP DIR	Clear	Day-Lighted	Automatic
15.35 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	101476361 At an Intersection	2016	10/26/2016	1653 Suspected Minor Injury	0	3	0	0	3 Vehicle in Transport	ANGLE	Dust	Daylight	Automatic
15.35 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	101385841 At an Intersection	2016	9/26/2016	830 Suspected Minor Injury	0	1	0	0	2 Vehicle in Transport	ANGLE	Rain	Daylight	Automatic
15.35 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	101501526 At an Intersection	2017	1/10/2017	925 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	HEAD-ON	Clear	Dark-Lighted	Automatic
15.35 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	101584733 At an Intersection	2017	3/16/2017	643 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic
15.35 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	101231691 At an Intersection	2018	8/18/2018	1523 Suspected Minor Injury	0	2	0	0	2 Vehicle in Transport	ANGLE	Rain	Daylight	Automatic
16.778 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	102426052 At an Intersection	2018	9/29/2018	1303 Suspected Minor Injury	0	2	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic
16.778 INTERSECTION	On Roadway	--	HENRY	SR076	O-NONE	1	102426052 At an Intersection	2018	10/8/2018	1443 Suspected Minor Injury	0	1	0	0	1 Vehicle in Transport	ANGLE	Rain	Daylight	Automatic
15.35 INTERSECTION	Roadside -- Right	--	HENRY	SR076	O-NONE	1	101737761 Along Roadway	2017	9/23/2017	1604 Prop Damage (over)	0	0	0	0	3 Vehicle in Transport	REAR-END	Cloud	Dark-Lighted	Automatic
14.42 INTERSECTION	Roadside -- Right	--	HENRY	SR076	O-NONE	1	101816020 At an Intersection	2017	11/6/2017	45 Prop Damage (over)	0	0	0	0	1 Utility Pole	NO COLLISION W/ VEHICLE	Rain	Dark-Lighted	Automatic
14.42 INTERSECTION	Roadside -- Right	--	HENRY	SR076	O-NONE	1	101040819 At an Intersection	2018	6/9/2018	1619 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Day-Lighted	Automatic
14.42 INTERSECTION	Roadside -- Right	--	HENRY	SR076	O-NONE	1	101808107 At an Intersection	2017	7/24/2017	1623 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	SIDESWIPE, OPP DIR	Clear	Day-Lighted	Automatic
15.35 INTERSECTION	--	--	HENRY	SR076	O-NONE	1	101830737 At an Intersection	2017	11/18/2017	752 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic
15.35 INTERSECTION	--	--	HENRY	SR076	O-NONE	1	101847046 At an Intersection	2017	1/3/2017	933 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic
15.35 INTERSECTION	--	--	HENRY	SR076	O-NONE	1	101081007 At an Intersection	2017	1/20/2017	823 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Snow	Daylight	Automatic
16.887 INTERSECTION RELATED	--	--	HENRY	SR076	O-NONE	1	101747658 At an Intersection	2016	7/17/2016	1203 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Rain	Daylight	Automatic
16.887 INTERSECTION RELATED	--	--	HENRY	SR076	O-NONE	1	101967552 At an Intersection	2018	12/13/2018	1703 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLES	Clear	Dark-Lighted	Automatic
16.447 INTERSECTION RELATED	--	--	HENRY	SR076	O-NONE	1	101696772 At an Intersection	2018	4/6/2018	1449 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	SIDESWIPE, SAME DIR	Clear	Daylight	Automatic
14.907 DRIVEWAY, ALLEY ACCESS, ET0 On Roadway	--	--	HENRY	SR076	O-NONE	1	101670506 Along Roadway	2017	6/18/2017	1117 Prop Damage (over)	0	0	0	0	1 Pedestrian	NO COLLISION W/ VEHICLE	Rain	Daylight	Automatic
14.995 DRIVEWAY, ALLEY ACCESS, ET0 On Roadway	--	--	HENRY	SR076	O-NONE	1	101670574 Along Roadway	2017	4/28/2017	1927 Suspected Minor Injury	0	1	0	0	1 Other Traffic Barrier	NO COLLISION W/ VEHICLE	Cloudy	Daylight	Automatic
15.35 UNKNOWN	On Roadway	--	HENRY	SR076	O-NONE	1	101207492 Along Roadway	2016	12/27/2016	1614 Prop Damage (under)	0	0	0	0	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic
10.148	--	--	HENRY	SR076	O-NONE	1	101184693 At an Intersection	2017	1/24/2017	1643 Prop Damage (under)	0	0	0	0	2 Vehicle in Transport	REAR-END	Cloudy	Dark-Lighted	Automatic

Query: SR 218 Crashes

CR\_CRASH.County = HENRY

CR\_CRASH.Route = SR218

CR\_CRASH.Log Miles &gt;= 8.785 And CR\_CRASH.Log Miles &lt;= 10.67

CR\_CRASH.Date of Crash = 1/1/2016 And CR\_CRASH.Date of Crash &lt;= 12/31/2018

BLM

Relation to First Junction	Relation to First Roadway</
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CR\_CRASH.Log.Mile >= 13.58 And CR\_CRASH.Log.Mile <= 14.42  
 CR\_CRASH.Date of Crash <= 12/31/2018 And CR\_CRASH.Date of Crash >= 1/1/2016

BLM	Relation to First Junction	Relation to First Roadway	Urban or Rural	County	Route	Sp Cse	Co Seq	Case Number	Location	Year Of Crash	Date of Crash	Time of Crash	Type of Crash	Total Killed	Total Inj	Total Cap Injuries	Total Other Injuries	Total Veh	First Harmful Event	Manner of First Collision	Weather Cond	Light Conditions	Locate Type
13.635 NON JUNCTION	On Roadway	--	HENRY	SR076	0-NONE	1	101234974 Along Roadway	2018	8/18/2018	1545	Suspected Minor Injury	0	1	0	1	2	Vehicle in Transport	SIDESWIPE, SAME DIR	Clear	Dark-Lighted	Automatic		
13.656 NON JUNCTION	On Roadway	--	HENRY	SR076	0-NONE	1	101216030 Along Roadway	2018	2/27/2018	1157	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	ANGLE	Clear	Daylight			
13.762 NON JUNCTION	On Roadway	--	HENRY	SR076	0-NONE	1	102084196 Along Roadway	2018	8/20/2018	1047	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic		
13.898 NON JUNCTION	On Roadway	--	HENRY	SR076	0-NONE	1	101216032 Along Roadway	2018	7/23/2018	834	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic		
14.243 NON JUNCTION	On Roadway	--	HENRY	SR076	0-NONE	1	101216033 Along Roadway	2018	5/17/2018	1285	Prop Damage (over)	0	1	0	1	2	Vehicle in Transport	NO COLLISION W/ VEHICLE	Cloudy	Dark-Lighted	Automatic		
14.204 NON JUNCTION	On Roadway	--	HENRY	SR076	0-NONE	1	102356931 Along Roadway	2018	1/11/2018	114	Suspected Minor Injury	0	2	0	2	2	Vehicle in Transport	REAR-END	Rain	Dark-Lighted	Automatic		
14.382 NON JUNCTION	On Roadway	--	HENRY	SR076	0-NONE	1	101620241 Along Roadway	2017	4/20/2017	753	Suspected Minor Injury	0	1	0	1	1	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic		
14.214 NON JUNCTION	Roadside - Left	--	HENRY	SR076	0-NONE	1	101497912 Along Roadway	2017	1/8/2017	149	Prop Damage (over)	0	0	0	0	1	1 Luminary/Light Support	NO COLLISION W/ VEHICLE	Clear	Dark-Lighted	Automatic		
13.855 NON JUNCTION	Roadside - Right	--	HENRY	SR076	0-NONE	1	102084197 Along Roadway	2018	12/30/2018	1330	Prop Damage (over)	0	1	0	1	2	Vehicle in Transport	NO COLLISION W/ VEHICLE	Clear	Daylight			
14.209 NON JUNCTION	Outside Trafficway	--	HENRY	SR076	0-NONE	1	101910330 Along Roadway	2018	2/8/2018	1249	Suspected Minor Injury	0	1	0	1	1	1 Standing Tree	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic		
13.604 NON JUNCTION	--	--	HENRY	SR076	0-NONE	1	101816781 Along Roadway	2017	11/6/2017	1424	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	SIDESWIPE, SAME DIR	Cloudy	Daylight	Automatic		
13.665 NON JUNCTION	--	--	HENRY	SR076	0-NONE	1	101196490 Along Roadway	2016	5/17/2016	1000	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	SIDESWIPE, SAME DIR	Cloudy	Daylight	Automatic		
14.388 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101497916 At an Intersection	2017	1/14/2017	1494	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic		
13.7 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101779033 At an Intersection	2017	10/2/2017	1106	Suspected Minor Injury	0	1	0	1	2	Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic		
13.7 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101389789 At an Intersection	2016	9/21/2016	1545	Prop Damage (over)	0	1	0	1	2	Vehicle in Transport	ANGLE	Clear	Daylight	Automatic		
13.96 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101620242 At an Intersection	2017	8/27/2017	1240	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	ANGLE	Rain	Daylight	Automatic		
13.96 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	102045577 At an Intersection	2017	6/12/2018	742	Suspected Minor Injury	0	1	0	1	2	Vehicle in Transport	ANGLE	Clear	Daylight	Automatic		
14.38 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101589922 At an Intersection	2017	3/17/2017	1047	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	ANGLE	Rain	Dusk	Automatic		
14.42 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101437633 At an Intersection	2016	11/9/2016	1220	Suspected Minor Injury	0	0	0	0	2	Vehicle in Transport	REAR-END	Clear	Dark-Lighted	Automatic		
14.42 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101526576 At an Intersection	2016	3/21/2016	1209	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	SIDESWIPE, OPP DIR	Cloudy	Daylight	Automatic		
14.42 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	102387122 At an Intersection	2018	12/7/2018	1257	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic		
13.805 INTERSECTION	--	--	HENRY	SR076	0-NONE	1	101431932 At an Intersection	2016	11/4/2016	1406	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	ANGLE	Clear	Daylight	Automatic		
14.42 INTERSECTION	--	--	HENRY	SR076	0-NONE	1	101671217 At an Intersection	2017	6/19/2017	1306	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	HEAD-ON	Clear	Daylight	Automatic		
14.42 INTERSECTION	--	--	HENRY	SR076	0-NONE	1	102048139 At an Intersection	2018	6/5/2018	1630	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	SIDESWIPE, SAME DIR	Clear	Daylight	Automatic		
14.42 INTERSECTION	--	--	HENRY	SR076	0-NONE	1	102095140 At an Intersection	2018	7/24/2018	1623	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	ANGLE	Clear	Daylight	Automatic		
14.17 INTERSECTION RELATED	On Roadway	--	HENRY	SR076	0-NONE	1	102051720 At an Intersection	2018	6/27/2018	1220	Suspected Minor Injury	0	4	0	4	2	Vehicle in Transport	ANGLE	Clear	Daylight	Automatic		
14.38 INTERSECTION RELATED	On Roadway	--	HENRY	SR076	0-NONE	1	101616438 At an Intersection	2016	4/3/2016	1438	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	SIDESWIPE, OPP DIR	Cloudy	Daylight	Automatic		
14.347 CROSSOVER RELATED	On Roadway	--	HENRY	SR076	0-NONE	1	102031658 Along Roadway	2018	6/2/2018	1710	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	SIDESWIPE, SAME DIR	Clear	Daylight	Automatic		
13.712 OTHER	--	--	HENRY	SR076	0-NONE	1	101387299 Along Roadway	2016	9/22/2016	1857	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport in other R ANGLE	ANGLE	Clear	Daylight	Automatic		

Query: Tyson Ave Crashes 2

CR\_CRASH.County = HENRY

CR\_CRASH.Route = SR076

CR\_CRASH.Log.Mile >= 13.44 And CR\_CRASH.Log.Mile <= 13.58

CR\_CRASH.Date of Crash <= 12/31/2018 And CR\_CRASH.Date of Crash >= 1/1/2016

BLM	Relation to First Junction	Relation to First Roadway	Urban or Rural	County	Route	Sp Cse	Co Seq	Case Number	Location	Year Of Crash	Date of Crash	Time of Crash	Type of Crash	Total Killed	Total Inj	Total Cap Injuries	Total Other Injuries	Total Veh	First Harmful Event	Manner of First Collision	Weather Cond	Light Conditions	Locate Type
13.47 NON JUNCTION	On Roadway	--	HENRY	SR076	0-NONE	1	102177633 Along Roadway	2018	10/12/2018	1705	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	REAR-END	Rain	Daylight	Automatic		
13.535 NON JUNCTION	On Roadway	--	HENRY	SR076	0-NONE	1	101717318 Along Roadway	2018	7/31/2017	1600	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	ANGLE	Clear	Daylight	Automatic		
13.535 NON JUNCTION	On Roadway	--	HENRY	SR076	0-NONE	1	101904601 Along Roadway	2018	2/2/2018	1119	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic		
12.509 NON JUNCTION	On Roadway	--	HENRY	SR076	0-NONE	1	101205264 Along Roadway	2018	8/17/2018	1237	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic		
12.342 NON JUNCTION	On Roadway	--	HENRY	SR076	0-NONE	1	101681109 Along Roadway	2017	6/20/2017	1800	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic		
12.294 NON JUNCTION	Shoulder	--	HENRY	SR076	0-NONE	1	101488180 Along Roadway	2016	12/28/2016	0	0	0	0	0	0	1	Guardrail Face	NO COLLISION W/ VEHICLE	Rain	Dark-Lighted	Automatic		
12.224 NON JUNCTION	Shoulder	--	HENRY	SR076	0-NONE	1	101725525 Along Roadway	2016	6/29/2016	932	Prop Damage (over)	0	0	0	0	1	Utility Pole	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic		
12.225 NON JUNCTION	Outside Trafficway	--	HENRY	SR076	0-NONE	1	101255255 Outside Trafficway	2017	7/27/2017	945	Prop Damage (over)	0	0	0	0	1	Guardrail Face	NO COLLISION W/ VEHICLE	Cloudy	Daylight	Automatic		
12.214 NON JUNCTION	OTHER	--	HENRY	SR076	0-NONE	1	102154540 Along Roadway	2018	9/22/2018	2020	Prop Damage (over)	0	0	0	0	0	1	Overturn	NO COLLISION W/ VEHICLE	Rain	Dark-Lighted	Automatic	
12.603 NON JUNCTION	--	--	HENRY	SR076	0-NONE	1	102186881 Along Roadway	2018	10/19/2018	1520	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	REAR-END	Clear	Daylight	Automatic		
12.893 NON JUNCTION	--	--	HENRY	SR076	0-NONE	1	101851154 Along Roadway	2017	12/7/2017	1557	Prop Damage (over)	0	0	0	0	3	Vehicle in Transport	ANGLE	Clear	Daylight	Automatic		
12.446 NON JUNCTION	--	--	HENRY	SR076	0-NONE	1	101603600 Along Roadway	2017	7/16/2017	1704	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	SIDESWIPE, SAME DIR	Clear	Daylight	Automatic		
12.471 NON JUNCTION	On Roadway	--	HENRY	SR076	0-NONE	1	101964818 Along Roadway	2018	4/5/2018	1809	Suspected Minor Injury	0	1	0	1	2	Vehicle in Transport	REAR-END	Clear	Daylight	Automatic		
12.59 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101333498 At an Intersection	2018	8/18/2018	1347	Prop Damage (over)	0	0	0	0	1	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic		
12.59 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101740254 At an Intersection	2017	7/14/2017	1511	Prop Damage (over)	0	0	0	0	1	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic		
12.59 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101794248 At an Intersection	2017	10/20/2017	1408	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	ANGLE	Clear	Daylight	Automatic		
12.59 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101817320 At an Intersection	2017	11/6/2017	1754	Prop Damage (over)	0	2	0	2	2	Vehicle in Transport	ANGLE	Clear	Daylight	Automatic		
12.59 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101819040 At an Intersection	2017	11/20/2017	1735	Prop Damage (over)	0	1	0	1	2	Vehicle in Transport	ANGLE	Clear	Daylight	Automatic		
12.59 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101264236 At an Intersection	2018	1/10/2018	1755	Prop Damage (over)	0	1	0	1	2	Vehicle in Transport	ANGLE	Clear	Daylight	Automatic		
12.59 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101221182 At an Intersection	2018	11/15/2018	1781	Prop Damage (over)	0	1	0	1	1	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic		
12.92 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101706958 At an Intersection	2018	7/19/2017	1781	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	SIDESWIPE, SAME DIR	Clear	Daylight	Automatic		
12.972 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101739724 At an Intersection	2016	9/9/2016	2141	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic		
12.972 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101827320 At an Intersection	2017	12/23/2017	1845	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	HEAD-ON	Clear	Dark-Lighted	Automatic		
12.972 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101693801 At an Intersection	2017	7/6/2017	846	Prop Damage (over)	0	0	0	0	2	Vehicle in Transport	ANGLE	Clear	Daylight	Automatic		
12.972 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101763054 At an Intersection	2017	9/13/2017	1635	Suspected Minor Injury</td												

12.05 INTERSECTION RELATED	On Roadway	--	HENRY	SR069	0-NONE	1	101785000 At an Intersection	2017	12/31/2017	1833 Suspected Minor Injury	0	2	0	2	2 Vehicle in Transport	REAR-END	Clear	Dark-Lighted	Automatic
12.05 INTERSECTION RELATED	--	--	HENRY	SR069	0-NONE	1	101319764 At an Intersection	2016	8/3/2016	1811 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic
12.05 INTERSECTION RELATED	--	--	HENRY	SR069	0-NONE	1	101942760 At an Intersection	2016	6/27/2016	1747 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic
12.05 INTERSECTION RELATED	--	--	HENRY	SR069	0-NONE	1	101942770 At an Intersection	2016	3/12/2016	1656 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic
12.05 INTERSECTION RELATED	--	--	HENRY	SR069	2-ALTERNA	1	10189430 Along Roadway	2018	4/6/2018	1705 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic
12.063 OTHER	Roadside -- Right	--	HENRY	SR069	2-ALTERNA	1	10189430 Along Roadway	2018	1/26/2018	1111 Prop Damage (over)	0	0	0	0	1 Utility Pole	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic

Query: Volunteer DR Crashes

CR\_CRASH.County == HENRY

CR\_CRASH.Route == 05363

CR\_CRASH.Log.Mile &gt;= 0.76 And CR\_CRASH.Log.Mile &lt;= 1.49

CR\_CRASH.Date.of.Crash == 1/1/2016 And CR\_CRASH.Date.of.Crash &lt;= 12/31/2018

BLM

Relation to First Junction	Relation to First Roadway	Urban or Rural	County	Route	Sp Cse	Co Seq	Case Number	Location	Year of Crash	Date of Crash	Time of Crash	Type of Crash	Total Killed	Total Inj	Total Cap Injuries	Total Other Injuries	Total Veh	First Harmful Event	Manner of First Collision	Weather Cond	Light Conditions	Locate Type
0.095 NON JUNCTION	On Roadway	--	HENRY	05663	0-NONE	1	101437945 Along Roadway	2016	11/11/2016	1605 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic			
0.482 NON JUNCTION	On Roadway	--	HENRY	05663	0-NONE	1	101469305 Along Roadway	2016	1/6/2016	1605 Suspected Minor Injury	0	2	0	0	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	-			
0.645 NON JUNCTION	On Roadway	--	HENRY	05663	0-NONE	1	101728294 Along Roadway	2017	8/11/2017	1538 Suspected Minor Injury	0	1	0	1	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic			
0.737 NON JUNCTION	On Roadway	--	HENRY	05663	0-NONE	1	101728300 Along Roadway	2017	10/25/2017	1459 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic			
1.178 NON JUNCTION	On Roadway	--	HENRY	05663	0-NONE	1	101667713 Along Roadway	2017	6/8/2017	1303 Suspected Minor Injury	0	2	0	2	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic			
1.302 NON JUNCTION	On Roadway	--	HENRY	05663	0-NONE	1	102037112 Along Roadway	2018	6/8/2018	1422 Suspected Minor Injury	0	2	0	2	2 Vehicle in Transport	SIDESWIPE, OPP DIR	Clear	Daylight	Automatic			
0.377 NON JUNCTION	On Roadway	--	HENRY	05663	0-NONE	1	101823790 Along Roadway	2017	11/17/2017	1221 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic			
0.377 INTERSECTION	On Roadway	--	HENRY	05663	0-NONE	1	101676633 At an Intersection	2017	6/20/2017	1535 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic			
0.377 INTERSECTION	On Roadway	--	HENRY	05663	0-NONE	1	101766875 At an Intersection	2017	9/13/2017	1641 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	HEAD-ON	Rain	Daylight	Automatic			
0.737 INTERSECTION	On Roadway	--	HENRY	05663	0-NONE	1	101772079 At an Intersection	2017	9/26/2017	1138 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic			
0.737 INTERSECTION	On Roadway	--	HENRY	05663	0-NONE	1	101772100 At an Intersection	2017	9/26/2017	946 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic			
0.737 INTERSECTION	On Roadway	--	HENRY	05663	0-NONE	1	101864990 At an Intersection	2016	7/13/2016	1222 Suspected Minor Injury	0	1	0	1	2 Vehicle in Transport	REAR-END	Clear	Daylight	Automatic			
1.08 INTERSECTION	On Roadway	--	HENRY	05663	0-NONE	1	101873171 At an Intersection	2017	11/21/2017	1646 Fatal	1	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic			
1.08 INTERSECTION	On Roadway	--	HENRY	05663	0-NONE	1	101355389 At an Intersection	2016	9/6/2016	2023 Suspected Minor Injury	0	2	0	2	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic			
0.466 INTERSECTION	On Roadway	--	HENRY	05663	0-NONE	1	101958680 At an Intersection	2018	3/28/2018	1147 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-END	Cloudy	Daylight	Automatic			
1.08 INTERSECTION	On Roadway	--	HENRY	05663	0-NONE	1	101072156 At an Intersection	2016	5/16/2016	843 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	OTHER	Clear	Daylight	Automatic			
1.08 INTERSECTION RELATED	On Roadway	--	HENRY	05663	0-NONE	1	101429446 At an Intersection	2016	11/2/2016	1504 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic			
1.08 INTERSECTION RELATED	On Roadway	--	HENRY	05663	0-NONE	1	101623532 At an Intersection	2017	4/22/2017	2112 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Dark-Lighted	Automatic			

Query: W Washington Crash

CR\_CRASH.County == HENRY

CR\_CRASH.Route == 0364

CR\_CRASH.Log.Mile &gt;= 0.76 And CR\_CRASH.Log.Mile &lt;= 0.89

CR\_CRASH.Date.of.Crash == 12/31/2018 And CR\_CRASH.Date.of.Crash &lt;= 1/1/2016

BLM

Relation to First Junction	Relation to First Roadway	Urban or Rural	County	Route	Sp Cse	Co Seq	Case Number	Location	Year of Crash	Date of Crash	Time of Crash	Type of Crash	Total Killed	Total Inj	Total Cap Injuries	Total Other Injuries	Total Veh	First Harmful Event	Manner of First Collision	Weather Cond	Light Conditions	Locate Type
0.883 NON JUNCTION	--	--	HENRY	03064	0-NONE	1	101320658 Along Roadway	2016	8/5/2016	0 Prop Damage (over)	0	0	0	0	2 Other Object (not fixed)	NO COLLISION W/ VEHICLE	Unknown	Dark-Lighted	Automatic			

Query: E Washington Crashes

CR\_CRASH.County == HENRY

CR\_CRASH.Route == 0364

CR\_CRASH.Log.Mile &gt;= 0.76 And CR\_CRASH.Log.Mile &lt;= 1.607

CR\_CRASH.Date.of.Crash == 12/31/2018 And CR\_CRASH.Date.of.Crash &lt;= 1/1/2016

BLM

Relation to First Junction	Relation to First Roadway	Urban or Rural	County	Route	Sp Cse	Co Seq	Case Number	Location	Year of Crash	Date of Crash	Time of Crash	Type of Crash	Total Killed	Total Inj	Total Cap Injuries	Total Other Injuries	Total Veh	First Harmful Event	Manner of First Collision	Weather Cond	Light Conditions	Locate Type
1.161 NON JUNCTION	On Roadway	--	HENRY	03064	0-NONE	1	101741763 Along Roadway	2017	8/25/2017	1223 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	SIDESWIPE, OPP DIR	Clear	Daylight	Automatic			
1.602 NON JUNCTION	On Roadway	--	HENRY	03064	0-NONE	1	101331017 Along Roadway	2016	8/19/2016	752 Suspected Minor Injury	0	1	0	1	2 Vehicle in Transport	SIDESWIPE, SAME DIR	Rain	Daylight	Automatic			
1.079 NON JUNCTION	Shoulder	--	HENRY	03064	0-NONE	1	101386930 Along Roadway	2017	9/22/2017	1138 Suspected Minor Injury	0	1	0	1	2 Vehicle in Transport	SIDESWIPE, SAME DIR	Clear	Daylight	Automatic			
0.737 NON JUNCTION	In Parking Lane	--	HENRY	03064	0-NONE	1	101404729 Along Roadway	2017	10/19/2016	1208 Suspected Minor Injury	0	1	0	1	2 Vehicle in Transport	SIDESWIPE, SAME DIR	Clear	Daylight	Automatic			
0.93 NON JUNCTION	On Roadway	--	HENRY	03064	0-NONE	1	101745714 Along Roadway	2017	10/19/2016	1333 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic			
1.01 INTERSECTION	On Roadway	--	HENRY	03064	0-NONE	1	101261579 At an Intersection	2018	1/3/2018	1039 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-TO REAR	Clear	Daylight	Automatic			
1.332 INTERSECTION	On Roadway	--	HENRY	03064	0-NONE	1	101813912 At an Intersection	2016	4/29/2016	1243 Suspected Minor Injury	0	2	0	2	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic			
0.933 INTERSECTION	On Roadway	--	HENRY	03064	0-NONE	1	101205483 At an Intersection	2017	1/24/2017	1651 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic			
0.952 INTERSECTION RELATED	On Roadway	--	HENRY	03064	0-NONE	1	101283934 At an Intersection	2018	6/4/2018	1415 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	REAR-TO SIDE	Clear	Daylight	Automatic			
0.986	--	--	HENRY	03064	0-NONE	1	101876959 Along Roadway	2018	1/3/2018	105 Prop Damage (under)	0	0	0	0	2 Vehicle in Transport	--	--	--	Automatic			

Query: 218 &amp; Tyson

CR\_CRASH.County == HENRY

CR\_CRASH.Route == SR076

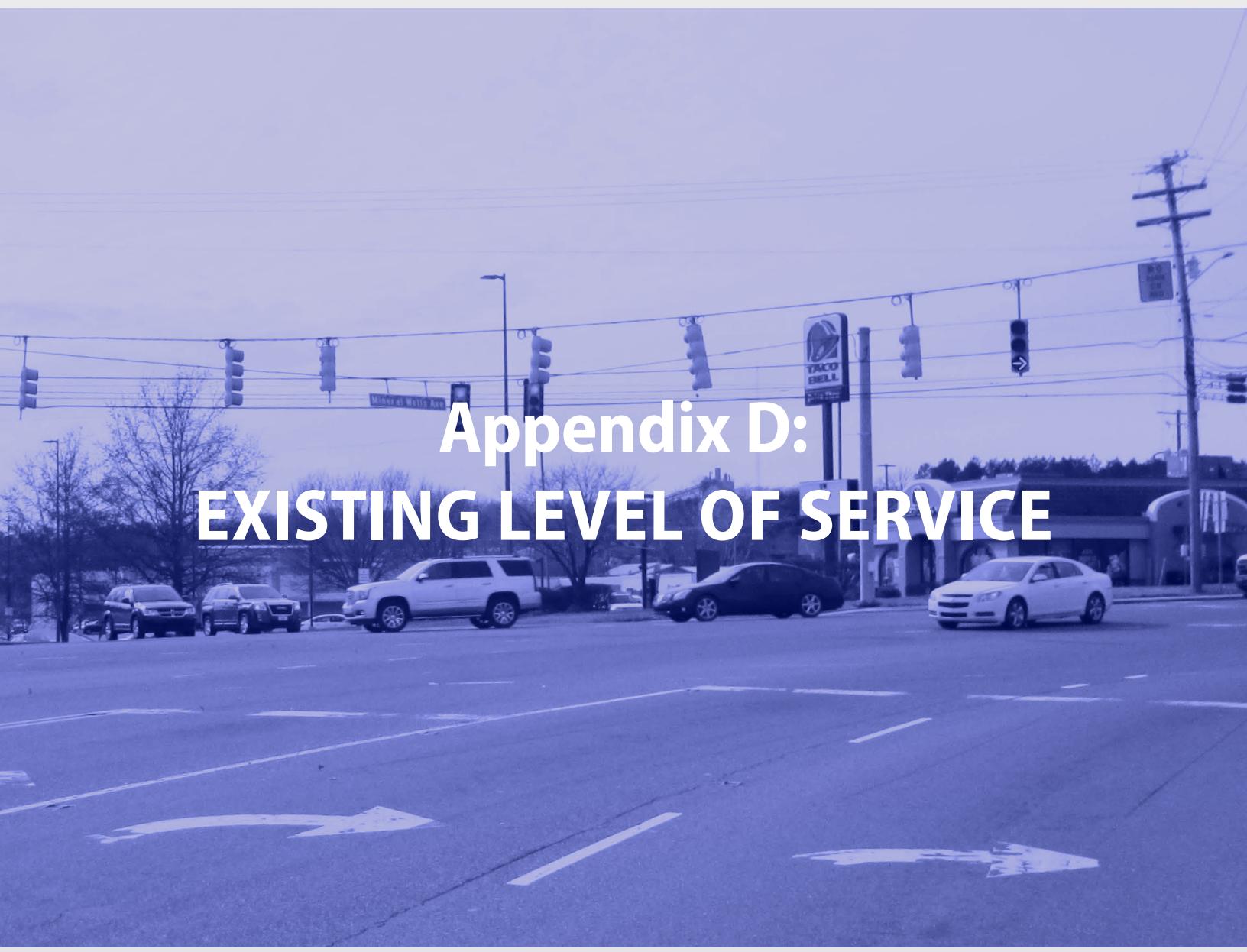
CR\_CRASH.Log.Mile &gt;= 11.649 And CR\_CRASH.Log.Mile &lt;= 12.87

CR\_CRASH.Date.of.Crash == 1/1/2016 And CR\_CRASH.Date.of.Crash &lt;= 12/31/2018

BLM

Relation to First Junction	Relation to First Roadway	Urban or Rural	County	Route	Sp Cse	Co Seq	Case Number	Location	Year of Crash	Date of Crash	Time of Crash	Type of Crash	Total Killed	Total Inj	Total Cap Injuries	Total Other Injuries	Total Veh	First Harmful Event	Manner of First Collision	Weather Cond	Light Conditions	Locate Type
12.156 NON JUNCTION	On Roadway	--	HENRY	SR076	0-NONE	1	102215304 Along Roadway	2018	11/16/2018	1229 Prop Damage (over)	0	0	0	0	2 Cargo Equip Loss/Shift	NO COLLISION W/ VEHICLE	Clear	Daylight	Automatic			
11.78 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101105432 At an Intersection	2018	5/26/2018	1703 Suspected Minor Injury	0	1	0	1	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic			
11.78 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101745704 At an Intersection	2017	8/21/2017	1740 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic			
11.78 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101745729 At an Intersection	2017	8/21/2017	1555 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	SIDESWIPE, SAME DIR	Clear	Daylight	Automatic			
11.78 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101823098 At an Intersection	2018	1/8/2018	558 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic			
11.78 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101823099 At an Intersection	2018	1/8/2018	1558 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	HEAD-ON	Clear	Daylight	Automatic			
11.78 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101497371 Along Roadway	2017	1/21/2017	1209 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic			
11.78 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101823098 Along Roadway	2017	1/21/2017	1219 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Rain	Daylight	Automatic			
11.78 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101200097 Along Roadway	2018	5/4/2018	2229 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Dark-Night	Automatic	Automatic			
11.78 INTERSECTION	On Roadway	--	HENRY	SR076	0-NONE	1	101															

0.58 INTERSECTION	On Roadway	--	HENRY	03066	O-NONE	1	101238883	At an Intersection	2016	6/3/2016	1150 Suspected Minor Injury	0	1	0	1	2 Vehicle in Transport	ANGLE	Cloudy	Daylight	Automatic
1.244 INTERSECTION	--	--	HENRY	03066	O-NONE	1	101326260	At an Intersection	2016	8/4/2016	1402 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	OTHER	Clear	Daylight	Automatic
0.136 INTERSECTION RELATED	On Roadway	--	HENRY	03066	O-NONE	1	101197032	At an Intersection	2016	5/17/2016	1753 Suspected Minor Injury	0	1	0	1	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic
0.247 INTERSECTION RELATED	--	--	HENRY	03066	O-NONE	1	101776077	At an Intersection	2017	9/29/2017	750 Prop Damage (over)	0	0	0	0	2 Vehicle in Transport	ANGLE	Clear	Daylight	Automatic



## Appendix D: EXISTING LEVEL OF SERVICE

Prepared on behalf of the  
City of Paris, TN by:

 **NEEL-SCHAFFER**  
Solutions you can build upon

in cooperation with

 **TDOT**  
Department of  
Transportation

## INTERSECTION LEVEL OF SERVICE ANALYSIS

Paris TSM&O

Intersection	EXISTING (2019)			PROPOSED (2019)			Comment	
	PEAK PERIOD							
	AM	MD	PM	AM	MD	PM		
W Wood St & Irvine St	A	A	A				Detection present on NB approach but constant call for Phase 4 (NB & SB)	
W Wood St & Market St	B	B	B				Left turn phases operate under the same phase due to existing equipment	
N Market St & Rison St	A	A	A					
N Market St & Ruff St	B	B	B					
N Market St & Washington St	A	A	B					
S Market St & Blythe St	A	A	B					
E Washington St & Poplar St	A	A	A					
E Wood St & Poplar St	A	A	A					
E Wood St & Brewer St	A	A	A					
E Wood St & Highland St	A	A	A					
E Wood St & Lake St	A	A	A					
E Wood St & Tyson Ave	B	B	B					
E Wood St & Volunteer Dr	B	B	B					

## INTERSECTION LEVEL OF SERVICE ANALYSIS

### Paris TSM&O

Intersection	EXISTING (2019)			PROPOSED (2019)			Comment	
	PEAK PERIOD							
	AM	MD	PM	AM	MD	PM		
E Wood St & Fairgrounds Rd /Chickasaw Rd	A	A	A				Broken detector on SB approach. Phase 2 (SB) constant call.	
Veterans Dr & Dunlap St	A	A	A				Pedestrian Push Button stops Veterans Dr (NB & SB) and gives green to Dunlap St. Phase 1 (SB LT) and Phase 5 (NB LT) are disconnected but two 150A2L signal heads are present.	
Veterans Dr/Mineral Wells Dr & Tyson Ave	B	B	C					
Mineral Wells Dr & Jim Adams Dr	B	B	B					
Mineral Wells Dr & Memorial Dr	B	B	B					
Memorial Dr & Volunteer Dr	A	B	B					
Memorial Dr & SR-69/US-641	B	B	B					
Volunteer Dr & Patriot Ave	C	B	C				AM and PM Peak Plan programs are not running.	
Volunteer Dr & Jim Adams Dr	B	B	B				AM and PM Peak Plan programs are not running.	
Tyson Ave & Joy St	B	B	B					
SR-76/US-79 & SR-218	A	A	A					
Lone Oak Rd & Wilson St	A	A	A				Stop Bars are not present.	

# HCM 2010 Signalized Intersection Summary

2: Irvine St & W Wood St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	0	365	26	14	250	0	12	0	6	0	2	0
Future Volume (veh/h)	0	365	26	14	250	0	12	0	6	0	2	0
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1909	1909	1948	1872	1872	1910	1910	1872	1910	1862	1825	1862
Adj Flow Rate, veh/h	0	401	29	15	275	0	13	0	7	0	2	0
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	1104	80	627	1174	0	263	22	96	0	332	0
Arrive On Green	0.00	0.63	0.63	0.63	0.63	0.00	0.18	0.00	0.18	0.00	0.18	0.00
Sat Flow, veh/h	1127	1760	127	959	1872	0	855	123	526	0	1825	0
Grp Volume(v), veh/h	0	0	430	15	275	0	20	0	0	0	2	0
Grp Sat Flow(s),veh/h/ln	1127	0	1887	959	1872	0	1504	0	0	0	1825	0
Q Serve(g_s), s	0.0	0.0	6.1	0.4	3.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	6.1	6.5	3.5	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.00	0.65		0.35	0.00		0.00
Lane Grp Cap(c), veh/h	131	0	1184	627	1174	0	381	0	0	0	332	0
V/C Ratio(X)	0.00	0.00	0.36	0.02	0.23	0.00	0.05	0.00	0.00	0.00	0.01	0.00
Avail Cap(c_a), veh/h	131	0	1184	627	1174	0	381	0	0	0	332	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	4.9	6.5	4.5	0.0	18.6	0.0	0.0	0.0	18.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.9	0.1	0.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.4	0.1	1.9	0.0	0.3	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	5.8	6.6	4.9	0.0	18.9	0.0	0.0	0.0	18.5	0.0
LnGrp LOS			A	A	A		B			B		
Approach Vol, veh/h	430			290			20			2		
Approach Delay, s/veh	5.8			5.0			18.9			18.5		
Approach LOS	A			A			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	40.0		15.0		40.0		15.0					
Change Period (Y+R <sub>c</sub> ), s	5.5		5.0		5.5		5.0					
Max Green Setting (Gmax), s	34.5		10.0		34.5		10.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			5.9									
HCM 2010 LOS			A									

## HCM 2010 Signalized Intersection Summary

7: S Market St/N Market St &amp; E Wood St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙		
Traffic Volume (veh/h)	8	235	86	11	161	36	106	150	33	75	175	33
Future Volume (veh/h)	8	235	86	11	161	36	106	150	33	75	175	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	9	258	95	12	177	40	116	165	36	82	192	36
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	385	412	152	278	472	107	593	527	115	611	537	101
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.09	0.35	0.35	0.09	0.35	0.35
Sat Flow, veh/h	1154	1293	476	1029	1479	334	1783	1490	325	1765	1518	285
Grp Volume(v), veh/h	9	0	353	12	0	217	116	0	201	82	0	228
Grp Sat Flow(s),veh/h/ln	1154	0	1769	1029	0	1813	1783	0	1815	1765	0	1803
Q Serve(g_s), s	0.4	0.0	9.8	0.6	0.0	5.4	2.2	0.0	4.7	1.6	0.0	5.4
Cycle Q Clear(g_c), s	5.7	0.0	9.8	10.4	0.0	5.4	2.2	0.0	4.7	1.6	0.0	5.4
Prop In Lane	1.00		0.27	1.00		0.18	1.00		0.18	1.00		0.16
Lane Grp Cap(c), veh/h	385	0	564	278	0	578	593	0	641	611	0	637
V/C Ratio(X)	0.02	0.00	0.63	0.04	0.00	0.38	0.20	0.00	0.31	0.13	0.00	0.36
Avail Cap(c_a), veh/h	385	0	564	278	0	578	593	0	641	611	0	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.5	0.0	16.8	21.2	0.0	15.3	9.7	0.0	13.6	9.5	0.0	13.9
Incr Delay (d2), s/veh	0.1	0.0	5.2	0.3	0.0	1.9	0.7	0.0	1.3	0.5	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	5.6	0.2	0.0	3.0	1.2	0.0	2.6	0.8	0.0	2.9
LnGrp Delay(d),s/veh	17.6	0.0	22.0	21.5	0.0	17.1	10.5	0.0	14.9	9.9	0.0	15.4
LnGrp LOS	B		C	C		B	B		B	A		B
Approach Vol, veh/h		362			229			317			310	
Approach Delay, s/veh		21.9			17.4			13.3			14.0	
Approach LOS		C			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	10.0	25.0		23.0	10.0	25.0		23.0				
Change Period (Y+R <sub>c</sub> ), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	20.5		18.5	5.5	20.5		18.5				
Max Q Clear Time (g_c+l1), s	0.0	0.0		0.0	0.0	0.0		0.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			16.8									
HCM 2010 LOS			B									

## HCM 2010 Signalized Intersection Summary

8: Highland St &amp; E Wood St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	1	354	2	5	290	3	2	4	7	6	1	1
Future Volume (veh/h)	1	354	2	5	290	3	2	4	7	6	1	1
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1844	1844	1881	1872	1872	1910	1938	1900	1938	1928	1891	1928
Adj Flow Rate, veh/h	1	416	2	6	341	4	2	5	8	7	1	1
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	649	815	4	596	821	10	197	35	56	360	10	10
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.06	0.06	0.06	0.06	0.06	0.06
Sat Flow, veh/h	1021	1834	9	969	1847	22	225	562	900	1183	169	169
Grp Volume(v), veh/h	1	0	418	6	0	345	15	0	0	9	0	0
Grp Sat Flow(s),veh/h/ln	1021	0	1843	969	0	1868	1687	0	0	1521	0	0
Q Serve(g_s), s	0.0	0.0	3.6	0.1	0.0	2.8	0.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.8	0.0	3.6	3.7	0.0	2.8	0.2	0.0	0.0	0.1	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.01	0.13		0.53	0.78		0.11
Lane Grp Cap(c), veh/h	649	0	819	596	0	831	288	0	0	381	0	0
V/C Ratio(X)	0.00	0.00	0.51	0.01	0.00	0.42	0.05	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	2233	0	3677	2100	0	3729	1645	0	0	1581	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.2	0.0	4.4	5.8	0.0	4.2	9.9	0.0	0.0	9.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.8	0.0	0.0	1.4	0.1	0.0	0.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	5.2	0.0	4.8	5.8	0.0	4.5	9.9	0.0	0.0	9.9	0.0	0.0
LnGrp LOS	A		A	A		A	A		A		A	
Approach Vol, veh/h	419			351			15			9		
Approach Delay, s/veh	4.8			4.5			9.9			9.9		
Approach LOS	A			A			A			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	15.4		6.9		15.4		6.9					
Change Period (Y+R <sub>c</sub> ), s	5.5		5.5		5.5		5.5					
Max Green Setting (Gmax), s	44.5		19.5		44.5		19.5					
Max Q Clear Time (g_c+l1), s	5.6		2.1		5.7		2.2					
Green Ext Time (p_c), s	2.6		0.0		2.6		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			4.8									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

10: Lake St & E Wood St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	5	357	12	1	312	30	10	15	5	48	25	8
Future Volume (veh/h)	5	357	12	1	312	30	10	15	5	48	25	8
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1853	1853	1853	1852	1816	1852	1919	1881	1919
Adj Flow Rate, veh/h	6	425	14	1	371	36	12	18	6	57	30	10
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	0	1	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	780	1290	42	740	1326	1127	134	77	22	191	38	13
Arrive On Green	0.72	0.72	0.72	0.72	0.72	0.72	0.08	0.08	0.08	0.08	0.08	0.08
Sat Flow, veh/h	979	1802	59	941	1853	1575	446	996	288	946	498	166
Grp Volume(v), veh/h	6	0	439	1	371	36	36	0	0	97	0	0
Grp Sat Flow(s),veh/h/ln	979	0	1862	941	1853	1575	1730	0	0	1611	0	0
Q Serve(g_s), s	0.1	0.0	4.2	0.0	3.4	0.3	0.0	0.0	0.0	1.9	0.0	0.0
Cycle Q Clear(g_c), s	3.5	0.0	4.2	4.3	3.4	0.3	0.9	0.0	0.0	2.8	0.0	0.0
Prop In Lane	1.00		0.03	1.00		1.00	0.33		0.17	0.59		0.10
Lane Grp Cap(c), veh/h	780	0	1332	740	1326	1127	233	0	0	243	0	0
V/C Ratio(X)	0.01	0.00	0.33	0.00	0.28	0.03	0.15	0.00	0.00	0.40	0.00	0.00
Avail Cap(c_a), veh/h	780	0	1332	740	1326	1127	618	0	0	619	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.1	0.0	2.6	3.3	2.4	2.0	21.0	0.0	0.0	21.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.7	0.0	0.5	0.1	0.3	0.0	0.0	1.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.3	0.0	1.9	0.2	0.5	0.0	0.0	1.3	0.0	0.0
LnGrp Delay(d),s/veh	3.1	0.0	3.2	3.3	3.0	2.0	21.3	0.0	0.0	22.8	0.0	0.0
LnGrp LOS	A		A	A	A	A	C			C		
Approach Vol, veh/h	445				408			36			97	
Approach Delay, s/veh	3.2				2.9			21.3			22.8	
Approach LOS	A				A			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	40.0		8.2		40.0		8.2					
Change Period (Y+R <sub>c</sub> ), s	5.5		4.5		5.5		4.5					
Max Green Setting (Gmax), s	34.5		15.5		34.5		15.5					
Max Q Clear Time (g_c+l1), s	6.2		4.8		6.3		2.9					
Green Ext Time (p_c), s	3.8		0.3		3.8		0.3					
Intersection Summary												
HCM 2010 Ctrl Delay			5.7									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

12: N Market St & Washington St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙											
Traffic Volume (veh/h)	8	36	28	28	40	33	21	183	33	13	211	7
Future Volume (veh/h)	8	36	28	28	40	33	21	183	33	13	211	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	8	38	29	29	42	35	22	193	35	14	222	7
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	456	275	210	468	266	222	697	856	155	692	991	31
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1310	977	745	1335	945	788	1153	1543	280	1142	1787	56
Grp Volume(v), veh/h	8	0	67	29	0	77	22	0	228	14	0	229
Grp Sat Flow(s),veh/h/ln	1310	0	1722	1335	0	1733	1153	0	1823	1142	0	1843
Q Serve(g_s), s	0.3	0.0	1.6	0.9	0.0	1.8	0.5	0.0	3.5	0.3	0.0	3.5
Cycle Q Clear(g_c), s	2.1	0.0	1.6	2.5	0.0	1.8	4.0	0.0	3.5	3.9	0.0	3.5
Prop In Lane	1.00		0.43	1.00		0.45	1.00		0.15	1.00		0.03
Lane Grp Cap(c), veh/h	456	0	485	468	0	488	697	0	1011	692	0	1022
V/C Ratio(X)	0.02	0.00	0.14	0.06	0.00	0.16	0.03	0.00	0.23	0.02	0.00	0.22
Avail Cap(c_a), veh/h	456	0	485	468	0	488	697	0	1011	692	0	1022
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.6	0.0	14.8	15.7	0.0	14.8	7.3	0.0	6.2	7.2	0.0	6.2
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.3	0.0	0.7	0.1	0.0	0.5	0.1	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.8	0.4	0.0	1.0	0.2	0.0	1.9	0.1	0.0	1.9
LnGrp Delay(d),s/veh	15.7	0.0	15.4	16.0	0.0	15.5	7.3	0.0	6.8	7.3	0.0	6.7
LnGrp LOS	B		B	B		B	A		A	A		A
Approach Vol, veh/h		75			106			250			243	
Approach Delay, s/veh		15.4			15.6			6.8			6.8	
Approach LOS		B			B			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	35.0		20.0		35.0		20.0					
Change Period (Y+R <sub>c</sub> ), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	30.5		15.5		30.5		15.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			9.1									
HCM 2010 LOS			A									
Notes												

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User approved pedestrian interval to be less than phase max green.

# HCM 2010 Signalized Intersection Summary

17: N Market St & E Ruff St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	9	3	2	9	14	5	163	13	6	267	19
Future Volume (veh/h)	10	9	3	2	9	14	5	163	13	6	267	19
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1910	1872	1910	1919	1881	1919	1881	1881	1919	1853	1853	1890
Adj Flow Rate, veh/h	12	11	4	2	11	18	6	204	16	8	334	24
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	264	228	72	68	204	296	540	914	72	649	907	65
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	613	761	239	31	680	985	1029	1722	135	1151	1709	123
Grp Volume(v), veh/h	27	0	0	31	0	0	6	0	220	8	0	358
Grp Sat Flow(s),veh/h/ln	1613	0	0	1697	0	0	1029	0	1858	1151	0	1832
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	4.1	0.2	0.0	7.4
Cycle Q Clear(g_c), s	0.7	0.0	0.0	0.8	0.0	0.0	7.6	0.0	4.1	4.3	0.0	7.4
Prop In Lane	0.44			0.15	0.06		0.58	1.00		0.07	1.00	0.07
Lane Grp Cap(c), veh/h	564	0	0	568	0	0	540	0	986	649	0	972
V/C Ratio(X)	0.05	0.00	0.00	0.05	0.00	0.00	0.01	0.00	0.22	0.01	0.00	0.37
Avail Cap(c_a), veh/h	564	0	0	568	0	0	540	0	986	649	0	972
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.2	0.0	0.0	16.2	0.0	0.0	11.1	0.0	8.1	9.3	0.0	8.9
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.5	0.0	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.4	0.0	0.0	0.1	0.0	2.2	0.1	0.0	4.0
LnGrp Delay(d),s/veh	16.3	0.0	0.0	16.4	0.0	0.0	11.2	0.0	8.6	9.3	0.0	10.0
LnGrp LOS	B			B			B		A	A		A
Approach Vol, veh/h	27			31			226		366			
Approach Delay, s/veh	16.3			16.4			8.7		10.0			
Approach LOS	B			B			A		A			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	40.0		25.0		40.0		25.0					
Change Period (Y+R <sub>c</sub> ), s	5.5		5.5		5.5		5.5					
Max Green Setting (Gmax), s	34.5		19.5		34.5		19.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			10.1									
HCM 2010 LOS			B									

# HCM 2010 Signalized Intersection Summary

20: Volunteer Dr & E Wood St

09/10/2019



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑↑	↑↑	↑	↑
Traffic Volume (veh/h)	310	240	100	480	120	70
Future Volume (veh/h)	310	240	100	480	120	70
Number	6	16	5	2	7	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1938	1844	1844	1853	1853
Adj Flow Rate, veh/h	337	261	109	522	130	76
Adj No. of Lanes	2	0	1	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	569	432	472	1899	312	279
Arrive On Green	0.29	0.29	0.10	0.54	0.18	0.18
Sat Flow, veh/h	2051	1486	1756	3596	1765	1575
Grp Volume(v), veh/h	310	288	109	522	130	76
Grp Sat Flow(s),veh/h/ln	1805	1638	1756	1752	1765	1575
Q Serve(g_s), s	6.0	6.2	1.5	3.3	2.7	1.7
Cycle Q Clear(g_c), s	6.0	6.2	1.5	3.3	2.7	1.7
Prop In Lane		0.91	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	525	476	472	1899	312	279
V/C Ratio(X)	0.59	0.60	0.23	0.27	0.42	0.27
Avail Cap(c_a), veh/h	1943	1763	1106	1899	1101	983
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.4	12.5	7.7	5.0	15.0	14.6
Incr Delay (d2), s/veh	0.4	0.5	0.1	0.1	0.9	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	2.8	0.7	1.6	1.4	1.6
LnGrp Delay(d),s/veh	12.8	12.9	7.8	5.2	15.8	15.1
LnGrp LOS	B	B	A	A	B	B
Approach Vol, veh/h	598			631	206	
Approach Delay, s/veh	12.9			5.6	15.6	
Approach LOS	B			A	B	
Timer	1	2	3	4	5	6
Assigned Phs		2		4	5	6
Phs Duration (G+Y+R <sub>c</sub> ), s	28.1		12.7	10.3	17.9	
Change Period (Y+R <sub>c</sub> ), s	6.0		5.5	6.0	6.0	
Max Green Setting (Gmax), s	20.5		25.5	19.0	44.0	
Max Q Clear Time (g_c+l1), s	5.3		4.7	3.5	8.2	
Green Ext Time (p_c), s	4.3		0.7	0.2	3.7	
<b>Intersection Summary</b>						
HCM 2010 Ctrl Delay			10.1			
HCM 2010 LOS			B			

# HCM 2010 Signalized Intersection Summary

22: N Market St & Rison St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	10	30	20	10	10	35	134	35	10	235	5
Future Volume (veh/h)	15	10	30	20	10	10	35	134	35	10	235	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1910	1872	1910	1900	1863	1900	1853	1853	1890	1910	1872	1910
Adj Flow Rate, veh/h	16	11	33	22	11	11	38	146	38	11	255	5
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	102	27	63	141	38	29	1009	1102	287	85	1390	27
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	345	392	900	697	545	414	1109	1419	369	27	1790	34
Grp Volume(v), veh/h	60	0	0	44	0	0	38	0	184	271	0	0
Grp Sat Flow(s),veh/h/ln	1637	0	0	1657	0	0	1109	0	1788	1851	0	0
Q Serve(g_s), s	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.0	0.0	0.0	1.4	0.0	0.0	0.3	0.0	1.5	2.2	0.0	0.0
Prop In Lane	0.27		0.55	0.50		0.25	1.00		0.21	0.04		0.02
Lane Grp Cap(c), veh/h	192	0	0	208	0	0	1009	0	1389	1502	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.21	0.00	0.00	0.04	0.00	0.13	0.18	0.00	0.00
Avail Cap(c_a), veh/h	364	0	0	373	0	0	1009	0	1389	1502	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.3	0.0	0.0	26.0	0.0	0.0	1.5	0.0	1.6	1.7	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0.2	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.7	0.0	0.0	0.2	0.0	0.8	1.2	0.0	0.0
LnGrp Delay(d),s/veh	27.2	0.0	0.0	26.5	0.0	0.0	1.6	0.0	1.8	2.0	0.0	0.0
LnGrp LOS	C		C			A		A	A			
Approach Vol, veh/h	60			44			222		271			
Approach Delay, s/veh	27.2			26.5			1.8		2.0			
Approach LOS	C		C			A		A				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	50.0		8.6		50.0		8.6					
Change Period (Y+R <sub>c</sub> ), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	45.5		10.5		45.5		10.5					
Max Q Clear Time (g_c+l1), s	3.5		4.0		4.2		3.4					
Green Ext Time (p_c), s	2.1		0.2		2.1		0.2					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			6.2									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

27: N Poplar St & Washington St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙		
Traffic Volume (veh/h)	6	54	25	14	71	18	25	21	35	19	27	6
Future Volume (veh/h)	6	54	25	14	71	18	25	21	35	19	27	6
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1844	1844	1881
Adj Flow Rate, veh/h	6	58	27	15	76	19	27	23	38	20	29	6
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	740	599	279	754	723	181	575	214	353	543	499	103
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1289	1198	557	1314	1447	362	1375	636	1051	1323	1483	307
Grp Volume(v), veh/h	6	0	85	15	0	95	27	0	61	20	0	35
Grp Sat Flow(s),veh/h/ln	1289	0	1755	1314	0	1808	1375	0	1687	1323	0	1790
Q Serve(g_s), s	0.1	0.0	1.4	0.3	0.0	1.5	0.7	0.0	1.4	0.6	0.0	0.7
Cycle Q Clear(g_c), s	1.7	0.0	1.4	1.7	0.0	1.5	1.5	0.0	1.4	2.0	0.0	0.7
Prop In Lane	1.00		0.32	1.00		0.20	1.00		0.62	1.00		0.17
Lane Grp Cap(c), veh/h	740	0	878	754	0	904	575	0	567	543	0	602
V/C Ratio(X)	0.01	0.00	0.10	0.02	0.00	0.11	0.05	0.00	0.11	0.04	0.00	0.06
Avail Cap(c_a), veh/h	740	0	878	754	0	904	575	0	567	543	0	602
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.7	0.0	7.2	7.7	0.0	7.3	12.9	0.0	12.6	13.2	0.0	12.4
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	0.0	0.2	0.2	0.0	0.4	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.7	0.1	0.0	0.8	0.3	0.0	0.7	0.2	0.0	0.4
LnGrp Delay(d),s/veh	7.7	0.0	7.4	7.7	0.0	7.5	13.0	0.0	12.9	13.4	0.0	12.5
LnGrp LOS	A		A	A		A	B		B	B		B
Approach Vol, veh/h		91			110			88			55	
Approach Delay, s/veh		7.5			7.5			13.0			12.8	
Approach LOS		A			A			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	32.0		23.0		32.0		23.0					
Change Period (Y+R <sub>c</sub> ), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	27.5		18.5		27.5		18.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			9.7									
HCM 2010 LOS			A									

HCM 2010 Signalized Intersection Summary  
29: E Wood St & Chickasaw/Fairgrounds Rd

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↗	↑ ↘	↑ ↙	↑ ↖		↑ ↗	↑ ↘	
Traffic Volume (veh/h)	40	64	9	56	66	38	5	348	34	39	513	71
Future Volume (veh/h)	40	64	9	56	66	38	5	348	34	39	513	71
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1844	1844	1844	1844	1844	1881	1853	1853	1890
Adj Flow Rate, veh/h	48	76	0	67	79	0	6	414	40	46	611	85
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	226	192	227	222	189	542	2125	204	682	2043	284
Arrive On Green	0.12	0.12	0.00	0.12	0.12	0.00	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	1328	1881	1599	1305	1844	1568	738	3231	311	929	3107	431
Grp Volume(v), veh/h	48	76	0	67	79	0	6	224	230	46	346	350
Grp Sat Flow(s),veh/h/ln	1328	1881	1599	1305	1844	1568	738	1752	1789	929	1761	1777
Q Serve(g_s), s	2.1	2.3	0.0	3.0	2.4	0.0	0.2	3.0	3.1	1.2	5.1	5.1
Cycle Q Clear(g_c), s	4.5	2.3	0.0	5.3	2.4	0.0	5.3	3.0	3.1	4.3	5.1	5.1
Prop In Lane	1.00			1.00	1.00		1.00	1.00		0.17	1.00	0.24
Lane Grp Cap(c), veh/h	226	226	192	227	222	189	542	1152	1177	682	1158	1169
V/C Ratio(X)	0.21	0.34	0.00	0.29	0.36	0.00	0.01	0.19	0.20	0.07	0.30	0.30
Avail Cap(c_a), veh/h	241	247	210	242	243	206	584	1253	1280	735	1259	1271
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	24.5	0.0	26.9	24.6	0.0	5.6	4.1	4.1	4.9	4.4	4.4
Incr Delay (d2), s/veh	0.7	1.2	0.0	1.0	1.4	0.0	0.0	0.0	0.0	0.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.2	0.0	1.1	1.3	0.0	0.0	1.4	1.5	0.3	2.5	2.5
LnGrp Delay(d),s/veh	27.3	25.8	0.0	28.0	26.0	0.0	5.6	4.1	4.1	5.0	4.6	4.6
LnGrp LOS	C	C		C	C		A	A	A	A	A	A
Approach Vol, veh/h		124			146			460		742		
Approach Delay, s/veh		26.4			26.9			4.1		4.7		
Approach LOS		C			C			A		A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s		46.5		14.3		46.5		14.3				
Change Period (Y+R <sub>c</sub> ), s		6.5		7.0		6.5		7.0				
Max Green Setting (Gmax), s		43.5		8.0		43.5		8.0				
Max Q Clear Time (g_c+l1), s		7.1		7.3		7.3		6.5				
Green Ext Time (p_c), s		5.0		0.1		5.0		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			8.5									
HCM 2010 LOS			A									



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑↑	↑↑	↑
Traffic Volume (veh/h)	293	91	341	262	76	263
Future Volume (veh/h)	293	91	341	262	76	263
Number	6	16	5	2	7	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1872	1872	1853	1853
Adj Flow Rate, veh/h	376	0	437	336	97	0
Adj No. of Lanes	1	1	1	2	2	1
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	482	410	574	2533	180	83
Arrive On Green	0.26	0.00	0.32	0.71	0.05	0.00
Sat Flow, veh/h	1853	1575	1783	3651	3424	1575
Grp Volume(v), veh/h	376	0	437	336	97	0
Grp Sat Flow(s),veh/h/ln	1853	1575	1783	1778	1712	1575
Q Serve(g_s), s	9.0	0.0	10.5	1.4	1.3	0.0
Cycle Q Clear(g_c), s	9.0	0.0	10.5	1.4	1.3	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	482	410	574	2533	180	83
V/C Ratio(X)	0.78	0.00	0.76	0.13	0.54	0.00
Avail Cap(c_a), veh/h	1316	1118	955	2533	719	331
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.4	0.0	14.5	2.2	22.0	0.0
Incr Delay (d2), s/veh	2.8	0.0	2.1	0.0	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	5.4	0.7	0.7	0.0
LnGrp Delay(d),s/veh	19.1	0.0	16.6	2.2	24.5	0.0
LnGrp LOS	B		B	A	C	
Approach Vol, veh/h	376			773	97	
Approach Delay, s/veh	19.1			10.3	24.5	
Approach LOS	B			B	C	
Timer	1	2	3	4	5	6
Assigned Phs		2		4	5	6
Phs Duration (G+Y+R <sub>c</sub> ), s	40.1			7.5	21.5	18.6
Change Period (Y+R <sub>c</sub> ), s	6.2			5.0	6.2	* 6.2
Max Green Setting (Gmax), s	33.8			10.0	25.5	* 34
Max Q Clear Time (g_c+l1), s	3.4			3.3	12.5	11.0
Green Ext Time (p_c), s	3.7			0.1	2.9	1.5
<b>Intersection Summary</b>						
HCM 2010 Ctrl Delay			14.1			
HCM 2010 LOS			B			
Notes						

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\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 2010 Signalized Intersection Summary

32: S Brewer St/N Brewer St & E Wood St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↙ ↖ ↘ ↗ ↘ ↙ ↖ ↙											
Traffic Volume (veh/h)	5	315	4	1	233	18	3	29	2	12	12	3
Future Volume (veh/h)	5	315	4	1	233	18	3	29	2	12	12	3
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1890	1853	1890	1919	1881	1919	1890	1853	1890
Adj Flow Rate, veh/h	6	380	5	1	281	22	4	35	2	14	14	4
Adj No. of Lanes	1	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	873	1190	16	66	1095	85	83	324	17	195	171	39
Arrive On Green	1.00	1.00	1.00	0.65	0.65	0.65	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1077	1844	24	1	1696	132	58	1698	90	526	896	203
Grp Volume(v), veh/h	6	0	385	304	0	0	41	0	0	32	0	0
Grp Sat Flow(s),veh/h/ln	1077	0	1868	1829	0	0	1846	0	0	1626	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	3.9	0.0	0.0	1.0	0.0	0.0	0.8	0.0	0.0
Prop In Lane	1.00		0.01	0.00		0.07	0.10		0.05	0.44		0.12
Lane Grp Cap(c), veh/h	873	0	1206	1247	0	0	424	0	0	404	0	0
V/C Ratio(X)	0.01	0.00	0.32	0.24	0.00	0.00	0.10	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	873	0	1206	1247	0	0	424	0	0	404	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	4.1	0.0	0.0	18.4	0.0	0.0	18.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.7	0.5	0.0	0.0	0.5	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	2.1	0.0	0.0	0.6	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.7	4.6	0.0	0.0	18.9	0.0	0.0	18.7	0.0	0.0
LnGrp LOS	A		A	A			B			B		
Approach Vol, veh/h	391			304			41			32		
Approach Delay, s/veh	0.7			4.6			18.9			18.7		
Approach LOS	A			A			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	40.0		15.0		40.0		15.0					
Change Period (Y+R <sub>c</sub> ), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	35.5		10.5		35.5		10.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			4.0									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

35: S Market St & E Blythe St

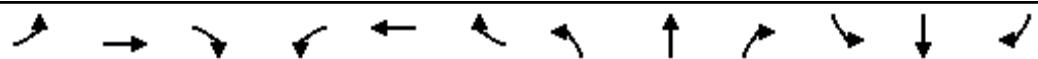
09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	34	41	28	14	14	26	266	39	1	271	2
Future Volume (veh/h)	7	34	41	28	14	14	26	266	39	1	271	2
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1853	1890	1910	1872	1910	1853	1853	1890	1872	1872	1910
Adj Flow Rate, veh/h	8	38	46	31	16	16	29	296	43	1	301	2
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	85	224	238	278	143	110	630	878	128	602	1030	7
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	48	796	844	640	507	390	1067	1583	230	1042	1858	12
Grp Volume(v), veh/h	92	0	0	63	0	0	29	0	339	1	0	303
Grp Sat Flow(s),veh/h/ln	1687	0	0	1538	0	0	1067	0	1813	1042	0	1870
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	5.6	0.0	0.0	4.7
Cycle Q Clear(g_c), s	2.3	0.0	0.0	1.4	0.0	0.0	5.6	0.0	5.6	5.7	0.0	4.7
Prop In Lane	0.09			0.50	0.49		0.25	1.00		0.13	1.00	0.01
Lane Grp Cap(c), veh/h	547	0	0	531	0	0	630	0	1005	602	0	1037
V/C Ratio(X)	0.17	0.00	0.00	0.12	0.00	0.00	0.05	0.00	0.34	0.00	0.00	0.29
Avail Cap(c_a), veh/h	547	0	0	531	0	0	630	0	1005	602	0	1037
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.0	0.0	0.0	14.7	0.0	0.0	8.0	0.0	6.7	8.3	0.0	6.5
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0.9	0.0	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	0.8	0.0	0.0	0.3	0.0	3.0	0.0	0.0	2.6
LnGrp Delay(d),s/veh	15.7	0.0	0.0	15.2	0.0	0.0	8.1	0.0	7.6	8.3	0.0	7.2
LnGrp LOS	B			B			A		A	A		A
Approach Vol, veh/h	92			63			368		304			
Approach Delay, s/veh	15.7			15.2			7.7		7.2			
Approach LOS	B			B			A		A			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	35.0		20.0		35.0		20.0					
Change Period (Y+R <sub>c</sub> ), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	30.5		15.5		30.5		15.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay	9.0											
HCM 2010 LOS	A											

## HCM 2010 Signalized Intersection Summary

37: S Poplar St/N Poplar St &amp; E Wood St

09/10/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	13	301	16	7	195	17	3	20	5	13	21	8
Future Volume (veh/h)	13	301	16	7	195	17	3	20	5	13	21	8
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	15	354	19	8	229	20	4	24	6	15	25	9
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	680	976	52	578	941	82	499	408	102	500	367	132
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1132	1761	95	1010	1698	148	1376	1447	362	1367	1302	469
Grp Volume(v), veh/h	15	0	373	8	0	249	4	0	30	15	0	34
Grp Sat Flow(s), veh/h/ln	1132	0	1855	1010	0	1846	1376	0	1808	1367	0	1771
Q Serve(g_s), s	0.4	0.0	6.2	0.2	0.0	3.8	0.1	0.0	0.7	0.4	0.0	0.8
Cycle Q Clear(g_c), s	4.2	0.0	6.2	6.4	0.0	3.8	0.9	0.0	0.7	1.1	0.0	0.8
Prop In Lane	1.00		0.05	1.00		0.08	1.00		0.20	1.00		0.26
Lane Grp Cap(c), veh/h	680	0	1029	578	0	1024	499	0	510	500	0	499
V/C Ratio(X)	0.02	0.00	0.36	0.01	0.00	0.24	0.01	0.00	0.06	0.03	0.00	0.07
Avail Cap(c_a), veh/h	680	0	1029	578	0	1024	499	0	510	500	0	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.4	0.0	6.8	8.6	0.0	6.3	14.8	0.0	14.4	14.8	0.0	14.5
Incr Delay (d2), s/veh	0.1	0.0	1.0	0.0	0.0	0.6	0.0	0.0	0.2	0.1	0.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.1	0.0	3.4	0.1	0.0	2.1	0.0	0.0	0.4	0.2	0.0	0.4
LnGrp Delay(d), s/veh	7.4	0.0	7.8	8.7	0.0	6.9	14.8	0.0	14.6	14.9	0.0	14.7
LnGrp LOS	A		A			A	B		B	B		B
Approach Vol, veh/h	388			257			34			49		
Approach Delay, s/veh	7.8			6.9			14.7			14.8		
Approach LOS	A			A			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	35.0		20.0		35.0		20.0					
Change Period (Y+R <sub>c</sub> ), s	4.5		4.5		4.5		4.5					
Max Green Setting (G <sub>max</sub> ), s	30.5		15.5		30.5		15.5					
Max Q Clear Time (g <sub>c</sub> +I <sub>1</sub> ), s	0.0		0.0		0.0		0.0					
Green Ext Time (p <sub>c</sub> ), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			8.3									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

42: Dunlap & Veterans Dr

09/10/2019

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑	↑	↑	↑				
Traffic Volume (veh/h)	3	277	21	104	293	79	8	57	74	20	77	8
Future Volume (veh/h)	3	277	21	104	293	79	8	57	74	20	77	8
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1872	1872	1835	1872	1910	1872	1910
Adj Flow Rate, veh/h	4	355	27	133	376	101	10	73	95	26	99	10
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	0	1	0
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	605	1696	128	646	1818	813	110	111	136	150	220	20
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	909	3319	251	1002	3557	1591	49	723	884	225	1434	133
Grp Volume(v), veh/h	4	188	194	133	376	101	178	0	0	135	0	0
Grp Sat Flow(s),veh/h/ln	909	1761	1809	1002	1778	1591	1656	0	0	1792	0	0
Q Serve(g_s), s	0.1	2.2	2.2	3.1	2.2	1.2	1.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.2	2.2	2.2	5.3	2.2	1.2	3.8	0.0	0.0	2.5	0.0	0.0
Prop In Lane	1.00		0.14	1.00		1.00	0.06		0.53	0.19		0.07
Lane Grp Cap(c), veh/h	605	900	925	646	1818	813	356	0	0	390	0	0
V/C Ratio(X)	0.01	0.21	0.21	0.21	0.21	0.12	0.50	0.00	0.00	0.35	0.00	0.00
Avail Cap(c_a), veh/h	1457	2550	2620	1572	5103	2283	940	0	0	987	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.6	5.0	5.0	6.4	5.0	4.8	14.9	0.0	0.0	14.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.3	0.1	0.1	1.1	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.1	1.1	0.9	1.1	0.6	1.8	0.0	0.0	1.3	0.0	0.0
LnGrp Delay(d),s/veh	5.6	5.2	5.2	6.8	5.1	4.9	16.0	0.0	0.0	14.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B			B		
Approach Vol, veh/h	386				610			178			135	
Approach Delay, s/veh	5.2				5.4			16.0			14.9	
Approach LOS	A				A			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	25.6		11.7		25.6		11.7					
Change Period (Y+R <sub>c</sub> ), s	6.5		6.0		* 6.5		6.0					
Max Green Setting (Gmax), s	53.5		19.0		* 54		19.0					
Max Q Clear Time (g_c+l1), s	7.3		5.8		4.2		4.5					
Green Ext Time (p_c), s	11.7		1.0		11.9		1.1					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			7.8									
HCM 2010 LOS			A									
Notes												

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User approved pedestrian interval to be less than phase max green.

\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary  
47: Tyson Ave & Mineral Wells/Veterans Dr

09/10/2019

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	1	2	1	1	2	1	1	2	1	2	1	1
Traffic Volume (veh/h)	117	338	208	62	259	47	62	277	188	218	189	61
Future Volume (veh/h)	117	338	208	62	259	47	62	277	188	218	189	61
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1825	1825	1825	1853	1853	1853	1881	1881	1881	1872	1872	1872
Adj Flow Rate, veh/h	146	422	0	78	324	0	78	346	0	272	236	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	417	732	327	368	664	297	466	608	272	449	792	355
Arrive On Green	0.10	0.21	0.00	0.08	0.19	0.00	0.08	0.17	0.00	0.13	0.22	0.00
Sat Flow, veh/h	1739	3468	1552	1765	3522	1575	1792	3575	1599	3459	3557	1591
Grp Volume(v), veh/h	146	422	0	78	324	0	78	346	0	272	236	0
Grp Sat Flow(s),veh/h/ln	1739	1734	1552	1765	1761	1575	1792	1787	1599	1729	1778	1591
Q Serve(g_s), s	3.5	5.8	0.0	1.8	4.4	0.0	1.8	4.7	0.0	4.0	2.9	0.0
Cycle Q Clear(g_c), s	3.5	5.8	0.0	1.8	4.4	0.0	1.8	4.7	0.0	4.0	2.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	417	732	327	368	664	297	466	608	272	449	792	355
V/C Ratio(X)	0.35	0.58	0.00	0.21	0.49	0.00	0.17	0.57	0.00	0.61	0.30	0.00
Avail Cap(c_a), veh/h	749	2502	1119	1075	2540	1136	1016	2579	1154	1653	1899	850
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.0	18.9	0.0	15.3	19.4	0.0	15.8	20.3	0.0	21.9	17.3	0.0
Incr Delay (d2), s/veh	0.4	0.7	0.0	0.1	0.6	0.0	0.1	0.8	0.0	1.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	2.8	0.0	0.9	2.2	0.0	0.9	2.4	0.0	2.0	1.5	0.0
LnGrp Delay(d),s/veh	15.4	19.6	0.0	15.4	19.9	0.0	15.9	21.2	0.0	23.3	17.4	0.0
LnGrp LOS	B	B		B	B		B	C		C	B	
Approach Vol, veh/h		568			402			424			508	
Approach Delay, s/veh		18.5			19.0			20.2			20.5	
Approach LOS		B			B			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	11.4	15.6	8.6	17.8	8.6	18.4	9.8	16.6				
Change Period (Y+R <sub>c</sub> ), s	4.5	6.5	4.5	6.5	4.5	6.5	4.5	6.5				
Max Green Setting (Gmax), s	25.5	38.5	25.5	38.5	20.5	28.5	15.5	38.5				
Max Q Clear Time (g_c+l1), s	6.0	6.7	3.8	7.8	3.8	4.9	5.5	6.4				
Green Ext Time (p_c), s	1.1	2.3	0.1	3.4	0.1	2.3	0.2	3.4				
Intersection Summary												
HCM 2010 Ctrl Delay			19.6									
HCM 2010 LOS			B									

# HCM 2010 Signalized Intersection Summary

49: TN-79 & TN-218

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑		↑	↑		↑	↑↑		↑	↑↑	
Traffic Volume (veh/h)	40	65	50	90	110	25	10	225	35	15	185	10
Future Volume (veh/h)	40	65	50	90	110	25	10	225	35	15	185	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1853	1853	1890	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	43	71	54	98	120	27	11	245	38	16	201	11
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	470	232	177	483	345	78	528	843	129	490	925	50
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	1242	988	751	1254	1466	330	1171	3093	474	1086	3397	185
Grp Volume(v), veh/h	43	0	125	98	0	147	11	139	144	16	104	108
Grp Sat Flow(s),veh/h/ln	1242	0	1739	1254	0	1795	1171	1778	1788	1086	1761	1821
Q Serve(g_s), s	0.8	0.0	1.6	1.9	0.0	1.9	0.2	1.7	1.7	0.3	1.2	1.3
Cycle Q Clear(g_c), s	2.7	0.0	1.6	3.5	0.0	1.9	1.5	1.7	1.7	2.1	1.2	1.3
Prop In Lane	1.00		0.43	1.00		0.18	1.00		0.26	1.00		0.10
Lane Grp Cap(c), veh/h	470	0	409	483	0	422	528	485	487	490	480	496
V/C Ratio(X)	0.09	0.00	0.31	0.20	0.00	0.35	0.02	0.29	0.29	0.03	0.22	0.22
Avail Cap(c_a), veh/h	993	0	1142	1012	0	1179	999	1200	1207	927	1188	1229
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.9	0.0	8.6	10.1	0.0	8.7	8.3	7.9	7.9	8.7	7.7	7.7
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.2	0.0	0.5	0.0	0.7	0.7	0.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.8	0.7	0.0	1.0	0.1	0.9	0.9	0.1	0.7	0.7
LnGrp Delay(d),s/veh	9.9	0.0	9.1	10.3	0.0	9.2	8.3	8.6	8.6	8.8	8.2	8.2
LnGrp LOS	A		A	B		A	A	A	A	A	A	A
Approach Vol, veh/h	168			245			294			228		
Approach Delay, s/veh	9.3			9.7			8.6			8.2		
Approach LOS	A			A			A			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	14.0		13.4		14.0		13.4					
Change Period (Y+R <sub>c</sub> ), s	6.5		7.0		6.5		7.0					
Max Green Setting (Gmax), s	18.5		18.0		18.5		18.0					
Max Q Clear Time (g_c+l1), s	3.7		4.7		4.1		5.5					
Green Ext Time (p_c), s	3.4		1.2		3.4		1.2					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			8.9									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

52: Tyson Ave & Joy St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↗	↑ ↘	↑ ↙	↑ ↖
Traffic Volume (veh/h)	15	35	20	140	60	160	85	280	200	125	260	35
Future Volume (veh/h)	15	35	20	140	60	160	85	280	200	125	260	35
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1872	1853	1853	1890	1881	1881	1919	1844	1844	1881
Adj Flow Rate, veh/h	16	38	0	152	65	174	92	304	217	136	283	38
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	397	337	392	95	254	640	705	491	543	1138	151
Arrive On Green	0.21	0.21	0.00	0.21	0.21	0.21	0.11	0.35	0.35	0.12	0.37	0.37
Sat Flow, veh/h	1142	1872	1591	1357	447	1196	1792	2017	1404	1756	3110	413
Grp Volume(v), veh/h	16	38	0	152	0	239	92	268	253	136	158	163
Grp Sat Flow(s),veh/h/ln	1142	1872	1591	1357	0	1642	1792	1787	1634	1756	1752	1771
Q Serve(g_s), s	0.7	0.9	0.0	5.8	0.0	7.7	1.7	6.6	6.8	2.5	3.6	3.7
Cycle Q Clear(g_c), s	8.4	0.9	0.0	6.7	0.0	7.7	1.7	6.6	6.8	2.5	3.6	3.7
Prop In Lane	1.00			1.00		0.73	1.00		0.86	1.00		0.23
Lane Grp Cap(c), veh/h	215	397	337	392	0	348	640	625	571	543	641	648
V/C Ratio(X)	0.07	0.10	0.00	0.39	0.00	0.69	0.14	0.43	0.44	0.25	0.25	0.25
Avail Cap(c_a), veh/h	452	785	668	697	0	718	1042	1218	1114	909	1194	1207
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	18.1	0.0	20.8	0.0	20.8	9.0	14.2	14.3	9.1	12.6	12.7
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.9	0.0	3.4	0.1	0.5	0.5	0.3	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.5	0.0	2.3	0.0	3.8	0.8	3.3	3.1	1.2	1.7	1.8
LnGrp Delay(d),s/veh	24.9	18.3	0.0	21.7	0.0	24.2	9.1	14.7	14.9	9.4	12.8	12.9
LnGrp LOS	C	B		C		C	A	B	B	A	B	B
Approach Vol, veh/h		54			391			613			457	
Approach Delay, s/veh		20.2			23.2			13.9			11.8	
Approach LOS		C			C			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	13.1	26.0		18.1	12.1	26.9		18.1				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	19.0	39.0		24.0	19.0	39.0		25.0				
Max Q Clear Time (g_c+l1), s	4.5	8.8		10.4	3.7	5.7		9.7				
Green Ext Time (p_c), s	0.5	3.5		2.3	0.3	3.5		2.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				15.9								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary  
57: Restaurant/Jim Adams Dr & Mineral Wells

09/10/2019

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑		↑	↑		↑↑	↑	
Traffic Volume (veh/h)	139	408	18	3	566	31	1	3	2	31	5	88
Future Volume (veh/h)	139	408	18	3	566	31	1	3	2	31	5	88
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1872	1872	1910	1881	1881	1919	1872	1872	1910
Adj Flow Rate, veh/h	162	474	21	3	658	36	1	3	2	36	6	102
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	2	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	446	2007	89	421	1096	60	239	106	71	655	9	153
Arrive On Green	0.10	0.58	0.58	0.32	0.32	0.32	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	1783	3470	153	903	3430	188	1293	1054	703	2740	89	1515
Grp Volume(v), veh/h	162	243	252	3	341	353	1	0	5	36	0	108
Grp Sat Flow(s),veh/h/ln	1783	1778	1845	903	1778	1839	1293	0	1757	1370	0	1605
Q Serve(g_s), s	0.0	2.5	2.5	0.1	6.0	6.0	0.0	0.0	0.1	0.4	0.0	2.4
Cycle Q Clear(g_c), s	0.0	2.5	2.5	2.6	6.0	6.0	2.5	0.0	0.1	0.5	0.0	2.4
Prop In Lane	1.00		0.08	1.00		0.10	1.00		0.40	1.00		0.94
Lane Grp Cap(c), veh/h	446	1028	1067	421	568	588	239	0	177	655	0	162
V/C Ratio(X)	0.36	0.24	0.24	0.01	0.60	0.60	0.00	0.00	0.03	0.06	0.00	0.67
Avail Cap(c_a), veh/h	1033	3850	3994	1556	2804	2900	1111	0	1362	2502	0	1244
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.3	3.9	3.9	10.5	10.7	10.7	17.4	0.0	15.2	15.4	0.0	16.2
Incr Delay (d2), s/veh	0.4	0.1	0.1	0.0	1.2	1.2	0.0	0.0	0.1	0.0	0.0	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.3	1.3	0.0	3.1	3.2	0.0	0.0	0.0	0.2	0.0	1.2
LnGrp Delay(d),s/veh	14.6	4.0	4.0	10.5	11.9	11.9	17.4	0.0	15.2	15.4	0.0	19.7
LnGrp LOS	B	A	A	B	B	B	B		B	B		B
Approach Vol, veh/h	657				697			6			144	
Approach Delay, s/veh	6.6				11.9			15.6			18.6	
Approach LOS	A				B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.7	18.0		9.8		27.6		9.8				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	16.0	59.0		29.0		81.0		29.0				
Max Q Clear Time (g_c+l1), s	2.0	8.0		4.5		4.5		4.4				
Green Ext Time (p_c), s	2.5	3.9		0.4		3.1		0.4				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				10.3								
HCM 2010 LOS				B								

## HCM 2010 Signalized Intersection Summary

62: Mineral Wells &amp; Walmart/Memorial Dr

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑			↑	↑↑	↑	↑↑	↑	↑	↑↑	↑↑
Traffic Volume (veh/h)	72	47	3	19	77	392	0	176	87	186	97	82
Future Volume (veh/h)	72	47	3	19	77	392	0	176	87	186	97	82
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1844	1844	1881	1890	1853	1853	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	87	57	4	23	93	472	0	212	0	224	117	99
Adj No. of Lanes	2	1	0	0	1	2	1	2	1	2	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	735	504	35	152	475	820	243	486	217	497	261	222
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.00	0.14	0.00	0.14	0.14	0.14
Sat Flow, veh/h	1618	1703	120	178	1605	2773	1756	3504	1568	3584	1881	1599
Grp Volume(v), veh/h	87	0	61	116	0	472	0	212	0	224	117	99
Grp Sat Flow(s),veh/h/ln	809	0	1823	1783	0	1386	1756	1752	1568	1792	1881	1599
Q Serve(g_s), s	1.8	0.0	1.1	0.0	0.0	6.3	0.0	2.4	0.0	2.5	2.5	2.5
Cycle Q Clear(g_c), s	3.9	0.0	1.1	2.0	0.0	6.3	0.0	2.4	0.0	2.5	2.5	2.5
Prop In Lane	1.00		0.07	0.20		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	735	0	539	627	0	820	243	486	217	497	261	222
V/C Ratio(X)	0.12	0.00	0.11	0.19	0.00	0.58	0.00	0.44	0.00	0.45	0.45	0.45
Avail Cap(c_a), veh/h	1116	0	968	952	0	1345	1379	2751	1231	2814	1477	1256
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.9	0.0	11.1	11.5	0.0	12.9	0.0	17.1	0.0	17.1	17.1	17.1
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.2	0.0	1.1	0.0	0.5	0.0	0.5	0.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.5	1.1	0.0	2.5	0.0	1.2	0.0	1.2	1.3	1.1
LnGrp Delay(d),s/veh	13.0	0.0	11.2	11.7	0.0	14.0	0.0	17.6	0.0	17.6	18.0	18.2
LnGrp LOS	B		B		B		B		B	B	B	B
Approach Vol, veh/h	148				588			212			440	
Approach Delay, s/veh	12.3				13.6			17.6			17.8	
Approach LOS	B				B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	12.0		19.3		12.0		19.3					
Change Period (Y+R <sub>c</sub> ), s	6.0		* 6.5		6.0		6.5					
Max Green Setting (Gmax), s	34.0		* 23		34.0		21.0					
Max Q Clear Time (g_c+l1), s	4.5		5.9		4.4		8.3					
Green Ext Time (p_c), s	1.5		5.3		0.7		4.6					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			15.4									
HCM 2010 LOS			B									
Notes												

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User approved volume balancing among the lanes for turning movement.

\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 2010 Signalized Intersection Summary

64: TN-641 & Memorial Dr

09/10/2019



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (veh/h)	139	95	54	374	206	71
Future Volume (veh/h)	139	95	54	374	206	71
Number	2	12	1	6	7	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1872	1872	1844	1844
Adj Flow Rate, veh/h	181	0	70	486	268	0
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1558	697	729	2130	347	310
Arrive On Green	0.44	0.00	0.06	0.60	0.20	0.00
Sat Flow, veh/h	3614	1575	1783	3651	1756	1568
Grp Volume(v), veh/h	181	0	70	486	268	0
Grp Sat Flow(s),veh/h/ln	1761	1575	1783	1778	1756	1568
Q Serve(g_s), s	1.7	0.0	1.1	3.6	8.2	0.0
Cycle Q Clear(g_c), s	1.7	0.0	1.1	3.6	8.2	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1558	697	729	2130	347	310
V/C Ratio(X)	0.12	0.00	0.10	0.23	0.77	0.00
Avail Cap(c_a), veh/h	2742	1227	1239	2770	917	818
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.3	0.0	6.4	5.3	21.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	4.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.5	1.8	4.4	0.0
LnGrp Delay(d),s/veh	9.3	0.0	6.5	5.3	25.8	0.0
LnGrp LOS	A		A	A	C	
Approach Vol, veh/h	181			556	268	
Approach Delay, s/veh	9.3			5.5	25.8	
Approach LOS	A			A	C	
Timer	1	2	3	4	5	6
Assigned Phs	1	2		4		6
Phs Duration (G+Y+R <sub>c</sub> ), s	8.8	31.0		16.7		39.8
Change Period (Y+R <sub>c</sub> ), s	5.5	6.0		5.5		6.0
Max Green Setting (Gmax), s	19.5	44.0		29.5		44.0
Max Q Clear Time (g_c+l1), s	3.1	3.7		10.2		5.6
Green Ext Time (p_c), s	0.1	4.0		1.2		4.0
<b>Intersection Summary</b>						
HCM 2010 Ctrl Delay			11.6			
HCM 2010 LOS			B			

## HCM 2010 Signalized Intersection Summary

67: Store/Volunteer Dr &amp; Memorial Dr

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑			↑	↑	↑	↑	
Traffic Volume (veh/h)	65	219	0	0	444	136	0	0	0	40	0	61
Future Volume (veh/h)	65	219	0	0	444	136	0	0	0	40	0	61
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A <sub>pbT</sub> )	1.00			1.00	1.00		1.00	1.00	1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1863	1863	1900	1881	1844	1844	1853	1853	1890
Adj Flow Rate, veh/h	79	267	0	0	541	166	0	0	0	49	0	74
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	389	1768	0	212	809	247	0	140	119	346	0	119
Arrive On Green	0.05	0.50	0.00	0.00	0.30	0.30	0.00	0.00	0.00	0.08	0.00	0.08
Sat Flow, veh/h	1783	3651	0	1108	2672	817	0	1844	1568	1765	0	1575
Grp Volume(v), veh/h	79	267	0	0	358	349	0	0	0	49	0	74
Grp Sat Flow(s),veh/h/ln	1783	1778	0	1108	1770	1719	0	1844	1568	1765	0	1575
Q Serve(g_s), s	0.9	1.4	0.0	0.0	6.0	6.0	0.0	0.0	0.0	0.9	0.0	1.5
Cycle Q Clear(g_c), s	0.9	1.4	0.0	0.0	6.0	6.0	0.0	0.0	0.0	0.9	0.0	1.5
Prop In Lane	1.00			1.00		0.48	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	389	1768	0	212	536	520	0	140	119	346	0	119
V/C Ratio(X)	0.20	0.15	0.00	0.00	0.67	0.67	0.00	0.00	0.00	0.14	0.00	0.62
Avail Cap(c_a), veh/h	1355	6917	0	2031	3441	3342	0	1141	970	1278	0	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.3	4.6	0.0	0.0	10.3	10.4	0.0	0.0	0.0	14.9	0.0	15.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	0.5	0.6	0.0	0.0	0.0	0.1	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7	0.0	0.0	3.0	2.9	0.0	0.0	0.0	0.4	0.0	0.7
LnGrp Delay(d),s/veh	7.4	4.7	0.0	0.0	10.9	10.9	0.0	0.0	0.0	15.0	0.0	17.2
LnGrp LOS	A	A			B	B			B		B	
Approach Vol, veh/h	346				707				0			123
Approach Delay, s/veh	5.3				10.9				0.0			16.3
Approach LOS	A				B							B
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	6.6	19.3		8.1		25.9		8.1				
Change Period (Y+R <sub>c</sub> ), s	5.0	9.0		* 5.5		9.0		5.5				
Max Green Setting (Gmax), s	20.0	66.0		* 21		66.0		20.5				
Max Q Clear Time (g_c+l1), s	2.9	8.0		0.0		3.4		3.5				
Green Ext Time (p_c), s	0.1	2.2		0.0		2.2		0.2				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				9.8								
HCM 2010 LOS				A								
Notes												

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\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary  
74: Volunteer Dr & Jim Adams Dr/Restaurant

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙
Traffic Volume (veh/h)	157	6	31	0	0	1	28	191	6	1	153	143
Future Volume (veh/h)	157	6	31	0	0	1	28	191	6	1	153	143
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1863	1863	1900	1863	1863	1900	1872	1872	1910
Adj Flow Rate, veh/h	187	7	37	0	0	1	33	227	7	1	182	170
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	475	51	270	196	0	312	355	856	26	511	245	229
Arrive On Green	0.20	0.20	0.20	0.00	0.00	0.20	0.04	0.48	0.48	0.27	0.27	0.27
Sat Flow, veh/h	1418	259	1371	1357	0	1583	1774	1798	55	1147	892	833
Grp Volume(v), veh/h	187	0	44	0	0	1	33	0	234	1	0	352
Grp Sat Flow(s),veh/h/ln	1418	0	1630	1357	0	1583	1774	0	1853	1147	0	1725
Q Serve(g_s), s	4.5	0.0	0.8	0.0	0.0	0.0	0.4	0.0	2.8	0.0	0.0	6.8
Cycle Q Clear(g_c), s	4.5	0.0	0.8	0.0	0.0	0.0	0.4	0.0	2.8	0.0	0.0	6.8
Prop In Lane	1.00		0.84	1.00		1.00	1.00		0.03	1.00		0.48
Lane Grp Cap(c), veh/h	475	0	321	196	0	312	355	0	883	511	0	473
V/C Ratio(X)	0.39	0.00	0.14	0.00	0.00	0.00	0.09	0.00	0.27	0.00	0.00	0.74
Avail Cap(c_a), veh/h	1314	0	1286	593	0	775	721	0	1714	1257	0	1596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.7	0.0	12.2	0.0	0.0	11.9	8.6	0.0	5.8	9.7	0.0	12.2
Incr Delay (d2), s/veh	0.5	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.4	0.0	0.0	0.0	0.2	0.0	1.4	0.0	0.0	3.3
LnGrp Delay(d),s/veh	14.2	0.0	12.4	0.0	0.0	11.9	8.6	0.0	5.8	9.7	0.0	13.0
LnGrp LOS	B		B			B	A		A	A		B
Approach Vol, veh/h	231				1				267			353
Approach Delay, s/veh	13.8				11.9				6.2			13.0
Approach LOS	B				B				A			B
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	7.4	16.1		13.2		23.5		13.2				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	9.0	34.0		18.0		34.0		29.0				
Max Q Clear Time (g_c+l1), s	2.4	8.8		2.0		4.8		6.5				
Green Ext Time (p_c), s	0.0	1.2		0.7		1.3		0.8				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			11.1									
HCM 2010 LOS			B									

## HCM 2010 Signalized Intersection Summary

79: Volunteer Dr &amp; School/Patriot Ave

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	166	69	16	172	0	44	5	119	99	20	259	9
Future Volume (veh/h)	166	69	16	172	0	44	5	119	99	20	259	9
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1891	1891	1928	1835	1835	1872	1835	1835	1872	1919	1919	1957
Adj Flow Rate, veh/h	277	115	27	287	0	73	8	198	165	33	432	15
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	545	170	40	495	0	205	216	257	214	267	564	20
Arrive On Green	0.17	0.12	0.12	0.19	0.00	0.13	0.01	0.28	0.28	0.04	0.31	0.31
Sat Flow, veh/h	1801	1481	348	1747	0	1560	1747	926	772	1827	1843	64
Grp Volume(v), veh/h	277	0	142	287	0	73	8	0	363	33	0	447
Grp Sat Flow(s),veh/h/ln	1801	0	1829	1747	0	1560	1747	0	1699	1827	0	1907
Q Serve(g_s), s	7.9	0.0	4.5	8.4	0.0	2.6	0.2	0.0	12.0	0.8	0.0	13.0
Cycle Q Clear(g_c), s	7.9	0.0	4.5	8.4	0.0	2.6	0.2	0.0	12.0	0.8	0.0	13.0
Prop In Lane	1.00		0.19	1.00		1.00	1.00		0.45	1.00		0.03
Lane Grp Cap(c), veh/h	545	0	210	495	0	205	216	0	471	267	0	584
V/C Ratio(X)	0.51	0.00	0.67	0.58	0.00	0.36	0.04	0.00	0.77	0.12	0.00	0.77
Avail Cap(c_a), veh/h	1241	0	1050	1142	0	511	764	0	780	787	0	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.4	0.0	25.9	18.0	0.0	24.1	16.8	0.0	20.3	15.9	0.0	19.2
Incr Delay (d2), s/veh	0.3	0.0	1.4	1.1	0.0	0.4	0.0	0.0	2.7	0.1	0.0	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	2.4	4.1	0.0	1.1	0.1	0.0	5.9	0.4	0.0	7.2
LnGrp Delay(d),s/veh	18.7	0.0	27.3	19.1	0.0	24.5	16.8	0.0	23.0	16.0	0.0	21.5
LnGrp LOS	B		C	B		C	B		C	B		C
Approach Vol, veh/h	419				360				371			480
Approach Delay, s/veh	21.6				20.2				22.8			21.1
Approach LOS	C				C				C			C
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	16.4	13.0	7.6	23.9	17.4	12.0	5.9	25.7				
Change Period (Y+R <sub>c</sub> ), s	6.0	5.0	5.5	7.0	6.0	5.0	5.5	7.0				
Max Green Setting (Gmax), s	34.0	20.0	19.5	28.0	34.0	35.0	19.5	28.0				
Max Q Clear Time (g_c+l1), s	9.9	4.6	2.8	14.0	10.4	6.5	2.2	15.0				
Green Ext Time (p_c), s	0.6	0.4	0.0	2.9	1.1	0.5	0.0	2.9				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				21.4								
HCM 2010 LOS				C								

# HCM 2010 Signalized Intersection Summary

85: Wilson St & Lone Oak

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	25	70	15	35	5	10	25	10	10	30	15
Future Volume (veh/h)	20	25	70	15	35	5	10	25	10	10	30	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A <sub>pbT</sub> )	1.00			1.00	1.00		1.00	1.00	1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1910	1872	1910	1900	1863	1900
Adj Flow Rate, veh/h	22	27	76	16	38	5	11	27	11	11	33	16
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	218	440	265	555	64	184	345	117	163	340	139
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	148	492	993	304	1253	144	193	1150	388	136	1133	462
Grp Volume(v), veh/h	125	0	0	59	0	0	49	0	0	60	0	0
Grp Sat Flow(s),veh/h/ln	1632	0	0	1701	0	0	1731	0	0	1731	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.0	0.6	0.0	0.0	0.7	0.0	0.0	0.9	0.0	0.0
Prop In Lane	0.18			0.61	0.27		0.08	0.22		0.22	0.18	0.27
Lane Grp Cap(c), veh/h	844	0	0	884	0	0	645	0	0	641	0	0
V/C Ratio(X)	0.15	0.00	0.00	0.07	0.00	0.00	0.08	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	844	0	0	884	0	0	645	0	0	641	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.9	0.0	0.0	5.6	0.0	0.0	8.8	0.0	0.0	8.9	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.5	0.0	0.0
LnGrp Delay(d),s/veh	6.2	0.0	0.0	5.8	0.0	0.0	9.0	0.0	0.0	9.2	0.0	0.0
LnGrp LOS	A			A			A			A		
Approach Vol, veh/h	125				59			49			60	
Approach Delay, s/veh	6.2				5.8			9.0			9.2	
Approach LOS	A			A			A			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	15.0		20.0		15.0		20.0					
Change Period (Y+R <sub>c</sub> ), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	10.5		15.5		10.5		15.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			7.2									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

2: Irvine St & W Wood St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	0	283	15	11	294	0	20	3	11	0	2	3
Future Volume (veh/h)	0	283	15	11	294	0	20	3	11	0	2	3
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1909	1909	1948	1872	1872	1910	1910	1872	1910	1862	1825	1862
Adj Flow Rate, veh/h	0	304	16	12	316	0	22	3	12	0	2	3
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	1128	59	716	1174	0	244	48	90	0	120	180
Arrive On Green	0.00	0.63	0.63	0.63	0.63	0.00	0.18	0.18	0.18	0.00	0.18	0.18
Sat Flow, veh/h	1086	1798	95	1061	1872	0	770	266	497	0	660	990
Grp Volume(v), veh/h	0	0	320	12	316	0	37	0	0	0	0	5
Grp Sat Flow(s),veh/h/ln	1086	0	1893	1061	1872	0	1534	0	0	0	0	1651
Q Serve(g_s), s	0.0	0.0	4.2	0.3	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.0	4.2	4.5	4.2	0.0	1.0	0.0	0.0	0.0	0.0	0.1
Prop In Lane	1.00		0.05	1.00		0.00	0.59		0.32	0.00		0.60
Lane Grp Cap(c), veh/h	131	0	1187	716	1174	0	383	0	0	0	0	300
V/C Ratio(X)	0.00	0.00	0.27	0.02	0.27	0.00	0.10	0.00	0.00	0.00	0.00	0.02
Avail Cap(c_a), veh/h	131	0	1187	716	1174	0	383	0	0	0	0	300
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	4.6	5.6	4.6	0.0	18.8	0.0	0.0	0.0	0.0	18.5
Incr Delay (d2), s/veh	0.0	0.0	0.6	0.0	0.6	0.0	0.5	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.3	0.1	2.3	0.0	0.5	0.0	0.0	0.0	0.0	0.1
LnGrp Delay(d),s/veh	0.0	0.0	5.2	5.6	5.2	0.0	19.3	0.0	0.0	0.0	0.0	18.6
LnGrp LOS			A	A	A		B					B
Approach Vol, veh/h	320			328			37			5		
Approach Delay, s/veh	5.2			5.2			19.3			18.6		
Approach LOS	A			A			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	40.0		15.0		40.0		15.0					
Change Period (Y+R <sub>c</sub> ), s	5.5		5.0		5.5		5.0					
Max Green Setting (Gmax), s	34.5		10.0		34.5		10.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			6.0									
HCM 2010 LOS			A									

## HCM 2010 Signalized Intersection Summary

7: S Market St/N Market St &amp; E Wood St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙		
Traffic Volume (veh/h)	24	142	114	29	158	78	147	257	50	93	201	28
Future Volume (veh/h)	24	142	114	29	158	78	147	257	50	93	201	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	26	151	121	31	168	83	156	273	53	99	214	30
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	355	304	244	336	378	187	581	539	105	513	562	79
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.09	0.35	0.35	0.09	0.35	0.35
Sat Flow, veh/h	1118	954	764	1108	1184	585	1783	1524	296	1765	1591	223
Grp Volume(v), veh/h	26	0	272	31	0	251	156	0	326	99	0	244
Grp Sat Flow(s),veh/h/ln	1118	0	1719	1108	0	1769	1783	0	1820	1765	0	1814
Q Serve(g_s), s	1.1	0.0	7.4	1.4	0.0	6.5	3.1	0.0	8.2	1.9	0.0	5.8
Cycle Q Clear(g_c), s	7.6	0.0	7.4	8.8	0.0	6.5	3.1	0.0	8.2	1.9	0.0	5.8
Prop In Lane	1.00		0.44	1.00		0.33	1.00		0.16	1.00		0.12
Lane Grp Cap(c), veh/h	355	0	548	336	0	564	581	0	643	513	0	641
V/C Ratio(X)	0.07	0.00	0.50	0.09	0.00	0.44	0.27	0.00	0.51	0.19	0.00	0.38
Avail Cap(c_a), veh/h	355	0	548	336	0	564	581	0	643	513	0	641
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.7	0.0	16.0	19.5	0.0	15.7	10.0	0.0	14.8	10.0	0.0	14.0
Incr Delay (d2), s/veh	0.4	0.0	3.2	0.5	0.0	2.5	1.1	0.0	2.8	0.8	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	4.0	0.5	0.0	3.5	1.7	0.0	4.6	1.0	0.0	3.2
LnGrp Delay(d),s/veh	19.1	0.0	19.2	20.1	0.0	18.2	11.1	0.0	17.6	10.8	0.0	15.7
LnGrp LOS	B		B	C		B	B		B	B		B
Approach Vol, veh/h	298				282			482			343	
Approach Delay, s/veh	19.2				18.4			15.5			14.3	
Approach LOS	B				B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	10.0	25.0		23.0	10.0	25.0		23.0				
Change Period (Y+R <sub>c</sub> ), s	4.5	4.5		4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	20.5		18.5	5.5	20.5		18.5				
Max Q Clear Time (g_c+l1), s	0.0	0.0		0.0	0.0	0.0		0.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				16.6								
HCM 2010 LOS				B								

## HCM 2010 Signalized Intersection Summary

8: Highland St &amp; E Wood St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↔	↔		↔	↔	
Traffic Volume (veh/h)	1	343	1	9	283	4	2	2	5	3	5	3
Future Volume (veh/h)	1	343	1	9	283	4	2	2	5	3	5	3
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1844	1844	1881	1872	1872	1910	1938	1900	1938	1928	1891	1928
Adj Flow Rate, veh/h	1	369	1	10	304	4	2	2	5	3	5	3
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	802	1196	3	758	1200	16	133	18	46	142	38	23
Arrive On Green	0.65	0.65	0.65	0.65	0.65	0.65	0.05	0.05	0.05	0.05	0.05	0.05
Sat Flow, veh/h	1056	1838	5	1013	1844	24	367	367	918	458	764	458
Grp Volume(v), veh/h	1	0	370	10	0	308	9	0	0	11	0	0
Grp Sat Flow(s),veh/h/ln	1056	0	1843	1013	0	1868	1652	0	0	1681	0	0
Q Serve(g_s), s	0.0	0.0	3.4	0.2	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.7	0.0	3.4	3.5	0.0	2.7	0.2	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.01	0.22		0.56	0.27		0.27
Lane Grp Cap(c), veh/h	802	0	1199	758	0	1215	197	0	0	203	0	0
V/C Ratio(X)	0.00	0.00	0.31	0.01	0.00	0.25	0.05	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	1324	0	2111	1259	0	2139	939	0	0	964	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.4	0.0	2.9	3.7	0.0	2.8	17.4	0.0	0.0	17.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.7	0.0	0.0	1.3	0.1	0.0	0.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	3.4	0.0	3.0	3.7	0.0	2.8	17.5	0.0	0.0	17.5	0.0	0.0
LnGrp LOS	A		A	A		A	B			B		
Approach Vol, veh/h	371			318			9			11		
Approach Delay, s/veh	3.0			2.9			17.5			17.5		
Approach LOS	A			A			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	31.0		7.4		31.0		7.4					
Change Period (Y+Rc), s	6.0		5.5		6.0		5.5					
Max Green Setting (Gmax), s	44.0		19.5		44.0		19.5					
Max Q Clear Time (g_c+l1), s	5.4		2.2		5.5		2.2					
Green Ext Time (p_c), s	1.4		0.0		1.4		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			3.4									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

10: Lake St & E Wood St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	8	367	17	6	302	50	11	11	9	65	25	15
Future Volume (veh/h)	8	367	17	6	302	50	11	11	9	65	25	15
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1853	1853	1853	1852	1816	1852	1919	1881	1919
Adj Flow Rate, veh/h	8	374	17	6	308	51	11	11	9	66	26	15
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	813	1259	57	768	1313	1116	137	68	43	204	33	19
Arrive On Green	0.71	0.71	0.71	0.71	0.71	0.71	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	1023	1777	81	984	1853	1575	425	787	496	975	384	222
Grp Volume(v), veh/h	8	0	391	6	308	51	31	0	0	107	0	0
Grp Sat Flow(s),veh/h/ln	1023	0	1858	984	1853	1575	1708	0	0	1580	0	0
Q Serve(g_s), s	0.1	0.0	3.8	0.1	2.8	0.5	0.0	0.0	0.0	2.4	0.0	0.0
Cycle Q Clear(g_c), s	3.0	0.0	3.8	3.9	2.8	0.5	0.8	0.0	0.0	3.2	0.0	0.0
Prop In Lane	1.00		0.04	1.00		1.00	0.35		0.29	0.62		0.14
Lane Grp Cap(c), veh/h	813	0	1316	768	1313	1116	248	0	0	256	0	0
V/C Ratio(X)	0.01	0.00	0.30	0.01	0.23	0.05	0.13	0.00	0.00	0.42	0.00	0.00
Avail Cap(c_a), veh/h	813	0	1316	768	1313	1116	604	0	0	609	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.0	0.0	2.6	3.3	2.5	2.1	20.7	0.0	0.0	21.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.6	0.0	0.4	0.1	0.2	0.0	0.0	1.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.1	0.0	1.5	0.2	0.4	0.0	0.0	1.5	0.0	0.0
LnGrp Delay(d),s/veh	3.0	0.0	3.2	3.4	2.9	2.2	20.9	0.0	0.0	22.8	0.0	0.0
LnGrp LOS	A		A	A	A	A	C		C			
Approach Vol, veh/h	399			365			31			107		
Approach Delay, s/veh	3.2			2.8			20.9			22.8		
Approach LOS	A			A			C		C			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	40.0		8.7		40.0		8.7					
Change Period (Y+R <sub>c</sub> ), s	5.5		4.5		5.5		4.5					
Max Green Setting (Gmax), s	34.5		15.5		34.5		15.5					
Max Q Clear Time (g_c+l1), s	5.8		5.2		5.9		2.8					
Green Ext Time (p_c), s	3.4		0.3		3.4		0.3					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			6.0									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

12: N Market St & Washington St

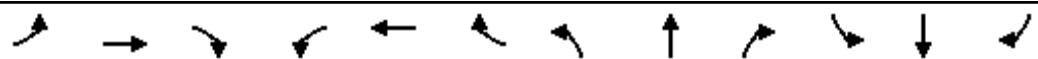
09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙		
Traffic Volume (veh/h)	6	56	35	49	54	39	35	267	55	21	239	8
Future Volume (veh/h)	6	56	35	49	54	39	35	267	55	21	239	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	6	57	36	50	55	40	36	272	56	21	244	8
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	485	339	214	490	322	234	633	792	163	672	938	31
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	1.00	1.00	1.00	0.53	0.53	0.53
Sat Flow, veh/h	1289	1063	672	1304	1009	734	1129	1507	310	1042	1785	59
Grp Volume(v), veh/h	6	0	93	50	0	95	36	0	328	21	0	252
Grp Sat Flow(s),veh/h/ln	1289	0	1735	1304	0	1743	1129	0	1817	1042	0	1843
Q Serve(g_s), s	0.2	0.0	2.2	1.7	0.0	2.3	0.3	0.0	0.0	0.6	0.0	4.4
Cycle Q Clear(g_c), s	2.5	0.0	2.2	3.9	0.0	2.3	4.6	0.0	0.0	0.6	0.0	4.4
Prop In Lane	1.00		0.39	1.00		0.42	1.00		0.17	1.00		0.03
Lane Grp Cap(c), veh/h	485	0	553	490	0	556	633	0	956	672	0	969
V/C Ratio(X)	0.01	0.00	0.17	0.10	0.00	0.17	0.06	0.00	0.34	0.03	0.00	0.26
Avail Cap(c_a), veh/h	485	0	553	490	0	556	633	0	956	672	0	969
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.1	0.0	14.2	15.6	0.0	14.2	0.3	0.0	0.0	6.7	0.0	7.6
Incr Delay (d2), s/veh	0.0	0.0	0.7	0.4	0.0	0.7	0.2	0.0	1.0	0.1	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.2	0.7	0.0	1.2	0.1	0.0	0.3	0.2	0.0	2.3
LnGrp Delay(d),s/veh	15.2	0.0	14.9	16.0	0.0	14.9	0.5	0.0	1.0	6.7	0.0	8.2
LnGrp LOS	B		B	B		B	A		A	A		A
Approach Vol, veh/h		99			145			364			273	
Approach Delay, s/veh		14.9			15.3			0.9			8.1	
Approach LOS		B			B			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	35.0		23.0		35.0		23.0					
Change Period (Y+R <sub>c</sub> ), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	30.5		18.5		30.5		18.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			7.1									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

17: N Market St & E Ruff St

09/10/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↑↓	→	↓↑	←	←↑	↑	↑↓	↑	↓	↑	↓↑	←	
Traffic Volume (veh/h)	15	18	23	9	17	14	9	268	35	10	235	16	
Future Volume (veh/h)	15	18	23	9	17	14	9	268	35	10	235	16	
Number	7	4	14	3	8	18	5	2	12	1	6	16	
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln	1910	1872	1910	1919	1881	1919	1881	1881	1919	1853	1853	1890	
Adj Flow Rate, veh/h	15	19	24	9	18	14	9	276	36	10	242	16	
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2	
Cap, veh/h	160	199	204	140	261	173	623	866	113	571	913	60	
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.53	0.53	0.53	0.53	0.53	0.53	
Sat Flow, veh/h	300	664	681	242	871	577	1128	1631	213	1058	1720	114	
Grp Volume(v), veh/h	58	0	0	41	0	0	9	0	312	10	0	258	
Grp Sat Flow(s),veh/h/ln	1645	0	0	1690	0	0	1128	0	1844	1058	0	1833	
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	6.2	0.4	0.0	5.0	
Cycle Q Clear(g_c), s	1.6	0.0	0.0	1.1	0.0	0.0	5.3	0.0	6.2	6.6	0.0	5.0	
Prop In Lane	0.26			0.41	0.22		0.34	1.00		0.12	1.00		0.06
Lane Grp Cap(c), veh/h	563	0	0	574	0	0	623	0	979	571	0	973	
V/C Ratio(X)	0.10	0.00	0.00	0.07	0.00	0.00	0.01	0.00	0.32	0.02	0.00	0.27	
Avail Cap(c_a), veh/h	563	0	0	574	0	0	623	0	979	571	0	973	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	
Uniform Delay (d), s/veh	16.5	0.0	0.0	16.3	0.0	0.0	9.8	0.0	8.6	10.5	0.0	8.3	
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.9	0.1	0.0	0.7	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.6	0.0	0.0	0.1	0.0	3.4	0.1	0.0	2.7	
LnGrp Delay(d),s/veh	16.8	0.0	0.0	16.5	0.0	0.0	9.8	0.0	9.5	10.5	0.0	9.0	
LnGrp LOS	B			B			A		A	B		A	
Approach Vol, veh/h	58			41			321		268				
Approach Delay, s/veh	16.8			16.5			9.5		9.1				
Approach LOS	B			B			A		A				
Timer	1	2	3	4	5	6	7	8					
Assigned Phs	2		4		6		8						
Phs Duration (G+Y+R <sub>c</sub> ), s	40.0		25.0		40.0		25.0						
Change Period (Y+R <sub>c</sub> ), s	5.5		5.5		5.5		5.5						
Max Green Setting (Gmax), s	34.5		19.5		34.5		19.5						
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0						
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0						
<b>Intersection Summary</b>													
HCM 2010 Ctrl Delay			10.4										
HCM 2010 LOS			B										

# HCM 2010 Signalized Intersection Summary

20: Volunteer Dr & E Wood St

09/10/2019



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑↑	↑↑	↑	↑
Traffic Volume (veh/h)	435	80	90	410	40	65
Future Volume (veh/h)	435	80	90	410	40	65
Number	6	16	5	2	7	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1938	1844	1844	1853	1853
Adj Flow Rate, veh/h	473	87	98	446	43	71
Adj No. of Lanes	2	0	1	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	988	181	646	2254	220	196
Arrive On Green	0.32	0.32	0.19	0.64	0.12	0.12
Sat Flow, veh/h	3144	558	1756	3596	1765	1575
Grp Volume(v), veh/h	279	281	98	446	43	71
Grp Sat Flow(s), veh/h/ln	1805	1802	1756	1752	1765	1575
Q Serve(g_s), s	6.4	6.5	1.4	2.7	1.1	2.1
Cycle Q Clear(g_c), s	6.4	6.5	1.4	2.7	1.1	2.1
Prop In Lane		0.31	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	585	584	646	2254	220	196
V/C Ratio(X)	0.48	0.48	0.15	0.20	0.20	0.36
Avail Cap(c_a), veh/h	1519	1516	935	2254	871	777
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.0	14.0	6.2	3.8	20.3	20.7
Incr Delay (d2), s/veh	0.9	0.9	0.2	0.1	0.4	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.3	3.3	0.7	1.3	0.6	2.0
LnGrp Delay(d), s/veh	14.8	14.9	6.3	3.8	20.7	21.9
LnGrp LOS	B	B	A	A	C	C
Approach Vol, veh/h	560			544	114	
Approach Delay, s/veh	14.9			4.3	21.4	
Approach LOS	B			A	C	
Timer	1	2	3	4	5	6
Assigned Phs		2		4	5	6
Phs Duration (G+Y+R <sub>c</sub> ), s	39.7		11.9	16.5	23.2	
Change Period (Y+R <sub>c</sub> ), s	6.5		5.5	6.5	6.5	
Max Green Setting (G <sub>max</sub> ), s	20.0		25.5	18.5	43.5	
Max Q Clear Time (g <sub>c+l1</sub> ), s	4.7		4.1	3.4	8.5	
Green Ext Time (p <sub>c</sub> ), s	5.6		0.4	0.4	4.2	
<b>Intersection Summary</b>						
HCM 2010 Ctrl Delay			10.7			
HCM 2010 LOS			B			

# HCM 2010 Signalized Intersection Summary

22: N Market St & Rison St

09/10/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	15	25	15	15	10	30	250	15	10	220	5
Future Volume (veh/h)	15	15	25	15	15	10	30	250	15	10	220	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1910	1872	1910	1900	1863	1900	1853	1853	1890	1910	1872	1910
Adj Flow Rate, veh/h	16	16	27	16	16	11	33	272	16	11	239	5
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	103	37	52	119	52	30	1020	1347	79	87	1382	28
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	355	541	756	497	759	431	1126	1733	102	30	1778	36
Grp Volume(v), veh/h	59	0	0	43	0	0	33	0	288	255	0	0
Grp Sat Flow(s),veh/h/ln	1653	0	0	1687	0	0	1126	0	1835	1844	0	0
Q Serve(g_s), s	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.9	0.0	0.0	1.3	0.0	0.0	0.2	0.0	2.4	2.1	0.0	0.0
Prop In Lane	0.27			0.46	0.37		0.26	1.00		0.06	0.04	0.02
Lane Grp Cap(c), veh/h	192	0	0	201	0	0	1020	0	1426	1497	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.21	0.00	0.00	0.03	0.00	0.20	0.17	0.00	0.00
Avail Cap(c_a), veh/h	368	0	0	374	0	0	1020	0	1426	1497	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.3	0.0	0.0	26.0	0.0	0.0	1.5	0.0	1.7	1.7	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0.3	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.7	0.0	0.0	0.1	0.0	1.3	1.2	0.0	0.0
LnGrp Delay(d),s/veh	27.1	0.0	0.0	26.5	0.0	0.0	1.5	0.0	2.0	1.9	0.0	0.0
LnGrp LOS	C			C			A		A	A		
Approach Vol, veh/h		59			43			321			255	
Approach Delay, s/veh		27.1			26.5			2.0			1.9	
Approach LOS		C			C			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2			4			6			8	
Phs Duration (G+Y+R <sub>c</sub> ), s		50.0			8.5			50.0			8.5	
Change Period (Y+R <sub>c</sub> ), s		4.5			4.5			4.5			4.5	
Max Green Setting (Gmax), s		45.5			10.5			45.5			10.5	
Max Q Clear Time (g_c+l1), s		4.4			3.9			4.1			3.3	
Green Ext Time (p_c), s		2.5			0.1			2.5			0.2	
Intersection Summary												
HCM 2010 Ctrl Delay				5.7								
HCM 2010 LOS				A								

# HCM 2010 Signalized Intersection Summary

27: N Poplar St & Washington St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙		
Traffic Volume (veh/h)	12	88	36	29	105	31	28	26	30	28	45	14
Future Volume (veh/h)	12	88	36	29	105	31	28	26	30	28	45	14
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1844	1844	1881
Adj Flow Rate, veh/h	13	95	39	31	113	33	30	28	32	30	48	15
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	692	625	257	708	697	203	549	269	307	544	454	142
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1231	1250	513	1257	1393	407	1340	798	913	1324	1348	421
Grp Volume(v), veh/h	13	0	134	31	0	146	30	0	60	30	0	63
Grp Sat Flow(s),veh/h/ln	1231	0	1763	1257	0	1800	1340	0	1711	1324	0	1770
Q Serve(g_s), s	0.3	0.0	2.3	0.8	0.0	2.4	0.9	0.0	1.3	0.9	0.0	1.3
Cycle Q Clear(g_c), s	2.7	0.0	2.3	3.0	0.0	2.4	2.2	0.0	1.3	2.2	0.0	1.3
Prop In Lane	1.00		0.29	1.00		0.23	1.00		0.53	1.00		0.24
Lane Grp Cap(c), veh/h	692	0	881	708	0	900	549	0	576	544	0	595
V/C Ratio(X)	0.02	0.00	0.15	0.04	0.00	0.16	0.05	0.00	0.10	0.06	0.00	0.11
Avail Cap(c_a), veh/h	692	0	881	708	0	900	549	0	576	544	0	595
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.2	0.0	7.4	8.3	0.0	7.5	13.3	0.0	12.6	13.3	0.0	12.6
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.1	0.0	0.4	0.2	0.0	0.4	0.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.2	0.3	0.0	1.3	0.3	0.0	0.7	0.3	0.0	0.7
LnGrp Delay(d),s/veh	8.3	0.0	7.8	8.4	0.0	7.9	13.5	0.0	12.9	13.5	0.0	12.9
LnGrp LOS	A		A	A		A	B		B	B		B
Approach Vol, veh/h	147			177			90			93		
Approach Delay, s/veh	7.8			8.0			13.1			13.1		
Approach LOS	A			A			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	32.0		23.0		32.0		23.0					
Change Period (Y+R <sub>c</sub> ), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	27.5		18.5		27.5		18.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			9.8									
HCM 2010 LOS			A									

HCM 2010 Signalized Intersection Summary  
29: E Wood St & Chickasaw/Fairgrounds Rd

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↗	↑ ↘	↑ ↙	↑ ↖		↑ ↗	↑ ↘	
Traffic Volume (veh/h)	52	24	13	40	26	20	6	467	54	14	475	59
Future Volume (veh/h)	52	24	13	40	26	20	6	467	54	14	475	59
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1844	1844	1844	1844	1844	1881	1853	1853	1890
Adj Flow Rate, veh/h	54	25	0	41	27	0	6	481	56	14	490	61
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	185	157	239	181	154	640	2134	247	651	2127	264
Arrive On Green	0.10	0.10	0.00	0.10	0.10	0.00	0.67	0.67	0.67	0.67	0.67	0.67
Sat Flow, veh/h	1392	1881	1599	1366	1844	1568	845	3164	367	860	3154	391
Grp Volume(v), veh/h	54	25	0	41	27	0	6	265	272	14	273	278
Grp Sat Flow(s),veh/h/ln	1392	1881	1599	1366	1844	1568	845	1752	1779	860	1761	1784
Q Serve(g_s), s	2.2	0.7	0.0	1.7	0.8	0.0	0.2	3.5	3.5	0.4	3.5	3.6
Cycle Q Clear(g_c), s	3.0	0.7	0.0	2.4	0.8	0.0	3.7	3.5	3.5	3.9	3.5	3.6
Prop In Lane	1.00			1.00			1.00	1.00		0.21	1.00	0.22
Lane Grp Cap(c), veh/h	239	185	157	239	181	154	640	1181	1200	651	1187	1203
V/C Ratio(X)	0.23	0.14	0.00	0.17	0.15	0.00	0.01	0.22	0.23	0.02	0.23	0.23
Avail Cap(c_a), veh/h	290	254	216	289	249	211	690	1285	1305	702	1291	1308
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	24.4	0.0	25.5	24.5	0.0	4.4	3.7	3.7	4.5	3.7	3.7
Incr Delay (d2), s/veh	0.7	0.5	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.4	0.0	0.7	0.4	0.0	0.0	1.6	1.7	0.1	1.7	1.7
LnGrp Delay(d),s/veh	26.5	24.9	0.0	26.0	25.0	0.0	4.5	3.7	3.7	4.5	3.8	3.8
LnGrp LOS	C	C		C	C		A	A	A	A	A	A
Approach Vol, veh/h		79				68			543			565
Approach Delay, s/veh		26.0				25.6			3.8			3.8
Approach LOS		C				C			A			A
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	46.5		12.8		46.5		12.8					
Change Period (Y+R <sub>c</sub> ), s	6.5		7.0		6.5		7.0					
Max Green Setting (Gmax), s	43.5		8.0		43.5		8.0					
Max Q Clear Time (g_c+l1), s	5.9		4.4		5.7		5.0					
Green Ext Time (p_c), s	0.9		0.2		0.9		0.2					
Intersection Summary												
HCM 2010 Ctrl Delay			6.4									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

30: Tyson Ave & E Wood St

09/10/2019



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑↑	↑↑	↑
Traffic Volume (veh/h)	267	180	257	224	125	291
Future Volume (veh/h)	267	180	257	224	125	291
Number	6	16	5	2	7	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1872	1872	1853	1853
Adj Flow Rate, veh/h	272	0	262	229	128	0
Adj No. of Lanes	1	1	1	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	513	436	404	2302	242	111
Arrive On Green	0.28	0.00	0.23	0.65	0.07	0.00
Sat Flow, veh/h	1853	1575	1783	3651	3424	1575
Grp Volume(v), veh/h	272	0	262	229	128	0
Grp Sat Flow(s),veh/h/ln	1853	1575	1783	1778	1712	1575
Q Serve(g_s), s	4.5	0.0	4.8	0.9	1.3	0.0
Cycle Q Clear(g_c), s	4.5	0.0	4.8	0.9	1.3	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	513	436	404	2302	242	111
V/C Ratio(X)	0.53	0.00	0.65	0.10	0.53	0.00
Avail Cap(c_a), veh/h	1785	1518	1259	3426	948	436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.1	0.0	12.7	2.4	16.2	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.8	0.0	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	2.5	0.4	0.7	0.0
LnGrp Delay(d),s/veh	11.9	0.0	14.4	2.4	18.0	0.0
LnGrp LOS	B		B	A	B	
Approach Vol, veh/h	272			491	128	
Approach Delay, s/veh	11.9			8.8	18.0	
Approach LOS	B			A	B	
Timer	1	2	3	4	5	6
Assigned Phs		2		4	5	6
Phs Duration (G+Y+R <sub>c</sub> ), s	28.6			7.5	13.4	15.2
Change Period (Y+R <sub>c</sub> ), s	5.2			5.0	5.2	* 5.2
Max Green Setting (Gmax), s	34.8			10.0	25.5	* 35
Max Q Clear Time (g_c+l1), s	2.9			3.3	6.8	6.5
Green Ext Time (p_c), s	2.2			0.2	2.0	1.1
<b>Intersection Summary</b>						
HCM 2010 Ctrl Delay			11.1			
HCM 2010 LOS			B			
Notes						

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\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

## HCM 2010 Signalized Intersection Summary

32: S Brewer St/N Brewer St &amp; E Wood St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	16	279	6	0	281	29	7	27	9	33	26	19
Future Volume (veh/h)	16	279	6	0	281	29	7	27	9	33	26	19
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1890	1853	1890	1919	1881	1919	1890	1853	1890
Adj Flow Rate, veh/h	17	300	6	0	302	31	8	29	10	35	28	20
Adj No. of Lanes	1	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	724	1181	24	0	1067	110	100	243	72	187	139	74
Arrive On Green	1.00	1.00	1.00	0.00	0.65	0.65	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1048	1829	37	0	1654	170	122	1270	376	492	726	387
Grp Volume(v), veh/h	17	0	306	0	0	333	47	0	0	83	0	0
Grp Sat Flow(s),veh/h/ln	1048	0	1866	0	0	1823	1769	0	0	1605	0	0
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	4.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.5	0.0	0.0	0.0	0.0	4.4	1.2	0.0	0.0	2.2	0.0	0.0
Prop In Lane	1.00		0.02	0.00		0.09	0.17		0.21	0.42		0.24
Lane Grp Cap(c), veh/h	724	0	1204	0	0	1177	414	0	0	399	0	0
V/C Ratio(X)	0.02	0.00	0.25	0.00	0.00	0.28	0.11	0.00	0.00	0.21	0.00	0.00
Avail Cap(c_a), veh/h	724	0	1204	0	0	1177	414	0	0	399	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.3	0.0	0.0	0.0	0.0	4.2	18.5	0.0	0.0	18.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.5	0.0	0.0	0.6	0.6	0.0	0.0	1.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	0.0	0.0	2.3	0.7	0.0	0.0	1.2	0.0	0.0
LnGrp Delay(d),s/veh	0.3	0.0	0.5	0.0	0.0	4.8	19.0	0.0	0.0	20.1	0.0	0.0
LnGrp LOS	A		A			A	B			C		
Approach Vol, veh/h	323			333			47			83		
Approach Delay, s/veh	0.5			4.8			19.0			20.1		
Approach LOS	A			A			B			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	40.0		15.0		40.0		15.0					
Change Period (Y+R <sub>c</sub> ), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	35.5		10.5		35.5		10.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			5.5									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

35: S Market St & E Blythe St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	20	47	51	24	26	37	429	30	4	369	1
Future Volume (veh/h)	3	20	47	51	24	26	37	429	30	4	369	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1853	1890	1910	1872	1910	1853	1853	1890	1872	1872	1910
Adj Flow Rate, veh/h	3	22	51	55	26	28	40	466	33	4	401	1
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	149	312	284	135	111	552	949	67	480	1035	3
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	16	527	1108	659	480	394	974	1711	121	900	1867	5
Grp Volume(v), veh/h	76	0	0	109	0	0	40	0	499	4	0	402
Grp Sat Flow(s),veh/h/ln	1652	0	0	1533	0	0	974	0	1832	900	0	1871
Q Serve(g_s), s	0.0	0.0	0.0	0.7	0.0	0.0	1.3	0.0	9.2	0.2	0.0	6.7
Cycle Q Clear(g_c), s	1.9	0.0	0.0	2.7	0.0	0.0	8.0	0.0	9.2	9.3	0.0	6.7
Prop In Lane	0.04		0.67	0.50		0.26	1.00		0.07	1.00		0.00
Lane Grp Cap(c), veh/h	534	0	0	530	0	0	552	0	1016	480	0	1038
V/C Ratio(X)	0.14	0.00	0.00	0.21	0.00	0.00	0.07	0.00	0.49	0.01	0.00	0.39
Avail Cap(c_a), veh/h	534	0	0	530	0	0	552	0	1016	480	0	1038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.9	0.0	0.0	15.1	0.0	0.0	9.2	0.0	7.5	10.4	0.0	6.9
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.9	0.0	0.0	0.3	0.0	1.7	0.0	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	1.4	0.0	0.0	0.4	0.0	5.1	0.0	0.0	3.7
LnGrp Delay(d),s/veh	15.4	0.0	0.0	16.0	0.0	0.0	9.5	0.0	9.2	10.4	0.0	8.0
LnGrp LOS	B		B			A		A	A	B		A
Approach Vol, veh/h	76			109			539			406		
Approach Delay, s/veh	15.4			16.0			9.2			8.1		
Approach LOS	B		B			A		A		A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	35.0		20.0		35.0		20.0					
Change Period (Y+R <sub>c</sub> ), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	30.5		15.5		30.5		15.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			9.9									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

37: S Poplar St/N Poplar St & E Wood St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	31	270	28	16	209	35	6	33	27	42	42	15
Future Volume (veh/h)	31	270	28	16	209	35	6	33	27	42	42	15
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	33	287	30	17	222	37	6	35	29	45	45	16
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	670	924	97	622	868	145	475	267	221	468	368	131
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1121	1667	174	1064	1565	261	1343	948	785	1326	1307	465
Grp Volume(v), veh/h	33	0	317	17	0	259	6	0	64	45	0	61
Grp Sat Flow(s),veh/h/ln	1121	0	1841	1064	0	1826	1343	0	1733	1326	0	1771
Q Serve(g_s), s	0.9	0.0	5.1	0.5	0.0	4.0	0.2	0.0	1.5	1.4	0.0	1.4
Cycle Q Clear(g_c), s	4.9	0.0	5.1	5.6	0.0	4.0	1.6	0.0	1.5	3.0	0.0	1.4
Prop In Lane	1.00		0.09	1.00		0.14	1.00		0.45	1.00		0.26
Lane Grp Cap(c), veh/h	670	0	1021	622	0	1013	475	0	489	468	0	499
V/C Ratio(X)	0.05	0.00	0.31	0.03	0.00	0.26	0.01	0.00	0.13	0.10	0.00	0.12
Avail Cap(c_a), veh/h	670	0	1021	622	0	1013	475	0	489	468	0	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.6	0.0	6.6	8.1	0.0	6.4	15.3	0.0	14.7	15.8	0.0	14.7
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.1	0.0	0.6	0.0	0.0	0.6	0.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	2.8	0.2	0.0	2.2	0.1	0.0	0.8	0.6	0.0	0.7
LnGrp Delay(d),s/veh	7.8	0.0	7.4	8.2	0.0	7.0	15.3	0.0	15.3	16.2	0.0	15.2
LnGrp LOS	A		A	A		A	B		B	B		B
Approach Vol, veh/h	350			276			70			106		
Approach Delay, s/veh	7.4			7.0			15.3			15.6		
Approach LOS	A			A			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	35.0		20.0		35.0		20.0					
Change Period (Y+R <sub>c</sub> ), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	30.5		15.5		30.5		15.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			9.1									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

42: Dunlap & Veterans Dr

09/10/2019

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑	↑	↑	↑				
Traffic Volume (veh/h)	4	373	15	55	449	65	12	32	29	45	25	6
Future Volume (veh/h)	4	373	15	55	449	65	12	32	29	45	25	6
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1872	1872	1835	1872	1910	1872	1910
Adj Flow Rate, veh/h	4	393	16	58	473	68	13	34	31	47	26	6
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	630	1854	75	697	1912	855	153	49	44	248	36	8
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.06	0.06	0.06	0.06	0.06	0.06
Sat Flow, veh/h	857	3449	140	977	3557	1591	293	765	698	1017	562	130
Grp Volume(v), veh/h	4	200	209	58	473	68	78	0	0	79	0	0
Grp Sat Flow(s),veh/h/ln	857	1761	1829	977	1778	1591	1756	0	0	1709	0	0
Q Serve(g_s), s	0.1	1.9	1.9	1.0	2.2	0.6	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.3	1.9	1.9	2.9	2.2	0.6	1.3	0.0	0.0	1.3	0.0	0.0
Prop In Lane	1.00		0.08	1.00		1.00	0.17		0.40	0.59		0.08
Lane Grp Cap(c), veh/h	630	946	983	697	1912	855	246	0	0	292	0	0
V/C Ratio(X)	0.01	0.21	0.21	0.08	0.25	0.08	0.32	0.00	0.00	0.27	0.00	0.00
Avail Cap(c_a), veh/h	1646	3035	3152	1841	6074	2717	1127	0	0	1104	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.5	3.8	3.8	4.5	3.9	3.5	14.4	0.0	0.0	14.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.1	0.1	0.1	0.7	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.0	1.0	0.3	1.1	0.3	0.7	0.0	0.0	0.7	0.0	0.0
LnGrp Delay(d),s/veh	4.5	4.0	4.0	4.6	4.0	3.6	15.1	0.0	0.0	14.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B			B		
Approach Vol, veh/h	413				599			78			79	
Approach Delay, s/veh	4.0				4.0			15.1			14.9	
Approach LOS	A				A			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	23.3		8.0		23.3		8.0					
Change Period (Y+R <sub>c</sub> ), s	6.5		6.0		* 6.5		6.0					
Max Green Setting (Gmax), s	53.5		19.0		* 54		19.0					
Max Q Clear Time (g_c+l1), s	4.9		3.3		4.3		3.3					
Green Ext Time (p_c), s	11.9		0.5		12.0		0.5					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			5.5									
HCM 2010 LOS			A									
Notes												

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User approved pedestrian interval to be less than phase max green.

\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

## HCM 2010 Signalized Intersection Summary

47: Tyson Ave &amp; Mineral Wells/Veterans Dr

09/10/2019

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	1	2	1	1	2	1	1	2	1	2	1	1
Traffic Volume (veh/h)	132	436	268	30	389	58	72	175	164	380	150	44
Future Volume (veh/h)	132	436	268	30	389	58	72	175	164	380	150	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A <sub>pbT</sub> )	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1825	1825	1825	1853	1853	1853	1881	1881	1881	1872	1872	1872
Adj Flow Rate, veh/h	145	479	0	33	427	0	79	192	0	418	165	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	402	948	424	347	776	347	401	395	177	619	760	340
Arrive On Green	0.10	0.27	0.00	0.04	0.22	0.00	0.08	0.11	0.00	0.18	0.21	0.00
Sat Flow, veh/h	1739	3468	1552	1765	3522	1575	1792	3575	1599	3459	3557	1591
Grp Volume(v), veh/h	145	479	0	33	427	0	79	192	0	418	165	0
Grp Sat Flow(s),veh/h/ln	1739	1734	1552	1765	1761	1575	1792	1787	1599	1729	1778	1591
Q Serve(g_s), s	3.4	6.5	0.0	0.8	6.0	0.0	2.1	2.8	0.0	6.3	2.1	0.0
Cycle Q Clear(g_c), s	3.4	6.5	0.0	0.8	6.0	0.0	2.1	2.8	0.0	6.3	2.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	402	948	424	347	776	347	401	395	177	619	760	340
V/C Ratio(X)	0.36	0.51	0.00	0.10	0.55	0.00	0.20	0.49	0.00	0.68	0.22	0.00
Avail Cap(c_a), veh/h	717	2391	1070	1077	2428	1086	922	2464	1102	1579	1815	812
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.3	17.1	0.0	15.6	19.3	0.0	19.3	23.3	0.0	21.4	18.1	0.0
Incr Delay (d2), s/veh	0.4	0.4	0.0	0.0	0.6	0.0	0.1	0.9	0.0	1.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.1	0.0	0.4	3.0	0.0	1.0	1.4	0.0	3.1	1.1	0.0
LnGrp Delay(d),s/veh	14.7	17.5	0.0	15.6	19.9	0.0	19.4	24.3	0.0	22.7	18.2	0.0
LnGrp LOS	B	B		B	B		B	C		C	C	B
Approach Vol, veh/h		624			460			271		583		
Approach Delay, s/veh		16.9			19.6			22.9		21.4		
Approach LOS		B			B			C		C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	14.5	12.7	6.9	21.8	8.7	18.4	9.9	18.8				
Change Period (Y+R <sub>c</sub> ), s	4.5	6.5	4.5	6.5	4.5	6.5	4.5	6.5				
Max Green Setting (Gmax), s	25.5	38.5	25.5	38.5	20.5	28.5	15.5	38.5				
Max Q Clear Time (g_c+l1), s	8.3	4.8	2.8	8.5	4.1	4.1	5.4	8.0				
Green Ext Time (p_c), s	1.7	1.4	0.0	4.3	0.1	1.3	0.2	4.3				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				19.7								
HCM 2010 LOS				B								

# HCM 2010 Signalized Intersection Summary

49: TN-79 & TN-218

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑		↑	↑		↑	↑↑		↑	↑↑	
Traffic Volume (veh/h)	20	40	35	85	90	25	10	175	25	15	160	5
Future Volume (veh/h)	20	40	35	85	90	25	10	175	25	15	160	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1853	1853	1890	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	22	43	38	92	98	27	11	190	27	16	174	5
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	466	180	159	498	275	76	552	795	111	529	887	25
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1267	918	811	1305	1400	386	1206	3134	439	1154	3496	100
Grp Volume(v), veh/h	22	0	81	92	0	125	11	107	110	16	87	92
Grp Sat Flow(s),veh/h/ln	1267	0	1729	1305	0	1785	1206	1778	1795	1154	1761	1836
Q Serve(g_s), s	0.4	0.0	1.0	1.6	0.0	1.5	0.2	1.2	1.2	0.3	1.0	1.0
Cycle Q Clear(g_c), s	1.9	0.0	1.0	2.5	0.0	1.5	1.1	1.2	1.2	1.5	1.0	1.0
Prop In Lane	1.00		0.47	1.00		0.22	1.00		0.24	1.00		0.05
Lane Grp Cap(c), veh/h	466	0	340	498	0	351	552	451	455	529	446	465
V/C Ratio(X)	0.05	0.00	0.24	0.18	0.00	0.36	0.02	0.24	0.24	0.03	0.20	0.20
Avail Cap(c_a), veh/h	1146	0	1268	1199	0	1309	1155	1340	1353	1106	1327	1384
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.3	0.0	8.3	9.4	0.0	8.5	7.6	7.3	7.3	7.9	7.2	7.2
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.2	0.0	0.6	0.0	0.6	0.6	0.0	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.5	0.6	0.0	0.8	0.1	0.6	0.7	0.1	0.5	0.5
LnGrp Delay(d),s/veh	9.4	0.0	8.7	9.6	0.0	9.1	7.7	7.8	7.9	7.9	7.6	7.6
LnGrp LOS	A		A			A	A	A	A	A	A	
Approach Vol, veh/h	103				217			228			195	
Approach Delay, s/veh	8.8				9.3			7.8			7.7	
Approach LOS	A				A			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	12.7		11.8		12.7		11.8					
Change Period (Y+R <sub>c</sub> ), s	6.5		7.0		6.5		7.0					
Max Green Setting (Gmax), s	18.5		18.0		18.5		18.0					
Max Q Clear Time (g_c+l1), s	3.2		3.9		3.5		4.5					
Green Ext Time (p_c), s	2.8		0.9		2.7		0.9					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			8.4									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

52: Tyson Ave & Joy St

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	10	25	10	70	15	100	35	120	85	85	180	25
Future Volume (veh/h)	10	25	10	70	15	100	35	120	85	85	180	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1872	1853	1853	1890	1881	1881	1919	1844	1844	1881
Adj Flow Rate, veh/h	11	27	0	76	16	109	38	130	92	92	196	27
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	333	283	362	37	249	686	772	510	706	1306	177
Arrive On Green	0.18	0.18	0.00	0.18	0.18	0.18	0.06	0.37	0.37	0.11	0.42	0.42
Sat Flow, veh/h	1267	1872	1591	1371	206	1401	1792	2064	1364	1756	3100	421
Grp Volume(v), veh/h	11	27	0	76	0	125	38	111	111	92	110	113
Grp Sat Flow(s),veh/h/ln	1267	1872	1591	1371	0	1606	1792	1787	1641	1756	1752	1770
Q Serve(g_s), s	0.4	0.6	0.0	2.6	0.0	3.7	0.7	2.2	2.4	1.5	2.1	2.1
Cycle Q Clear(g_c), s	4.1	0.6	0.0	3.3	0.0	3.7	0.7	2.2	2.4	1.5	2.1	2.1
Prop In Lane	1.00			1.00		0.87	1.00		0.83	1.00		0.24
Lane Grp Cap(c), veh/h	272	333	283	362	0	285	686	669	614	706	738	745
V/C Ratio(X)	0.04	0.08	0.00	0.21	0.00	0.44	0.06	0.17	0.18	0.13	0.15	0.15
Avail Cap(c_a), veh/h	616	841	714	759	0	751	1207	1304	1197	1135	1278	1291
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.4	18.3	0.0	19.7	0.0	19.6	8.6	11.2	11.2	7.5	9.6	9.6
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.4	0.0	1.5	0.0	0.1	0.1	0.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.0	1.0	0.0	1.8	0.3	1.1	1.1	0.7	1.0	1.1
LnGrp Delay(d),s/veh	21.5	18.5	0.0	20.1	0.0	21.1	8.7	11.3	11.4	7.6	9.6	9.7
LnGrp LOS	C	B		C		C	A	B	B	A	A	A
Approach Vol, veh/h		38			201			260			315	
Approach Delay, s/veh		19.4			20.7			10.9			9.1	
Approach LOS		B			C			B			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	12.0	26.0		15.5	9.4	28.5		15.5				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0		6.0	6.0	6.0		6.0				
Max Green Setting (Gmax), s	19.0	39.0		24.0	19.0	39.0		25.0				
Max Q Clear Time (g_c+l1), s	3.5	4.4		6.1	2.7	4.1		5.7				
Green Ext Time (p_c), s	0.3	1.7		1.3	0.1	1.7		1.3				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			13.0									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary  
57: Restaurant/Jim Adams Dr & Mineral Wells

09/10/2019

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑		↑	↑		↑↑	↑	
Traffic Volume (veh/h)	109	730	29	6	715	97	9	2	22	128	9	138
Future Volume (veh/h)	109	730	29	6	715	97	9	2	22	128	9	138
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1872	1872	1910	1881	1881	1919	1872	1872	1910
Adj Flow Rate, veh/h	112	753	30	6	737	100	9	2	23	132	9	142
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	2	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	406	2034	81	324	1114	151	238	20	226	690	15	229
Arrive On Green	0.10	0.58	0.58	0.35	0.35	0.35	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	1783	3487	139	691	3148	427	1244	129	1489	2691	96	1510
Grp Volume(v), veh/h	112	384	399	6	416	421	9	0	25	132	0	151
Grp Sat Flow(s),veh/h/ln	1783	1778	1848	691	1778	1797	1244	0	1619	1346	0	1606
Q Serve(g_s), s	0.0	5.2	5.2	0.3	8.9	8.9	0.3	0.0	0.6	2.0	0.0	4.0
Cycle Q Clear(g_c), s	0.0	5.2	5.2	5.5	8.9	8.9	4.3	0.0	0.6	2.6	0.0	4.0
Prop In Lane	1.00		0.08	1.00		0.24	1.00		0.92	1.00		0.94
Lane Grp Cap(c), veh/h	406	1037	1078	324	629	636	238	0	245	690	0	244
V/C Ratio(X)	0.28	0.37	0.37	0.02	0.66	0.66	0.04	0.00	0.10	0.19	0.00	0.62
Avail Cap(c_a), veh/h	863	3181	3304	980	2317	2341	846	0	1036	2005	0	1028
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.8	5.0	5.0	13.2	12.3	12.3	20.0	0.0	16.6	17.7	0.0	18.0
Incr Delay (d2), s/veh	0.3	0.3	0.3	0.0	1.4	1.4	0.1	0.0	0.2	0.1	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.5	2.6	0.1	4.5	4.6	0.1	0.0	0.3	0.8	0.0	1.9
LnGrp Delay(d),s/veh	17.1	5.3	5.3	13.3	13.8	13.8	20.1	0.0	16.8	17.8	0.0	19.9
LnGrp LOS	B	A	A	B	B	B	C		B	B		B
Approach Vol, veh/h	895				843			34			283	
Approach Delay, s/veh	6.7				13.8			17.6			18.9	
Approach LOS	A				B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.4	22.0		12.9		32.4		12.9				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	16.0	59.0		29.0		81.0		29.0				
Max Q Clear Time (g_c+l1), s	2.0	10.9		6.3		7.2		6.0				
Green Ext Time (p_c), s	3.8	5.1		1.1		4.9		1.1				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				11.5								
HCM 2010 LOS				B								

# HCM 2010 Signalized Intersection Summary

62: Mineral Wells & Walmart/Memorial Dr

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑			↑	↑↑	↑	↑↑	↑	↑	↑↑	↑
Traffic Volume (veh/h)	156	85	21	25	97	368	7	195	69	309	158	256
Future Volume (veh/h)	156	85	21	25	97	368	7	195	69	309	158	256
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1844	1844	1881	1890	1853	1853	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	164	89	22	26	102	387	7	205	0	325	166	269
Adj No. of Lanes	2	1	0	0	1	2	1	2	1	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	668	391	97	138	432	759	199	397	177	878	461	392
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.11	0.11	0.00	0.24	0.24	0.24
Sat Flow, veh/h	1735	1429	353	189	1577	2773	1756	3504	1568	3584	1881	1599
Grp Volume(v), veh/h	164	0	111	128	0	387	7	205	0	325	166	269
Grp Sat Flow(s),veh/h/ln	868	0	1782	1767	0	1386	1756	1752	1568	1792	1881	1599
Q Serve(g_s), s	4.1	0.0	2.4	0.0	0.0	5.9	0.2	2.8	0.0	3.8	3.7	7.7
Cycle Q Clear(g_c), s	6.8	0.0	2.4	2.7	0.0	5.9	0.2	2.8	0.0	3.8	3.7	7.7
Prop In Lane	1.00		0.20	0.20		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	668	0	488	570	0	759	199	397	177	878	461	392
V/C Ratio(X)	0.25	0.00	0.23	0.22	0.00	0.51	0.04	0.52	0.00	0.37	0.36	0.69
Avail Cap(c_a), veh/h	987	0	815	814	0	1159	1188	2370	1060	2424	1273	1082
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	0.0	14.1	14.2	0.0	15.4	19.8	21.0	0.0	15.8	15.7	17.2
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.3	0.0	0.9	0.1	0.8	0.0	0.2	0.4	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	1.2	1.4	0.0	2.4	0.1	1.4	0.0	1.9	1.9	3.5
LnGrp Delay(d),s/veh	17.1	0.0	14.4	14.6	0.0	16.3	19.9	21.8	0.0	15.9	16.1	18.8
LnGrp LOS	B		B	B		B	B	C		B	B	B
Approach Vol, veh/h	275				515			212			760	
Approach Delay, s/veh	16.0				15.9			21.7			17.0	
Approach LOS	B				B			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	18.3		20.3		11.7		20.3					
Change Period (Y+R <sub>c</sub> ), s	6.0		* 6.5		6.0		6.5					
Max Green Setting (Gmax), s	34.0		* 23		34.0		21.0					
Max Q Clear Time (g_c+l1), s	9.7		8.8		4.8		7.9					
Green Ext Time (p_c), s	2.6		5.0		0.7		4.7					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			17.1									
HCM 2010 LOS			B									
Notes												

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User approved volume balancing among the lanes for turning movement.

\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 2010 Signalized Intersection Summary

64: TN-641 & Memorial Dr

09/10/2019



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑		
Traffic Volume (veh/h)	194	202	19	237	166	32		
Future Volume (veh/h)	194	202	19	237	166	32		
Number	2	12	1	6	7	14		
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1853	1853	1872	1872	1844	1844		
Adj Flow Rate, veh/h	211	0	21	258	180	0		
Adj No. of Lanes	2	1	1	2	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1747	782	732	2243	247	221		
Arrive On Green	0.50	0.00	0.03	0.63	0.14	0.00		
Sat Flow, veh/h	3614	1575	1783	3651	1756	1568		
Grp Volume(v), veh/h	211	0	21	258	180	0		
Grp Sat Flow(s),veh/h/ln	1761	1575	1783	1778	1756	1568		
Q Serve(g_s), s	1.6	0.0	0.3	1.5	4.9	0.0		
Cycle Q Clear(g_c), s	1.6	0.0	0.3	1.5	4.9	0.0		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1747	782	732	2243	247	221		
V/C Ratio(X)	0.12	0.00	0.03	0.12	0.73	0.00		
Avail Cap(c_a), veh/h	3079	1378	1378	3110	1030	919		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	6.8	0.0	5.0	3.7	20.7	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	4.9	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.1	0.7	2.7	0.0		
LnGrp Delay(d),s/veh	6.8	0.0	5.0	3.7	25.6	0.0		
LnGrp LOS	A		A	A	C			
Approach Vol, veh/h	211			279	180			
Approach Delay, s/veh	6.8			3.8	25.6			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+R <sub>c</sub> ), s	6.8	31.0		12.6		37.7		
Change Period (Y+R <sub>c</sub> ), s	5.5	6.0		5.5		6.0		
Max Green Setting (Gmax), s	19.5	44.0		29.5		44.0		
Max Q Clear Time (g_c+l1), s	2.3	3.6		6.9		3.5		
Green Ext Time (p_c), s	0.0	2.6		0.8		2.6		
Intersection Summary								
HCM 2010 Ctrl Delay	10.6							
HCM 2010 LOS	B							

## HCM 2010 Signalized Intersection Summary

67: Store/Volunteer Dr &amp; Memorial Dr

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑			↑	↑	↑	↑	
Traffic Volume (veh/h)	114	326	0	0	356	76	0	0	0	101	0	146
Future Volume (veh/h)	114	326	0	0	356	76	0	0	0	101	0	146
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1863	1863	1900	1881	1844	1844	1853	1853	1890
Adj Flow Rate, veh/h	119	340	0	0	371	79	0	0	0	105	0	152
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	466	1668	0	190	770	162	0	272	231	451	0	232
Arrive On Green	0.07	0.47	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.15	0.00	0.15
Sat Flow, veh/h	1783	3651	0	1036	2911	613	0	1844	1568	1765	0	1575
Grp Volume(v), veh/h	119	340	0	0	224	226	0	0	0	105	0	152
Grp Sat Flow(s),veh/h/ln	1783	1778	0	1036	1770	1754	0	1844	1568	1765	0	1575
Q Serve(g_s), s	1.7	2.1	0.0	0.0	4.0	4.1	0.0	0.0	0.0	2.0	0.0	3.4
Cycle Q Clear(g_c), s	1.7	2.1	0.0	0.0	4.0	4.1	0.0	0.0	0.0	2.0	0.0	3.4
Prop In Lane	1.00			1.00		0.35	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	466	1668	0	190	468	464	0	272	231	451	0	232
V/C Ratio(X)	0.26	0.20	0.00	0.00	0.48	0.49	0.00	0.00	0.00	0.23	0.00	0.65
Avail Cap(c_a), veh/h	1280	6210	0	1725	3089	3063	0	1561	1327	1661	0	1313
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.1	5.9	0.0	0.0	11.7	11.7	0.0	0.0	0.0	14.6	0.0	15.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.1	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	1.0	0.0	1.6
LnGrp Delay(d),s/veh	8.2	5.9	0.0	0.0	12.0	12.0	0.0	0.0	0.0	14.7	0.0	16.4
LnGrp LOS	A	A			B	B			B		B	
Approach Vol, veh/h	459				450				0			257
Approach Delay, s/veh	6.5				12.0				0.0			15.7
Approach LOS	A				B							B
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	7.7	19.0		11.1		26.7		11.1				
Change Period (Y+R <sub>c</sub> ), s	5.0	9.0		* 5.5		9.0		5.5				
Max Green Setting (Gmax), s	20.0	66.0		* 32		66.0		31.5				
Max Q Clear Time (g_c+l1), s	3.7	6.1		0.0		4.1		5.4				
Green Ext Time (p_c), s	0.2	1.8		0.0		1.8		0.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				10.7								
HCM 2010 LOS				B								
Notes												

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\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary  
74: Volunteer Dr & Jim Adams Dr/Restaurant

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙											
Traffic Volume (veh/h)	133	2	59	4	3	0	42	189	8	4	240	152
Future Volume (veh/h)	133	2	59	4	3	0	42	189	8	4	240	152
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1863	1863	1900	1863	1863	1900	1872	1872	1910
Adj Flow Rate, veh/h	143	2	63	4	3	0	45	203	9	4	258	163
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	442	9	284	383	342	0	355	901	40	542	328	207
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.00	0.05	0.51	0.51	0.31	0.31	0.31
Sat Flow, veh/h	1415	49	1549	1331	1863	0	1774	1770	78	1171	1074	678
Grp Volume(v), veh/h	143	0	65	4	3	0	45	0	212	4	0	421
Grp Sat Flow(s),veh/h/ln	1415	0	1599	1331	1863	0	1774	0	1849	1171	0	1752
Q Serve(g_s), s	3.6	0.0	1.4	0.1	0.1	0.0	0.6	0.0	2.5	0.1	0.0	8.6
Cycle Q Clear(g_c), s	3.6	0.0	1.4	1.5	0.1	0.0	0.6	0.0	2.5	0.1	0.0	8.6
Prop In Lane	1.00		0.97	1.00		0.00	1.00		0.04	1.00		0.39
Lane Grp Cap(c), veh/h	442	0	293	383	342	0	355	0	941	542	0	536
V/C Ratio(X)	0.32	0.00	0.22	0.01	0.01	0.00	0.13	0.00	0.23	0.01	0.00	0.79
Avail Cap(c_a), veh/h	2105	0	2171	1947	2530	0	677	0	1611	1205	0	1527
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.5	0.0	13.6	14.2	13.0	0.0	8.6	0.0	5.3	9.4	0.0	12.4
Incr Delay (d2), s/veh	0.4	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.6	0.0	0.0	0.0	0.3	0.0	1.2	0.0	0.0	4.2
LnGrp Delay(d),s/veh	14.9	0.0	13.9	14.2	13.0	0.0	8.6	0.0	5.4	9.4	0.0	13.4
LnGrp LOS	B		B	B	B		A		A	A		B
Approach Vol, veh/h	208				7			257			425	
Approach Delay, s/veh	14.6				13.7			5.9			13.3	
Approach LOS	B				B			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	7.9	17.9		13.2		25.9		13.2				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	9.0	34.0		53.0		34.0		53.0				
Max Q Clear Time (g_c+l1), s	2.6	10.6		3.5		4.5		5.6				
Green Ext Time (p_c), s	0.0	1.4		0.8		1.4		0.8				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			11.5									
HCM 2010 LOS			B									

## HCM 2010 Signalized Intersection Summary

79: Volunteer Dr &amp; School/Patriot Ave

09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	3	4	13	41	4	23	7	256	48	12	323	11
Future Volume (veh/h)	3	4	13	41	4	23	7	256	48	12	323	11
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1891	1891	1928	1835	1835	1872	1835	1835	1872	1919	1919	1957
Adj Flow Rate, veh/h	3	4	14	44	4	25	8	275	52	13	347	12
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	274	21	72	302	18	111	329	423	80	350	539	19
Arrive On Green	0.00	0.06	0.06	0.03	0.08	0.08	0.01	0.28	0.28	0.02	0.29	0.29
Sat Flow, veh/h	1801	369	1293	1747	220	1373	1747	1501	284	1827	1844	64
Grp Volume(v), veh/h	3	0	18	44	0	29	8	0	327	13	0	359
Grp Sat Flow(s),veh/h/ln	1801	0	1662	1747	0	1593	1747	0	1785	1827	0	1907
Q Serve(g_s), s	0.1	0.0	0.4	0.9	0.0	0.7	0.1	0.0	6.1	0.2	0.0	6.3
Cycle Q Clear(g_c), s	0.1	0.0	0.4	0.9	0.0	0.7	0.1	0.0	6.1	0.2	0.0	6.3
Prop In Lane	1.00			0.78	1.00		0.86	1.00		0.16	1.00	0.03
Lane Grp Cap(c), veh/h	274	0	93	302	0	129	329	0	503	350	0	557
V/C Ratio(X)	0.01	0.00	0.19	0.15	0.00	0.22	0.02	0.00	0.65	0.04	0.00	0.64
Avail Cap(c_a), veh/h	1872	0	1526	1808	0	835	1211	0	1310	1253	0	1400
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.9	0.0	17.2	16.4	0.0	16.4	10.2	0.0	12.0	9.9	0.0	11.8
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.2	0.0	0.3	0.0	0.0	1.4	0.0	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	0.4	0.0	0.3	0.1	0.0	3.2	0.1	0.0	3.5
LnGrp Delay(d),s/veh	16.9	0.0	17.6	16.6	0.0	16.7	10.2	0.0	13.5	10.0	0.0	13.0
LnGrp LOS	B		B	B		B	B		B	A		B
Approach Vol, veh/h		21			73			335			372	
Approach Delay, s/veh		17.5			16.6			13.4			12.9	
Approach LOS		B			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	6.2	8.1	6.1	17.7	7.1	7.1	5.7	18.1				
Change Period (Y+R <sub>c</sub> ), s	6.0	5.0	5.5	7.0	6.0	5.0	5.5	7.0				
Max Green Setting (Gmax), s	34.0	20.0	19.5	28.0	34.0	35.0	19.5	28.0				
Max Q Clear Time (g_c+l1), s	2.1	2.7	2.2	8.1	2.9	2.4	2.1	8.3				
Green Ext Time (p_c), s	0.0	0.1	0.0	2.6	0.1	0.1	0.0	2.6				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			13.6									
HCM 2010 LOS			B									

# HCM 2010 Signalized Intersection Summary

85: Wilson St & Lone Oak

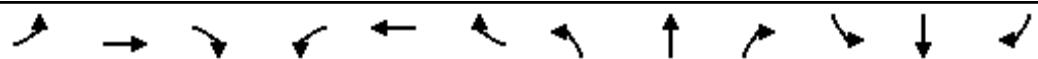
09/10/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	40	10	10	30	5	5	10	5	10	20	15
Future Volume (veh/h)	15	40	10	10	30	5	5	10	5	10	20	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1910	1872	1910	1900	1863	1900
Adj Flow Rate, veh/h	16	43	11	11	33	5	5	11	5	11	22	16
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	232	539	120	229	589	79	191	330	123	183	287	167
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	239	1218	271	233	1330	178	212	1100	410	190	955	555
Grp Volume(v), veh/h	70	0	0	49	0	0	21	0	0	49	0	0
Grp Sat Flow(s),veh/h/ln	1728	0	0	1741	0	0	1722	0	0	1700	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0	0.5	0.0	0.0	0.3	0.0	0.0	0.7	0.0	0.0
Prop In Lane	0.23		0.16	0.22		0.10	0.24		0.24	0.22		0.33
Lane Grp Cap(c), veh/h	891	0	0	897	0	0	644	0	0	636	0	0
V/C Ratio(X)	0.08	0.00	0.00	0.05	0.00	0.00	0.03	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	891	0	0	897	0	0	644	0	0	636	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.7	0.0	0.0	5.6	0.0	0.0	8.7	0.0	0.0	8.8	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d),s/veh	5.8	0.0	0.0	5.7	0.0	0.0	8.8	0.0	0.0	9.1	0.0	0.0
LnGrp LOS	A		A			A			A			
Approach Vol, veh/h	70			49			21			49		
Approach Delay, s/veh	5.8			5.7			8.8			9.1		
Approach LOS	A		A			A			A			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+Rc), s	15.0		20.0		15.0		20.0					
Change Period (Y+Rc), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	10.5		15.5		10.5		15.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			7.0									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

85: Wilson St & Lone Oak

09/10/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	35	5	10	25	5	70	30	15	10	25	20
Future Volume (veh/h)	15	35	5	10	25	5	70	30	15	10	25	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1910	1872	1910	1900	1863	1900
Adj Flow Rate, veh/h	16	38	5	11	27	5	76	33	16	11	27	22
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	562	65	255	549	89	405	162	59	162	283	187
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	310	1269	146	283	1239	200	798	541	196	134	944	624
Grp Volume(v), veh/h	59	0	0	43	0	0	125	0	0	60	0	0
Grp Sat Flow(s),veh/h/ln	1726	0	0	1722	0	0	1535	0	0	1702	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.6	0.0	0.0	0.5	0.0	0.0	1.9	0.0	0.0	0.9	0.0	0.0
Prop In Lane	0.27		0.08	0.26		0.12	0.61		0.13	0.18		0.37
Lane Grp Cap(c), veh/h	895	0	0	892	0	0	626	0	0	632	0	0
V/C Ratio(X)	0.07	0.00	0.00	0.05	0.00	0.00	0.20	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	895	0	0	892	0	0	626	0	0	632	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.6	0.0	0.0	5.6	0.0	0.0	9.2	0.0	0.0	8.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0	0.7	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.3	0.0	0.0	1.0	0.0	0.0	0.5	0.0	0.0
LnGrp Delay(d),s/veh	5.8	0.0	0.0	5.7	0.0	0.0	9.9	0.0	0.0	9.2	0.0	0.0
LnGrp LOS	A		A			A			A			
Approach Vol, veh/h	59			43			125			60		
Approach Delay, s/veh	5.8			5.7			9.9			9.2		
Approach LOS	A		A			A			A			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	15.0		20.0		15.0		20.0					
Change Period (Y+R <sub>c</sub> ), s	4.5		4.5		4.5		4.5					
Max Green Setting (Gmax), s	10.5		15.5		10.5		15.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			8.3									
HCM 2010 LOS			A									



## Appendix E: CLEARANCE INTERVALS

Prepared on behalf of the  
City of Paris, TN by:



in cooperation with



## Comparison of Local Controller Settings (Pedestrian Timings, Pedestrian Clearance Intervals, and Vehicle Clearance Intervals)

ID	Intersection	Pedestrian Timings				Intersection Geometry				Vehicle Clearance Intervals											
		Phase	Movement	Approach	NBT	NBL	WBT	WBL	SBT	SBL	EBT	EBL	1	2	3	4	5	6	7	8	
N/A	W Wood St & Irvine St	Phase Movement		Approach	50	60		55		57			1	2	3	4	5	6	7	8	
		Existing W, FDW Time		Intersection Width	30	30		30		30			EBT			NBT		WBT		SBT	
		Crossing Distance		Approach speed	-1	-1		4		-5			3.5	1.5		3.5	1.5				
		Theoretical Pedestrian Clearance Time		Grade									4.7			4.2		4.3		3.8	
		Theoretical Walk, Flashing Don't Walk Times											4.2	0.4		3.8	0.3		3.8	0.4	
		<b>Chosen Walk, Flashing Don't Walk Times</b>											4.0	1.5		3.5	1.5		4.0	1.5	
	Wood St & Market St	Phase Movement		Approach	75	80	90		85	90	90			1	2	3	4	5	6	7	8
		Existing W, FDW Time		Intersection Width	30	25	30		30	25	30			3.5	1.5	3.5	1.5				
		Crossing Distance		Approach speed	-1	-1		1		1			4.4	5.8		4.8	4.2	4.6		4.8	
		Theoretical Pedestrian Clearance Time		Grade									2.4	2.0	3.8	0.7		3.8	1.0	2.5	1.7
		Theoretical Walk, Flashing Don't Walk Times											3.0	2.0	3.5	1.5		3.0	2.0	3.5	1.5
	<b>Chosen Walk, Flashing Don't Walk Times</b>												7.0	19.0	7.0	17.0	7.0	17.0	7.0	19.0	
	N Market St & Washington St	Phase Movement		Approach	85	80		85		70											
		Existing W, FDW Time		Intersection Width	30	30		30		30											
		Crossing Distance		Approach speed	1	0		-1		-1											
		Theoretical Pedestrian Clearance Time		Grade									22.0	21.7	16.9	18.3		3.5	1.5	3.5	1.5
		Theoretical Walk, Flashing Don't Walk Times											7.0	19.0	7.0	18.7	7.0	16.1	7.0	15.3	
	<b>Chosen Walk, Flashing Don't Walk Times</b>												7.0	19.0	7.0	19.0	7.0	14.0	7.0	16.0	
	N Market St & Ruff St	Phase Movement		Approach	60	75	55		75												
		Existing W, FDW Time		Intersection Width	30	30	30		30												
		Crossing Distance		Approach speed	-2	-2	1		1												
		Theoretical Pedestrian Clearance Time		Grade									10.3	18.6	10.9	17.4		3.6	0.9	3.8	0.7
		Theoretical Walk, Flashing Don't Walk Times											7.0	7.3	7.0	15.6	7.0	7.9	7.0	14.4	
	<b>Chosen Walk, Flashing Don't Walk Times</b>												7.0	8.0	7.0	16.0	7.0	8.0	7.0	15.0	
	N Market St & Rison St	Phase Movement		Approach	50	50	45		50	53											
		Existing W, FDW Time		Intersection Width	30	30	30		30	25											
		Crossing Distance		Approach speed	1	0	-1		-1	-1											
		Theoretical Pedestrian Clearance Time		Grade									2.8	3.0	3.8	1.0		3.8	0.2	2.5	1.0
		Theoretical Walk, Flashing Don't Walk Times											Chosen Walk, Flashing Don't Walk Times	3.5	1.5	3.5	1.5	3.0	1.5	3.5	1.5
	<b>Chosen Walk, Flashing Don't Walk Times</b>												7.0	19.0	7.0	19.0	7.0	14.0	7.0	16.0	
	S Market St & Blythe St	Phase Movement		Approach	60	85	65		85												
		Existing W, FDW Time		Intersection Width	30	30	30		30												
		Crossing Distance		Approach speed	-1	-1	-1		1												
		Theoretical Pedestrian Clearance Time		Grade									43	70	42	68		3.6	0.5	3.8	0.6
		Theoretical Walk, Flashing Don't Walk Times											12.3	20.0	12.0	19.4		3.5	1.5	4.0	4.7
	<b>Chosen Walk, Flashing Don't Walk Times</b>												7.0	9.3	7.0	17.0	7.0	9.0	7.0	16.4	
	<b>Chosen Walk, Flashing Don't Walk Times</b>												7.0	10.0	7.0	17.0	7.0	9.0	7.0	17.0	
	E Washington St & N Poplar	Phase Movement		Approach	87	85	87		86												
		Existing W, FDW Time		Intersection Width	30	30	30		30												
		Crossing Distance		Approach speed	-1	-1	2		1												
		Theoretical Pedestrian Clearance Time		Grade									22.3	17.7	18.0	21.4		3.6	0.3	3.8	1.0
		Theoretical Walk, Flashing Don't Walk Times											7.0	19.3	7.0	14.7	7.0	15.0	7.0	18.4	
	<b>Chosen Walk, Flashing Don't Walk Times</b>												7.0	20.0	7.0	15.0	7.0	15.0	7.0	19.0	
	E Wood St & Poplar	Phase Movement		Approach	80	85	85		85												
		Existing W, FDW Time		Intersection Width	30	30	30		30												
		Crossing Distance		Approach speed	-1	-1	1		1												
		Theoretical Pedestrian Clearance Time		Grade									17.7	17.1	21.7	22.0		3.8	0.9	4.6	4.7
		Theoretical Walk, Flashing Don't Walk Times											7.0	14.7	7.0	14.1	7.0	18.7	7.0	19.0	
	<b>Chosen Walk, Flashing Don't Walk Times</b>												7.0	15.0	7.0	15.0	7.0	19.0	7.0	19.0	

## **Comparison of Local Controller Settings (Pedestrian Timings, Pedestrian Clearance Intervals, and Vehicle Clearance Intervals)**

ID	Intersection	Pedestrian Timings				Intersection Geometry						Vehicle Clearance Intervals															
		P2	P4	P6	P8	Approach	NBT	NBL	WBT	WBL	SBT	SBL	EBT	EBL	Phase	1	2	3	4	5	6	7	8				
N/A	E Wood St & Brewer	Phase Movement	EB	NB	WB	SB	Approach	Intersection Width	60	60	80	60	60	60	Phase	1	2	3	4	5	6	7	8				
		Existing W, FDW Time					Intersection Width								Movement	EBT			NBT			WBT		SBT			
		Crossing Distance	42	38	49	61	Approach speed	30	30	30	30				Theoretical Clearance		3.5	1.5		3.5	1.5			4.5			
		Theoretical Pedestrian Clearance Time	12.0	10.9	14.0	17.4	Grade	-2	1	1	1				Theoretical Y   AR		4.3		4.4		4.1			3.6			
		Theoretical Walk, Flashing Don't Walk Times	7.0	9.0	7.0	7.9	7.0	11.0	7.0	14.4					Chosen Y   AR		3.8	0.5		3.9	0.5		3.6	0.8			
		<i>Chosen Walk, Flashing Don't Walk Times</i>	7.0	9.0	7.0	8.0	7.0	11.0	7.0	15.0							3.5	1.5		3.5	1.5		3.5	1.5			
	E Wood St & Highland	Phase Movement					Approach	Intersection Width	60	60	65	55			Phase	1	2	3	4	5	6	7	8				
		Existing W, FDW Time					Intersection Width								Movement	E/W	N/S										
		Crossing Distance					Approach speed	30	35	30	35				Theoretical Clearance		4.0	2.0	3.5	2.0							
		Theoretical Pedestrian Clearance Time					Grade	-4	-1	-3	2				Theoretical Y   AR		4.5		4.7								
		Theoretical Walk, Flashing Don't Walk Times													Chosen Y   AR		4.2	0.3	4.1	0.6							
		<i>Chosen Walk, Flashing Don't Walk Times</i>															4.0	2.0	4.0	1.5							
	E Wood St & Lake St	Phase Movement					Approach	Intersection Width	55	55	65	55			Phase	1	2	3	4	5	6	7	8				
		Existing W, FDW Time					Intersection Width								Movement	EBT			NBT			WBT		SBT			
		Crossing Distance					Approach speed	30	35	30	35				Theoretical Clearance		3.5	1.5		3.5	1.5						
		Theoretical Pedestrian Clearance Time					Grade	1	-1	-1					Theoretical Y   AR		4.3		4.0		4.4			4.4			
		Theoretical Walk, Flashing Don't Walk Times													Chosen Y   AR		4.1	0.2	3.6	0.4		4.2	0.2		3.8	0.6	
		<i>Chosen Walk, Flashing Don't Walk Times</i>															3.5	1.5		3.5	1.5			3.5	1.5		
	E Wood St & Tyson Ave	Phase Movement					Approach	Intersection Width	80	75	75		75		Phase	1	2	3	4	5	6	7	8				
		Existing W, FDW Time					Intersection Width								Movement	WBL	EBT		NBL			WBT		SBT			
		Crossing Distance					Approach speed	30	35	25		35			Theoretical Clearance		4.2	2.0	4.2	1.0		4.0	1.0				
		Theoretical Pedestrian Clearance Time					Grade	1	-1			1			Theoretical Y   AR		4.1		4.5		4.0		4.7				
		Theoretical Walk, Flashing Don't Walk Times													Chosen Y   AR		2.5	1.6	4.0	0.5	2.8	1.3	4.2	0.5			
		<i>Chosen Walk, Flashing Don't Walk Times</i>															3.5	2.0	4.5	1.5	3.5	1.5	4.5	1.5			
	E Wood St & Volunteer Dr	Phase Movement	P2	P4			Approach	Intersection Width	95	90	95		100		Phase	1	2	3	4	5	6	7	8				
		Existing W, FDW Time	EB	NB			Intersection Width								Movement	WBL	EBT		NBL			WBT		SBT			
		Crossing Distance	8.0	12.0	10.0	15.0	Approach speed	25	40	30		40			Theoretical Clearance		5.0	1.0	5.0	1.5		5.0					
		Theoretical Pedestrian Clearance Time	74	72			Grade	1	2			-4			Theoretical Y   AR		4.3		5.7		4.6		4.8				
		Theoretical Walk, Flashing Don't Walk Times	21.1	20.6											Chosen Y   AR		2.7	1.6	5.0	0.7	2.4	2.1	4.2	0.6			
		<i>Chosen Walk, Flashing Don't Walk Times</i>	7.0	18.1	7.0	17.6											3.5	2.0	4.5	1.5	3.5	2.0	4.5	1.5			
		* Added "Walk" time due to PPB being 15' from crosswalk	8.0	19.0	8.0	18.0																					
	E Wood St & Chickasaw	Phase Movement	P2	P4	P6	P8	Approach	Intersection Width	95	90	95		100		Phase	1	2	3	4	5	6	7	8				
		Existing W, FDW Time	EB	NB	WB	SB	Intersection Width								Movement	EBT			NBL			WBT		SBT			
		Crossing Distance	101	67	104	62	Approach speed	40	30	25	40	30	25		Theoretical Clearance		5.0	1.0	5.0	1.5		5.0					
		Theoretical Pedestrian Clearance Time	25.3	16.8	26.0	15.5	Grade	-2	2	2		1			Theoretical Y   AR		4.3		5.7		4.6		4.8				
		Theoretical Walk, Flashing Don't Walk Times	7.0	22.3	7.0	13.8	7.0	23.0	7.0	12.5					Chosen Y   AR		2.7	1.6	5.0	0.7	2.4	2.1	4.2	0.6			
		<i>Chosen Walk, Flashing Don't Walk Times</i>	7.0	23.0	7.0	14.0	7.0	23.0	7.0	13.0							3.5	2.0	4.5	1.5	3.5	2.0	4.5	1.5			
	Veterans Dr & Dunlap	Phase Movement	P3				Approach	Intersection Width	110	65	75	100	75	85	Phase	1	2	3	4	5	6	7	8				
		Existing W, FDW Time	SB				Intersection Width								Movement	EBL	WBT		N/S			WBL		SBT			
		Crossing Distance	10.0	10.0			Approach speed	30	40	30	30	40	30		Theoretical Clearance		5.0	2.0	4.5	2.0	4.0	2.0		4.5	2.0		
		Theoretical Pedestrian Clearance Time	138				Grade	3	-1	-1		1			Theoretical Y   AR		4.2		4.8		5.2		4.1		4.7		
		Theoretical Walk, Flashing Don't Walk Times	39.4												Chosen Y   AR		2.8	1.4	4.6	0.2	3.8	1.4		2.9	1.2	4.3	0.4
		<i>Chosen Walk, Flashing Don't Walk Times</i>	7.0	36.4													3.5	1.5	4.5	1.5	4.0	1.5	3.5	1.5	4.5	1.5	
		* Added "Walk" time due to PPB being 12' from crosswalk (not heavy ped. Movement)	10.0	37.0																							
	Veterans Dr & Tyson Ave	Phase Movement					Approach	Intersection Width	75	95	85	80	90	90	95	Phase	1	2	3	4	5	6	7	8			
		Existing W, FDW Time					Intersection Width								Movement	SBL	NBT		EBL			WBT		EBT			
		Crossing Distance					Approach speed	40	30	40	30	40	30		Theoretical Clearance		3.5	1.0	4.5	2.0	3.5	0.0	4.5	2.0			
		Theoretical Pedestrian Clearance Time					Grade	-2	4	-1		1			Theoretical Y   AR		4.4		5.1		4.4		4.6				
		Theoretical Walk, Flashing Don't Walk Times													Chosen Y   AR		2.9	1.5	4.7	0.4	2.8	1.6	4.1	0.5			
		<i>Chosen Walk, Flashing Don't Walk Times</i>															3.5	1.5	4.5	1.5	3.5	1.5	4.5	1.5	4.5	1.5	

## Comparison of Local Controller Settings (Pedestrian Timings, Pedestrian Clearance Intervals, and Vehicle Clearance Intervals)

ID	Intersection	Pedestrian Timings				Intersection Geometry				Vehicle Clearance Intervals																		
		Phase	P2	P6	P8	Approach	NBT	NBL	WBT	WBL	SBT	SBL	EBT	EBL	Phase	1	2	3	4	5	6	7	8					
N/A	Tyson Ave & Joy St	Phase Movement	<b>P2</b>	<b>P6</b>	<b>P8</b>	Approach	NBT	NBL	WBT	WBL	SBT	SBL	EBT	EBL	Phase Movement	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>					
		Existing W, FDW Time	<i>NB</i>	<i>SB</i>	<i>WB</i>	Intersection Width	135	110	100		125	85	100		Phase Movement	<b>SBL</b>	<b>NBT</b>		<b>EBT</b>	<b>NBL</b>	<b>SBT</b>		<b>WBT</b>					
		Crossing Distance	7.0	8.0	7.0	8.0	10.0	15.0			40	30	30		Existing Y   AR	4.0	2.0	4.0	2.0	4.0	2.0	4.0	2.0					
		Theoretical Pedestrian Clearance Time	78		54		85				Grade	-2	1	2		Theoretical Clearance	4.1	5.9		5.0	4.9	5.3		4.8				
		Theoretical Walk, Flashing Don't Walk Times	22.3		15.4		24.3								Theoretical Y   AR	2.7	1.4	4.7	1.2	3.8	1.2	3.0	1.9	4.2	1.1		3.6	1.2
		<i>Chosen Walk, Flashing Don't Walk Times</i>	<b>7.0</b>	<b>19.3</b>	<b>7.0</b>	<b>12.4</b>	<b>7.0</b>	<b>21.3</b>							Chosen Y / AR	<b>3.5</b>	<b>2.0</b>	<b>5.0</b>	<b>1.5</b>	<b>4.0</b>	<b>1.5</b>	<b>5.0</b>	<b>1.5</b>	<b>4.0</b>	<b>1.5</b>			
		* Added "Walk" time due to PPB being greater than 6' from crosswalk																										
	Austin Peay & Paris Bypass	Phase Movement				Approach	NBT	NBL	WBT	WBL	SBT	SBL	EBT	EBL	Phase Movement	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>					
		Existing W, FDW Time				Intersection Width	105		105		100		110		Existing Y   AR													
		Crossing Distance				Approach speed	50		40		50		40		Theoretical Clearance	4.0	2.0	4.0	2.0	4.0	2.0	4.0	2.0					
		Theoretical Pedestrian Clearance Time				Grade	-1		1		1		-1		Theoretical Y   AR	5.8		5.5		5.5		5.5		5.2				
		Theoretical Walk, Flashing Don't Walk Times													Chosen Y / AR	<b>5.3</b>	<b>0.5</b>	<b>4.6</b>	<b>0.9</b>	<b>5.1</b>	<b>0.4</b>	<b>4.3</b>	<b>0.8</b>					
		<i>Chosen Walk, Flashing Don't Walk Times</i>														<b>5.0</b>	<b>1.5</b>	<b>4.5</b>	<b>1.5</b>	<b>5.0</b>	<b>1.5</b>	<b>4.5</b>	<b>1.5</b>					
		* Added "Walk" time due to PPB being greater than 6' from crosswalk																										
N/A	Mineral Wells & Jim Adams	Phase Movement	<b>P2</b>	<b>P3</b>		Approach	NBT	NBL	WBT	WBL	SBT	SBL	EBT	EBL	Phase Movement	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>					
		Existing W, FDW Time	<i>NB</i>	<i>WB</i>		Intersection Width	95		100		105	105	95		Existing Y   AR	<b>SBL</b>	<b>NBT</b>	<b>WBT</b>	<b>EBT</b>	<b>SBT</b>								
		Crossing Distance	10.0	12.0	10.0	12.0					Approach speed	35	35	35		Theoretical Clearance	4.0	2.0	4.0	2.0	4.0	2.0						
		Theoretical Pedestrian Clearance Time	70		81					Grade	-1	-1	-1		Theoretical Y   AR	4.9	5.2	5.1	5.0					5.2				
		Theoretical Walk, Flashing Don't Walk Times	20.0		23.1										Chosen Y / AR	<b>2.5</b>	<b>2.4</b>	<b>4.2</b>	<b>1.0</b>	<b>4.2</b>	<b>1.0</b>							
		<i>Chosen Walk, Flashing Don't Walk Times</i>	<b>7.0</b>	<b>17.0</b>	<b>7.0</b>	<b>20.1</b>										<b>3.5</b>	<b>2.5</b>	<b>4.5</b>	<b>1.5</b>									
		* Added "Walk" time due to PPB being greater than 6' from crosswalk																										
	Mineral Wells & Memorial	Phase Movement	<b>P1</b>	<b>P2</b>	<b>P7</b>	Approach	NBT	NBL	WBT	WBL	SBT	SBL	EBT	EBL	Phase Movement	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>					
		Existing W, FDW Time	<i>SB</i>	<i>NB</i>	<i>EB</i>	Intersection Width	115	115	140	120	120	90	90	110	Existing Y   AR	<b>SB</b>	<b>NB</b>		<b>EB</b>	<b>WB</b>								
		Crossing Distance	12.0	5.0	12.0	5.0	10.0	8.0			Approach speed	35	30	40	30	Theoretical Clearance	4.0	2.0	4.0	2.0								
		Theoretical Pedestrian Clearance Time	89		108		75				Grade	2	1	-2	2	Theoretical Y   AR	5.8	6.0							6.1			
		Theoretical Walk, Flashing Don't Walk Times	25.4		30.9		21.4								Chosen Y / AR	<b>4.3</b>	<b>1.5</b>	<b>3.9</b>	<b>2.1</b>			<b>3.6</b>	<b>2.5</b>	<b>4.3</b>	<b>2.2</b>			
		<i>Chosen Walk, Flashing Don't Walk Times</i>	<b>7.0</b>	<b>22.4</b>	<b>7.0</b>	<b>27.9</b>	<b>7.0</b>	<b>18.4</b>								<b>4.5</b>	<b>1.5</b>	<b>4.0</b>	<b>2.5</b>	<b>4.0</b>	<b>2.5</b>	<b>4.5</b>	<b>2.5</b>					
		* Added "Walk" time due to PPB being greater than 6' from crosswalk																										
N/A	Memorial & Volunteer	Phase Movement	<b>P2</b>	<b>P4</b>		Approach	NBT	NBL	WBT	WBL	SBT	SBL	EBT	EBL	Phase Movement	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>					
		Existing W, FDW Time	<i>WB</i>	<i>NB/SB</i>		Intersection Width	85	80	85		90	90	110	110	Existing Y   AR	<b>EBL</b>	<b>WBT</b>	<b>SB</b>	<b>NB</b>	<b>EBT</b>								
		Crossing Distance	10.0	8.0	10.0	8.0					Approach speed	30	25	40	30	Theoretical Clearance	3.0	2.0	4.0	5.0	3.5	2.0	4.0	5.0				
		Theoretical Pedestrian Clearance Time	63		70					Grade	2	0	1		Theoretical Y   AR	4.8	5.0	5.8		5.3		5.5						
		Theoretical Walk, Flashing Don't Walk Times	18.0		20.0										Chosen Y / AR	<b>2.9</b>	<b>1.9</b>	<b>4.5</b>	<b>0.5</b>	<b>4.3</b>	<b>1.5</b>	<b>4.6</b>	<b>0.9</b>					
		<i>Chosen Walk, Flashing Don't Walk Times</i>	<b>7.0</b>	<b>15.0</b>	<b>7.0</b>	<b>17.0</b>										<b>3.5</b>	<b>2.0</b>	<b>4.5</b>	<b>1.5</b>	<b>4.5</b>	<b>1.5</b>							
		* Added "Walk" time due to PPB being greater than 6' from crosswalk																										
	Memorial & TN-69/US-641	Phase Movement				Approach	NBT	NBL	WBT	WBL	SBT	SBL	EBT	EBL	Phase Movement	<b>1</b>	<b>2</b>	<b>3</b> </										

## Comparison of Local Controller Settings (Pedestrian Timings, Pedestrian Clearance Intervals, and Vehicle Clearance Intervals)



## Appendix F: PROPOSED LEVEL OF SERVICE

Prepared on behalf of the  
City of Paris, TN by:

 **NEEL-SCHAFFER**  
Solutions you can build upon

in cooperation with

 **TN** **TDOT**  
Department of  
Transportation

## INTERSECTION LEVEL OF SERVICE ANALYSIS

Paris TSM&O

Intersection	EXISTING (2019)			PROPOSED (2019)			Comment	
	PEAK PERIOD							
	AM	MD	PM	AM	MD	PM		
W Wood St & Irvine St	A	A	A	A	A	A		
W Wood St & Market St	B	B	B	B	B	B	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)	
N Market St & Rison St	A	A	A	A	A	A		
N Market St & Ruff St	B	B	B	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)	
N Market St & Washington St	A	A	B	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)	
S Market St & Blythe St	A	A	B	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)	
E Washington St & Poplar St	A	A	A	B	B	B	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)	
E Wood St & Poplar St	A	A	A	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)	
E Wood St & Brewer St	A	A	A	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)	
E Wood St & Highland St	A	A	A	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)	
E Wood St & Lake St	A	A	A	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)	
E Wood St & Tyson Ave	B	B	B	A	A	B	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)	
E Wood St & Volunteer Dr	B	B	B	A	A	A	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)	

## INTERSECTION LEVEL OF SERVICE ANALYSIS

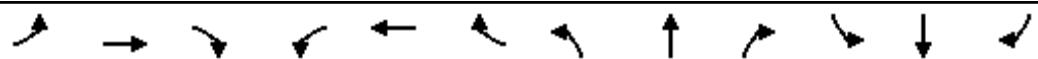
Paris TSM&O

Intersection	EXISTING (2019)			PROPOSED (2019)			Comment	
	PEAK PERIOD							
	AM	MD	PM	AM	MD	PM		
E Wood St & Fairgrounds Rd /Chickasaw Rd	A	A	A	B	A	B	Proposed Coordination for select hours Monday through Friday (AM,PM plans)	
Veterans Dr & Dunlap St	A	A	A	B	A	B	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)	
Veterans Dr/Mineral Wells Dr & Tyson Ave	B	B	C	C	C	C	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)	
Mineral Wells Dr & Jim Adams Dr	B	B	B	A	B	B	Proposed Coordination for select hours Monday through Friday (AM,MD,PM plans)	
Mineral Wells Dr & Memorial Dr	B	B	B	B	C	C		
Memorial Dr & Volunteer Dr	A	B	B	A	A	A		
Memorial Dr & SR-69/US-641	B	B	B	B	B	B		
Volunteer Dr & Patriot Ave	C	B	C	C	B	C		
Volunteer Dr & Jim Adams Dr	B	B	B	B	B	B		
Tyson Ave & Joy St	B	B	B	B	B	B		
SR-76/US-79 & SR-218	A	A	A	A	A	A		
Lone Oak Rd & Wilson St	A	A	A	A	A	A		

# HCM 2010 Signalized Intersection Summary

2: Irvine St & W Wood St

09/06/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	0	365	26	14	250	0	12	0	6	0	2	0
Future Volume (veh/h)	0	365	26	14	250	0	12	0	6	0	2	0
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00	1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1909	1909	1948	1872	1872	1910	1910	1872	1910	1862	1825	1862
Adj Flow Rate, veh/h	0	401	29	15	275	0	13	0	7	0	2	0
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	1313	95	799	1397	0	153	0	13	0	49	0
Arrive On Green	0.00	0.75	0.75	0.75	0.75	0.00	0.03	0.00	0.03	0.00	0.03	0.00
Sat Flow, veh/h	1127	1760	127	959	1872	0	919	0	495	0	1825	0
Grp Volume(v), veh/h	0	0	430	15	275	0	20	0	0	0	2	0
Grp Sat Flow(s), veh/h/ln	1127	0	1887	959	1872	0	1414	0	0	0	1825	0
Q Serve(g_s), s	0.0	0.0	3.5	0.2	2.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.5	3.7	2.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.07	1.00		0.00	0.65		0.35	0.00		0.00
Lane Grp Cap(c), veh/h	156	0	1408	799	1397	0	166	0	0	0	49	0
V/C Ratio(X)	0.00	0.00	0.31	0.02	0.20	0.00	0.12	0.00	0.00	0.00	0.04	0.00
Avail Cap(c_a), veh/h	156	0	1408	799	1397	0	605	0	0	0	592	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	1.9	2.5	1.7	0.0	22.3	0.0	0.0	0.0	21.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.6	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.0	0.0	1.9	0.1	1.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	0.0	2.5	2.5	1.8	0.0	22.6	0.0	0.0	0.0	22.3	0.0
LnGrp LOS			A	A	A		C			C		
Approach Vol, veh/h	430			290			20			2		
Approach Delay, s/veh	2.5			1.9			22.6			22.3		
Approach LOS	A			A			C			C		

## Timer

1	2	3	4	5	6	7	8
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Assigned Phs	2		4		6		8
Phs Duration (G+Y+R <sub>c</sub> ), s	40.0		6.2		40.0		6.2
Change Period (Y+R <sub>c</sub> ), s	5.5		5.0		5.5		5.0
Max Green Setting (G <sub>max</sub> ), s	34.5		15.0		34.5		15.0
Max Q Clear Time (g <sub>c+l1</sub> ), s	5.5		2.7		5.7		2.0
Green Ext Time (p <sub>c</sub> ), s	4.9		0.0		4.9		0.0

## Intersection Summary

HCM 2010 Ctrl Delay	2.8
HCM 2010 LOS	A

## HCM 2010 Signalized Intersection Summary

7: S Market St/N Market St &amp; E Wood St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙		
Traffic Volume (veh/h)	8	235	86	11	161	36	106	150	33	75	175	33
Future Volume (veh/h)	8	235	86	11	161	36	106	150	33	75	175	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	9	258	95	12	177	40	116	165	36	82	192	36
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	421	441	162	267	505	114	662	543	119	674	554	104
Arrive On Green	0.34	0.34	0.34	0.68	0.68	0.68	0.24	0.73	0.73	0.24	0.73	0.73
Sat Flow, veh/h	1154	1293	476	1029	1479	334	1783	1490	325	1765	1518	285
Grp Volume(v), veh/h	9	0	353	12	0	217	116	0	201	82	0	228
Grp Sat Flow(s),veh/h/ln	1154	0	1769	1029	0	1813	1783	0	1815	1765	0	1803
Q Serve(g_s), s	0.5	0.0	14.0	0.7	0.0	4.2	2.9	0.0	3.3	2.0	0.0	3.9
Cycle Q Clear(g_c), s	4.7	0.0	14.0	14.6	0.0	4.2	2.9	0.0	3.3	2.0	0.0	3.9
Prop In Lane	1.00		0.27	1.00		0.18	1.00		0.18	1.00		0.16
Lane Grp Cap(c), veh/h	421	0	604	267	0	619	662	0	662	674	0	658
V/C Ratio(X)	0.02	0.00	0.58	0.04	0.00	0.35	0.18	0.00	0.30	0.12	0.00	0.35
Avail Cap(c_a), veh/h	421	0	604	267	0	619	662	0	662	674	0	658
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	23.0	15.8	0.0	9.6	10.6	0.0	7.7	10.4	0.0	7.8
Incr Delay (d2), s/veh	0.1	0.0	4.1	0.3	0.0	1.6	0.6	0.0	1.2	0.4	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	7.5	0.2	0.0	2.3	1.4	0.0	1.7	1.0	0.0	2.1
LnGrp Delay(d),s/veh	21.6	0.0	27.2	16.1	0.0	11.1	11.2	0.0	8.9	10.7	0.0	9.3
LnGrp LOS	C		C	B		B	B		A	B		A
Approach Vol, veh/h		362			229			317			310	
Approach Delay, s/veh		27.0			11.4			9.8			9.7	
Approach LOS		C			B			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	15.0	36.0		34.0	15.0	36.0		34.0				
Change Period (Y+R <sub>c</sub> ), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	31.0		29.0	10.0	31.0		29.0				
Max Q Clear Time (g_c+l1), s	0.0	0.0		0.0	0.0	0.0		0.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			15.2									
HCM 2010 LOS			B									

# HCM 2010 Signalized Intersection Summary

8: Highland St & E Wood St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	1	354	2	5	290	3	2	4	7	6	1	1
Future Volume (veh/h)	1	354	2	5	290	3	2	4	7	6	1	1
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1844	1844	1881	1872	1872	1910	1938	1900	1938	1928	1891	1928
Adj Flow Rate, veh/h	1	416	2	6	341	4	2	5	8	7	1	1
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	926	1534	7	836	1544	18	47	33	44	114	16	8
Arrive On Green	0.84	0.84	0.84	1.00	1.00	1.00	0.05	0.05	0.05	0.05	0.05	0.05
Sat Flow, veh/h	1021	1834	9	969	1847	22	121	673	907	1032	336	171
Grp Volume(v), veh/h	1	0	418	6	0	345	15	0	0	9	0	0
Grp Sat Flow(s),veh/h/ln	1021	0	1843	969	0	1868	1701	0	0	1539	0	0
Q Serve(g_s), s	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	4.8	4.8	0.0	0.0	0.8	0.0	0.0	0.5	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.01	0.13		0.53	0.78		0.11
Lane Grp Cap(c), veh/h	926	0	1541	836	0	1562	124	0	0	139	0	0
V/C Ratio(X)	0.00	0.00	0.27	0.01	0.00	0.22	0.12	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	926	0	1541	836	0	1562	368	0	0	355	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.98	0.00	0.98	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	1.3	0.0	1.7	0.1	0.0	0.0	45.6	0.0	0.0	45.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.0	0.0	0.3	0.3	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.5	0.0	0.0	0.1	0.4	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d),s/veh	1.3	0.0	2.2	0.2	0.0	0.3	46.0	0.0	0.0	45.6	0.0	0.0
LnGrp LOS	A		A	A		A	D			D		
Approach Vol, veh/h	419			351			15			9		
Approach Delay, s/veh	2.2			0.3			46.0			45.6		
Approach LOS	A			A			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s	89.6		10.4		89.6		10.4					
Change Period (Y+Rc), s	* 6		5.5		6.0		5.5					
Max Green Setting (Gmax), s	* 70		19.5		69.0		19.5					
Max Q Clear Time (g_c+l1), s	6.8		2.8		6.8		2.5					
Green Ext Time (p_c), s	1.4		0.0		1.4		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			2.7									
HCM 2010 LOS			A									
Notes												

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\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 2010 Signalized Intersection Summary

10: Lake St & E Wood St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	5	357	12	1	312	30	10	15	5	48	25	8
Future Volume (veh/h)	5	357	12	1	312	30	10	15	5	48	25	8
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1853	1853	1853	1852	1816	1852	1919	1881	1919
Adj Flow Rate, veh/h	6	425	14	1	371	36	12	18	6	57	30	10
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	0	1	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	878	1484	49	847	1526	1297	75	84	22	125	43	13
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.08	0.08	0.08	0.08	0.08	0.08
Sat Flow, veh/h	979	1802	59	941	1853	1575	347	1092	288	887	559	166
Grp Volume(v), veh/h	6	0	439	1	371	36	36	0	0	97	0	0
Grp Sat Flow(s),veh/h/ln	979	0	1862	941	1853	1575	1728	0	0	1612	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	5.8	0.0	0.0
Prop In Lane	1.00		0.03	1.00		1.00	0.33		0.17	0.59		0.10
Lane Grp Cap(c), veh/h	878	0	1533	847	1526	1297	180	0	0	181	0	0
V/C Ratio(X)	0.01	0.00	0.29	0.00	0.24	0.03	0.20	0.00	0.00	0.54	0.00	0.00
Avail Cap(c_a), veh/h	878	0	1533	847	1526	1297	454	0	0	447	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.98	0.00	0.98	0.99	0.99	0.99	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	43.5	0.0	0.0	45.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.5	0.0	0.4	0.0	0.5	0.0	0.0	2.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	0.0	0.2	0.0	1.0	0.0	0.0	2.8	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.5	0.0	0.4	0.0	44.1	0.0	0.0	47.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D			D		
Approach Vol, veh/h	445			408			36			97		
Approach Delay, s/veh	0.5			0.3			44.1			47.7		
Approach LOS	A			A			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	87.3		12.7		87.3		12.7					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	65.0		25.0		65.0		25.0					
Max Q Clear Time (g_c+l1), s	2.0		3.9		2.0		7.8					
Green Ext Time (p_c), s	4.0		0.4		4.0		0.4					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			6.6									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

12: N Market St & Washington St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙		
Traffic Volume (veh/h)	8	36	28	28	40	33	21	183	33	13	211	7
Future Volume (veh/h)	8	36	28	28	40	33	21	183	33	13	211	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	8	38	29	29	42	35	22	193	35	14	222	7
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	475	322	246	488	311	259	722	853	155	716	988	31
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Sat Flow, veh/h	1310	977	745	1335	945	788	1153	1543	280	1142	1787	56
Grp Volume(v), veh/h	8	0	67	29	0	77	22	0	228	14	0	229
Grp Sat Flow(s),veh/h/ln	1310	0	1722	1335	0	1733	1153	0	1823	1142	0	1843
Q Serve(g_s), s	0.4	0.0	2.3	1.3	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.0	0.0	2.3	3.6	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.43	1.00		0.45	1.00		0.15	1.00		0.03
Lane Grp Cap(c), veh/h	475	0	567	488	0	571	722	0	1008	716	0	1019
V/C Ratio(X)	0.02	0.00	0.12	0.06	0.00	0.13	0.03	0.00	0.23	0.02	0.00	0.22
Avail Cap(c_a), veh/h	475	0	567	488	0	571	722	0	1008	716	0	1019
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.1	0.0	19.9	21.1	0.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.2	0.0	0.5	0.1	0.0	0.5	0.1	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.2	0.5	0.0	1.3	0.0	0.0	0.1	0.0	0.0	0.1
LnGrp Delay(d),s/veh	21.1	0.0	20.3	21.4	0.0	20.5	0.1	0.0	0.5	0.1	0.0	0.5
LnGrp LOS	C		C	C		C	A		A	A		A
Approach Vol, veh/h		75			106			250			243	
Approach Delay, s/veh		20.4			20.7			0.5			0.5	
Approach LOS		C			C			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	52.0		33.0		52.0		33.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	47.0		28.0		47.0		28.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			5.9									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

17: N Market St & E Ruff St

09/06/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↓			↑↓			↑	↑↓		↑	↑↓	
Traffic Volume (veh/h)	10	9	3	2	9	14	5	163	13	6	267	19
Future Volume (veh/h)	10	9	3	2	9	14	5	163	13	6	267	19
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1910	1872	1910	1919	1881	1919	1881	1881	1919	1853	1853	1890
Adj Flow Rate, veh/h	12	11	4	2	11	18	6	204	16	8	334	24
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	216	70	56	198	289	587	1013	79	762	1005	72
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	1.00	1.00	1.00	0.59	0.59	0.59
Sat Flow, veh/h	633	735	238	37	674	984	1029	1722	135	1151	1709	123
Grp Volume(v), veh/h	27	0	0	31	0	0	6	0	220	8	0	358
Grp Sat Flow(s),veh/h/ln	1606	0	0	1695	0	0	1029	0	1858	1151	0	1832
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	8.5
Cycle Q Clear(g_c), s	0.9	0.0	0.0	1.1	0.0	0.0	8.6	0.0	0.0	0.2	0.0	8.5
Prop In Lane	0.44			0.15	0.06		0.58	1.00		0.07	1.00	0.07
Lane Grp Cap(c), veh/h	533	0	0	544	0	0	587	0	1093	762	0	1078
V/C Ratio(X)	0.05	0.00	0.00	0.06	0.00	0.00	0.01	0.00	0.20	0.01	0.00	0.33
Avail Cap(c_a), veh/h	533	0	0	544	0	0	587	0	1093	762	0	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	0.0	21.6	0.0	0.0	0.7	0.0	0.0	7.3	0.0	9.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.1	0.1	0.0	4.5
LnGrp Delay(d),s/veh	21.7	0.0	0.0	21.8	0.0	0.0	0.8	0.0	0.4	7.3	0.0	9.8
LnGrp LOS	C			C			A		A	A		A
Approach Vol, veh/h	27			31			226		366			
Approach Delay, s/veh	21.7			21.8			0.4		9.7			
Approach LOS	C			C			A		A			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	55.0		30.0		55.0		30.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	50.0		25.0		50.0		25.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			7.6									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

20: Volunteer Dr & E Wood St

09/06/2019



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑		↑↑	↑↑	↑	↑		
Traffic Volume (veh/h)	310	240	100	480	120	70		
Future Volume (veh/h)	310	240	100	480	120	70		
Number	2	12	1	6	7	14		
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1900	1938	1844	1844	1853	1853		
Adj Flow Rate, veh/h	337	261	109	522	130	76		
Adj No. of Lanes	2	0	1	2	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1319	1002	718	2755	174	245		
Arrive On Green	1.00	1.00	0.06	0.79	0.10	0.10		
Sat Flow, veh/h	2051	1486	1756	3596	1765	1575		
Grp Volume(v), veh/h	310	288	109	522	130	76		
Grp Sat Flow(s),veh/h/ln	1805	1638	1756	1752	1765	1575		
Q Serve(g_s), s	0.0	0.0	1.6	3.7	7.2	4.3		
Cycle Q Clear(g_c), s	0.0	0.0	1.6	3.7	7.2	4.3		
Prop In Lane		0.91	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1217	1104	718	2755	174	245		
V/C Ratio(X)	0.26	0.26	0.15	0.19	0.75	0.31		
Avail Cap(c_a), veh/h	1217	1104	837	2755	521	555		
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00		
Upstream Filter(l)	0.83	0.83	0.97	0.97	1.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	3.3	2.7	43.9	37.5		
Incr Delay (d2), s/veh	0.4	0.5	0.0	0.0	6.3	0.7		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.8	1.8	3.8	3.9		
LnGrp Delay(d),s/veh	0.4	0.5	3.4	2.7	50.1	38.2		
LnGrp LOS	A	A	A	A	D	D		
Approach Vol, veh/h	598			631	206			
Approach Delay, s/veh	0.4			2.8	45.7			
Approach LOS	A			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+R <sub>c</sub> ), s	11.2	73.4		15.4		84.6		
Change Period (Y+R <sub>c</sub> ), s	5.5	6.0		5.5		6.0		
Max Green Setting (Gmax), s	12.5	41.0		29.5		59.0		
Max Q Clear Time (g_c+l1), s	3.6	2.0		9.2		5.7		
Green Ext Time (p_c), s	0.1	8.9		0.7		9.3		
Intersection Summary								
HCM 2010 Ctrl Delay			8.0					
HCM 2010 LOS			A					

# HCM 2010 Signalized Intersection Summary

22: N Market St & Rison St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	10	30	20	10	10	35	134	35	10	235	5
Future Volume (veh/h)	15	10	30	20	10	10	35	134	35	10	235	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1910	1872	1910	1900	1863	1900	1853	1853	1890	1910	1872	1910
Adj Flow Rate, veh/h	16	11	33	22	11	11	38	146	38	11	255	5
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	110	28	66	151	40	30	985	1052	274	88	1330	25
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	345	389	898	695	542	412	1109	1419	369	25	1793	34
Grp Volume(v), veh/h	60	0	0	44	0	0	38	0	184	271	0	0
Grp Sat Flow(s),veh/h/ln	1633	0	0	1649	0	0	1109	0	1788	1852	0	0
Q Serve(g_s), s	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.8	0.0	0.0	1.3	0.0	0.0	0.3	0.0	1.6	2.4	0.0	0.0
Prop In Lane	0.27		0.55	0.50		0.25	1.00		0.21	0.04		0.02
Lane Grp Cap(c), veh/h	204	0	0	221	0	0	985	0	1326	1443	0	0
V/C Ratio(X)	0.29	0.00	0.00	0.20	0.00	0.00	0.04	0.00	0.14	0.19	0.00	0.00
Avail Cap(c_a), veh/h	964	0	0	531	0	0	985	0	1326	1443	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.0	0.0	0.0	23.8	0.0	0.0	1.8	0.0	2.0	2.1	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.4	0.0	0.0	0.1	0.0	0.2	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.7	0.0	0.0	0.2	0.0	0.8	1.3	0.0	0.0
LnGrp Delay(d),s/veh	24.8	0.0	0.0	24.2	0.0	0.0	1.9	0.0	2.2	2.4	0.0	0.0
LnGrp LOS	C		C			A		A	A			
Approach Vol, veh/h	60			44			222		271			
Approach Delay, s/veh	24.8			24.2			2.2		2.4			
Approach LOS	C		C			A		A				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	45.0		8.9		45.0		8.9					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	40.0		30.0		40.0		15.0					
Max Q Clear Time (g_c+l1), s	3.6		3.8		4.4		3.3					
Green Ext Time (p_c), s	2.1		0.4		2.1		0.2					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			6.2									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

27: N Poplar St & Washington St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙		
Traffic Volume (veh/h)	6	54	25	14	71	18	25	21	35	19	27	6
Future Volume (veh/h)	6	54	25	14	71	18	25	21	35	19	27	6
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1844	1844	1881
Adj Flow Rate, veh/h	6	58	27	15	76	19	27	23	38	20	29	6
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	653	564	262	668	681	170	635	262	433	600	611	126
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1289	1198	557	1314	1447	362	1375	636	1051	1323	1483	307
Grp Volume(v), veh/h	6	0	85	15	0	95	27	0	61	20	0	35
Grp Sat Flow(s),veh/h/ln	1289	0	1755	1314	0	1808	1375	0	1687	1323	0	1790
Q Serve(g_s), s	0.2	0.0	2.3	0.5	0.0	2.5	1.0	0.0	1.9	0.8	0.0	1.0
Cycle Q Clear(g_c), s	2.7	0.0	2.3	2.8	0.0	2.5	2.0	0.0	1.9	2.7	0.0	1.0
Prop In Lane	1.00		0.32	1.00		0.20	1.00		0.62	1.00		0.17
Lane Grp Cap(c), veh/h	653	0	826	668	0	851	635	0	694	600	0	737
V/C Ratio(X)	0.01	0.00	0.10	0.02	0.00	0.11	0.04	0.00	0.09	0.03	0.00	0.05
Avail Cap(c_a), veh/h	653	0	826	668	0	851	635	0	694	600	0	737
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	12.5	13.3	0.0	12.6	15.6	0.0	15.3	16.1	0.0	15.0
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.1	0.0	0.3	0.1	0.0	0.2	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.2	0.2	0.0	1.3	0.4	0.0	0.9	0.3	0.0	0.5
LnGrp Delay(d),s/veh	13.4	0.0	12.8	13.4	0.0	12.8	15.7	0.0	15.5	16.2	0.0	15.1
LnGrp LOS	B		B	B		B	B		B	B		B
Approach Vol, veh/h		91			110			88			55	
Approach Delay, s/veh		12.8			12.9			15.6			15.5	
Approach LOS		B			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	45.0		40.0		45.0		40.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	40.0		35.0		40.0		35.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			14.0									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary  
29: E Wood St & Chickasaw/Fairgrounds Rd

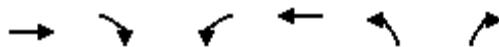
09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↗	↑ ↘	↑ ↙	↑ ↖		↑ ↗	↑ ↘	
Traffic Volume (veh/h)	40	64	9	56	66	38	5	348	34	39	513	71
Future Volume (veh/h)	40	64	9	56	66	38	5	348	34	39	513	71
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1844	1844	1844	1844	1844	1881	1853	1853	1890
Adj Flow Rate, veh/h	48	76	0	67	79	0	6	414	40	46	611	85
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	224	190	179	220	187	595	2474	238	751	2379	330
Arrive On Green	0.12	0.12	0.00	0.12	0.12	0.00	0.77	0.77	0.77	0.77	0.77	0.77
Sat Flow, veh/h	1328	1881	1599	1305	1844	1568	738	3231	311	929	3107	431
Grp Volume(v), veh/h	48	76	0	67	79	0	6	224	230	46	346	350
Grp Sat Flow(s),veh/h/ln	1328	1881	1599	1305	1844	1568	738	1752	1789	929	1761	1777
Q Serve(g_s), s	3.5	3.7	0.0	5.0	3.9	0.0	0.2	3.4	3.5	1.4	5.7	5.7
Cycle Q Clear(g_c), s	7.4	3.7	0.0	8.7	3.9	0.0	6.0	3.4	3.5	4.9	5.7	5.7
Prop In Lane	1.00			1.00		1.00		0.17	1.00			0.24
Lane Grp Cap(c), veh/h	178	224	190	179	220	187	595	1342	1370	751	1349	1361
V/C Ratio(X)	0.27	0.34	0.00	0.37	0.36	0.00	0.01	0.17	0.17	0.06	0.26	0.26
Avail Cap(c_a), veh/h	411	555	472	409	544	462	595	1342	1370	751	1349	1361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.98	0.98	0.98	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	40.4	0.0	44.4	40.5	0.0	4.3	3.1	3.1	3.8	3.4	3.4
Incr Delay (d2), s/veh	1.1	1.3	0.0	1.8	1.4	0.0	0.0	0.3	0.3	0.2	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.0	0.0	1.9	2.1	0.0	0.1	1.7	1.8	0.4	2.9	3.0
LnGrp Delay(d),s/veh	45.1	41.7	0.0	46.3	41.9	0.0	4.3	3.4	3.4	4.0	3.9	3.9
LnGrp LOS	D	D		D	D		A	A	A	A	A	A
Approach Vol, veh/h		124			146			460		742		
Approach Delay, s/veh		43.0			43.9			3.4		3.9		
Approach LOS		D			D			A		A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	17.4		82.6		17.4		82.6					
Change Period (Y+R <sub>c</sub> ), s	5.5		6.0		5.5		6.0					
Max Green Setting (Gmax), s	29.5		59.0		29.5		59.0					
Max Q Clear Time (g_c+l1), s	9.4		8.0		10.7		7.7					
Green Ext Time (p_c), s	1.5		1.0		1.4		1.0					
Intersection Summary												
HCM 2010 Ctrl Delay			11.0									
HCM 2010 LOS			B									

# HCM 2010 Signalized Intersection Summary

30: Tyson Ave & E Wood St

09/06/2019



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑↑	↑↑	↑
Traffic Volume (veh/h)	293	91	341	262	76	263
Future Volume (veh/h)	293	91	341	262	76	263
Number	2	12	1	6	7	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1872	1872	1853	1853
Adj Flow Rate, veh/h	376	0	437	336	97	0
Adj No. of Lanes	1	1	1	2	2	1
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1274	1083	943	2997	162	75
Arrive On Green	1.00	0.00	0.10	0.84	0.05	0.00
Sat Flow, veh/h	1853	1575	1783	3651	3424	1575
Grp Volume(v), veh/h	376	0	437	336	97	0
Grp Sat Flow(s),veh/h/ln	1853	1575	1783	1778	1712	1575
Q Serve(g_s), s	0.0	0.0	6.2	1.6	2.8	0.0
Cycle Q Clear(g_c), s	0.0	0.0	6.2	1.6	2.8	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1274	1083	943	2997	162	75
V/C Ratio(X)	0.30	0.00	0.46	0.11	0.60	0.00
Avail Cap(c_a), veh/h	1274	1083	1112	2997	856	394
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.97	0.00	0.97	0.97	0.92	0.00
Uniform Delay (d), s/veh	0.0	0.0	2.5	1.4	46.7	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.3	0.1	3.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.1	0.8	1.4	0.0
LnGrp Delay(d),s/veh	0.6	0.0	2.8	1.4	49.9	0.0
LnGrp LOS	A		A	A	D	
Approach Vol, veh/h	376			773	97	
Approach Delay, s/veh	0.6			2.2	49.9	
Approach LOS	A			A	D	
Timer	1	2	3	4	5	6
Assigned Phs	1	2		4		6
Phs Duration (G+Y+R <sub>c</sub> ), s	15.5	74.8		9.7		90.3
Change Period (Y+R <sub>c</sub> ), s	5.5	6.0		5.0		6.0
Max Green Setting (Gmax), s	19.5	39.0		25.0		64.0
Max Q Clear Time (g_c+l1), s	8.2	2.0		4.8		3.6
Green Ext Time (p_c), s	1.5	3.3		0.3		3.4
Intersection Summary						
HCM 2010 Ctrl Delay			5.4			
HCM 2010 LOS			A			

# HCM 2010 Signalized Intersection Summary

32: S Brewer St/N Brewer St & E Wood St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↙ ↖ ↘ ↗ ↘ ↙ ↖ ↙											
Traffic Volume (veh/h)	5	315	4	1	233	18	3	29	2	12	12	3
Future Volume (veh/h)	5	315	4	1	233	18	3	29	2	12	12	3
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1890	1853	1890	1919	1881	1919	1890	1853	1890
Adj Flow Rate, veh/h	6	380	5	1	281	22	4	35	2	14	14	4
Adj No. of Lanes	1	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	709	1084	14	43	998	78	71	490	26	242	229	59
Arrive On Green	1.00	1.00	1.00	0.59	0.59	0.59	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1077	1844	24	1	1696	132	82	1666	90	616	779	199
Grp Volume(v), veh/h	6	0	385	304	0	0	41	0	0	32	0	0
Grp Sat Flow(s),veh/h/ln	1077	0	1868	1829	0	0	1838	0	0	1594	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	7.0	0.0	0.0	1.3	0.0	0.0	1.1	0.0	0.0
Prop In Lane	1.00		0.01	0.00		0.07	0.10		0.05	0.44		0.12
Lane Grp Cap(c), veh/h	709	0	1099	1119	0	0	587	0	0	530	0	0
V/C Ratio(X)	0.01	0.00	0.35	0.27	0.00	0.00	0.07	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	709	0	1099	1119	0	0	587	0	0	530	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	8.6	0.0	0.0	21.7	0.0	0.0	21.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.9	0.6	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.3	3.6	0.0	0.0	0.7	0.0	0.0	0.6	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.9	9.2	0.0	0.0	21.9	0.0	0.0	21.8	0.0	0.0
LnGrp LOS	A		A	A			C			C		
Approach Vol, veh/h	391			304			41			32		
Approach Delay, s/veh	0.9			9.2			21.9			21.8		
Approach LOS	A			A			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	55.0		30.0		55.0		30.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	50.0		25.0		50.0		25.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			6.2									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

35: S Market St & E Blythe St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	34	41	28	14	14	26	266	39	1	271	2
Future Volume (veh/h)	7	34	41	28	14	14	26	266	39	1	271	2
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1853	1890	1910	1872	1910	1853	1853	1890	1872	1872	1910
Adj Flow Rate, veh/h	8	38	46	31	16	16	29	296	43	1	301	2
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	64	229	247	264	136	115	712	931	135	599	1093	7
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.59	0.59	0.59	1.00	1.00	1.00
Sat Flow, veh/h	62	780	841	683	463	390	1067	1583	230	1042	1858	12
Grp Volume(v), veh/h	92	0	0	63	0	0	29	0	339	1	0	303
Grp Sat Flow(s),veh/h/ln	1683	0	0	1537	0	0	1067	0	1813	1042	0	1870
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	8.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.4	0.0	0.0	2.2	0.0	0.0	1.0	0.0	8.1	8.1	0.0	0.0
Prop In Lane	0.09			0.50	0.49		0.25	1.00		0.13	1.00	0.01
Lane Grp Cap(c), veh/h	541	0	0	515	0	0	712	0	1066	599	0	1100
V/C Ratio(X)	0.17	0.00	0.00	0.12	0.00	0.00	0.04	0.00	0.32	0.00	0.00	0.28
Avail Cap(c_a), veh/h	541	0	0	515	0	0	712	0	1066	599	0	1100
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.4	0.0	0.0	21.9	0.0	0.0	7.4	0.0	8.9	0.6	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0.8	0.0	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	1.2	0.0	0.0	0.3	0.0	4.2	0.0	0.0	0.2
LnGrp Delay(d),s/veh	23.1	0.0	0.0	22.4	0.0	0.0	7.5	0.0	9.6	0.7	0.0	0.6
LnGrp LOS	C			C			A		A	A		A
Approach Vol, veh/h	92			63			368		304			
Approach Delay, s/veh	23.1			22.4			9.5		0.6			
Approach LOS	C			C			A		A			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	55.0		30.0		55.0		30.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	50.0		25.0		50.0		25.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			8.7									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

37: S Poplar St/N Poplar St & E Wood St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	13	301	16	7	195	17	3	20	5	13	21	8
Future Volume (veh/h)	13	301	16	7	195	17	3	20	5	13	21	8
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	15	354	19	8	229	20	4	24	6	15	25	9
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	711	974	52	643	939	82	520	477	119	520	429	154
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1132	1761	95	1010	1698	148	1376	1447	362	1367	1302	469
Grp Volume(v), veh/h	15	0	373	8	0	249	4	0	30	15	0	34
Grp Sat Flow(s),veh/h/ln	1132	0	1855	1010	0	1846	1376	0	1808	1367	0	1771
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	1.0	0.6	0.0	1.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	1.0	1.6	0.0	1.1
Prop In Lane	1.00		0.05	1.00		0.08	1.00		0.20	1.00		0.26
Lane Grp Cap(c), veh/h	711	0	1026	643	0	1021	520	0	596	520	0	583
V/C Ratio(X)	0.02	0.00	0.36	0.01	0.00	0.24	0.01	0.00	0.05	0.03	0.00	0.06
Avail Cap(c_a), veh/h	711	0	1026	643	0	1021	520	0	596	520	0	583
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	19.9	0.0	19.4	20.0	0.0	19.5
Incr Delay (d2), s/veh	0.1	0.0	1.0	0.0	0.0	0.6	0.0	0.0	0.2	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.3	0.0	0.0	0.2	0.1	0.0	0.5	0.3	0.0	0.6
LnGrp Delay(d),s/veh	0.1	0.0	1.0	0.0	0.0	0.6	20.0	0.0	19.6	20.1	0.0	19.7
LnGrp LOS	A		A	A		A	B		B	C		B
Approach Vol, veh/h	388			257			34			49		
Approach Delay, s/veh	1.0			0.6			19.6			19.8		
Approach LOS	A			A			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	52.0		33.0		52.0		33.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	47.0		28.0		47.0		28.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			3.0									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

42: Dunlap & Veterans Dr

09/06/2019

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑	↑		↑			↑	
Traffic Volume (veh/h)	3	277	21	104	293	79	8	57	74	20	77	8
Future Volume (veh/h)	3	277	21	104	293	79	8	57	74	20	77	8
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1872	1872	1835	1872	1910	1872	1910
Adj Flow Rate, veh/h	4	355	27	133	376	101	10	73	95	26	99	10
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	0	1	0
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	696	2279	172	789	2576	1153	39	96	117	65	179	17
Arrive On Green	0.01	0.69	0.69	0.04	0.72	0.72	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	1765	3319	251	1783	3557	1591	44	732	888	209	1366	126
Grp Volume(v), veh/h	4	188	194	133	376	101	178	0	0	135	0	0
Grp Sat Flow(s),veh/h/ln	1765	1761	1809	1783	1778	1591	1664	0	0	1701	0	0
Q Serve(g_s), s	0.1	4.3	4.3	2.4	3.7	2.1	3.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.1	4.3	4.3	2.4	3.7	2.1	11.9	0.0	0.0	8.3	0.0	0.0
Prop In Lane	1.00		0.14	1.00		1.00	0.06		0.53	0.19		0.07
Lane Grp Cap(c), veh/h	696	1209	1242	789	2576	1153	252	0	0	261	0	0
V/C Ratio(X)	0.01	0.16	0.16	0.17	0.15	0.09	0.71	0.00	0.00	0.52	0.00	0.00
Avail Cap(c_a), veh/h	848	1209	1242	922	2576	1153	571	0	0	587	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.5	6.3	6.3	4.2	4.9	4.7	48.5	0.0	0.0	46.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.1	0.1	0.1	3.6	0.0	0.0	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.2	2.3	1.2	1.9	1.0	5.7	0.0	0.0	4.2	0.0	0.0
LnGrp Delay(d),s/veh	5.5	6.6	6.6	4.3	5.0	4.8	52.2	0.0	0.0	48.5	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D			D		
Approach Vol, veh/h		386			610			178			135	
Approach Delay, s/veh		6.6			4.8			52.2			48.5	
Approach LOS		A			A			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	5.1	89.3		20.6	9.4	85.0		20.6				
Change Period (Y+R <sub>c</sub> ), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	10.5	51.0		37.5	13.5	48.0		37.5				
Max Q Clear Time (g_c+l1), s	2.1	5.7		13.9	4.4	6.3		10.3				
Green Ext Time (p_c), s	0.0	9.3		1.2	0.3	9.2		1.3				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				16.3								
HCM 2010 LOS				B								
Notes												

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User approved pedestrian interval to be less than phase max green.

## HCM 2010 Signalized Intersection Summary

47: Tyson Ave &amp; Mineral Wells/Veterans Dr

09/06/2019

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	1	2	1	1	2	1	1	2	1	2	1	1
Traffic Volume (veh/h)	117	338	208	62	259	47	62	277	188	218	189	61
Future Volume (veh/h)	117	338	208	62	259	47	62	277	188	218	189	61
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1825	1825	1825	1853	1853	1853	1881	1881	1881	1872	1872	1872
Adj Flow Rate, veh/h	146	422	0	78	324	0	78	346	0	272	236	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	652	1852	828	596	1851	828	289	453	203	347	627	281
Arrive On Green	0.06	0.53	0.00	0.05	0.53	0.00	0.05	0.13	0.00	0.10	0.18	0.00
Sat Flow, veh/h	1739	3468	1552	1765	3522	1575	1792	3575	1599	3459	3557	1591
Grp Volume(v), veh/h	146	422	0	78	324	0	78	346	0	272	236	0
Grp Sat Flow(s),veh/h/ln	1739	1734	1552	1765	1761	1575	1792	1787	1599	1729	1778	1591
Q Serve(g_s), s	4.4	7.4	0.0	2.3	5.5	0.0	4.3	10.8	0.0	8.8	6.7	0.0
Cycle Q Clear(g_c), s	4.4	7.4	0.0	2.3	5.5	0.0	4.3	10.8	0.0	8.8	6.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	652	1852	828	596	1851	828	289	453	203	347	627	281
V/C Ratio(X)	0.22	0.23	0.00	0.13	0.18	0.00	0.27	0.76	0.00	0.78	0.38	0.00
Avail Cap(c_a), veh/h	706	1852	828	665	1851	828	354	746	334	571	1021	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.97	0.97	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.1	14.2	0.0	11.1	14.3	0.0	40.7	48.6	0.0	50.5	41.8	0.0
Incr Delay (d2), s/veh	0.1	0.3	0.0	0.0	0.2	0.0	0.2	2.7	0.0	3.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	3.6	0.0	1.1	2.8	0.0	2.1	5.5	0.0	4.4	3.3	0.0
LnGrp Delay(d),s/veh	11.3	14.5	0.0	11.2	14.5	0.0	40.9	51.3	0.0	54.4	42.1	0.0
LnGrp LOS	B	B		B	B		D	D		D	D	
Approach Vol, veh/h		568			402			424			508	
Approach Delay, s/veh		13.7			13.8			49.4			48.7	
Approach LOS		B			B			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.5	20.6	10.5	67.4	10.8	26.3	11.5	66.4				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	19.0	24.0	10.0	40.0	10.0	33.0	10.0	40.0				
Max Q Clear Time (g_c+l1), s	10.8	12.8	4.3	9.4	6.3	8.7	6.4	7.5				
Green Ext Time (p_c), s	0.7	1.8	0.0	3.4	0.0	2.3	0.1	3.4				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			31.0									
HCM 2010 LOS			C									

# HCM 2010 Signalized Intersection Summary

49: TN-79 & TN-218

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↙ ↖ ↗ ↘ ↙ ↗ ↘ ↙											
Traffic Volume (veh/h)	40	65	50	90	110	25	10	225	35	15	185	10
Future Volume (veh/h)	40	65	50	90	110	25	10	225	35	15	185	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1853	1853	1890	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	43	71	54	98	120	27	11	245	38	16	201	11
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	489	237	180	503	351	79	552	872	133	514	957	52
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1242	988	751	1254	1466	330	1171	3093	474	1086	3397	185
Grp Volume(v), veh/h	43	0	125	98	0	147	11	139	144	16	104	108
Grp Sat Flow(s),veh/h/ln	1242	0	1739	1254	0	1795	1171	1778	1788	1086	1761	1821
Q Serve(g_s), s	0.8	0.0	1.5	1.8	0.0	1.8	0.2	1.6	1.6	0.3	1.2	1.2
Cycle Q Clear(g_c), s	2.5	0.0	1.5	3.4	0.0	1.8	1.4	1.6	1.6	1.9	1.2	1.2
Prop In Lane	1.00		0.43	1.00		0.18	1.00		0.26	1.00		0.10
Lane Grp Cap(c), veh/h	489	0	417	503	0	430	552	501	504	514	496	513
V/C Ratio(X)	0.09	0.00	0.30	0.20	0.00	0.34	0.02	0.28	0.28	0.03	0.21	0.21
Avail Cap(c_a), veh/h	1095	0	1265	1114	0	1306	1051	1259	1266	977	1247	1289
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.3	0.0	8.1	9.5	0.0	8.2	7.7	7.3	7.3	8.1	7.2	7.2
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.2	0.0	0.5	0.0	0.6	0.7	0.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.8	0.7	0.0	0.9	0.1	0.9	0.9	0.1	0.6	0.6
LnGrp Delay(d),s/veh	9.4	0.0	8.5	9.7	0.0	8.7	7.7	8.0	8.0	8.1	7.6	7.6
LnGrp LOS	A		A			A	A	A	A	A	A	
Approach Vol, veh/h	168				245			294			228	
Approach Delay, s/veh	8.7				9.1			8.0			7.6	
Approach LOS	A				A			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	13.9		12.3		13.9		12.3					
Change Period (Y+R <sub>c</sub> ), s	6.5		6.0		6.5		6.0					
Max Green Setting (Gmax), s	18.5		19.0		18.5		19.0					
Max Q Clear Time (g_c+l1), s	3.6		4.5		3.9		5.4					
Green Ext Time (p_c), s	3.5		1.3		3.4		1.2					
Intersection Summary												
HCM 2010 Ctrl Delay			8.3									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

52: Tyson Ave & Joy St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	15	35	20	140	60	160	85	280	200	125	260	35
Future Volume (veh/h)	15	35	20	140	60	160	85	280	200	125	260	35
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1872	1853	1853	1890	1881	1881	1919	1844	1844	1881
Adj Flow Rate, veh/h	16	38	0	152	65	174	92	304	217	136	283	38
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	226	413	351	403	98	264	640	705	491	544	1138	151
Arrive On Green	0.22	0.22	0.00	0.22	0.22	0.22	0.11	0.35	0.35	0.12	0.37	0.37
Sat Flow, veh/h	1142	1872	1591	1357	447	1196	1792	2017	1404	1756	3110	413
Grp Volume(v), veh/h	16	38	0	152	0	239	92	268	253	136	158	163
Grp Sat Flow(s),veh/h/ln	1142	1872	1591	1357	0	1642	1792	1787	1634	1756	1752	1771
Q Serve(g_s), s	0.7	0.9	0.0	5.7	0.0	7.6	1.7	6.6	6.8	2.5	3.6	3.7
Cycle Q Clear(g_c), s	8.3	0.9	0.0	6.7	0.0	7.6	1.7	6.6	6.8	2.5	3.6	3.7
Prop In Lane	1.00			1.00		0.73	1.00		0.86	1.00		0.23
Lane Grp Cap(c), veh/h	226	413	351	403	0	362	640	625	571	544	641	648
V/C Ratio(X)	0.07	0.09	0.00	0.38	0.00	0.66	0.14	0.43	0.44	0.25	0.25	0.25
Avail Cap(c_a), veh/h	763	1293	1099	1041	0	1134	902	1359	1243	772	1333	1347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	17.7	0.0	20.4	0.0	20.3	9.0	14.2	14.3	9.1	12.6	12.7
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.8	0.0	2.9	0.1	0.5	0.5	0.3	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.5	0.0	2.2	0.0	3.7	0.8	3.3	3.1	1.2	1.7	1.8
LnGrp Delay(d),s/veh	24.3	17.9	0.0	21.2	0.0	23.2	9.1	14.7	14.8	9.4	12.8	12.9
LnGrp LOS	C	B		C		C	A	B	B	A	B	B
Approach Vol, veh/h		54			391			613			457	
Approach Delay, s/veh		19.8			22.5			13.9			11.8	
Approach LOS		B			C			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	12.6	26.5		18.1	11.6	27.4		18.1				
Change Period (Y+R <sub>c</sub> ), s	5.5	6.5		5.5	5.5	6.5		5.5				
Max Green Setting (Gmax), s	14.5	43.5		39.5	14.5	43.5		39.5				
Max Q Clear Time (g_c+l1), s	4.5	8.8		10.3	3.7	5.7		9.6				
Green Ext Time (p_c), s	0.4	3.5		3.0	0.3	3.5		3.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				15.7								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary  
57: Restaurant/Jim Adams Dr & Mineral Wells

09/06/2019

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	139	408	18	3	566	31	1	3	2	31	5	88
Future Volume (veh/h)	139	408	18	3	566	31	1	3	2	31	5	88
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A <sub>pbT</sub> )	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1872	1872	1910	1881	1881	1919	1872	1872	1910
Adj Flow Rate, veh/h	162	474	21	3	658	36	1	3	2	36	6	102
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	2	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	614	2749	122	691	2351	129	100	93	62	378	8	133
Arrive On Green	0.05	0.79	0.79	0.69	0.69	0.69	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	1783	3470	153	903	3430	188	1293	1054	703	2740	89	1515
Grp Volume(v), veh/h	162	243	252	3	341	353	1	0	5	36	0	108
Grp Sat Flow(s),veh/h/ln	1783	1778	1845	903	1778	1839	1293	0	1757	1370	0	1605
Q Serve(g_s), s	2.5	3.3	3.3	0.1	7.5	7.5	0.1	0.0	0.3	1.2	0.0	6.6
Cycle Q Clear(g_c), s	2.5	3.3	3.3	0.1	7.5	7.5	6.7	0.0	0.3	1.5	0.0	6.6
Prop In Lane	1.00		0.08	1.00		0.10	1.00		0.40	1.00		0.94
Lane Grp Cap(c), veh/h	614	1409	1462	691	1219	1261	100	0	154	378	0	141
V/C Ratio(X)	0.26	0.17	0.17	0.00	0.28	0.28	0.01	0.00	0.03	0.10	0.00	0.77
Avail Cap(c_a), veh/h	745	1409	1462	691	1219	1261	304	0	431	794	0	385
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.89	0.89	0.89	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.0	2.5	2.5	5.0	6.1	6.1	47.9	0.0	41.7	42.4	0.0	44.6
Incr Delay (d2), s/veh	0.1	0.2	0.2	0.0	0.6	0.6	0.0	0.0	0.1	0.1	0.0	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.6	1.7	0.0	3.8	3.9	0.0	0.0	0.1	0.5	0.0	3.2
LnGrp Delay(d),s/veh	4.1	2.7	2.7	5.0	6.7	6.7	47.9	0.0	41.8	42.5	0.0	50.9
LnGrp LOS	A	A	A	A	A	A	D		D	D		D
Approach Vol, veh/h	657				697			6			144	
Approach Delay, s/veh	3.1				6.7			42.8			48.8	
Approach LOS	A				A			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	10.7	74.6		14.8		85.2		14.8				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0		* 6		6.0		6.0				
Max Green Setting (Gmax), s	12.0	46.0		* 25		64.0		24.0				
Max Q Clear Time (g_c+l1), s	4.5	9.5		8.7		5.3		8.6				
Green Ext Time (p_c), s	0.2	7.1		0.4		7.3		0.4				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			9.3									
HCM 2010 LOS			A									
Notes												

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User approved pedestrian interval to be less than phase max green.

\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 2010 Signalized Intersection Summary

62: Mineral Wells & Walmart/Memorial Dr

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑			↑	↑↑	↑	↑↑	↑	↑	↑↑	↑↑
Traffic Volume (veh/h)	72	47	3	19	77	392	0	176	87	186	97	82
Future Volume (veh/h)	72	47	3	19	77	392	0	176	87	186	97	82
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1844	1844	1881	1890	1853	1853	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	87	57	4	23	93	472	0	212	0	224	117	99
Adj No. of Lanes	2	1	0	0	1	2	1	2	1	2	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	278	139	10	94	379	1019	131	399	179	394	627	533
Arrive On Green	0.08	0.08	0.08	0.26	0.26	0.26	0.00	0.11	0.00	0.11	0.33	0.33
Sat Flow, veh/h	3407	1703	120	364	1471	2773	1149	3504	1568	3584	1881	1599
Grp Volume(v), veh/h	87	0	61	116	0	472	0	212	0	224	117	99
Grp Sat Flow(s),veh/h/ln	1704	0	1823	1835	0	1386	1149	1752	1568	1792	1881	1599
Q Serve(g_s), s	1.3	0.0	1.7	2.8	0.0	7.1	0.0	3.1	0.0	3.3	2.4	2.4
Cycle Q Clear(g_c), s	1.3	0.0	1.7	2.8	0.0	7.1	0.0	3.1	0.0	3.3	2.4	2.4
Prop In Lane	1.00		0.07	0.20		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	278	0	149	472	0	1019	131	399	179	394	627	533
V/C Ratio(X)	0.31	0.00	0.41	0.25	0.00	0.46	0.00	0.53	0.00	0.57	0.19	0.19
Avail Cap(c_a), veh/h	1117	0	598	1103	0	1971	764	2329	1042	2350	1234	1049
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	0.0	24.0	16.2	0.0	13.2	0.0	22.9	0.0	23.2	13.0	13.0
Incr Delay (d2), s/veh	0.6	0.0	1.8	0.5	0.0	0.6	0.0	0.8	0.0	1.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	1.0	1.4	0.0	2.8	0.0	1.5	0.0	1.7	1.3	1.1
LnGrp Delay(d),s/veh	24.4	0.0	25.8	16.6	0.0	13.8	0.0	23.8	0.0	24.2	13.1	13.1
LnGrp LOS	C		C	B		B		C		C	B	B
Approach Vol, veh/h	148				588			212			440	
Approach Delay, s/veh	25.0				14.4			23.8			18.7	
Approach LOS	C				B			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	12.0	12.8		9.0		24.8		21.1				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.5		4.5		* 6.5		7.0				
Max Green Setting (Gmax), s	36.0	36.5		18.0		* 36		33.0				
Max Q Clear Time (g_c+l1), s	5.3	5.1		3.7		4.4		9.1				
Green Ext Time (p_c), s	0.8	1.4		0.4		1.4		5.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				18.3								
HCM 2010 LOS				B								
Notes												

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User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 2010 Signalized Intersection Summary

64: TN-641 & Memorial Dr

09/06/2019



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (veh/h)	139	95	54	374	206	71
Future Volume (veh/h)	139	95	54	374	206	71
Number	2	12	1	6	7	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1872	1872	1844	1844
Adj Flow Rate, veh/h	181	0	70	486	268	0
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.77	0.77	0.77	0.77	0.77	0.77
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1509	675	706	2097	345	308
Arrive On Green	0.43	0.00	0.06	0.59	0.20	0.00
Sat Flow, veh/h	3614	1575	1783	3651	1756	1568
Grp Volume(v), veh/h	181	0	70	486	268	0
Grp Sat Flow(s),veh/h/ln	1761	1575	1783	1778	1756	1568
Q Serve(g_s), s	1.8	0.0	1.1	3.8	8.4	0.0
Cycle Q Clear(g_c), s	1.8	0.0	1.1	3.8	8.4	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1509	675	706	2097	345	308
V/C Ratio(X)	0.12	0.00	0.10	0.23	0.78	0.00
Avail Cap(c_a), veh/h	2625	1175	1183	4176	873	779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.0	0.0	7.1	5.7	22.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	4.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.5	1.8	4.5	0.0
LnGrp Delay(d),s/veh	10.1	0.0	7.1	5.8	26.8	0.0
LnGrp LOS	B		A	A	C	
Approach Vol, veh/h	181			556	268	
Approach Delay, s/veh	10.1			5.9	26.8	
Approach LOS	B			A	C	
Timer	1	2	3	4	5	6
Assigned Phs	1	2		4		6
Phs Duration (G+Y+R <sub>c</sub> ), s	9.4	31.5		17.5		40.9
Change Period (Y+R <sub>c</sub> ), s	6.0	6.5		6.0		6.5
Max Green Setting (Gmax), s	19.0	43.5		29.0		68.5
Max Q Clear Time (g_c+l1), s	3.1	3.8		10.4		5.8
Green Ext Time (p_c), s	0.1	4.0		1.2		4.0
<b>Intersection Summary</b>						
HCM 2010 Ctrl Delay			12.2			
HCM 2010 LOS			B			

# HCM 2010 Signalized Intersection Summary

67: Store/Volunteer Dr & Memorial Dr

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑			↑	↑	↑	↑	
Traffic Volume (veh/h)	65	219	0	0	444	136	0	0	0	40	0	61
Future Volume (veh/h)	65	219	0	0	444	136	0	0	0	40	0	61
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00	1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1863	1863	1900	1881	1844	1844	1853	1853	1890
Adj Flow Rate, veh/h	79	267	0	0	541	166	0	0	0	49	0	74
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	421	1925	0	229	851	260	0	141	120	365	0	121
Arrive On Green	0.05	0.54	0.00	0.00	0.32	0.32	0.00	0.00	0.00	0.08	0.00	0.08
Sat Flow, veh/h	1783	3651	0	1108	2672	817	0	1844	1568	1765	0	1575
Grp Volume(v), veh/h	79	267	0	0	358	349	0	0	0	49	0	74
Grp Sat Flow(s),veh/h/ln	1783	1778	0	1108	1770	1719	0	1844	1568	1765	0	1575
Q Serve(g_s), s	0.8	1.2	0.0	0.0	5.4	5.5	0.0	0.0	0.0	0.8	0.0	1.4
Cycle Q Clear(g_c), s	0.8	1.2	0.0	0.0	5.4	5.5	0.0	0.0	0.0	0.8	0.0	1.4
Prop In Lane	1.00		0.00	1.00		0.48	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	421	1925	0	229	564	547	0	141	120	365	0	121
V/C Ratio(X)	0.19	0.14	0.00	0.00	0.63	0.64	0.00	0.00	0.00	0.13	0.00	0.61
Avail Cap(c_a), veh/h	1160	11214	0	2663	4452	4324	0	1732	1473	1859	0	1455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.3	3.6	0.0	0.0	9.1	9.2	0.0	0.0	0.0	13.8	0.0	14.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.1	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.6	0.0	0.0	2.7	2.6	0.0	0.0	0.0	0.4	0.0	0.7
LnGrp Delay(d),s/veh	6.4	3.6	0.0	0.0	9.6	9.6	0.0	0.0	0.0	13.8	0.0	15.9
LnGrp LOS	A	A			A	A				B		B
Approach Vol, veh/h	346				707				0			123
Approach Delay, s/veh	4.2				9.6				0.0			15.1
Approach LOS	A				A							B
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	7.0	16.0		8.4		23.0		8.4				
Change Period (Y+R <sub>c</sub> ), s	5.5	6.0		* 6		6.0		6.0				
Max Green Setting (Gmax), s	14.5	79.0		* 30		99.0		29.0				
Max Q Clear Time (g_c+l1), s	2.8	7.5		0.0		3.2		3.4				
Green Ext Time (p_c), s	0.1	2.2		0.0		2.2		0.2				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				8.6								
HCM 2010 LOS				A								
Notes												

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\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

HCM 2010 Signalized Intersection Summary  
74: Volunteer Dr & Jim Adams Dr/Restaurant

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙
Traffic Volume (veh/h)	157	6	31	0	0	1	28	191	6	1	153	143
Future Volume (veh/h)	157	6	31	0	0	1	28	191	6	1	153	143
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1863	1863	1900	1863	1863	1900	1872	1872	1910
Adj Flow Rate, veh/h	187	7	37	0	0	1	33	227	7	1	182	170
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	43	230	4	0	4	300	777	24	460	233	218
Arrive On Green	0.17	0.17	0.17	0.00	0.00	0.00	0.04	0.43	0.43	0.26	0.26	0.26
Sat Flow, veh/h	1783	259	1371	1774	0	1583	1774	1798	55	1147	892	833
Grp Volume(v), veh/h	187	0	44	0	0	1	33	0	234	1	0	352
Grp Sat Flow(s),veh/h/ln	1783	0	1630	1774	0	1583	1774	0	1853	1147	0	1725
Q Serve(g_s), s	4.4	0.0	1.0	0.0	0.0	0.0	0.6	0.0	3.7	0.0	0.0	8.5
Cycle Q Clear(g_c), s	4.4	0.0	1.0	0.0	0.0	0.0	0.6	0.0	3.7	0.0	0.0	8.5
Prop In Lane	1.00		0.84	1.00		1.00	1.00		0.03	1.00		0.48
Lane Grp Cap(c), veh/h	299	0	273	4	0	4	300	0	801	460	0	451
V/C Ratio(X)	0.63	0.00	0.16	0.00	0.00	0.29	0.11	0.00	0.29	0.00	0.00	0.78
Avail Cap(c_a), veh/h	1146	0	1047	747	0	667	587	0	2628	1405	0	1873
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.5	0.0	16.1	0.0	0.0	22.5	11.2	0.0	8.3	12.3	0.0	15.5
Incr Delay (d2), s/veh	2.2	0.0	0.3	0.0	0.0	39.4	0.1	0.0	0.1	0.0	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.5	0.0	0.0	0.1	0.3	0.0	1.9	0.0	0.0	4.1
LnGrp Delay(d),s/veh	19.6	0.0	16.3	0.0	0.0	61.9	11.2	0.0	8.4	12.3	0.0	16.6
LnGrp LOS	B		B			E	B		A	B		B
Approach Vol, veh/h	231				1				267			353
Approach Delay, s/veh	19.0				61.9				8.8			16.6
Approach LOS	B				E				A			B
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	7.7	17.8		6.1		25.5		13.6				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	9.0	49.0		19.0		64.0		29.0				
Max Q Clear Time (g_c+l1), s	2.6	10.5		2.0		5.7		6.4				
Green Ext Time (p_c), s	0.0	1.3		0.0		1.3		0.8				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				14.8								
HCM 2010 LOS				B								

# HCM 2010 Signalized Intersection Summary

79: Volunteer Dr & School/Patriot Ave

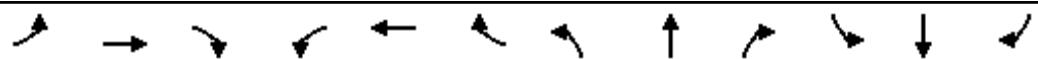
09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	166	69	16	172	0	44	5	119	99	20	259	9
Future Volume (veh/h)	166	69	16	172	0	44	5	119	99	20	259	9
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1891	1891	1928	1835	1835	1872	1835	1835	1872	1919	1919	1957
Adj Flow Rate, veh/h	277	115	27	287	0	73	8	198	165	33	432	15
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	532	169	40	481	0	198	221	263	219	273	576	20
Arrive On Green	0.17	0.11	0.11	0.18	0.00	0.13	0.01	0.28	0.28	0.03	0.31	0.31
Sat Flow, veh/h	1801	1481	348	1747	0	1560	1747	926	772	1827	1843	64
Grp Volume(v), veh/h	277	0	142	287	0	73	8	0	363	33	0	447
Grp Sat Flow(s),veh/h/ln	1801	0	1829	1747	0	1560	1747	0	1699	1827	0	1907
Q Serve(g_s), s	8.1	0.0	4.6	8.6	0.0	2.7	0.2	0.0	12.1	0.8	0.0	13.1
Cycle Q Clear(g_c), s	8.1	0.0	4.6	8.6	0.0	2.7	0.2	0.0	12.1	0.8	0.0	13.1
Prop In Lane	1.00		0.19	1.00		1.00	1.00		0.45	1.00		0.03
Lane Grp Cap(c), veh/h	532	0	209	481	0	198	221	0	482	273	0	596
V/C Ratio(X)	0.52	0.00	0.68	0.60	0.00	0.37	0.04	0.00	0.75	0.12	0.00	0.75
Avail Cap(c_a), veh/h	793	0	853	712	0	727	463	0	1461	473	0	1640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.0	0.0	26.5	18.7	0.0	24.9	16.8	0.0	20.3	15.9	0.0	19.2
Incr Delay (d2), s/veh	0.3	0.0	1.5	1.2	0.0	0.4	0.0	0.0	2.4	0.1	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	2.4	4.2	0.0	1.2	0.1	0.0	6.0	0.4	0.0	7.1
LnGrp Delay(d),s/veh	19.3	0.0	27.9	19.9	0.0	25.3	16.8	0.0	22.7	16.0	0.0	21.1
LnGrp LOS	B		C	B		C	B		C	B		C
Approach Vol, veh/h	419				360				371			480
Approach Delay, s/veh	22.2				21.0				22.6			20.8
Approach LOS	C				C				C			C
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	16.0	13.9	8.2	24.2	16.8	13.1	6.4	25.9				
Change Period (Y+R <sub>c</sub> ), s	5.5	6.0	6.0	6.5	5.5	6.0	6.0	6.5				
Max Green Setting (Gmax), s	19.5	29.0	9.0	53.5	19.5	29.0	9.0	53.5				
Max Q Clear Time (g_c+l1), s	10.1	4.7	2.8	14.1	10.6	6.6	2.2	15.1				
Green Ext Time (p_c), s	0.4	0.5	0.0	3.5	0.8	0.5	0.0	3.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				21.6								
HCM 2010 LOS				C								

# HCM 2010 Signalized Intersection Summary

85: Wilson St & Lone Oak

09/06/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	25	70	15	35	5	10	25	10	10	30	15
Future Volume (veh/h)	20	25	70	15	35	5	10	25	10	10	30	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1910	1872	1910	1900	1863	1900
Adj Flow Rate, veh/h	22	27	76	16	38	5	11	27	11	11	33	16
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	206	412	254	524	60	176	315	106	157	310	126
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	143	497	994	296	1264	144	183	1162	389	129	1143	462
Grp Volume(v), veh/h	125	0	0	59	0	0	49	0	0	60	0	0
Grp Sat Flow(s),veh/h/ln	1634	0	0	1704	0	0	1734	0	0	1734	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.0	0.7	0.0	0.0	0.7	0.0	0.0	0.9	0.0	0.0
Prop In Lane	0.18			0.61	0.27		0.08	0.22		0.22	0.18	0.27
Lane Grp Cap(c), veh/h	798	0	0	837	0	0	597	0	0	592	0	0
V/C Ratio(X)	0.16	0.00	0.00	0.07	0.00	0.00	0.08	0.00	0.00	0.10	0.00	0.00
Avail Cap(c_a), veh/h	798	0	0	837	0	0	597	0	0	592	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.5	0.0	0.0	6.2	0.0	0.0	9.5	0.0	0.0	9.6	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.4	0.0	0.0	0.4	0.0	0.0	0.5	0.0	0.0
LnGrp Delay(d),s/veh	6.9	0.0	0.0	6.4	0.0	0.0	9.8	0.0	0.0	10.0	0.0	0.0
LnGrp LOS	A			A			A			A		
Approach Vol, veh/h	125				59			49			60	
Approach Delay, s/veh	6.9				6.4			9.8			10.0	
Approach LOS	A			A			A			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	15.0		20.0		15.0		20.0					
Change Period (Y+R <sub>c</sub> ), s	5.5		5.5		5.5		5.5					
Max Green Setting (Gmax), s	9.5		14.5		9.5		14.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			7.9									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

2: Irvine St & W Wood St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	0	283	15	11	294	0	20	3	11	0	2	3
Future Volume (veh/h)	0	283	15	11	294	0	20	3	11	0	2	3
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A <sub>pbT</sub> )	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1909	1909	1948	1872	1872	1910	1910	1872	1910	1862	1825	1862
Adj Flow Rate, veh/h	0	304	16	12	316	0	22	3	12	0	2	3
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	120	1034	54	638	1076	0	298	55	123	0	165	248
Arrive On Green	0.00	0.57	0.57	0.57	0.57	0.00	0.25	0.25	0.25	0.00	0.25	0.25
Sat Flow, veh/h	1086	1798	95	1061	1872	0	809	219	494	0	660	990
Grp Volume(v), veh/h	0	0	320	12	316	0	37	0	0	0	0	5
Grp Sat Flow(s),veh/h/ln	1086	0	1893	1061	1872	0	1522	0	0	0	0	1651
Q Serve(g_s), s	0.0	0.0	5.2	0.4	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.0	5.2	5.5	5.2	0.0	1.0	0.0	0.0	0.0	0.0	0.1
Prop In Lane	1.00		0.05	1.00		0.00	0.59		0.32	0.00		0.60
Lane Grp Cap(c), veh/h	120	0	1088	638	1076	0	476	0	0	0	0	413
V/C Ratio(X)	0.00	0.00	0.29	0.02	0.29	0.00	0.08	0.00	0.00	0.00	0.00	0.01
Avail Cap(c_a), veh/h	120	0	1088	638	1076	0	476	0	0	0	0	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	6.5	7.9	6.5	0.0	17.2	0.0	0.0	0.0	0.0	16.9
Incr Delay (d2), s/veh	0.0	0.0	0.7	0.1	0.7	0.0	0.3	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.9	0.1	2.8	0.0	0.5	0.0	0.0	0.0	0.0	0.1
LnGrp Delay(d),s/veh	0.0	0.0	7.2	8.0	7.2	0.0	17.6	0.0	0.0	0.0	0.0	17.0
LnGrp LOS			A	A	A		B					B
Approach Vol, veh/h	320			328			37			5		
Approach Delay, s/veh	7.2			7.2			17.6			17.0		
Approach LOS	A			A			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	40.0		20.0		40.0		20.0					
Change Period (Y+R <sub>c</sub> ), s	5.5		5.0		5.5		5.0					
Max Green Setting (Gmax), s	34.5		15.0		34.5		15.0					
Max Q Clear Time (g_c+l1), s	7.2		3.0		7.5		2.1					
Green Ext Time (p_c), s	6.2		0.0		6.2		0.1					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			7.8									
HCM 2010 LOS			A									

## HCM 2010 Signalized Intersection Summary

7: S Market St/N Market St &amp; E Wood St

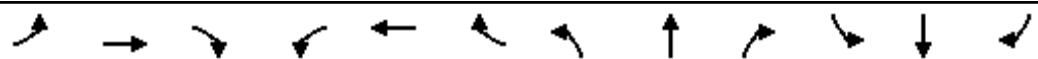
09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗	↖ ↗
Traffic Volume (veh/h)	24	142	114	29	158	78	147	257	50	93	201	28
Future Volume (veh/h)	24	142	114	29	158	78	147	257	50	93	201	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	26	151	121	31	168	83	156	273	53	99	214	30
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	396	325	261	326	404	200	653	556	108	594	580	81
Arrive On Green	0.34	0.34	0.34	0.68	0.68	0.68	0.24	0.73	0.73	0.24	0.73	0.73
Sat Flow, veh/h	1118	954	764	1108	1184	585	1783	1524	296	1765	1591	223
Grp Volume(v), veh/h	26	0	272	31	0	251	156	0	326	99	0	244
Grp Sat Flow(s),veh/h/ln	1118	0	1719	1108	0	1769	1783	0	1820	1765	0	1814
Q Serve(g_s), s	1.5	0.0	10.5	1.4	0.0	5.3	4.0	0.0	6.4	2.4	0.0	4.2
Cycle Q Clear(g_c), s	6.8	0.0	10.5	12.0	0.0	5.3	4.0	0.0	6.4	2.4	0.0	4.2
Prop In Lane	1.00		0.44	1.00		0.33	1.00		0.16	1.00		0.12
Lane Grp Cap(c), veh/h	396	0	586	326	0	603	653	0	664	594	0	662
V/C Ratio(X)	0.07	0.00	0.46	0.10	0.00	0.42	0.24	0.00	0.49	0.17	0.00	0.37
Avail Cap(c_a), veh/h	396	0	586	326	0	603	653	0	664	594	0	662
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.7	0.0	21.9	13.9	0.0	9.7	10.9	0.0	8.2	10.6	0.0	7.9
Incr Delay (d2), s/veh	0.3	0.0	2.6	0.6	0.0	2.1	0.9	0.0	2.6	0.6	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	5.4	0.5	0.0	2.8	2.0	0.0	3.5	1.2	0.0	2.3
LnGrp Delay(d),s/veh	23.0	0.0	24.5	14.5	0.0	11.9	11.7	0.0	10.8	11.2	0.0	9.5
LnGrp LOS	C		C	B		B	B		B	B		A
Approach Vol, veh/h	298			282			482			343		
Approach Delay, s/veh	24.4			12.1			11.1			10.0		
Approach LOS	C			B			B			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	15.0	36.0		34.0	15.0	36.0		34.0				
Change Period (Y+R <sub>c</sub> ), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	31.0		29.0	10.0	31.0		29.0				
Max Q Clear Time (g_c+l1), s	0.0	0.0		0.0	0.0	0.0		0.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				13.9								
HCM 2010 LOS				B								

# HCM 2010 Signalized Intersection Summary

8: Highland St & E Wood St

09/06/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	1	343	1	9	283	4	2	2	5	3	5	3
Future Volume (veh/h)	1	343	1	9	283	4	2	2	5	3	5	3
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1844	1844	1881	1872	1872	1910	1938	1900	1938	1928	1891	1928
Adj Flow Rate, veh/h	1	369	1	10	304	4	2	2	5	3	5	3
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	964	1546	4	887	1550	20	56	22	40	61	41	20
Arrive On Green	0.84	0.84	0.84	1.00	1.00	1.00	0.04	0.04	0.04	0.04	0.04	0.04
Sat Flow, veh/h	1056	1838	5	1013	1844	24	221	518	924	294	951	467
Grp Volume(v), veh/h	1	0	370	10	0	308	9	0	0	11	0	0
Grp Sat Flow(s),veh/h/ln	1056	0	1843	1013	0	1868	1664	0	0	1712	0	0
Q Serve(g_s), s	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	3.8	3.8	0.0	0.0	0.5	0.0	0.0	0.6	0.0	0.0
Prop In Lane	1.00			1.00		0.01	0.22		0.56	0.27		0.27
Lane Grp Cap(c), veh/h	964	0	1550	887	0	1571	118	0	0	122	0	0
V/C Ratio(X)	0.00	0.00	0.24	0.01	0.00	0.20	0.08	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	964	0	1550	887	0	1571	381	0	0	392	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	0.99	0.00	0.99	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	1.2	0.0	1.5	0.1	0.0	0.0	43.7	0.0	0.0	43.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.0	0.0	0.3	0.2	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.0	0.0	0.0	0.1	0.2	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d),s/veh	1.2	0.0	1.9	0.1	0.0	0.3	43.9	0.0	0.0	44.0	0.0	0.0
LnGrp LOS	A		A	A		A	D			D		
Approach Vol, veh/h	371			318			9			11		
Approach Delay, s/veh	1.9			0.3			43.9			44.0		
Approach LOS	A			A			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	85.4		9.6		85.4		9.6					
Change Period (Y+R <sub>c</sub> ), s	5.5		5.5		5.5		5.5					
Max Green Setting (Gmax), s	64.5		19.5		64.5		19.5					
Max Q Clear Time (g_c+l1), s	5.8		2.6		5.8		2.5					
Green Ext Time (p_c), s	2.2		0.0		2.2		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			2.3									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

10: Lake St & E Wood St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	8	367	17	6	302	50	11	11	9	65	25	15
Future Volume (veh/h)	8	367	17	6	302	50	11	11	9	65	25	15
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1853	1853	1853	1852	1816	1852	1919	1881	1919
Adj Flow Rate, veh/h	8	374	17	6	308	51	11	11	9	66	26	15
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	904	1437	65	872	1499	1274	84	72	43	140	38	19
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	1023	1777	81	984	1853	1575	377	832	495	918	441	222
Grp Volume(v), veh/h	8	0	391	6	308	51	31	0	0	107	0	0
Grp Sat Flow(s),veh/h/ln	1023	0	1858	984	1853	1575	1704	0	0	1581	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	6.2	0.0	0.0
Prop In Lane	1.00		0.04	1.00		1.00	0.35		0.29	0.62		0.14
Lane Grp Cap(c), veh/h	904	0	1503	872	1499	1274	198	0	0	197	0	0
V/C Ratio(X)	0.01	0.00	0.26	0.01	0.21	0.04	0.16	0.00	0.00	0.54	0.00	0.00
Avail Cap(c_a), veh/h	904	0	1503	872	1499	1274	551	0	0	547	0	0
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.99	0.00	0.99	0.99	0.99	0.99	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	40.4	0.0	0.0	42.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.0	0.3	0.1	0.4	0.0	0.0	2.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	0.0	0.1	0.0	0.8	0.0	0.0	2.9	0.0	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.4	0.0	0.3	0.1	40.8	0.0	0.0	44.7	0.0	0.0
LnGrp LOS	A		A	A	A	A	D			D		
Approach Vol, veh/h	399			365			31			107		
Approach Delay, s/veh	0.4			0.3			40.8			44.7		
Approach LOS	A			A			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	81.8		13.2		81.8		13.2					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	55.0		30.0		55.0		30.0					
Max Q Clear Time (g_c+l1), s	2.0		3.6		2.0		8.2					
Green Ext Time (p_c), s	3.5		0.5		3.5		0.5					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			7.0									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

12: N Market St & Washington St

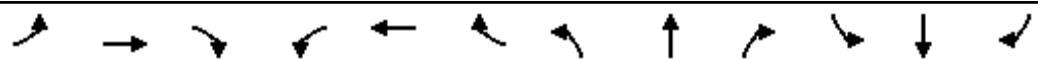
09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙			↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙		
Traffic Volume (veh/h)	6	56	35	49	54	39	35	267	55	21	239	8
Future Volume (veh/h)	6	56	35	49	54	39	35	267	55	21	239	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	6	57	36	50	55	40	36	272	56	21	244	8
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	459	350	221	465	332	242	709	833	172	661	987	32
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Sat Flow, veh/h	1289	1063	672	1304	1009	734	1129	1507	310	1042	1785	59
Grp Volume(v), veh/h	6	0	93	50	0	95	36	0	328	21	0	252
Grp Sat Flow(s),veh/h/ln	1289	0	1735	1304	0	1743	1129	0	1817	1042	0	1843
Q Serve(g_s), s	0.3	0.0	3.2	2.4	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.6	0.0	3.2	5.6	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.39	1.00		0.42	1.00		0.17	1.00		0.03
Lane Grp Cap(c), veh/h	459	0	572	465	0	574	709	0	1005	661	0	1019
V/C Ratio(X)	0.01	0.00	0.16	0.11	0.00	0.17	0.05	0.00	0.33	0.03	0.00	0.25
Avail Cap(c_a), veh/h	459	0	572	465	0	574	709	0	1005	661	0	1019
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	20.2	22.2	0.0	20.2	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.5	0.0	0.6	0.1	0.0	0.9	0.1	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.6	0.9	0.0	1.7	0.0	0.0	0.2	0.0	0.0	0.2
LnGrp Delay(d),s/veh	21.5	0.0	20.8	22.7	0.0	20.8	0.1	0.0	0.9	0.1	0.0	0.6
LnGrp LOS	C	C	C		C	A		A	A	A		A
Approach Vol, veh/h		99			145			364			273	
Approach Delay, s/veh		20.8			21.5			0.8			0.5	
Approach LOS		C			C			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	52.0		33.0		52.0		33.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	47.0		28.0		47.0		28.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			6.4									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

17: N Market St & E Ruff St

09/06/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	18	23	9	17	14	9	268	35	10	235	16
Future Volume (veh/h)	15	18	23	9	17	14	9	268	35	10	235	16
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1910	1872	1910	1919	1881	1919	1881	1881	1919	1853	1853	1890
Adj Flow Rate, veh/h	15	19	24	9	18	14	9	276	36	10	242	16
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	187	199	129	248	169	672	959	125	707	1012	67
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	1.00	1.00	1.00	0.59	0.59	0.59
Sat Flow, veh/h	322	637	677	263	844	574	1128	1631	213	1058	1720	114
Grp Volume(v), veh/h	58	0	0	41	0	0	9	0	312	10	0	258
Grp Sat Flow(s),veh/h/ln	1637	0	0	1682	0	0	1128	0	1844	1058	0	1833
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0	5.7
Cycle Q Clear(g_c), s	2.1	0.0	0.0	1.4	0.0	0.0	5.8	0.0	0.0	0.3	0.0	5.7
Prop In Lane	0.26			0.41	0.22		0.34	1.00		0.12	1.00	0.06
Lane Grp Cap(c), veh/h	535	0	0	546	0	0	672	0	1085	707	0	1078
V/C Ratio(X)	0.11	0.00	0.00	0.08	0.00	0.00	0.01	0.00	0.29	0.01	0.00	0.24
Avail Cap(c_a), veh/h	535	0	0	546	0	0	672	0	1085	707	0	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.9	0.0	0.0	21.7	0.0	0.0	0.3	0.0	0.0	7.3	0.0	8.4
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.2	0.1	0.0	3.0
LnGrp Delay(d),s/veh	22.3	0.0	0.0	21.9	0.0	0.0	0.4	0.0	0.7	7.3	0.0	8.9
LnGrp LOS	C			C			A		A	A		A
Approach Vol, veh/h	58			41			321		268			
Approach Delay, s/veh	22.3			21.9			0.7		8.9			
Approach LOS	C			C			A		A			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	55.0		30.0		55.0		30.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (G <sub>max</sub> ), s	50.0		25.0		50.0		25.0					
Max Q Clear Time (g <sub>c+l1</sub> ), s	0.0		0.0		0.0		0.0					
Green Ext Time (p <sub>c</sub> ), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			6.9									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

20: Volunteer Dr & E Wood St

09/06/2019



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↑↑	↑↑	↑	↑
Traffic Volume (veh/h)	435	80	90	410	40	65
Future Volume (veh/h)	435	80	90	410	40	65
Number	2	12	1	6	7	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1938	1844	1844	1853	1853
Adj Flow Rate, veh/h	473	87	98	446	43	71
Adj No. of Lanes	2	0	1	2	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2081	381	701	2799	141	218
Arrive On Green	0.68	0.68	0.06	0.80	0.08	0.08
Sat Flow, veh/h	3144	558	1756	3596	1765	1575
Grp Volume(v), veh/h	279	281	98	446	43	71
Grp Sat Flow(s),veh/h/ln	1805	1802	1756	1752	1765	1575
Q Serve(g_s), s	5.5	5.6	1.3	2.8	2.2	3.9
Cycle Q Clear(g_c), s	5.5	5.6	1.3	2.8	2.2	3.9
Prop In Lane		0.31	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1232	1230	701	2799	141	218
V/C Ratio(X)	0.23	0.23	0.14	0.16	0.30	0.33
Avail Cap(c_a), veh/h	1232	1230	830	2799	455	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.88	0.88	0.99	0.99	1.00	1.00
Uniform Delay (d), s/veh	5.7	5.7	3.2	2.2	41.2	36.9
Incr Delay (d2), s/veh	0.4	0.4	0.0	0.0	1.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	2.9	0.6	1.3	1.1	3.5
LnGrp Delay(d),s/veh	6.0	6.0	3.2	2.2	42.4	37.8
LnGrp LOS	A	A	A	A	D	D
Approach Vol, veh/h	560			544	114	
Approach Delay, s/veh	6.0			2.4	39.5	
Approach LOS	A			A	D	
Timer	1	2	3	4	5	6
Assigned Phs	1	2		4		6
Phs Duration (G+Y+R <sub>c</sub> ), s	11.0	70.8		13.1		81.9
Change Period (Y+R <sub>c</sub> ), s	5.5	6.0		5.5		6.0
Max Green Setting (Gmax), s	12.5	41.0		24.5		59.0
Max Q Clear Time (g_c+l1), s	3.3	7.6		5.9		4.8
Green Ext Time (p_c), s	0.1	7.4		0.3		7.8
Intersection Summary						
HCM 2010 Ctrl Delay			7.6			
HCM 2010 LOS			A			
Notes						

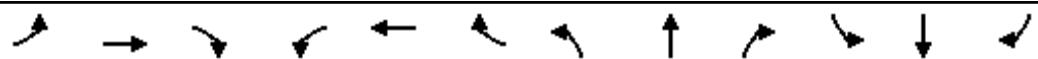
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User approved pedestrian interval to be less than phase max green.

# HCM 2010 Signalized Intersection Summary

22: N Market St & Rison St

09/06/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	→	↓	←	↖	↙	↑	↗	↘	↑	↗	↖
Traffic Volume (veh/h)	15	15	25	15	15	10	30	250	15	10	220	5
Future Volume (veh/h)	15	15	25	15	15	10	30	250	15	10	220	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1910	1872	1910	1900	1863	1900	1853	1853	1890	1910	1872	1910
Adj Flow Rate, veh/h	16	16	27	16	16	11	33	272	16	11	239	5
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	39	55	128	55	31	995	1286	76	90	1323	27
Arrive On Green	0.07	0.07	0.07	0.07	0.07	0.07	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	356	538	755	497	754	430	1126	1733	102	27	1783	36
Grp Volume(v), veh/h	59	0	0	43	0	0	33	0	288	255	0	0
Grp Sat Flow(s),veh/h/ln	1649	0	0	1681	0	0	1126	0	1835	1846	0	0
Q Serve(g_s), s	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.8	0.0	0.0	1.2	0.0	0.0	0.3	0.0	2.6	2.2	0.0	0.0
Prop In Lane	0.27			0.46	0.37		0.26	1.00		0.06	0.04	0.02
Lane Grp Cap(c), veh/h	205	0	0	214	0	0	995	0	1362	1439	0	0
V/C Ratio(X)	0.29	0.00	0.00	0.20	0.00	0.00	0.03	0.00	0.21	0.18	0.00	0.00
Avail Cap(c_a), veh/h	975	0	0	975	0	0	995	0	1362	1439	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.0	0.0	0.0	23.8	0.0	0.0	1.8	0.0	2.1	2.1	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.5	0.0	0.0	0.1	0.0	0.4	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.6	0.0	0.0	0.1	0.0	1.4	1.2	0.0	0.0
LnGrp Delay(d),s/veh	24.8	0.0	0.0	24.2	0.0	0.0	1.9	0.0	2.5	2.3	0.0	0.0
LnGrp LOS	C			C			A		A	A		
Approach Vol, veh/h	59			43			321		255			
Approach Delay, s/veh	24.8			24.2			2.4		2.3			
Approach LOS	C			C			A		A			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	45.0		8.9		45.0		8.9					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	40.0		30.0		40.0		30.0					
Max Q Clear Time (g_c+l1), s	4.6		3.8		4.2		3.2					
Green Ext Time (p_c), s	2.5		0.3		2.5		0.3					
Intersection Summary												
HCM 2010 Ctrl Delay			5.7									
HCM 2010 LOS			A									

## HCM 2010 Signalized Intersection Summary

27: N Poplar St &amp; Washington St

09/06/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	12	88	36	29	105	31	28	26	30	28	45	14
Future Volume (veh/h)	12	88	36	29	105	31	28	26	30	28	45	14
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1844	1844	1881
Adj Flow Rate, veh/h	13	95	39	31	113	33	30	28	32	30	48	15
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	606	588	241	669	656	191	607	329	376	602	555	174
Arrive On Green	0.94	0.94	0.94	0.47	0.47	0.47	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1231	1250	513	1257	1393	407	1340	798	913	1324	1348	421
Grp Volume(v), veh/h	13	0	134	31	0	146	30	0	60	30	0	63
Grp Sat Flow(s),veh/h/ln	1231	0	1763	1257	0	1800	1340	0	1711	1324	0	1770
Q Serve(g_s), s	0.1	0.0	0.4	1.1	0.0	4.0	1.2	0.0	1.8	1.2	0.0	1.8
Cycle Q Clear(g_c), s	4.1	0.0	0.4	1.6	0.0	4.0	3.0	0.0	1.8	3.0	0.0	1.8
Prop In Lane	1.00		0.29	1.00		0.23	1.00		0.53	1.00		0.24
Lane Grp Cap(c), veh/h	606	0	830	669	0	847	607	0	705	602	0	729
V/C Ratio(X)	0.02	0.00	0.16	0.05	0.00	0.17	0.05	0.00	0.09	0.05	0.00	0.09
Avail Cap(c_a), veh/h	606	0	830	669	0	847	607	0	705	602	0	729
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	1.8	0.0	1.3	12.5	0.0	13.0	16.2	0.0	15.2	16.2	0.0	15.2
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.1	0.0	0.4	0.2	0.0	0.2	0.2	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.3	0.4	0.0	2.1	0.5	0.0	0.9	0.5	0.0	0.9
LnGrp Delay(d),s/veh	1.8	0.0	1.8	12.6	0.0	13.4	16.3	0.0	15.5	16.3	0.0	15.5
LnGrp LOS	A		A	B		B	B		B	B		B
Approach Vol, veh/h	147			177			90			93		
Approach Delay, s/veh	1.8			13.3			15.8			15.8		
Approach LOS	A			B			B			B		

Timer	1	2	3	4	5	6	7	8
Assigned Phs	2		4		6		8	
Phs Duration (G+Y+R <sub>c</sub> ), s	45.0		40.0		45.0		40.0	
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0	
Max Green Setting (G <sub>max</sub> ), s	40.0		35.0		40.0		35.0	
Max Q Clear Time (g <sub>c+l1</sub> ), s	0.0		0.0		0.0		0.0	
Green Ext Time (p <sub>c</sub> ), s	0.0		0.0		0.0		0.0	

**Intersection Summary**

HCM 2010 Ctrl Delay	10.8
HCM 2010 LOS	B

HCM 2010 Signalized Intersection Summary  
29: E Wood St & Chickasaw/Fairgrounds Rd

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↗	↑ ↘	↑ ↙	↑ ↖
Traffic Volume (veh/h)	52	24	13	40	26	20	6	467	54	14	475	59
Future Volume (veh/h)	52	24	13	40	26	20	6	467	54	14	475	59
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1844	1844	1844	1844	1844	1881	1853	1853	1890
Adj Flow Rate, veh/h	54	25	0	41	27	0	6	481	56	14	490	61
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	188	160	246	184	157	669	2212	257	680	2205	273
Arrive On Green	0.10	0.10	0.00	0.10	0.10	0.00	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	1392	1881	1599	1366	1844	1568	845	3164	367	860	3154	391
Grp Volume(v), veh/h	54	25	0	41	27	0	6	265	272	14	273	278
Grp Sat Flow(s),veh/h/ln	1392	1881	1599	1366	1844	1568	845	1752	1779	860	1761	1784
Q Serve(g_s), s	2.1	0.7	0.0	1.6	0.8	0.0	0.1	3.1	3.1	0.3	3.2	3.2
Cycle Q Clear(g_c), s	2.9	0.7	0.0	2.3	0.8	0.0	3.3	3.1	3.1	3.4	3.2	3.2
Prop In Lane	1.00			1.00			1.00	1.00		0.21	1.00	0.22
Lane Grp Cap(c), veh/h	246	188	160	246	184	157	669	1225	1244	680	1231	1247
V/C Ratio(X)	0.22	0.13	0.00	0.17	0.15	0.00	0.01	0.22	0.22	0.02	0.22	0.22
Avail Cap(c_a), veh/h	338	312	265	336	306	260	728	1347	1368	741	1354	1372
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	23.5	0.0	24.5	23.5	0.0	3.7	3.1	3.1	3.7	3.1	3.1
Incr Delay (d2), s/veh	0.6	0.5	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.4	0.0	0.6	0.4	0.0	0.0	1.5	1.5	0.1	1.5	1.6
LnGrp Delay(d),s/veh	25.5	23.9	0.0	25.0	24.0	0.0	3.7	3.1	3.1	3.7	3.1	3.1
LnGrp LOS	C	C		C	C		A	A	A	A	A	A
Approach Vol, veh/h		79				68			543			565
Approach Delay, s/veh		25.0				24.6			3.1			3.1
Approach LOS		C			C			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	11.2		46.0		11.2		46.0					
Change Period (Y+R <sub>c</sub> ), s	5.5		6.0		5.5		6.0					
Max Green Setting (Gmax), s	9.5		44.0		9.5		44.0					
Max Q Clear Time (g_c+l1), s	4.9		5.3		4.3		5.4					
Green Ext Time (p_c), s	0.3		0.9		0.3		0.9					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			5.6									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

30: Tyson Ave & E Wood St

09/06/2019



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑	↑	↑	↑↑	↑↑	↑		
Traffic Volume (veh/h)	267	180	257	224	125	291		
Future Volume (veh/h)	267	180	257	224	125	291		
Number	2	12	1	6	7	14		
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1853	1853	1872	1872	1853	1853		
Adj Flow Rate, veh/h	272	0	262	229	128	0		
Adj No. of Lanes	1	1	1	2	2	1		
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1226	1042	996	2933	204	94		
Arrive On Green	1.00	0.00	0.11	0.82	0.06	0.00		
Sat Flow, veh/h	1853	1575	1783	3651	3424	1575		
Grp Volume(v), veh/h	272	0	262	229	128	0		
Grp Sat Flow(s),veh/h/ln	1853	1575	1783	1778	1712	1575		
Q Serve(g_s), s	0.0	0.0	3.5	1.1	3.5	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	3.5	1.1	3.5	0.0		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1226	1042	996	2933	204	94		
V/C Ratio(X)	0.22	0.00	0.26	0.08	0.63	0.00		
Avail Cap(c_a), veh/h	1226	1042	1119	2933	793	365		
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00		
Upstream Filter(l)	0.98	0.00	0.99	0.99	1.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	2.5	1.6	43.6	0.0		
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.1	3.1	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.7	0.6	1.7	0.0		
LnGrp Delay(d),s/veh	0.4	0.0	2.7	1.6	46.8	0.0		
LnGrp LOS	A		A	A	D			
Approach Vol, veh/h	272			491	128			
Approach Delay, s/veh	0.4			2.2	46.8			
Approach LOS	A			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+R <sub>c</sub> ), s	15.5	68.8		10.7		84.3		
Change Period (Y+R <sub>c</sub> ), s	5.5	6.0		5.0		6.0		
Max Green Setting (Gmax), s	16.5	40.0		22.0		62.0		
Max Q Clear Time (g_c+l1), s	5.5	2.0		5.5		3.1		
Green Ext Time (p_c), s	0.8	2.2		0.4		2.2		
Intersection Summary								
HCM 2010 Ctrl Delay			8.0					
HCM 2010 LOS			A					

# HCM 2010 Signalized Intersection Summary

32: S Brewer St/N Brewer St & E Wood St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↙ ↖ ↘ ↗ ↘ ↙ ↖ ↙											
Traffic Volume (veh/h)	16	279	6	0	281	29	7	27	9	33	26	19
Future Volume (veh/h)	16	279	6	0	281	29	7	27	9	33	26	19
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1890	1853	1890	1919	1881	1919	1890	1853	1890
Adj Flow Rate, veh/h	17	300	6	0	302	31	8	29	10	35	28	20
Adj No. of Lanes	1	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	605	1076	22	0	973	100	105	349	109	231	180	112
Arrive On Green	1.00	1.00	1.00	0.00	0.59	0.59	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1048	1829	37	0	1654	170	188	1185	371	581	613	379
Grp Volume(v), veh/h	17	0	306	0	0	333	47	0	0	83	0	0
Grp Sat Flow(s),veh/h/ln	1048	0	1866	0	0	1823	1745	0	0	1573	0	0
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	7.8	0.0	0.0	0.0	0.2	0.0	0.0
Cycle Q Clear(g_c), s	8.0	0.0	0.0	0.0	0.0	7.8	1.6	0.0	0.0	3.0	0.0	0.0
Prop In Lane	1.00		0.02	0.00		0.09	0.17		0.21	0.42		0.24
Lane Grp Cap(c), veh/h	605	0	1097	0	0	1073	563	0	0	523	0	0
V/C Ratio(X)	0.03	0.00	0.28	0.00	0.00	0.31	0.08	0.00	0.00	0.16	0.00	0.00
Avail Cap(c_a), veh/h	605	0	1097	0	0	1073	563	0	0	523	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.6	0.0	0.0	0.0	0.0	8.8	21.7	0.0	0.0	22.2	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.0	0.0	0.8	0.3	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2	0.0	0.0	4.1	0.8	0.0	0.0	1.5	0.0	0.0
LnGrp Delay(d),s/veh	0.7	0.0	0.6	0.0	0.0	9.6	22.0	0.0	0.0	22.9	0.0	0.0
LnGrp LOS	A		A			A	C			C		
Approach Vol, veh/h	323			333			47			83		
Approach Delay, s/veh	0.6			9.6			22.0			22.9		
Approach LOS	A			A			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	55.0		30.0		55.0		30.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	50.0		25.0		50.0		25.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			8.0									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

35: S Market St & E Blythe St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	20	47	51	24	26	37	429	30	4	369	1
Future Volume (veh/h)	3	20	47	51	24	26	37	429	30	4	369	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1853	1890	1910	1872	1910	1853	1853	1890	1872	1872	1910
Adj Flow Rate, veh/h	3	22	51	55	26	28	40	466	33	4	401	1
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	155	326	270	128	116	658	1006	71	475	1098	3
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.59	0.59	0.59	1.00	1.00	1.00
Sat Flow, veh/h	15	529	1109	701	436	393	974	1711	121	900	1867	5
Grp Volume(v), veh/h	76	0	0	109	0	0	40	0	499	4	0	402
Grp Sat Flow(s),veh/h/ln	1652	0	0	1531	0	0	974	0	1832	900	0	1871
Q Serve(g_s), s	0.0	0.0	0.0	1.2	0.0	0.0	1.5	0.0	13.1	0.1	0.0	0.0
Cycle Q Clear(g_c), s	2.9	0.0	0.0	4.1	0.0	0.0	1.5	0.0	13.1	13.2	0.0	0.0
Prop In Lane	0.04		0.67	0.50		0.26	1.00		0.07	1.00		0.00
Lane Grp Cap(c), veh/h	530	0	0	514	0	0	658	0	1078	475	0	1101
V/C Ratio(X)	0.14	0.00	0.00	0.21	0.00	0.00	0.06	0.00	0.46	0.01	0.00	0.37
Avail Cap(c_a), veh/h	530	0	0	514	0	0	658	0	1078	475	0	1101
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.2	0.0	0.0	22.6	0.0	0.0	7.5	0.0	9.9	1.7	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.9	0.0	0.0	0.2	0.0	1.4	0.0	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	2.0	0.0	0.0	0.4	0.0	6.9	0.0	0.0	0.3
LnGrp Delay(d),s/veh	22.8	0.0	0.0	23.5	0.0	0.0	7.7	0.0	11.3	1.8	0.0	0.9
LnGrp LOS	C		C			A		B	A		A	
Approach Vol, veh/h	76			109			539			406		
Approach Delay, s/veh	22.8			23.5			11.1			0.9		
Approach LOS	C		C			B			A			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	55.0		30.0		55.0		30.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	50.0		25.0		50.0		25.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			9.4									
HCM 2010 LOS			A									

## HCM 2010 Signalized Intersection Summary

37: S Poplar St/N Poplar St &amp; E Wood St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	31	270	28	16	209	35	6	33	27	42	42	15
Future Volume (veh/h)	31	270	28	16	209	35	6	33	27	42	42	15
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	33	287	30	17	222	37	6	35	29	45	45	16
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	705	922	96	673	865	144	495	312	259	487	430	153
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1121	1667	174	1064	1565	261	1343	948	785	1326	1307	465
Grp Volume(v), veh/h	33	0	317	17	0	259	6	0	64	45	0	61
Grp Sat Flow(s),veh/h/ln	1121	0	1841	1064	0	1826	1343	0	1733	1326	0	1771
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	2.2	2.1	0.0	2.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	2.2	4.3	0.0	2.0
Prop In Lane	1.00		0.09	1.00		0.14	1.00		0.45	1.00		0.26
Lane Grp Cap(c), veh/h	705	0	1018	673	0	1010	495	0	571	487	0	584
V/C Ratio(X)	0.05	0.00	0.31	0.03	0.00	0.26	0.01	0.00	0.11	0.09	0.00	0.10
Avail Cap(c_a), veh/h	705	0	1018	673	0	1010	495	0	571	487	0	584
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	20.6	0.0	19.8	21.3	0.0	19.8
Incr Delay (d2), s/veh	0.1	0.0	0.8	0.1	0.0	0.6	0.0	0.0	0.4	0.4	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	0.0	0.0	0.2	0.1	0.0	1.1	0.8	0.0	1.0
LnGrp Delay(d),s/veh	0.1	0.0	0.8	0.1	0.0	0.6	20.6	0.0	20.2	21.7	0.0	20.2
LnGrp LOS	A		A	A		A	C		C	C		C
Approach Vol, veh/h	350			276			70			106		
Approach Delay, s/veh	0.7			0.6			20.3			20.8		
Approach LOS	A			A			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	52.0		33.0		52.0		33.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	47.0		28.0		47.0		28.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			5.0									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

42: Dunlap & Veterans Dr

09/06/2019

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑	↑		↑↓			↑	↑
Traffic Volume (veh/h)	4	373	15	55	449	65	12	32	29	45	25	6
Future Volume (veh/h)	4	373	15	55	449	65	12	32	29	45	25	6
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1872	1872	1835	1872	1910	1872	1910
Adj Flow Rate, veh/h	4	393	16	58	473	68	13	34	31	47	26	6
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	717	2573	105	835	2772	1240	52	53	43	113	38	8
Arrive On Green	0.01	0.75	0.75	0.04	0.78	0.78	0.06	0.06	0.06	0.06	0.06	0.06
Sat Flow, veh/h	1765	3449	140	1783	3557	1591	196	847	688	931	596	125
Grp Volume(v), veh/h	4	200	209	58	473	68	78	0	0	79	0	0
Grp Sat Flow(s),veh/h/ln	1765	1761	1829	1783	1778	1591	1731	0	0	1652	0	0
Q Serve(g_s), s	0.1	3.4	3.4	0.7	3.6	1.0	0.0	0.0	0.0	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.1	3.4	3.4	0.7	3.6	1.0	4.5	0.0	0.0	4.8	0.0	0.0
Prop In Lane	1.00		0.08	1.00		1.00	0.17		0.40	0.59		0.08
Lane Grp Cap(c), veh/h	717	1313	1364	835	2772	1240	149	0	0	159	0	0
V/C Ratio(X)	0.01	0.15	0.15	0.07	0.17	0.05	0.52	0.00	0.00	0.50	0.00	0.00
Avail Cap(c_a), veh/h	884	1313	1364	944	2772	1240	580	0	0	556	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.3	3.8	3.8	2.4	2.9	2.7	48.3	0.0	0.0	48.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.0	0.1	0.1	2.8	0.0	0.0	2.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.7	1.8	0.3	1.8	0.5	2.3	0.0	0.0	2.4	0.0	0.0
LnGrp Delay(d),s/veh	3.3	4.1	4.1	2.4	3.1	2.8	51.1	0.0	0.0	50.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	D			D		
Approach Vol, veh/h	413				599			78			79	
Approach Delay, s/veh	4.1				3.0			51.1			50.7	
Approach LOS	A				A			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	5.1	87.8		12.1	8.6	84.3		12.1				
Change Period (Y+R <sub>c</sub> ), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	10.5	44.0		34.5	10.5	44.0		34.5				
Max Q Clear Time (g_c+l1), s	2.1	5.6		6.5	2.7	5.4		6.8				
Green Ext Time (p_c), s	0.0	10.3		0.6	0.1	10.3		0.6				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				9.8								
HCM 2010 LOS				A								
Notes												

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User approved pedestrian interval to be less than phase max green.

HCM 2010 Signalized Intersection Summary  
47: Tyson Ave & Mineral Wells/Veterans Dr

09/06/2019

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑	↑↑	↑↑	↑
Traffic Volume (veh/h)	132	436	268	30	389	58	72	175	164	380	150	44
Future Volume (veh/h)	132	436	268	30	389	58	72	175	164	380	150	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1825	1825	1825	1853	1853	1853	1881	1881	1881	1872	1872	1872
Adj Flow Rate, veh/h	145	479	0	33	427	0	79	192	0	418	165	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	581	1834	820	542	1775	794	264	289	129	503	616	275
Arrive On Green	0.06	0.53	0.00	0.04	0.50	0.00	0.05	0.08	0.00	0.15	0.17	0.00
Sat Flow, veh/h	1739	3468	1552	1765	3522	1575	1792	3575	1599	3459	3557	1591
Grp Volume(v), veh/h	145	479	0	33	427	0	79	192	0	418	165	0
Grp Sat Flow(s),veh/h/ln	1739	1734	1552	1765	1761	1575	1792	1787	1599	1729	1778	1591
Q Serve(g_s), s	4.2	7.9	0.0	0.9	7.2	0.0	4.2	5.5	0.0	12.3	4.2	0.0
Cycle Q Clear(g_c), s	4.2	7.9	0.0	0.9	7.2	0.0	4.2	5.5	0.0	12.3	4.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	581	1834	820	542	1775	794	264	289	129	503	616	275
V/C Ratio(X)	0.25	0.26	0.00	0.06	0.24	0.00	0.30	0.66	0.00	0.83	0.27	0.00
Avail Cap(c_a), veh/h	725	1834	820	648	1775	794	339	647	289	659	982	439
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.94	0.94	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	11.2	13.5	0.0	11.5	14.7	0.0	41.2	46.9	0.0	43.6	37.6	0.0
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.0	0.3	0.0	0.2	2.6	0.0	6.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	3.9	0.0	0.4	3.6	0.0	2.1	2.8	0.0	6.4	2.1	0.0
LnGrp Delay(d),s/veh	11.3	13.9	0.0	11.5	15.0	0.0	41.4	49.5	0.0	50.5	37.8	0.0
LnGrp LOS	B	B		B	B		D	D		D	D	
Approach Vol, veh/h		624			460			271		583		
Approach Delay, s/veh		13.3			14.8			47.1		46.9		
Approach LOS		B			B			D		D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.3	14.5	8.7	61.5	10.6	24.2	11.3	58.9				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	20.0	19.0	10.0	34.0	10.0	29.0	15.0	29.0				
Max Q Clear Time (g_c+l1), s	14.3	7.5	2.9	9.9	6.2	6.2	6.2	9.2				
Green Ext Time (p_c), s	0.9	1.0	0.0	4.1	0.0	1.3	0.2	4.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				28.5								
HCM 2010 LOS				C								

# HCM 2010 Signalized Intersection Summary

49: TN-79 & TN-218

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑		↑	↑		↑	↑↑		↑	↑↑	
Traffic Volume (veh/h)	20	40	35	85	90	25	10	175	25	15	160	5
Future Volume (veh/h)	20	40	35	85	90	25	10	175	25	15	160	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1853	1853	1890	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	22	43	38	92	98	27	11	190	27	16	174	5
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	486	183	162	519	280	77	580	826	116	557	921	26
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.26	0.26	0.26	0.26	0.26	0.26
Sat Flow, veh/h	1267	918	811	1305	1400	386	1206	3134	439	1154	3496	100
Grp Volume(v), veh/h	22	0	81	92	0	125	11	107	110	16	87	92
Grp Sat Flow(s),veh/h/ln	1267	0	1729	1305	0	1785	1206	1778	1795	1154	1761	1836
Q Serve(g_s), s	0.4	0.0	0.9	1.5	0.0	1.4	0.2	1.1	1.1	0.3	0.9	0.9
Cycle Q Clear(g_c), s	1.8	0.0	0.9	2.4	0.0	1.4	1.1	1.1	1.1	1.4	0.9	0.9
Prop In Lane	1.00		0.47	1.00		0.22	1.00		0.24	1.00		0.05
Lane Grp Cap(c), veh/h	486	0	345	519	0	357	580	469	473	557	464	484
V/C Ratio(X)	0.05	0.00	0.23	0.18	0.00	0.35	0.02	0.23	0.23	0.03	0.19	0.19
Avail Cap(c_a), veh/h	1266	0	1410	1323	0	1456	1221	1413	1425	1170	1399	1458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.8	0.0	7.8	8.8	0.0	8.0	7.1	6.7	6.7	7.3	6.6	6.6
Incr Delay (d2), s/veh	0.0	0.0	0.3	0.2	0.0	0.6	0.0	0.5	0.5	0.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.5	0.6	0.0	0.8	0.1	0.6	0.6	0.1	0.5	0.5
LnGrp Delay(d),s/veh	8.8	0.0	8.2	9.0	0.0	8.6	7.1	7.2	7.3	7.3	7.1	7.1
LnGrp LOS	A		A	A		A	A	A	A	A	A	A
Approach Vol, veh/h	103				217			228			195	
Approach Delay, s/veh	8.3				8.8			7.2			7.1	
Approach LOS	A				A			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	12.6		10.7		12.6		10.7					
Change Period (Y+R <sub>c</sub> ), s	6.5		6.0		6.5		6.0					
Max Green Setting (Gmax), s	18.5		19.0		18.5		19.0					
Max Q Clear Time (g_c+l1), s	3.1		3.8		3.4		4.4					
Green Ext Time (p_c), s	2.8		0.9		2.8		0.9					
Intersection Summary												
HCM 2010 Ctrl Delay			7.8									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

52: Tyson Ave & Joy St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↗	↑ ↘	↑ ↙	↑ ↖
Traffic Volume (veh/h)	10	25	10	70	15	100	35	120	85	85	180	25
Future Volume (veh/h)	10	25	10	70	15	100	35	120	85	85	180	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00	1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1872	1853	1853	1890	1881	1881	1919	1844	1844	1881
Adj Flow Rate, veh/h	11	27	0	76	16	109	38	130	92	92	196	27
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	335	285	365	37	251	692	780	516	713	1319	179
Arrive On Green	0.18	0.18	0.00	0.18	0.18	0.18	0.06	0.38	0.38	0.11	0.43	0.43
Sat Flow, veh/h	1267	1872	1591	1371	206	1401	1792	2064	1364	1756	3100	421
Grp Volume(v), veh/h	11	27	0	76	0	125	38	111	111	92	110	113
Grp Sat Flow(s),veh/h/ln	1267	1872	1591	1371	0	1606	1792	1787	1641	1756	1752	1770
Q Serve(g_s), s	0.4	0.6	0.0	2.6	0.0	3.7	0.6	2.2	2.4	1.5	2.0	2.1
Cycle Q Clear(g_c), s	4.1	0.6	0.0	3.2	0.0	3.7	0.6	2.2	2.4	1.5	2.0	2.1
Prop In Lane	1.00			1.00		0.87	1.00		0.83	1.00		0.24
Lane Grp Cap(c), veh/h	275	335	285	365	0	288	692	676	620	713	745	753
V/C Ratio(X)	0.04	0.08	0.00	0.21	0.00	0.43	0.05	0.16	0.18	0.13	0.15	0.15
Avail Cap(c_a), veh/h	994	1398	1188	1143	0	1199	1067	1469	1349	998	1440	1455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	18.1	0.0	19.4	0.0	19.3	8.4	10.9	11.0	7.3	9.3	9.3
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.4	0.0	1.5	0.0	0.1	0.1	0.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	0.0	1.0	0.0	1.7	0.3	1.1	1.1	0.7	1.0	1.0
LnGrp Delay(d),s/veh	21.2	18.2	0.0	19.8	0.0	20.8	8.4	11.0	11.1	7.4	9.4	9.4
LnGrp LOS	C	B		B		C	A	B	B	A	A	A
Approach Vol, veh/h		38				201			260		315	
Approach Delay, s/veh		19.1				20.4			10.7		8.8	
Approach LOS		B				C			B		A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6			8			
Phs Duration (G+Y+R <sub>c</sub> ), s	11.4	26.5		15.0	8.9	29.0			15.0			
Change Period (Y+R <sub>c</sub> ), s	5.5	6.5		5.5	5.5	6.5			5.5			
Max Green Setting (Gmax), s	14.5	43.5		39.5	14.5	43.5			39.5			
Max Q Clear Time (g_c+l1), s	3.5	4.4		6.1	2.6	4.1			5.7			
Green Ext Time (p_c), s	0.3	1.7		1.6	0.1	1.7			1.6			
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				12.8								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary  
57: Restaurant/Jim Adams Dr & Mineral Wells

09/06/2019

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	109	730	29	6	715	97	9	2	22	128	9	138
Future Volume (veh/h)	109	730	29	6	715	97	9	2	22	128	9	138
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1872	1872	1910	1881	1881	1919	1872	1872	1910
Adj Flow Rate, veh/h	112	753	30	6	737	100	9	2	23	132	9	142
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	2	1	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	498	2594	103	520	2003	272	120	16	183	454	12	186
Arrive On Green	0.04	0.74	0.74	0.64	0.64	0.64	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1783	3487	139	691	3148	427	1244	129	1489	2691	96	1510
Grp Volume(v), veh/h	112	384	399	6	416	421	9	0	25	132	0	151
Grp Sat Flow(s),veh/h/ln	1783	1778	1848	691	1778	1797	1244	0	1619	1346	0	1606
Q Serve(g_s), s	1.8	6.3	6.4	0.3	10.0	10.0	0.6	0.0	1.2	4.1	0.0	8.2
Cycle Q Clear(g_c), s	1.8	6.3	6.4	0.3	10.0	10.0	8.8	0.0	1.2	5.4	0.0	8.2
Prop In Lane	1.00		0.08	1.00		0.24	1.00		0.92	1.00		0.94
Lane Grp Cap(c), veh/h	498	1323	1374	520	1131	1143	120	0	199	454	0	197
V/C Ratio(X)	0.22	0.29	0.29	0.01	0.37	0.37	0.08	0.00	0.13	0.29	0.00	0.77
Avail Cap(c_a), veh/h	603	1323	1374	520	1131	1143	298	0	432	841	0	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.85	0.85	0.85	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.3	3.8	3.8	6.0	7.8	7.8	42.5	0.0	35.2	37.6	0.0	38.2
Incr Delay (d2), s/veh	0.1	0.5	0.5	0.0	0.9	0.9	0.2	0.0	0.2	0.3	0.0	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.3	3.4	0.1	5.1	5.2	0.2	0.0	0.6	1.6	0.0	3.9
LnGrp Delay(d),s/veh	5.5	4.2	4.2	6.0	8.7	8.7	42.7	0.0	35.4	37.8	0.0	42.8
LnGrp LOS	A	A	A	A	A	A	D		D	D		D
Approach Vol, veh/h	895				843			34			283	
Approach Delay, s/veh	4.4				8.7			37.3			40.5	
Approach LOS	A				A			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.7	63.3		17.1		72.9		17.1				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	9.0	39.0		24.0		54.0		24.0				
Max Q Clear Time (g_c+l1), s	3.8	12.0		10.8		8.4		10.2				
Green Ext Time (p_c), s	0.1	10.2		0.9		11.7		0.9				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				11.7								
HCM 2010 LOS				B								
Notes												

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User approved pedestrian interval to be less than phase max green.

# HCM 2010 Signalized Intersection Summary

62: Mineral Wells & Walmart/Memorial Dr

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑			↑	↑↑	↑	↑↑	↑	↑	↑↑	↑↑
Traffic Volume (veh/h)	156	85	21	25	97	368	7	195	69	309	158	256
Future Volume (veh/h)	156	85	21	25	97	368	7	195	69	309	158	256
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1844	1844	1881	1890	1853	1853	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	164	89	22	26	102	387	7	205	0	325	166	269
Adj No. of Lanes	2	1	0	0	1	2	1	2	1	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	357	150	37	78	306	964	231	419	187	495	671	570
Arrive On Green	0.10	0.10	0.10	0.21	0.21	0.21	0.12	0.12	0.00	0.14	0.36	0.36
Sat Flow, veh/h	3407	1429	353	373	1462	2773	940	3504	1568	3584	1881	1599
Grp Volume(v), veh/h	164	0	111	128	0	387	7	205	0	325	166	269
Grp Sat Flow(s),veh/h/ln	1704	0	1782	1835	0	1386	940	1752	1568	1792	1881	1599
Q Serve(g_s), s	2.7	0.0	3.6	3.6	0.0	6.4	0.4	3.3	0.0	5.2	3.8	7.9
Cycle Q Clear(g_c), s	2.7	0.0	3.6	3.6	0.0	6.4	0.4	3.3	0.0	5.2	3.8	7.9
Prop In Lane	1.00		0.20	0.20		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	357	0	187	384	0	964	231	419	187	495	671	570
V/C Ratio(X)	0.46	0.00	0.59	0.33	0.00	0.40	0.03	0.49	0.00	0.66	0.25	0.47
Avail Cap(c_a), veh/h	1318	0	689	997	0	1890	560	1644	735	2301	2292	1948
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	0.0	26.0	20.4	0.0	15.0	23.7	25.0	0.0	24.8	13.8	15.1
Incr Delay (d2), s/veh	0.7	0.0	2.2	0.9	0.0	0.5	0.0	0.7	0.0	1.1	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	1.9	1.9	0.0	2.5	0.1	1.6	0.0	2.6	2.0	3.5
LnGrp Delay(d),s/veh	26.2	0.0	28.2	21.3	0.0	15.5	23.8	25.7	0.0	25.9	13.9	15.6
LnGrp LOS	C		C		B	C	C		C	B		B
Approach Vol, veh/h		275			515			212		760		
Approach Delay, s/veh		27.0			16.9			25.6		19.6		
Approach LOS		C			B			C		B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	14.4	13.8		12.9		28.2		19.7				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.5		6.5		* 6.5		7.0				
Max Green Setting (Gmax), s	39.0	28.5		23.5		* 74		33.0				
Max Q Clear Time (g_c+l1), s	7.2	5.3		5.6		9.9		8.4				
Green Ext Time (p_c), s	1.2	2.1		0.8		2.2		4.3				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			20.7									
HCM 2010 LOS			C									
Notes												

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User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 2010 Signalized Intersection Summary

64: TN-641 & Memorial Dr

09/06/2019



Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑		
Traffic Volume (veh/h)	194	202	19	237	166	32		
Future Volume (veh/h)	194	202	19	237	166	32		
Number	2	12	1	6	7	14		
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1853	1853	1872	1872	1844	1844		
Adj Flow Rate, veh/h	211	0	21	258	180	0		
Adj No. of Lanes	2	1	1	2	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1689	756	706	2205	246	219		
Arrive On Green	0.48	0.00	0.03	0.62	0.14	0.00		
Sat Flow, veh/h	3614	1575	1783	3651	1756	1568		
Grp Volume(v), veh/h	211	0	21	258	180	0		
Grp Sat Flow(s),veh/h/ln	1761	1575	1783	1778	1756	1568		
Q Serve(g_s), s	1.7	0.0	0.3	1.5	5.1	0.0		
Cycle Q Clear(g_c), s	1.7	0.0	0.3	1.5	5.1	0.0		
Prop In Lane		1.00	1.00		1.00	1.00		
Lane Grp Cap(c), veh/h	1689	756	706	2205	246	219		
V/C Ratio(X)	0.12	0.00	0.03	0.12	0.73	0.00		
Avail Cap(c_a), veh/h	2942	1316	1312	4679	978	873		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00		
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	0.00		
Uniform Delay (d), s/veh	7.5	0.0	5.6	4.1	21.5	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	5.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.1	0.8	2.8	0.0		
LnGrp Delay(d),s/veh	7.5	0.0	5.6	4.1	26.5	0.0		
LnGrp LOS	A		A	A	C			
Approach Vol, veh/h	211			279	180			
Approach Delay, s/veh	7.5			4.2	26.5			
Approach LOS	A			A	C			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+R <sub>c</sub> ), s	7.3	31.5		13.3		38.8		
Change Period (Y+R <sub>c</sub> ), s	6.0	6.5		6.0		6.5		
Max Green Setting (Gmax), s	19.0	43.5		29.0		68.5		
Max Q Clear Time (g_c+l1), s	2.3	3.7		7.1		3.5		
Green Ext Time (p_c), s	0.0	2.6		0.8		2.7		
Intersection Summary								
HCM 2010 Ctrl Delay	11.2							
HCM 2010 LOS	B							

# HCM 2010 Signalized Intersection Summary

67: Store/Volunteer Dr & Memorial Dr

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↘		↑ ↗	↑ ↘			↑ ↗	↑ ↘	↑ ↗	↑ ↘	
Traffic Volume (veh/h)	114	326	0	0	356	76	0	0	0	101	0	146
Future Volume (veh/h)	114	326	0	0	356	76	0	0	0	101	0	146
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1863	1863	1900	1881	1844	1844	1853	1853	1890
Adj Flow Rate, veh/h	119	340	0	0	371	79	0	0	0	105	0	152
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	498	1815	0	204	825	174	0	276	234	468	0	235
Arrive On Green	0.07	0.51	0.00	0.00	0.28	0.28	0.00	0.00	0.00	0.15	0.00	0.15
Sat Flow, veh/h	1783	3651	0	1036	2911	613	0	1844	1568	1765	0	1575
Grp Volume(v), veh/h	119	340	0	0	224	226	0	0	0	105	0	152
Grp Sat Flow(s),veh/h/ln	1783	1778	0	1036	1770	1754	0	1844	1568	1765	0	1575
Q Serve(g_s), s	1.5	1.8	0.0	0.0	3.7	3.7	0.0	0.0	0.0	1.9	0.0	3.2
Cycle Q Clear(g_c), s	1.5	1.8	0.0	0.0	3.7	3.7	0.0	0.0	0.0	1.9	0.0	3.2
Prop In Lane	1.00		0.00	1.00		0.35	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	498	1815	0	204	502	498	0	276	234	468	0	235
V/C Ratio(X)	0.24	0.19	0.00	0.00	0.45	0.45	0.00	0.00	0.00	0.22	0.00	0.65
Avail Cap(c_a), veh/h	1104	9985	0	2232	3964	3930	0	1516	1289	1656	0	1296
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.1	4.7	0.0	0.0	10.4	10.4	0.0	0.0	0.0	13.6	0.0	14.1
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.1	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.9	0.0	0.0	1.8	1.8	0.0	0.0	0.0	0.9	0.0	1.5
LnGrp Delay(d),s/veh	7.2	4.7	0.0	0.0	10.6	10.6	0.0	0.0	0.0	13.7	0.0	15.2
LnGrp LOS	A	A			B	B			B		B	
Approach Vol, veh/h	459				450				0			257
Approach Delay, s/veh	5.3				10.6				0.0			14.6
Approach LOS	A				B							B
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	8.0	16.0		11.3		24.0		11.3				
Change Period (Y+R <sub>c</sub> ), s	5.5	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	14.5	79.0		29.0		99.0		29.0				
Max Q Clear Time (g_c+l1), s	3.5	5.7		0.0		3.8		5.2				
Green Ext Time (p_c), s	0.1	1.8		0.0		1.8		0.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			9.4									
HCM 2010 LOS			A									

HCM 2010 Signalized Intersection Summary  
74: Volunteer Dr & Jim Adams Dr/Restaurant

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑		↑	↑		↑	↑	
Traffic Volume (veh/h)	133	2	59	4	3	0	42	189	8	4	240	152
Future Volume (veh/h)	133	2	59	4	3	0	42	189	8	4	240	152
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1863	1863	1900	1863	1863	1900	1872	1872	1910
Adj Flow Rate, veh/h	143	2	63	4	3	0	45	203	9	4	258	163
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	8	240	20	21	0	298	820	36	491	314	199
Arrive On Green	0.15	0.15	0.15	0.01	0.01	0.00	0.05	0.46	0.46	0.29	0.29	0.29
Sat Flow, veh/h	1783	49	1549	1774	1863	0	1774	1770	78	1171	1074	678
Grp Volume(v), veh/h	143	0	65	4	3	0	45	0	212	4	0	421
Grp Sat Flow(s),veh/h/ln	1783	0	1599	1774	1863	0	1774	0	1849	1171	0	1752
Q Serve(g_s), s	3.6	0.0	1.7	0.1	0.1	0.0	0.8	0.0	3.4	0.1	0.0	10.9
Cycle Q Clear(g_c), s	3.6	0.0	1.7	0.1	0.1	0.0	0.8	0.0	3.4	0.1	0.0	10.9
Prop In Lane	1.00		0.97	1.00		0.00	1.00		0.04	1.00		0.39
Lane Grp Cap(c), veh/h	276	0	248	20	21	0	298	0	856	491	0	513
V/C Ratio(X)	0.52	0.00	0.26	0.20	0.14	0.00	0.15	0.00	0.25	0.01	0.00	0.82
Avail Cap(c_a), veh/h	1065	0	955	694	729	0	544	0	1867	968	0	1228
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	18.8	0.0	18.1	23.8	23.8	0.0	11.3	0.0	7.9	12.2	0.0	16.0
Incr Delay (d2), s/veh	1.5	0.0	0.6	4.9	3.1	0.0	0.1	0.0	0.1	0.0	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	0.8	0.1	0.1	0.0	0.4	0.0	1.7	0.0	0.0	5.3
LnGrp Delay(d),s/veh	20.3	0.0	18.6	28.7	26.9	0.0	11.4	0.0	8.0	12.2	0.0	17.3
LnGrp LOS	C		B	C	C		B		A	B		B
Approach Vol, veh/h	208				7			257			425	
Approach Delay, s/veh	19.8				27.9			8.6			17.2	
Approach LOS	B				C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	8.3	20.2		6.5		28.5		13.5				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	9.0	34.0		19.0		49.0		29.0				
Max Q Clear Time (g_c+l1), s	2.8	12.9		2.1		5.4		5.6				
Green Ext Time (p_c), s	0.0	1.3		0.0		1.4		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			15.4									
HCM 2010 LOS			B									

# HCM 2010 Signalized Intersection Summary

79: Volunteer Dr & School/Patriot Ave

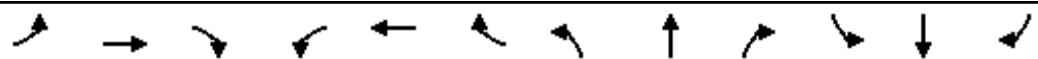
09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	3	4	13	41	4	23	7	256	48	12	323	11
Future Volume (veh/h)	3	4	13	41	4	23	7	256	48	12	323	11
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1891	1891	1928	1835	1835	1872	1835	1835	1872	1919	1919	1957
Adj Flow Rate, veh/h	3	4	14	44	4	25	8	275	52	13	347	12
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	269	20	71	297	18	110	327	426	81	349	543	19
Arrive On Green	0.00	0.06	0.06	0.03	0.08	0.08	0.01	0.28	0.28	0.02	0.29	0.29
Sat Flow, veh/h	1801	369	1293	1747	220	1373	1747	1501	284	1827	1844	64
Grp Volume(v), veh/h	3	0	18	44	0	29	8	0	327	13	0	359
Grp Sat Flow(s),veh/h/ln	1801	0	1662	1747	0	1593	1747	0	1785	1827	0	1907
Q Serve(g_s), s	0.1	0.0	0.4	0.9	0.0	0.7	0.1	0.0	6.3	0.2	0.0	6.4
Cycle Q Clear(g_c), s	0.1	0.0	0.4	0.9	0.0	0.7	0.1	0.0	6.3	0.2	0.0	6.4
Prop In Lane	1.00			0.78	1.00		0.86	1.00		0.16	1.00	0.03
Lane Grp Cap(c), veh/h	269	0	92	297	0	128	327	0	507	349	0	562
V/C Ratio(X)	0.01	0.00	0.20	0.15	0.00	0.23	0.02	0.00	0.65	0.04	0.00	0.64
Avail Cap(c_a), veh/h	1161	0	1235	1118	0	1183	719	0	2445	739	0	2613
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.3	0.0	17.6	16.8	0.0	16.8	10.3	0.0	12.3	10.1	0.0	12.0
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.2	0.0	0.3	0.0	0.0	1.4	0.0	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	0.4	0.0	0.3	0.1	0.0	3.3	0.1	0.0	3.5
LnGrp Delay(d),s/veh	17.3	0.0	18.0	17.0	0.0	17.1	10.3	0.0	13.6	10.1	0.0	13.2
LnGrp LOS	B		B	B		B	B		B	B		B
Approach Vol, veh/h		21			73			335			372	
Approach Delay, s/veh		17.9			17.1			13.6			13.1	
Approach LOS		B			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	5.7	9.1	6.7	17.6	6.6	8.2	6.2	18.0				
Change Period (Y+R <sub>c</sub> ), s	5.5	6.0	6.0	6.5	5.5	6.0	6.0	6.5				
Max Green Setting (Gmax), s	19.5	29.0	9.0	53.5	19.5	29.0	9.0	53.5				
Max Q Clear Time (g_c+l1), s	2.1	2.7	2.2	8.3	2.9	2.4	2.1	8.4				
Green Ext Time (p_c), s	0.0	0.1	0.0	2.8	0.1	0.1	0.0	2.8				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			13.8									
HCM 2010 LOS			B									

# HCM 2010 Signalized Intersection Summary

85: Wilson St & Lone Oak

09/06/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	40	10	10	30	5	5	10	5	10	20	15
Future Volume (veh/h)	15	40	10	10	30	5	5	10	5	10	20	15
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1910	1872	1910	1900	1863	1900
Adj Flow Rate, veh/h	16	43	11	11	33	5	5	11	5	11	22	16
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	508	113	220	555	74	182	302	112	175	262	151
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	232	1226	272	227	1339	178	202	1113	411	181	966	556
Grp Volume(v), veh/h	70	0	0	49	0	0	21	0	0	49	0	0
Grp Sat Flow(s),veh/h/ln	1730	0	0	1744	0	0	1726	0	0	1703	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0	0.6	0.0	0.0	0.3	0.0	0.0	0.7	0.0	0.0
Prop In Lane	0.23			0.16	0.22		0.10	0.24		0.24	0.22	0.33
Lane Grp Cap(c), veh/h	843	0	0	848	0	0	596	0	0	588	0	0
V/C Ratio(X)	0.08	0.00	0.00	0.06	0.00	0.00	0.04	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	843	0	0	848	0	0	596	0	0	588	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.2	0.0	0.0	6.2	0.0	0.0	9.4	0.0	0.0	9.6	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d),s/veh	6.4	0.0	0.0	6.3	0.0	0.0	9.5	0.0	0.0	9.8	0.0	0.0
LnGrp LOS	A			A			A			A		
Approach Vol, veh/h	70			49			21			49		
Approach Delay, s/veh	6.4			6.3			9.5			9.8		
Approach LOS	A			A			A			A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	15.0		20.0		15.0		20.0					
Change Period (Y+R <sub>c</sub> ), s	5.5		5.5		5.5		5.5					
Max Green Setting (Gmax), s	9.5		14.5		9.5		14.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			7.6									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

2: Irvine St & W Wood St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	2	392	20	14	363	0	25	5	13	0	3	2
Future Volume (veh/h)	2	392	20	14	363	0	25	5	13	0	3	2
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1909	1909	1948	1872	1872	1910	1910	1872	1910	1862	1825	1862
Adj Flow Rate, veh/h	2	431	22	15	399	0	27	5	14	0	3	2
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	583	1036	53	534	1076	0	295	66	116	0	256	171
Arrive On Green	0.57	0.57	0.57	0.57	0.57	0.00	0.25	0.25	0.25	0.00	0.25	0.25
Sat Flow, veh/h	1006	1801	92	939	1872	0	800	264	466	0	1023	682
Grp Volume(v), veh/h	2	0	453	15	399	0	46	0	0	0	0	5
Grp Sat Flow(s),veh/h/ln	1006	0	1893	939	1872	0	1530	0	0	0	0	1705
Q Serve(g_s), s	0.1	0.0	8.0	0.5	6.9	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	7.0	0.0	8.0	8.6	6.9	0.0	1.2	0.0	0.0	0.0	0.0	0.1
Prop In Lane	1.00		0.05	1.00		0.00	0.59		0.30	0.00		0.40
Lane Grp Cap(c), veh/h	583	0	1089	534	1076	0	478	0	0	0	0	426
V/C Ratio(X)	0.00	0.00	0.42	0.03	0.37	0.00	0.10	0.00	0.00	0.00	0.00	0.01
Avail Cap(c_a), veh/h	583	0	1089	534	1076	0	478	0	0	0	0	426
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	8.8	0.0	7.1	9.5	6.9	0.0	17.3	0.0	0.0	0.0	0.0	16.9
Incr Delay (d2), s/veh	0.0	0.0	1.2	0.1	1.0	0.0	0.4	0.0	0.0	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	4.5	0.2	3.8	0.0	0.6	0.0	0.0	0.0	0.0	0.1
LnGrp Delay(d),s/veh	8.8	0.0	8.3	9.6	7.9	0.0	17.7	0.0	0.0	0.0	0.0	17.0
LnGrp LOS	A		A	A	A		B					B
Approach Vol, veh/h	455			414			46					5
Approach Delay, s/veh	8.3			7.9			17.7					17.0
Approach LOS	A			A			B					B
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	40.0		20.0		40.0		20.0					
Change Period (Y+R <sub>c</sub> ), s	5.5		5.0		5.5		5.0					
Max Green Setting (Gmax), s	34.5		15.0		34.5		15.0					
Max Q Clear Time (g_c+l1), s	10.0		3.2		10.6		2.1					
Green Ext Time (p_c), s	8.5		0.1		8.4		0.1					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			8.7									
HCM 2010 LOS			A									

## HCM 2010 Signalized Intersection Summary

7: S Market St/N Market St &amp; E Wood St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙											
Traffic Volume (veh/h)	29	225	124	24	184	70	159	286	38	95	283	49
Future Volume (veh/h)	29	225	124	24	184	70	159	286	38	95	283	49
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	32	250	138	27	204	78	177	318	42	106	314	54
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	376	383	212	237	441	168	570	591	78	573	562	97
Arrive On Green	0.34	0.34	0.34	0.68	0.68	0.68	0.24	0.73	0.73	0.24	0.73	0.73
Sat Flow, veh/h	1087	1124	620	997	1291	494	1783	1620	214	1765	1542	265
Grp Volume(v), veh/h	32	0	388	27	0	282	177	0	360	106	0	368
Grp Sat Flow(s),veh/h/ln	1087	0	1744	997	0	1785	1783	0	1834	1765	0	1807
Q Serve(g_s), s	1.9	0.0	16.0	1.7	0.0	6.2	4.7	0.0	7.4	2.6	0.0	7.9
Cycle Q Clear(g_c), s	8.1	0.0	16.0	17.7	0.0	6.2	4.7	0.0	7.4	2.6	0.0	7.9
Prop In Lane	1.00		0.36	1.00		0.28	1.00		0.12	1.00		0.15
Lane Grp Cap(c), veh/h	376	0	595	237	0	609	570	0	669	573	0	659
V/C Ratio(X)	0.09	0.00	0.65	0.11	0.00	0.46	0.31	0.00	0.54	0.18	0.00	0.56
Avail Cap(c_a), veh/h	376	0	595	237	0	609	570	0	669	573	0	659
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	23.7	17.6	0.0	9.9	11.3	0.0	8.3	10.8	0.0	8.4
Incr Delay (d2), s/veh	0.4	0.0	5.5	1.0	0.0	2.5	1.4	0.0	3.1	0.7	0.0	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	8.6	0.5	0.0	3.3	2.4	0.0	4.1	1.3	0.0	4.4
LnGrp Delay(d),s/veh	23.9	0.0	29.2	18.6	0.0	12.4	12.7	0.0	11.4	11.5	0.0	11.8
LnGrp LOS	C		C	B		B	B		B	B		B
Approach Vol, veh/h	420			309			537			474		
Approach Delay, s/veh	28.8			12.9			11.8			11.7		
Approach LOS	C			B			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	15.0	36.0		34.0	15.0	36.0		34.0				
Change Period (Y+R <sub>c</sub> ), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	31.0		29.0	10.0	31.0		29.0				
Max Q Clear Time (g_c+l1), s	0.0	0.0		0.0	0.0	0.0		0.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			16.1									
HCM 2010 LOS			B									

## HCM 2010 Signalized Intersection Summary

8: Highland St &amp; E Wood St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑		↑	↑			↔			↔	
Traffic Volume (veh/h)	6	404	3	13	285	7	2	2	12	4	0	2
Future Volume (veh/h)	6	404	3	13	285	7	2	2	12	4	0	2
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1844	1844	1881	1872	1872	1910	1938	1900	1938	1928	1891	1928
Adj Flow Rate, veh/h	7	459	3	15	324	8	2	2	14	5	0	2
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	851	1391	9	753	1382	34	74	14	72	150	15	25
Arrive On Green	0.76	0.76	0.76	0.76	0.76	0.76	0.06	0.06	0.06	0.06	0.00	0.06
Sat Flow, veh/h	1033	1830	12	931	1819	45	123	241	1272	829	266	438
Grp Volume(v), veh/h	7	0	462	15	0	332	18	0	0	7	0	0
Grp Sat Flow(s),veh/h/ln	1033	0	1842	931	0	1864	1636	0	0	1533	0	0
Q Serve(g_s), s	0.1	0.0	4.8	0.3	0.0	3.1	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.2	0.0	4.8	5.1	0.0	3.1	0.6	0.0	0.0	0.2	0.0	0.0
Prop In Lane	1.00		0.01	1.00		0.02	0.11		0.78	0.71		0.29
Lane Grp Cap(c), veh/h	851	0	1400	753	0	1417	160	0	0	190	0	0
V/C Ratio(X)	0.01	0.00	0.33	0.02	0.00	0.23	0.11	0.00	0.00	0.04	0.00	0.00
Avail Cap(c_a), veh/h	851	0	1400	753	0	1417	729	0	0	704	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	0.98	0.00	0.98	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.6	0.0	2.3	3.1	0.0	2.1	27.0	0.0	0.0	26.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.6	0.0	0.0	0.4	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.7	0.1	0.0	1.7	0.3	0.0	0.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	2.6	0.0	2.9	3.2	0.0	2.5	27.2	0.0	0.0	26.9	0.0	0.0
LnGrp LOS	A		A		A		C			C		
Approach Vol, veh/h	469			347			18			7		
Approach Delay, s/veh	2.9			2.5			27.2			26.9		
Approach LOS	A			A			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	51.1		8.9		51.1		8.9					
Change Period (Y+R <sub>c</sub> ), s	5.5		5.5		5.5		5.5					
Max Green Setting (Gmax), s	24.5		24.5		24.5		24.5					
Max Q Clear Time (g_c+l1), s	6.8		2.2		7.1		2.6					
Green Ext Time (p_c), s	2.6		0.0		2.5		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			3.5									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

10: Lake St & E Wood St

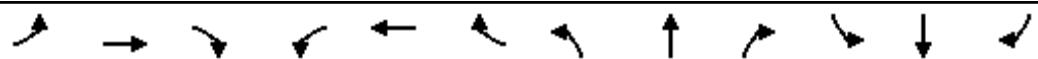
09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	9	436	14	7	296	66	13	9	4	72	21	6
Future Volume (veh/h)	9	436	14	7	296	66	13	9	4	72	21	6
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1853	1853	1853	1852	1816	1852	1919	1881	1919
Adj Flow Rate, veh/h	10	507	16	8	344	77	15	10	5	84	24	7
Adj No. of Lanes	1	1	0	1	1	1	0	1	0	0	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	857	1484	47	718	1524	1295	106	64	25	156	31	9
Arrive On Green	0.82	0.82	0.82	1.00	1.00	1.00	0.09	0.09	0.09	0.09	0.09	0.09
Sat Flow, veh/h	967	1805	57	871	1853	1575	649	706	271	1119	339	94
Grp Volume(v), veh/h	10	0	523	8	344	77	30	0	0	115	0	0
Grp Sat Flow(s),veh/h/ln	967	0	1862	871	1853	1575	1627	0	0	1552	0	0
Q Serve(g_s), s	0.2	0.0	8.0	0.1	0.0	0.0	0.0	0.0	0.0	6.5	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.0	8.0	8.1	0.0	0.0	1.8	0.0	0.0	8.3	0.0	0.0
Prop In Lane	1.00		0.03	1.00		1.00	0.50		0.17	0.73		0.06
Lane Grp Cap(c), veh/h	857	0	1531	718	1524	1295	195	0	0	195	0	0
V/C Ratio(X)	0.01	0.00	0.34	0.01	0.23	0.06	0.15	0.00	0.00	0.59	0.00	0.00
Avail Cap(c_a), veh/h	857	0	1531	718	1524	1295	450	0	0	450	0	0
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.97	0.00	0.97	0.99	0.99	0.99	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	1.8	0.0	2.5	0.3	0.0	0.0	48.3	0.0	0.0	51.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.6	0.0	0.3	0.1	0.4	0.0	0.0	2.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	4.3	0.0	0.1	0.0	0.9	0.0	0.0	3.7	0.0	0.0
LnGrp Delay(d),s/veh	1.9	0.0	3.1	0.4	0.3	0.1	48.7	0.0	0.0	53.9	0.0	0.0
LnGrp LOS	A		A	A	A	A	D			D		
Approach Vol, veh/h	533			429			30			115		
Approach Delay, s/veh	3.1			0.3			48.7			53.9		
Approach LOS	A			A			D			D		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	99.5		15.5		99.5		15.5					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	75.0		30.0		75.0		30.0					
Max Q Clear Time (g_c+l1), s	10.0		3.8		10.1		10.3					
Green Ext Time (p_c), s	4.7		0.5		4.7		0.5					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			8.5									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

12: N Market St & Washington St

09/06/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↘ ↗											
Traffic Volume (veh/h)	8	61	55	69	50	34	36	315	32	25	301	14
Future Volume (veh/h)	8	61	55	69	50	34	36	315	32	25	301	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	9	70	63	79	57	39	41	362	37	29	346	16
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	459	297	267	428	342	234	649	924	94	625	972	45
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Sat Flow, veh/h	1288	900	810	1258	1037	710	1021	1671	171	977	1758	81
Grp Volume(v), veh/h	9	0	133	79	0	96	41	0	399	29	0	362
Grp Sat Flow(s),veh/h/ln	1288	0	1710	1258	0	1747	1021	0	1842	977	0	1839
Q Serve(g_s), s	0.4	0.0	4.8	4.1	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.7	0.0	4.8	8.9	0.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.47	1.00		0.41	1.00		0.09	1.00		0.04
Lane Grp Cap(c), veh/h	459	0	563	428	0	575	649	0	1018	625	0	1017
V/C Ratio(X)	0.02	0.00	0.24	0.18	0.00	0.17	0.06	0.00	0.39	0.05	0.00	0.36
Avail Cap(c_a), veh/h	459	0	563	428	0	575	649	0	1018	625	0	1017
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	20.7	24.0	0.0	20.2	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	1.0	0.9	0.0	0.6	0.2	0.0	1.1	0.1	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	2.4	1.5	0.0	1.7	0.0	0.0	0.3	0.0	0.0	0.3
LnGrp Delay(d),s/veh	21.6	0.0	21.7	24.9	0.0	20.8	0.2	0.0	1.1	0.1	0.0	1.0
LnGrp LOS	C		C			C	A		A	A		A
Approach Vol, veh/h		142			175			440			391	
Approach Delay, s/veh		21.7			22.7			1.0			0.9	
Approach LOS		C			C			A			A	

## Timer

1	2	3	4	5	6	7	8
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Assigned Phs	2		4		6		8
Phs Duration (G+Y+R <sub>c</sub> ), s	52.0		33.0		52.0		33.0
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0
Max Green Setting (G <sub>max</sub> ), s	47.0		28.0		47.0		28.0
Max Q Clear Time (g <sub>c+l1</sub> ), s	0.0		0.0		0.0		0.0
Green Ext Time (p <sub>c</sub> ), s	0.0		0.0		0.0		0.0

## Intersection Summary

HCM 2010 Ctrl Delay	6.9
HCM 2010 LOS	A

# HCM 2010 Signalized Intersection Summary

17: N Market St & E Ruff St

09/06/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	13	28	22	8	18	28	5	341	26	25	324	19	
Future Volume (veh/h)	13	28	22	8	18	28	5	341	26	25	324	19	
Number	7	4	14	3	8	18	5	2	12	1	6	16	
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0	
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Adj Sat Flow, veh/h/ln	1910	1872	1910	1919	1881	1919	1881	1881	1919	1853	1853	1890	
Adj Flow Rate, veh/h	14	31	24	9	20	31	6	379	29	28	360	21	
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2	
Cap, veh/h	120	253	172	92	194	254	569	1015	78	655	1020	60	
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	1.00	1.00	1.00	0.59	0.59	0.59	
Sat Flow, veh/h	235	860	584	149	659	864	1008	1726	132	969	1734	101	
Grp Volume(v), veh/h	69	0	0	60	0	0	6	0	408	28	0	381	
Grp Sat Flow(s),veh/h/ln	1679	0	0	1671	0	0	1008	0	1858	969	0	1836	
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	1.0	0.0	9.2	
Cycle Q Clear(g_c), s	2.4	0.0	0.0	2.2	0.0	0.0	9.3	0.0	0.0	1.0	0.0	9.2	
Prop In Lane	0.20			0.35	0.15		0.52	1.00		0.07	1.00		0.06
Lane Grp Cap(c), veh/h	545	0	0	540	0	0	569	0	1093	655	0	1080	
V/C Ratio(X)	0.13	0.00	0.00	0.11	0.00	0.00	0.01	0.00	0.37	0.04	0.00	0.35	
Avail Cap(c_a), veh/h	545	0	0	540	0	0	569	0	1093	655	0	1080	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	
Uniform Delay (d), s/veh	22.0	0.0	0.0	21.9	0.0	0.0	0.8	0.0	0.0	7.4	0.0	9.1	
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.4	0.0	0.0	0.0	0.0	1.0	0.1	0.0	0.9	
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.3	0.3	0.0	4.8	
LnGrp Delay(d),s/veh	22.5	0.0	0.0	22.4	0.0	0.0	0.9	0.0	1.0	7.5	0.0	10.0	
LnGrp LOS	C			C			A		A	A		A	
Approach Vol, veh/h	69			60			414		409				
Approach Delay, s/veh	22.5			22.4			1.0		9.8				
Approach LOS	C			C			A		A				
Timer	1	2	3	4	5	6	7	8					
Assigned Phs	2		4		6		8						
Phs Duration (G+Y+R <sub>c</sub> ), s	55.0		30.0		55.0		30.0						
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0						
Max Green Setting (Gmax), s	50.0		25.0		50.0		25.0						
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0						
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0						
Intersection Summary													
HCM 2010 Ctrl Delay			7.7										
HCM 2010 LOS			A										

# HCM 2010 Signalized Intersection Summary

20: Volunteer Dr & E Wood St

09/06/2019

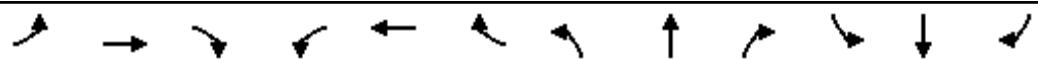


Movement	EBT	EBR	WBL	WBT	NBL	NBR		
Lane Configurations	↑↑		↑↑	↑↑	↑	↑		
Traffic Volume (veh/h)	600	135	115	485	120	165		
Future Volume (veh/h)	600	135	115	485	120	165		
Number	2	12	1	6	7	14		
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1900	1938	1844	1844	1853	1853		
Adj Flow Rate, veh/h	652	147	125	527	130	179		
Adj No. of Lanes	2	0	1	2	1	1		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Percent Heavy Veh, %	2	2	2	2	2	2		
Cap, veh/h	1961	442	602	2692	232	288		
Arrive On Green	1.00	1.00	0.05	0.77	0.13	0.13		
Sat Flow, veh/h	3024	660	1756	3596	1765	1575		
Grp Volume(v), veh/h	401	398	125	527	130	179		
Grp Sat Flow(s),veh/h/ln	1805	1784	1756	1752	1765	1575		
Q Serve(g_s), s	0.0	0.0	2.3	4.7	7.9	12.0		
Cycle Q Clear(g_c), s	0.0	0.0	2.3	4.7	7.9	12.0		
Prop In Lane	0.37	1.00		1.00	1.00			
Lane Grp Cap(c), veh/h	1208	1194	602	2692	232	288		
V/C Ratio(X)	0.33	0.33	0.21	0.20	0.56	0.62		
Avail Cap(c_a), veh/h	1208	1194	733	2692	453	485		
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00		
Upstream Filter(l)	0.83	0.83	0.98	0.98	1.00	1.00		
Uniform Delay (d), s/veh	0.0	0.0	4.3	3.6	46.8	43.3		
Incr Delay (d2), s/veh	0.6	0.6	0.1	0.0	2.1	2.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.2	0.2	1.1	2.3	4.0	10.5		
LnGrp Delay(d),s/veh	0.6	0.6	4.3	3.7	48.9	45.5		
LnGrp LOS	A	A	A	A	D	D		
Approach Vol, veh/h	799			652	309			
Approach Delay, s/veh	0.6			3.8	46.9			
Approach LOS	A			A	D			
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+R <sub>c</sub> ), s	11.4	83.0		20.6		94.4		
Change Period (Y+R <sub>c</sub> ), s	5.5	6.0		5.5		6.0		
Max Green Setting (Gmax), s	14.5	54.0		29.5		74.0		
Max Q Clear Time (g_c+l1), s	4.3	2.0		14.0		6.7		
Green Ext Time (p_c), s	0.1	11.6		1.1		11.9		
Intersection Summary								
HCM 2010 Ctrl Delay	9.9							
HCM 2010 LOS	A							

# HCM 2010 Signalized Intersection Summary

22: N Market St & Rison St

09/06/2019



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	30	30	80	20	20	35	280	40	42	255	5
Future Volume (veh/h)	20	30	30	80	20	20	35	280	40	42	255	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1910	1872	1910	1900	1863	1900	1853	1853	1890	1910	1872	1910
Adj Flow Rate, veh/h	22	33	33	87	22	22	38	304	43	46	277	5
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	97	78	223	41	32	934	1117	158	189	1083	19
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	277	802	648	976	336	265	1087	1589	225	167	1540	26
Grp Volume(v), veh/h	88	0	0	131	0	0	38	0	347	328	0	0
Grp Sat Flow(s),veh/h/ln	1727	0	0	1577	0	0	1087	0	1814	1733	0	0
Q Serve(g_s), s	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.6	0.0	0.0	4.3	0.0	0.0	0.4	0.0	4.0	3.6	0.0	0.0
Prop In Lane	0.25		0.37	0.66		0.17	1.00		0.12	0.14		0.02
Lane Grp Cap(c), veh/h	288	0	0	296	0	0	934	0	1275	1290	0	0
V/C Ratio(X)	0.31	0.00	0.00	0.44	0.00	0.00	0.04	0.00	0.27	0.25	0.00	0.00
Avail Cap(c_a), veh/h	944	0	0	880	0	0	934	0	1275	1290	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	23.1	0.0	0.0	23.7	0.0	0.0	2.6	0.0	3.1	3.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.0	0.0	0.0	0.1	0.0	0.5	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.0	2.1	0.0	0.0	0.2	0.0	2.1	2.0	0.0	0.0
LnGrp Delay(d),s/veh	23.7	0.0	0.0	24.8	0.0	0.0	2.6	0.0	3.6	3.5	0.0	0.0
LnGrp LOS	C		C			A		A	A			
Approach Vol, veh/h		88			131			385			328	
Approach Delay, s/veh		23.7			24.8			3.5			3.5	
Approach LOS		C			C			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	45.0		11.9		45.0		11.9					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	40.0		30.0		40.0		30.0					
Max Q Clear Time (g_c+l1), s	6.0		4.6		5.6		6.3					
Green Ext Time (p_c), s	3.3		0.8		3.3		0.8					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			8.4									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

27: N Poplar St & Washington St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	10	99	21	24	120	36	34	36	28	12	37	8
Future Volume (veh/h)	10	99	21	24	120	36	34	36	28	12	37	8
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1910	1872	1872	1910	1844	1844	1881
Adj Flow Rate, veh/h	10	101	21	24	122	37	35	37	29	12	38	8
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	595	701	146	677	649	197	624	401	314	596	609	128
Arrive On Green	0.94	0.94	0.94	0.47	0.47	0.47	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1216	1489	310	1270	1380	418	1361	974	763	1317	1478	311
Grp Volume(v), veh/h	10	0	122	24	0	159	35	0	66	12	0	46
Grp Sat Flow(s),veh/h/ln	1216	0	1799	1270	0	1798	1361	0	1737	1317	0	1789
Q Serve(g_s), s	0.1	0.0	0.4	0.9	0.0	4.4	1.4	0.0	2.0	0.5	0.0	1.3
Cycle Q Clear(g_c), s	4.5	0.0	0.4	1.3	0.0	4.4	2.7	0.0	2.0	2.5	0.0	1.3
Prop In Lane	1.00		0.17	1.00		0.23	1.00		0.44	1.00		0.17
Lane Grp Cap(c), veh/h	595	0	846	677	0	846	624	0	715	596	0	737
V/C Ratio(X)	0.02	0.00	0.14	0.04	0.00	0.19	0.06	0.00	0.09	0.02	0.00	0.06
Avail Cap(c_a), veh/h	595	0	846	677	0	846	624	0	715	596	0	737
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	1.8	0.0	1.3	12.4	0.0	13.1	15.9	0.0	15.3	16.0	0.0	15.1
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.1	0.0	0.5	0.2	0.0	0.3	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.3	0.3	0.0	2.3	0.5	0.0	1.0	0.2	0.0	0.7
LnGrp Delay(d),s/veh	1.9	0.0	1.7	12.5	0.0	13.6	16.1	0.0	15.5	16.1	0.0	15.3
LnGrp LOS	A		A	B		B	B		B	B		B
Approach Vol, veh/h	132			183			101			58		
Approach Delay, s/veh	1.7			13.4			15.7			15.4		
Approach LOS	A			B			B			B		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	45.0		40.0		45.0		40.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	40.0		35.0		40.0		35.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			10.9									
HCM 2010 LOS			B									

HCM 2010 Signalized Intersection Summary  
29: E Wood St & Chickasaw/Fairgrounds Rd

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑	↑	↑	↑	↑	↑	↑↑		↑	↑↑	
Traffic Volume (veh/h)	63	56	20	62	54	31	13	539	55	25	455	70
Future Volume (veh/h)	63	56	20	62	54	31	13	539	55	25	455	70
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1844	1844	1844	1844	1844	1881	1853	1853	1890
Adj Flow Rate, veh/h	70	62	0	69	60	0	14	599	61	28	506	78
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	167	202	171	164	198	168	678	2547	259	635	2427	373
Arrive On Green	0.11	0.11	0.00	0.11	0.11	0.00	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1351	1881	1599	1321	1844	1568	819	3212	327	767	3061	470
Grp Volume(v), veh/h	70	62	0	69	60	0	14	326	334	28	290	294
Grp Sat Flow(s),veh/h/ln	1351	1881	1599	1321	1844	1568	819	1752	1786	767	1761	1770
Q Serve(g_s), s	5.8	3.5	0.0	5.8	3.5	0.0	0.5	5.5	5.5	1.1	4.7	4.7
Cycle Q Clear(g_c), s	9.3	3.5	0.0	9.3	3.5	0.0	5.2	5.5	5.5	6.6	4.7	4.7
Prop In Lane	1.00			1.00			1.00	1.00		0.18	1.00	0.27
Lane Grp Cap(c), veh/h	167	202	171	164	198	168	678	1389	1416	635	1396	1404
V/C Ratio(X)	0.42	0.31	0.00	0.42	0.30	0.00	0.02	0.23	0.24	0.04	0.21	0.21
Avail Cap(c_a), veh/h	310	401	341	304	393	334	678	1389	1416	635	1396	1404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	0.95	0.95	0.95	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	47.4	0.0	51.7	47.4	0.0	3.6	3.0	3.0	3.9	3.0	3.0
Incr Delay (d2), s/veh	2.4	1.2	0.0	2.4	1.2	0.0	0.1	0.4	0.4	0.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	1.9	0.0	2.2	1.8	0.0	0.1	2.8	2.8	0.3	2.4	2.4
LnGrp Delay(d),s/veh	54.0	48.6	0.0	54.1	48.6	0.0	3.7	3.4	3.4	4.0	3.3	3.3
LnGrp LOS	D	D		D	D		A	A	A	A	A	A
Approach Vol, veh/h		132			129			674		612		
Approach Delay, s/veh		51.5			51.6			3.4		3.3		
Approach LOS		D			D			A		A		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	17.8		97.2		17.8		97.2					
Change Period (Y+R <sub>c</sub> ), s	5.5		6.0		5.5		6.0					
Max Green Setting (Gmax), s	24.5		79.0		24.5		79.0					
Max Q Clear Time (g_c+l1), s	11.3		7.5		11.3		8.6					
Green Ext Time (p_c), s	1.2		1.1		1.2		1.1					
Intersection Summary												
HCM 2010 Ctrl Delay			11.5									
HCM 2010 LOS			B									

# HCM 2010 Signalized Intersection Summary

30: Tyson Ave & E Wood St

09/06/2019



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑	↑	↑	↑↑	↑↑	↑
Traffic Volume (veh/h)	365	153	265	251	120	371
Future Volume (veh/h)	365	153	265	251	120	371
Number	2	12	1	6	7	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1872	1872	1853	1853
Adj Flow Rate, veh/h	372	0	270	256	122	0
Adj No. of Lanes	1	1	1	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1324	1126	868	3021	189	87
Arrive On Green	0.71	0.00	0.09	0.85	0.06	0.00
Sat Flow, veh/h	1853	1575	1783	3651	3424	1575
Grp Volume(v), veh/h	372	0	270	256	122	0
Grp Sat Flow(s),veh/h/ln	1853	1575	1783	1778	1712	1575
Q Serve(g_s), s	8.2	0.0	3.7	1.3	4.0	0.0
Cycle Q Clear(g_c), s	8.2	0.0	3.7	1.3	4.0	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1324	1126	868	3021	189	87
V/C Ratio(X)	0.28	0.00	0.31	0.08	0.65	0.00
Avail Cap(c_a), veh/h	1324	1126	1015	3021	893	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.94	0.00	0.97	0.97	0.94	0.00
Uniform Delay (d), s/veh	5.9	0.0	2.8	1.4	53.2	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.2	0.1	3.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	1.8	0.7	2.0	0.0
LnGrp Delay(d),s/veh	6.4	0.0	3.0	1.5	56.7	0.0
LnGrp LOS	A		A	A	E	
Approach Vol, veh/h	372			526	122	
Approach Delay, s/veh	6.4			2.3	56.7	
Approach LOS	A			A	E	
Timer	1	2	3	4	5	6
Assigned Phs	1	2		4		6
Phs Duration (G+Y+R <sub>c</sub> ), s	15.5	88.2		11.3		103.7
Change Period (Y+R <sub>c</sub> ), s	5.5	6.0		5.0		6.0
Max Green Setting (Gmax), s	19.5	49.0		30.0		74.0
Max Q Clear Time (g_c+l1), s	5.7	10.2		6.0		3.3
Green Ext Time (p_c), s	0.9	2.9		0.4		2.9
Intersection Summary						
HCM 2010 Ctrl Delay			10.3			
HCM 2010 LOS			B			

## HCM 2010 Signalized Intersection Summary

32: S Brewer St/N Brewer St &amp; E Wood St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↙ ↖ ↗ ↘ ↙ ↖ ↙ ↖											
Traffic Volume (veh/h)	15	345	8	2	286	25	3	23	10	36	23	11
Future Volume (veh/h)	15	345	8	2	286	25	3	23	10	36	23	11
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A <sub>pbT</sub> )	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1890	1853	1890	1919	1881	1919	1890	1853	1890
Adj Flow Rate, veh/h	16	375	9	2	311	27	3	25	11	39	25	12
Adj No. of Lanes	1	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	680	1071	26	44	988	85	61	359	147	277	170	72
Arrive On Green	1.00	1.00	1.00	0.59	0.59	0.59	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1043	1821	44	2	1680	145	53	1221	500	724	579	244
Grp Volume(v), veh/h	16	0	384	340	0	0	39	0	0	76	0	0
Grp Sat Flow(s),veh/h/ln	1043	0	1864	1826	0	0	1774	0	0	1547	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	8.0	0.0	0.0	1.3	0.0	0.0	2.8	0.0	0.0
Prop In Lane	1.00		0.02	0.01		0.08	0.08		0.28	0.51		0.16
Lane Grp Cap(c), veh/h	680	0	1097	1117	0	0	567	0	0	519	0	0
V/C Ratio(X)	0.02	0.00	0.35	0.30	0.00	0.00	0.07	0.00	0.00	0.15	0.00	0.00
Avail Cap(c_a), veh/h	680	0	1097	1117	0	0	567	0	0	519	0	0
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	8.9	0.0	0.0	21.6	0.0	0.0	22.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.9	0.7	0.0	0.0	0.2	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.3	4.2	0.0	0.0	0.7	0.0	0.0	1.4	0.0	0.0
LnGrp Delay(d),s/veh	0.1	0.0	0.9	9.6	0.0	0.0	21.9	0.0	0.0	22.7	0.0	0.0
LnGrp LOS	A		A	A			C			C		
Approach Vol, veh/h	400			340			39			76		
Approach Delay, s/veh	0.8			9.6			21.9			22.7		
Approach LOS	A			A			C			C		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	55.0		30.0		55.0		30.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	50.0		25.0		50.0		25.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			7.2									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

35: S Market St & E Blythe St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	22	56	57	19	34	35	444	17	2	421	8
Future Volume (veh/h)	4	22	56	57	19	34	35	444	17	2	421	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1890	1853	1890	1910	1872	1910	1853	1853	1890	1872	1872	1910
Adj Flow Rate, veh/h	4	24	61	62	21	37	38	483	18	2	458	8
Adj No. of Lanes	0	1	0	0	1	0	1	1	0	1	1	0
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	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	50	147	332	274	98	137	625	1044	39	475	1079	19
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.59	0.59	0.59	1.00	1.00	1.00
Sat Flow, veh/h	19	499	1129	714	334	467	918	1776	66	898	1834	32
Grp Volume(v), veh/h	89	0	0	120	0	0	38	0	501	2	0	466
Grp Sat Flow(s),veh/h/ln	1647	0	0	1514	0	0	918	0	1842	898	0	1866
Q Serve(g_s), s	0.0	0.0	0.0	1.1	0.0	0.0	1.5	0.0	13.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.4	0.0	0.0	4.5	0.0	0.0	1.5	0.0	13.1	13.1	0.0	0.0
Prop In Lane	0.04			0.69	0.52		0.31	1.00		0.04	1.00	0.02
Lane Grp Cap(c), veh/h	529	0	0	510	0	0	625	0	1083	475	0	1098
V/C Ratio(X)	0.17	0.00	0.00	0.24	0.00	0.00	0.06	0.00	0.46	0.00	0.00	0.42
Avail Cap(c_a), veh/h	529	0	0	510	0	0	625	0	1083	475	0	1098
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.4	0.0	0.0	22.7	0.0	0.0	7.5	0.0	9.9	1.7	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	1.1	0.0	0.0	0.2	0.0	1.4	0.0	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	2.3	0.0	0.0	0.4	0.0	7.0	0.0	0.0	0.4
LnGrp Delay(d),s/veh	23.1	0.0	0.0	23.8	0.0	0.0	7.7	0.0	11.3	1.7	0.0	1.2
LnGrp LOS	C			C			A		B	A		A
Approach Vol, veh/h	89			120			539		468			
Approach Delay, s/veh	23.1			23.8			11.1		1.2			
Approach LOS	C			C			B		A			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	55.0		30.0		55.0		30.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	50.0		25.0		50.0		25.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay	9.4											
HCM 2010 LOS	A											

# HCM 2010 Signalized Intersection Summary

37: S Poplar St/N Poplar St & E Wood St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↘											
Traffic Volume (veh/h)	24	315	18	9	248	36	13	18	10	37	55	16
Future Volume (veh/h)	24	315	18	9	248	36	13	18	10	37	55	16
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1872	1872	1910	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	27	354	20	10	279	40	15	20	11	42	62	18
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	672	971	55	643	886	127	478	374	206	518	455	132
Arrive On Green	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1062	1755	99	1009	1602	230	1320	1137	625	1366	1382	401
Grp Volume(v), veh/h	27	0	374	10	0	319	15	0	31	42	0	80
Grp Sat Flow(s),veh/h/ln	1062	0	1855	1009	0	1832	1320	0	1762	1366	0	1783
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	1.0	1.8	0.0	2.7
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	1.0	2.9	0.0	2.7
Prop In Lane	1.00		0.05	1.00		0.13	1.00		0.35	1.00		0.22
Lane Grp Cap(c), veh/h	672	0	1025	643	0	1013	478	0	580	518	0	587
V/C Ratio(X)	0.04	0.00	0.36	0.02	0.00	0.31	0.03	0.00	0.05	0.08	0.00	0.14
Avail Cap(c_a), veh/h	672	0	1025	643	0	1013	478	0	580	518	0	587
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	21.2	0.0	19.5	20.4	0.0	20.0
Incr Delay (d2), s/veh	0.1	0.0	1.0	0.0	0.0	0.8	0.1	0.0	0.2	0.3	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.3	0.0	0.0	0.2	0.3	0.0	0.5	0.7	0.0	1.4
LnGrp Delay(d),s/veh	0.1	0.0	1.0	0.0	0.0	0.8	21.3	0.0	19.6	20.7	0.0	20.5
LnGrp LOS	A		A	A		A	C		B	C		C
Approach Vol, veh/h	401				329			46			122	
Approach Delay, s/veh	0.9				0.8			20.2			20.6	
Approach LOS	A				A			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	52.0		33.0		52.0		33.0					
Change Period (Y+R <sub>c</sub> ), s	5.0		5.0		5.0		5.0					
Max Green Setting (Gmax), s	47.0		28.0		47.0		28.0					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			4.5									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

42: Dunlap & Veterans Dr

09/06/2019

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑	↑	↑	↑				
Traffic Volume (veh/h)	7	407	20	74	426	42	14	57	89	41	44	8
Future Volume (veh/h)	7	407	20	74	426	42	14	57	89	41	44	8
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1890	1872	1872	1872	1872	1835	1872	1910	1872	1910
Adj Flow Rate, veh/h	8	447	22	81	468	46	15	63	98	45	48	9
Adj No. of Lanes	1	2	0	1	2	1	0	1	0	0	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	695	2472	121	747	2665	1192	39	82	115	90	87	13
Arrive On Green	0.01	0.72	0.72	0.04	0.75	0.75	0.12	0.12	0.12	0.12	0.12	0.12
Sat Flow, veh/h	1765	3417	168	1783	3557	1591	83	665	940	424	707	109
Grp Volume(v), veh/h	8	230	239	81	468	46	176	0	0	102	0	0
Grp Sat Flow(s),veh/h/ln	1765	1761	1824	1783	1778	1591	1688	0	0	1240	0	0
Q Serve(g_s), s	0.2	5.6	5.6	1.5	5.1	1.0	2.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	5.6	5.6	1.5	5.1	1.0	13.7	0.0	0.0	10.8	0.0	0.0
Prop In Lane	1.00		0.09	1.00		1.00	0.09		0.56	0.44		0.09
Lane Grp Cap(c), veh/h	695	1274	1320	747	2665	1192	236	0	0	191	0	0
V/C Ratio(X)	0.01	0.18	0.18	0.11	0.18	0.04	0.75	0.00	0.00	0.54	0.00	0.00
Avail Cap(c_a), veh/h	815	1274	1320	823	2665	1192	391	0	0	334	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.8	5.9	5.9	4.1	4.9	4.4	58.0	0.0	0.0	56.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.1	0.1	0.1	4.6	0.0	0.0	2.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	2.8	2.9	0.7	2.5	0.5	6.8	0.0	0.0	3.8	0.0	0.0
LnGrp Delay(d),s/veh	4.8	6.2	6.2	4.1	5.0	4.4	62.6	0.0	0.0	58.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	E			E		
Approach Vol, veh/h	477				595			176			102	
Approach Delay, s/veh	6.2				4.9			62.6			58.4	
Approach LOS	A				A			E			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	5.8	107.1		22.1	9.3	103.7		22.1				
Change Period (Y+R <sub>c</sub> ), s	4.5	6.0		5.5	4.5	6.0		5.5				
Max Green Setting (Gmax), s	10.5	79.0		29.5	10.5	79.0		29.5				
Max Q Clear Time (g_c+l1), s	2.2	7.1		15.7	3.5	7.6		12.8				
Green Ext Time (p_c), s	0.0	11.8		0.9	0.1	11.8		1.0				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				16.9								
HCM 2010 LOS				B								
Notes												

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User approved pedestrian interval to be less than phase max green.

## HCM 2010 Signalized Intersection Summary

47: Tyson Ave &amp; Mineral Wells/Veterans Dr

09/06/2019

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	1	2	1	1	2	1	1	2	1	2	1	1
Traffic Volume (veh/h)	181	400	220	36	460	72	68	165	166	347	237	62
Future Volume (veh/h)	181	400	220	36	460	72	68	165	166	347	237	62
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1825	1825	1825	1853	1853	1853	1881	1881	1881	1872	1872	1872
Adj Flow Rate, veh/h	203	449	0	40	517	0	76	185	0	390	266	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	586	2051	918	609	1974	883	229	271	121	468	571	255
Arrive On Green	0.07	0.59	0.00	0.03	0.56	0.00	0.05	0.08	0.00	0.14	0.16	0.00
Sat Flow, veh/h	1739	3468	1552	1765	3522	1575	1792	3575	1599	3459	3557	1591
Grp Volume(v), veh/h	203	449	0	40	517	0	76	185	0	390	266	0
Grp Sat Flow(s),veh/h/ln	1739	1734	1552	1765	1761	1575	1792	1787	1599	1729	1778	1591
Q Serve(g_s), s	6.5	8.2	0.0	1.3	10.2	0.0	5.2	6.8	0.0	14.8	9.2	0.0
Cycle Q Clear(g_c), s	6.5	8.2	0.0	1.3	10.2	0.0	5.2	6.8	0.0	14.8	9.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	586	2051	918	609	1974	883	229	271	121	468	571	255
V/C Ratio(X)	0.35	0.22	0.00	0.07	0.26	0.00	0.33	0.68	0.00	0.83	0.47	0.00
Avail Cap(c_a), veh/h	678	2051	918	679	1974	883	271	609	272	769	1133	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.95	0.95	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.8	12.9	0.0	11.4	15.3	0.0	53.8	60.8	0.0	56.9	51.4	0.0
Incr Delay (d2), s/veh	0.2	0.2	0.0	0.0	0.3	0.0	0.3	3.0	0.0	4.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	4.0	0.0	0.6	5.0	0.0	2.6	3.5	0.0	7.4	4.5	0.0
LnGrp Delay(d),s/veh	11.1	13.2	0.0	11.4	15.6	0.0	54.1	63.8	0.0	61.0	51.9	0.0
LnGrp LOS	B	B		B	B		D	E		E	D	
Approach Vol, veh/h		652			557			261		656		
Approach Delay, s/veh		12.5			15.3			61.0		57.3		
Approach LOS		B			B			E		E		
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	23.3	16.2	9.7	85.8	11.8	27.7	13.8	81.7				
Change Period (Y+R <sub>c</sub> ), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	30.0	23.0	10.0	50.0	10.0	43.0	16.0	44.0				
Max Q Clear Time (g_c+l1), s	16.8	8.8	3.3	10.2	7.2	11.2	8.5	12.2				
Green Ext Time (p_c), s	1.4	1.4	0.0	4.8	0.0	1.7	0.3	4.7				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				33.0								
HCM 2010 LOS				C								

# HCM 2010 Signalized Intersection Summary

49: TN-79 & TN-218

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↙ ↖ ↗ ↘ ↙ ↖ ↘ ↙											
Traffic Volume (veh/h)	45	65	55	100	120	30	10	230	40	20	190	10
Future Volume (veh/h)	45	65	55	100	120	30	10	230	40	20	190	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1853	1853	1890	1872	1872	1910	1853	1853	1890
Adj Flow Rate, veh/h	49	71	60	109	130	33	11	250	43	22	207	11
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	238	201	506	362	92	544	869	147	503	972	51
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1224	939	793	1248	1427	362	1164	3043	516	1076	3403	180
Grp Volume(v), veh/h	49	0	131	109	0	163	11	145	148	22	107	111
Grp Sat Flow(s),veh/h/ln	1224	0	1732	1248	0	1789	1164	1778	1781	1076	1761	1822
Q Serve(g_s), s	0.9	0.0	1.7	2.1	0.0	2.0	0.2	1.7	1.8	0.4	1.2	1.3
Cycle Q Clear(g_c), s	3.0	0.0	1.7	3.8	0.0	2.0	1.5	1.7	1.8	2.2	1.2	1.3
Prop In Lane	1.00		0.46	1.00		0.20	1.00		0.29	1.00		0.10
Lane Grp Cap(c), veh/h	484	0	440	506	0	454	544	508	509	503	503	520
V/C Ratio(X)	0.10	0.00	0.30	0.22	0.00	0.36	0.02	0.28	0.29	0.04	0.21	0.21
Avail Cap(c_a), veh/h	1031	0	1212	1062	0	1253	1005	1212	1214	929	1200	1242
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.5	0.0	8.2	9.7	0.0	8.3	7.9	7.5	7.6	8.4	7.4	7.4
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.2	0.0	0.5	0.0	0.7	0.7	0.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.8	0.8	0.0	1.1	0.1	0.9	1.0	0.1	0.7	0.7
LnGrp Delay(d),s/veh	9.6	0.0	8.6	9.9	0.0	8.8	8.0	8.2	8.2	8.5	7.8	7.8
LnGrp LOS	A		A			A	A	A	A	A	A	A
Approach Vol, veh/h	180				272			304			240	
Approach Delay, s/veh	8.8				9.2			8.2			7.9	
Approach LOS	A				A			A			A	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	14.3		12.9		14.3		12.9					
Change Period (Y+R <sub>c</sub> ), s	6.5		6.0		6.5		6.0					
Max Green Setting (Gmax), s	18.5		19.0		18.5		19.0					
Max Q Clear Time (g_c+l1), s	3.8		5.0		4.2		5.8					
Green Ext Time (p_c), s	3.6		1.4		3.6		1.4					
Intersection Summary												
HCM 2010 Ctrl Delay			8.5									
HCM 2010 LOS			A									

# HCM 2010 Signalized Intersection Summary

52: Tyson Ave & Joy St

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	→	↑	←	↑	→	↑	↑↓	↑	↑	↑↓	↑
Traffic Volume (veh/h)	20	35	20	130	40	170	60	300	145	110	280	30
Future Volume (veh/h)	20	35	20	130	40	170	60	300	145	110	280	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1872	1853	1853	1890	1881	1881	1919	1844	1844	1881
Adj Flow Rate, veh/h	22	38	0	141	43	185	65	326	158	120	304	33
Adj No. of Lanes	1	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	403	343	398	66	283	624	834	396	562	1225	132
Arrive On Green	0.22	0.22	0.00	0.22	0.22	0.22	0.09	0.35	0.35	0.12	0.38	0.38
Sat Flow, veh/h	1154	1872	1591	1357	306	1316	1792	2354	1118	1756	3192	344
Grp Volume(v), veh/h	22	38	0	141	0	228	65	246	238	120	166	171
Grp Sat Flow(s),veh/h/ln	1154	1872	1591	1357	0	1621	1792	1787	1684	1756	1752	1783
Q Serve(g_s), s	1.0	0.9	0.0	5.2	0.0	7.2	1.2	5.8	6.0	2.2	3.6	3.7
Cycle Q Clear(g_c), s	8.2	0.9	0.0	6.2	0.0	7.2	1.2	5.8	6.0	2.2	3.6	3.7
Prop In Lane	1.00		1.00	1.00		0.81	1.00		0.66	1.00		0.19
Lane Grp Cap(c), veh/h	228	403	343	398	0	349	624	633	597	562	673	685
V/C Ratio(X)	0.10	0.09	0.00	0.35	0.00	0.65	0.10	0.39	0.40	0.21	0.25	0.25
Avail Cap(c_a), veh/h	787	1310	1114	1056	0	1135	922	1378	1298	802	1350	1375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.0	17.7	0.0	20.2	0.0	20.2	9.1	13.6	13.7	8.7	11.8	11.8
Incr Delay (d2), s/veh	0.3	0.1	0.0	0.8	0.0	2.9	0.1	0.4	0.4	0.3	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.5	0.0	2.0	0.0	3.5	0.6	2.9	2.8	1.0	1.8	1.8
LnGrp Delay(d),s/veh	24.2	17.9	0.0	21.0	0.0	23.1	9.2	14.0	14.1	9.0	12.0	12.0
LnGrp LOS	C	B		C		C	A	B	B	A	B	B
Approach Vol, veh/h		60				369			549		457	
Approach Delay, s/veh		20.2				22.3			13.5		11.2	
Approach LOS		C				C			B		B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6			8			
Phs Duration (G+Y+R <sub>c</sub> ), s	12.3	26.5		17.7	10.6	28.2			17.7			
Change Period (Y+R <sub>c</sub> ), s	5.5	6.5		5.5	5.5	6.5			5.5			
Max Green Setting (Gmax), s	14.5	43.5		39.5	14.5	43.5			39.5			
Max Q Clear Time (g_c+l1), s	4.2	8.0		10.2	3.2	5.7			9.2			
Green Ext Time (p_c), s	0.4	3.3		2.9	0.2	3.4			2.9			
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				15.3								
HCM 2010 LOS				B								

HCM 2010 Signalized Intersection Summary  
57: Restaurant/Jim Adams Dr & Mineral Wells

09/06/2019

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑	↑↑		↑	↑↑		↑	↑		↑↑	↑	
Traffic Volume (veh/h)	88	792	20	2	672	87	13	3	7	101	2	120
Future Volume (veh/h)	88	792	20	2	672	87	13	3	7	101	2	120
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1872	1872	1910	1881	1881	1919	1872	1872	1910
Adj Flow Rate, veh/h	97	870	22	2	738	96	14	3	8	111	2	132
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	2	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	529	2825	71	507	2270	295	87	47	125	385	2	162
Arrive On Green	0.03	0.80	0.80	0.72	0.72	0.72	0.10	0.10	0.10	0.10	0.10	0.10
Sat Flow, veh/h	1783	3545	90	624	3166	412	1263	455	1213	2725	24	1571
Grp Volume(v), veh/h	97	436	456	2	414	420	14	0	11	111	0	134
Grp Sat Flow(s),veh/h/ln	1783	1778	1856	624	1778	1799	1263	0	1667	1363	0	1595
Q Serve(g_s), s	1.6	7.9	7.9	0.1	10.3	10.3	1.3	0.0	0.7	4.6	0.0	9.9
Cycle Q Clear(g_c), s	1.6	7.9	7.9	0.1	10.3	10.3	11.2	0.0	0.7	5.3	0.0	9.9
Prop In Lane	1.00		0.05	1.00		0.23	1.00		0.73	1.00		0.99
Lane Grp Cap(c), veh/h	529	1417	1479	507	1275	1290	87	0	172	385	0	165
V/C Ratio(X)	0.18	0.31	0.31	0.00	0.32	0.33	0.16	0.00	0.06	0.29	0.00	0.81
Avail Cap(c_a), veh/h	609	1417	1479	507	1275	1290	156	0	264	535	0	253
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.86	0.86	0.86	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	4.3	3.3	3.3	4.8	6.3	6.3	58.2	0.0	48.6	51.0	0.0	52.7
Incr Delay (d2), s/veh	0.1	0.5	0.5	0.0	0.7	0.7	1.0	0.0	0.2	0.3	0.0	9.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.1	4.2	0.0	5.3	5.4	0.5	0.0	0.3	1.7	0.0	4.8
LnGrp Delay(d),s/veh	4.4	3.8	3.7	4.8	6.9	6.9	59.2	0.0	48.8	51.3	0.0	61.8
LnGrp LOS	A	A	A	A	A	A	E		D	D		E
Approach Vol, veh/h	989				836			25			245	
Approach Delay, s/veh	3.8				6.9			54.6			57.0	
Approach LOS	A				A			D			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.6	92.0		18.4		101.6		18.4				
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	9.0	74.0		19.0		89.0		19.0				
Max Q Clear Time (g_c+l1), s	3.6	12.3		13.2		9.9		11.9				
Green Ext Time (p_c), s	0.1	13.4		0.5		13.6		0.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				11.9								
HCM 2010 LOS				B								
Notes												

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User approved pedestrian interval to be less than phase max green.

# HCM 2010 Signalized Intersection Summary

62: Mineral Wells & Walmart/Memorial Dr

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑			↑	↑↑	↑	↑↑	↑	↑	↑↑	↑
Traffic Volume (veh/h)	208	128	39	37	93	305	17	217	78	328	266	262
Future Volume (veh/h)	208	128	39	37	93	305	17	217	78	328	266	262
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1844	1844	1881	1890	1853	1853	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	219	135	41	39	98	321	18	228	0	347	277	276
Adj No. of Lanes	2	1	0	0	1	2	1	2	1	2	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	499	199	60	85	213	852	230	473	212	516	707	601
Arrive On Green	0.15	0.15	0.15	0.16	0.16	0.16	0.13	0.13	0.00	0.14	0.38	0.38
Sat Flow, veh/h	3407	1359	413	520	1307	2773	843	3504	1568	3584	1881	1599
Grp Volume(v), veh/h	219	0	176	137	0	321	18	228	0	347	277	276
Grp Sat Flow(s),veh/h/ln	1704	0	1771	1827	0	1386	843	1752	1568	1792	1881	1599
Q Serve(g_s), s	3.6	0.0	5.8	4.2	0.0	5.6	1.2	3.7	0.0	5.7	6.7	8.1
Cycle Q Clear(g_c), s	3.6	0.0	5.8	4.2	0.0	5.6	1.2	3.7	0.0	5.7	6.7	8.1
Prop In Lane	1.00		0.23	0.28		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	499	0	259	298	0	852	230	473	212	516	707	601
V/C Ratio(X)	0.44	0.00	0.68	0.46	0.00	0.38	0.08	0.48	0.00	0.67	0.39	0.46
Avail Cap(c_a), veh/h	990	0	515	531	0	1205	572	1895	848	1967	2247	1910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	0.0	25.1	23.5	0.0	16.8	23.7	24.8	0.0	25.1	14.2	14.6
Incr Delay (d2), s/veh	0.6	0.0	3.1	1.9	0.0	0.5	0.1	0.6	0.0	1.1	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	3.1	2.3	0.0	2.2	0.3	1.8	0.0	2.9	3.5	3.6
LnGrp Delay(d),s/veh	24.7	0.0	28.2	25.3	0.0	17.3	23.8	25.4	0.0	26.3	14.4	15.0
LnGrp LOS	C		C			B	C	C		C	B	B
Approach Vol, veh/h	395				458			246			900	
Approach Delay, s/veh	26.3				19.7			25.2			19.2	
Approach LOS	C				B			C			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	14.9	14.9		15.1		29.8		17.1				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.5		6.0		* 6.5		7.0				
Max Green Setting (Gmax), s	34.0	33.5		18.0		* 74		18.0				
Max Q Clear Time (g_c+l1), s	7.7	5.7		7.8		10.1		7.6				
Green Ext Time (p_c), s	1.2	2.8		1.2		2.8		2.5				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				21.4								
HCM 2010 LOS				C								
Notes												

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User approved pedestrian interval to be less than phase max green.

User approved volume balancing among the lanes for turning movement.

\* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

# HCM 2010 Signalized Intersection Summary

64: TN-641 & Memorial Dr

09/06/2019



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Volume (veh/h)	286	224	20	217	240	44
Future Volume (veh/h)	286	224	20	217	240	44
Number	2	12	1	6	7	14
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1853	1853	1872	1872	1844	1844
Adj Flow Rate, veh/h	349	0	24	265	293	0
Adj No. of Lanes	2	1	1	2	1	1
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1537	688	562	2023	374	334
Arrive On Green	0.44	0.00	0.03	0.57	0.21	0.00
Sat Flow, veh/h	3614	1575	1783	3651	1756	1568
Grp Volume(v), veh/h	349	0	24	265	293	0
Grp Sat Flow(s),veh/h/ln	1761	1575	1783	1778	1756	1568
Q Serve(g_s), s	3.6	0.0	0.4	2.0	9.0	0.0
Cycle Q Clear(g_c), s	3.6	0.0	0.4	2.0	9.0	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1537	688	562	2023	374	334
V/C Ratio(X)	0.23	0.00	0.04	0.13	0.78	0.00
Avail Cap(c_a), veh/h	2674	1196	1104	4254	889	794
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.1	0.0	7.6	5.8	21.3	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	4.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.2	1.0	4.8	0.0
LnGrp Delay(d),s/veh	10.2	0.0	7.6	5.8	25.6	0.0
LnGrp LOS	B		A	A	C	
Approach Vol, veh/h	349			289	293	
Approach Delay, s/veh	10.2			5.9	25.6	
Approach LOS	B			A	C	
Timer	1	2	3	4	5	6
Assigned Phs	1	2		4		6
Phs Duration (G+Y+R <sub>c</sub> ), s	7.6	31.5		18.2		39.1
Change Period (Y+R <sub>c</sub> ), s	6.0	6.5		6.0		6.5
Max Green Setting (Gmax), s	19.0	43.5		29.0		68.5
Max Q Clear Time (g_c+l1), s	2.4	5.6		11.0		4.0
Green Ext Time (p_c), s	0.0	3.6		1.3		3.6
<b>Intersection Summary</b>						
HCM 2010 Ctrl Delay			13.7			
HCM 2010 LOS			B			

## HCM 2010 Signalized Intersection Summary

67: Store/Volunteer Dr &amp; Memorial Dr

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑		↑	↑↑			↑	↑	↑	↑	
Traffic Volume (veh/h)	103	424	0	0	371	99	0	0	0	121	0	135
Future Volume (veh/h)	103	424	0	0	371	99	0	0	0	121	0	135
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1863	1863	1900	1881	1844	1844	1853	1853	1890
Adj Flow Rate, veh/h	116	476	0	0	417	111	0	0	0	136	0	152
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	462	1804	0	203	783	207	0	284	241	475	0	242
Arrive On Green	0.07	0.51	0.00	0.00	0.28	0.28	0.00	0.00	0.00	0.15	0.00	0.15
Sat Flow, veh/h	1783	3651	0	914	2772	731	0	1844	1568	1765	0	1575
Grp Volume(v), veh/h	116	476	0	0	265	263	0	0	0	136	0	152
Grp Sat Flow(s),veh/h/ln	1783	1778	0	914	1770	1734	0	1844	1568	1765	0	1575
Q Serve(g_s), s	1.5	2.7	0.0	0.0	4.5	4.5	0.0	0.0	0.0	2.5	0.0	3.2
Cycle Q Clear(g_c), s	1.5	2.7	0.0	0.0	4.5	4.5	0.0	0.0	0.0	2.5	0.0	3.2
Prop In Lane	1.00		0.00	1.00		0.42	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	462	1804	0	203	500	490	0	284	241	475	0	242
V/C Ratio(X)	0.25	0.26	0.00	0.00	0.53	0.54	0.00	0.00	0.00	0.29	0.00	0.63
Avail Cap(c_a), veh/h	1069	9950	0	1986	3950	3870	0	1511	1284	1650	0	1291
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.3	5.0	0.0	0.0	10.7	10.7	0.0	0.0	0.0	13.7	0.0	14.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.1	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	1.3	0.0	0.0	2.2	2.2	0.0	0.0	0.0	1.2	0.0	1.5
LnGrp Delay(d),s/veh	7.4	5.0	0.0	0.0	11.0	11.1	0.0	0.0	0.0	13.8	0.0	15.0
LnGrp LOS	A	A			B	B				B		B
Approach Vol, veh/h	592				528				0			288
Approach Delay, s/veh	5.5				11.1				0.0			14.5
Approach LOS	A				B							B
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	7.9	16.0		11.4		23.9		11.4				
Change Period (Y+R <sub>c</sub> ), s	5.5	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	14.5	79.0		29.0		99.0		29.0				
Max Q Clear Time (g_c+l1), s	3.5	6.5		0.0		4.7		5.2				
Green Ext Time (p_c), s	0.1	2.4		0.0		2.4		0.6				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			9.4									
HCM 2010 LOS			A									

HCM 2010 Signalized Intersection Summary  
74: Volunteer Dr & Jim Adams Dr/Restaurant

09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↗	↑ ↘	↑ ↙	↑ ↖	↑ ↗	↑ ↘	↑ ↙	↑ ↖
Traffic Volume (veh/h)	158	7	69	5	0	1	45	272	3	10	272	174
Future Volume (veh/h)	158	7	69	5	0	1	45	272	3	10	272	174
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1872	1872	1910	1863	1863	1900	1863	1863	1900	1872	1872	1910
Adj Flow Rate, veh/h	180	8	78	6	0	1	51	309	3	11	309	198
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	22	215	20	0	18	302	947	9	511	368	236
Arrive On Green	0.15	0.15	0.15	0.01	0.00	0.01	0.05	0.51	0.51	0.34	0.34	0.34
Sat Flow, veh/h	1783	150	1464	1774	0	1583	1774	1842	18	1068	1067	684
Grp Volume(v), veh/h	180	0	86	6	0	1	51	0	312	11	0	507
Grp Sat Flow(s),veh/h/ln	1783	0	1614	1774	0	1583	1774	0	1860	1068	0	1751
Q Serve(g_s), s	4.8	0.0	2.4	0.2	0.0	0.0	0.8	0.0	4.9	0.3	0.0	13.4
Cycle Q Clear(g_c), s	4.8	0.0	2.4	0.2	0.0	0.0	0.8	0.0	4.9	0.3	0.0	13.4
Prop In Lane	1.00		0.91	1.00		1.00	1.00		0.01	1.00		0.39
Lane Grp Cap(c), veh/h	261	0	237	20	0	18	302	0	956	511	0	603
V/C Ratio(X)	0.69	0.00	0.36	0.30	0.00	0.06	0.17	0.00	0.33	0.02	0.00	0.84
Avail Cap(c_a), veh/h	638	0	578	494	0	441	529	0	2736	1396	0	2054
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.4	0.0	19.3	24.7	0.0	24.6	10.8	0.0	7.1	10.9	0.0	15.2
Incr Delay (d2), s/veh	3.2	0.0	0.9	8.4	0.0	1.3	0.1	0.0	0.1	0.0	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	1.1	0.1	0.0	0.0	0.4	0.0	2.5	0.1	0.0	6.7
LnGrp Delay(d),s/veh	23.6	0.0	20.3	33.1	0.0	25.9	10.9	0.0	7.2	10.9	0.0	16.5
LnGrp LOS	C		C			C	B		A	B		B
Approach Vol, veh/h	266				7			363			518	
Approach Delay, s/veh	22.5				32.1			7.7			16.3	
Approach LOS	C				C			A			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+R <sub>c</sub> ), s	8.5	23.3		6.6		31.9		11.9				
Change Period (Y+R <sub>c</sub> ), s	6.0	6.0		6.0		6.0		4.5				
Max Green Setting (Gmax), s	9.0	59.0		14.0		74.0		18.0				
Max Q Clear Time (g_c+l1), s	2.8	15.4		2.2		6.9		6.8				
Green Ext Time (p_c), s	0.0	1.9		0.0		1.9		0.7				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			15.2									
HCM 2010 LOS			B									
Notes												

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User approved pedestrian interval to be less than phase max green.

# HCM 2010 Signalized Intersection Summary

79: Volunteer Dr & School/Patriot Ave

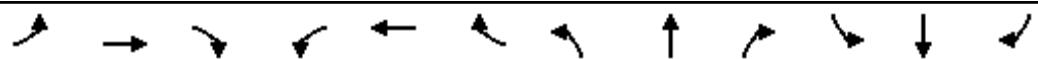
09/06/2019

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖ ↗ ↘ ↙ ↖											
Traffic Volume (veh/h)	93	35	22	192	2	52	4	271	74	29	292	5
Future Volume (veh/h)	93	35	22	192	2	52	4	271	74	29	292	5
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00		1.00	1.00		1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1891	1891	1928	1835	1835	1872	1835	1835	1872	1919	1919	1957
Adj Flow Rate, veh/h	129	49	31	267	3	72	6	376	103	40	406	7
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	377	86	54	456	10	243	311	469	128	271	701	12
Arrive On Green	0.09	0.08	0.08	0.17	0.16	0.16	0.00	0.34	0.34	0.04	0.37	0.37
Sat Flow, veh/h	1801	1084	686	1747	63	1506	1747	1388	380	1827	1880	32
Grp Volume(v), veh/h	129	0	80	267	0	75	6	0	479	40	0	413
Grp Sat Flow(s),veh/h/ln	1801	0	1770	1747	0	1569	1747	0	1768	1827	0	1913
Q Serve(g_s), s	4.1	0.0	2.8	8.4	0.0	2.7	0.1	0.0	15.9	0.9	0.0	11.1
Cycle Q Clear(g_c), s	4.1	0.0	2.8	8.4	0.0	2.7	0.1	0.0	15.9	0.9	0.0	11.1
Prop In Lane	1.00		0.39	1.00		0.96	1.00		0.22	1.00		0.02
Lane Grp Cap(c), veh/h	377	0	140	456	0	253	311	0	597	271	0	713
V/C Ratio(X)	0.34	0.00	0.57	0.59	0.00	0.30	0.02	0.00	0.80	0.15	0.00	0.58
Avail Cap(c_a), veh/h	763	0	796	687	0	706	547	0	1467	453	0	1588
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.0	0.0	28.6	20.0	0.0	23.8	14.6	0.0	19.4	14.8	0.0	16.2
Incr Delay (d2), s/veh	0.2	0.0	1.4	1.2	0.0	0.2	0.0	0.0	2.6	0.1	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	1.4	4.1	0.0	1.2	0.1	0.0	8.1	0.5	0.0	6.0
LnGrp Delay(d),s/veh	24.2	0.0	30.0	21.2	0.0	24.0	14.6	0.0	21.9	14.9	0.0	16.9
LnGrp LOS	C		C	C		C	B		C	B		B
Approach Vol, veh/h	209			342			485		453			
Approach Delay, s/veh	26.4			21.9			21.8		16.7			
Approach LOS	C			C			C		B			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+R <sub>c</sub> ), s	11.2	16.4	8.6	28.3	16.5	11.1	6.3	30.5				
Change Period (Y+R <sub>c</sub> ), s	5.5	6.0	6.0	6.5	5.5	6.0	6.0	6.5				
Max Green Setting (Gmax), s	19.5	29.0	9.0	53.5	19.5	29.0	9.0	53.5				
Max Q Clear Time (g_c+l1), s	6.1	4.7	2.9	17.9	10.4	4.8	2.1	13.1				
Green Ext Time (p_c), s	0.2	0.3	0.0	3.9	0.7	0.3	0.0	3.9				
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay				20.9								
HCM 2010 LOS				C								

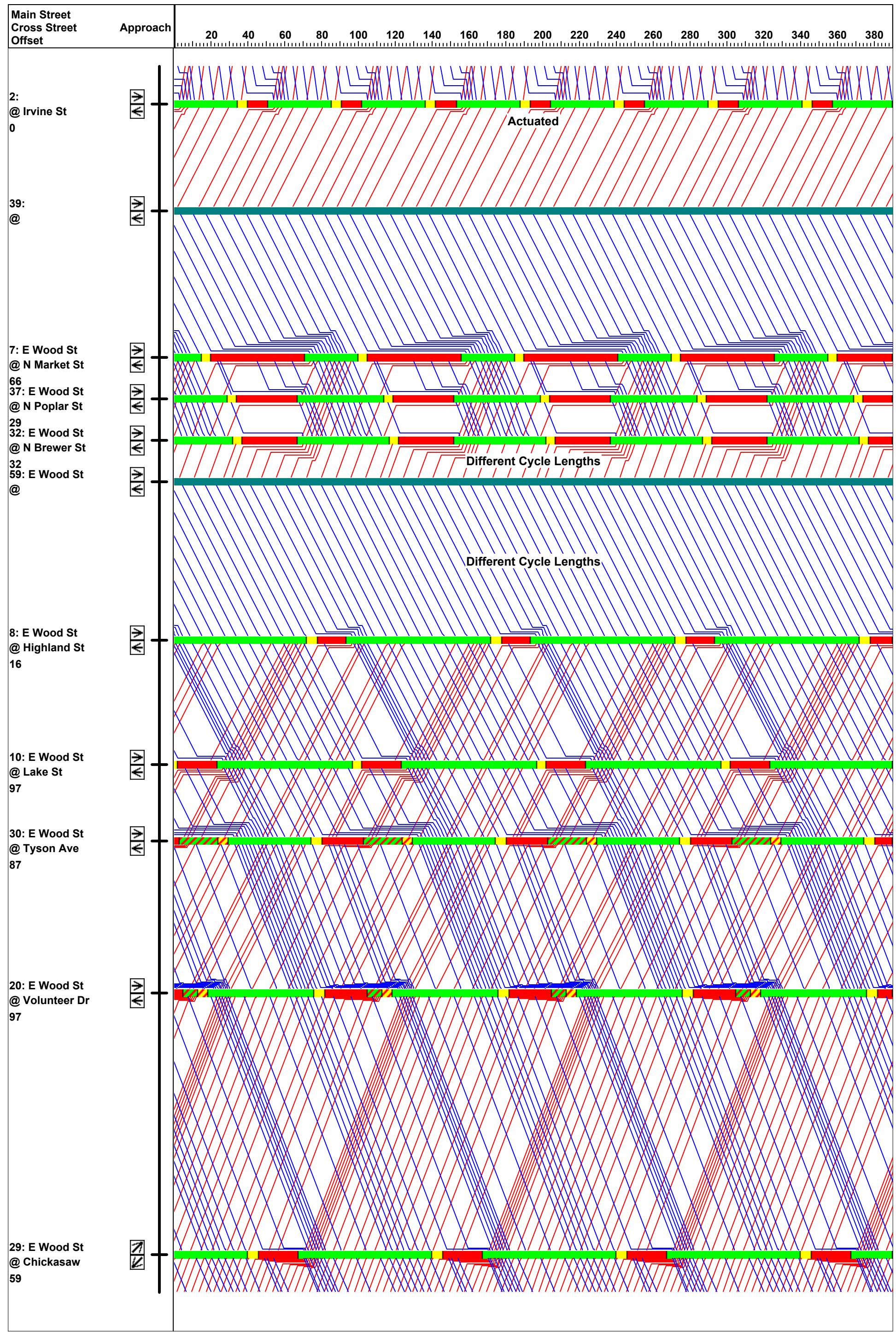
# HCM 2010 Signalized Intersection Summary

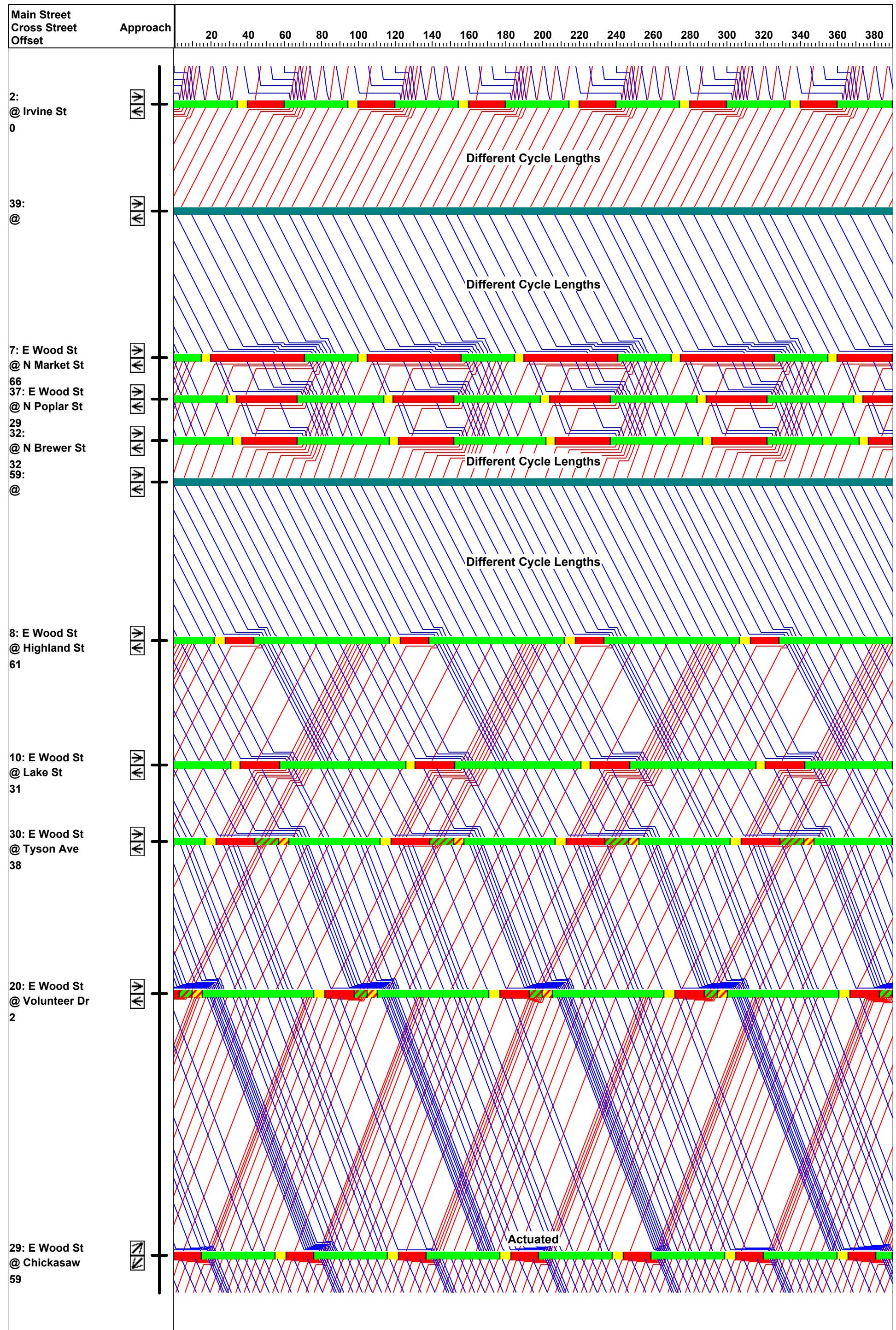
85: Wilson St & Lone Oak

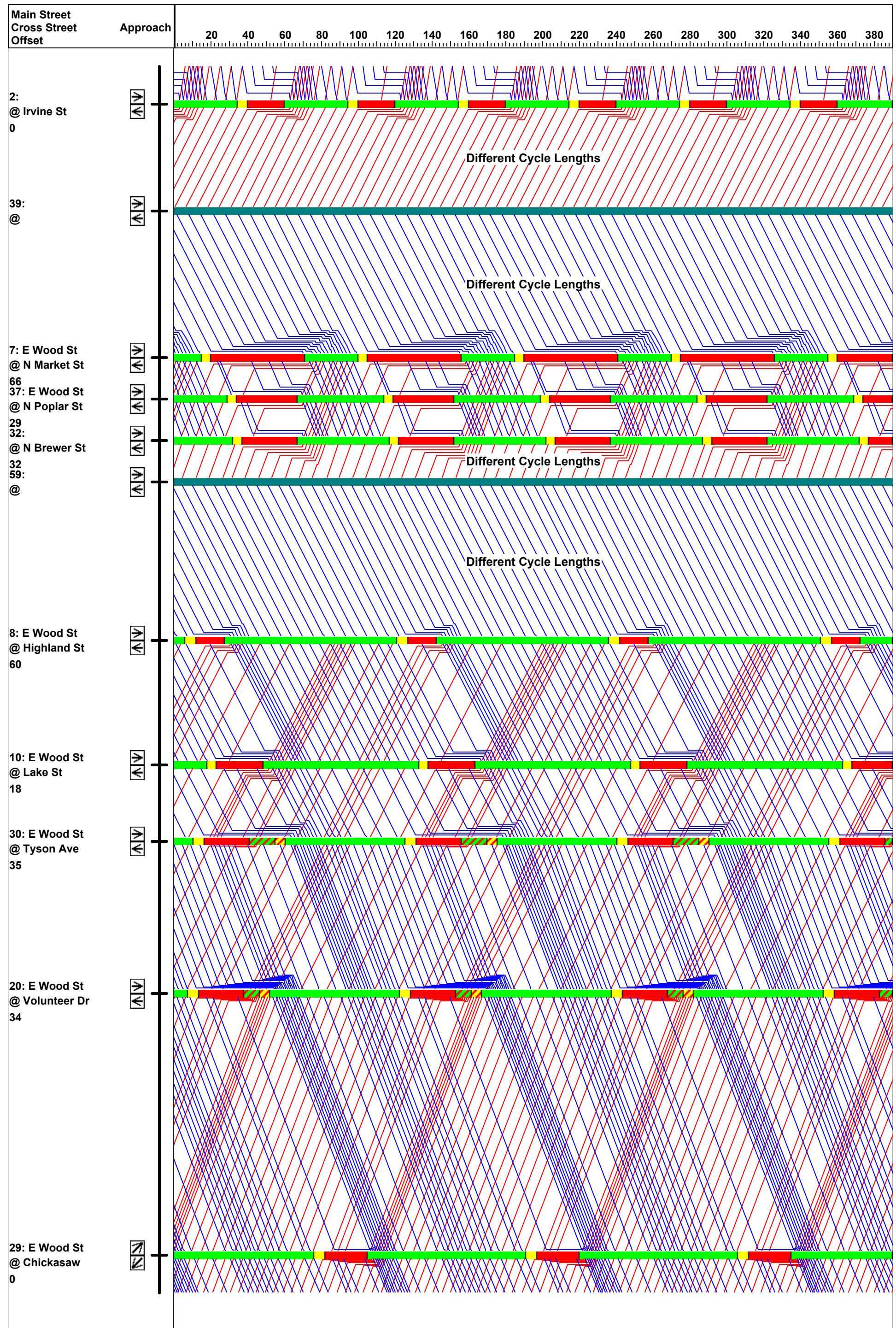
09/06/2019

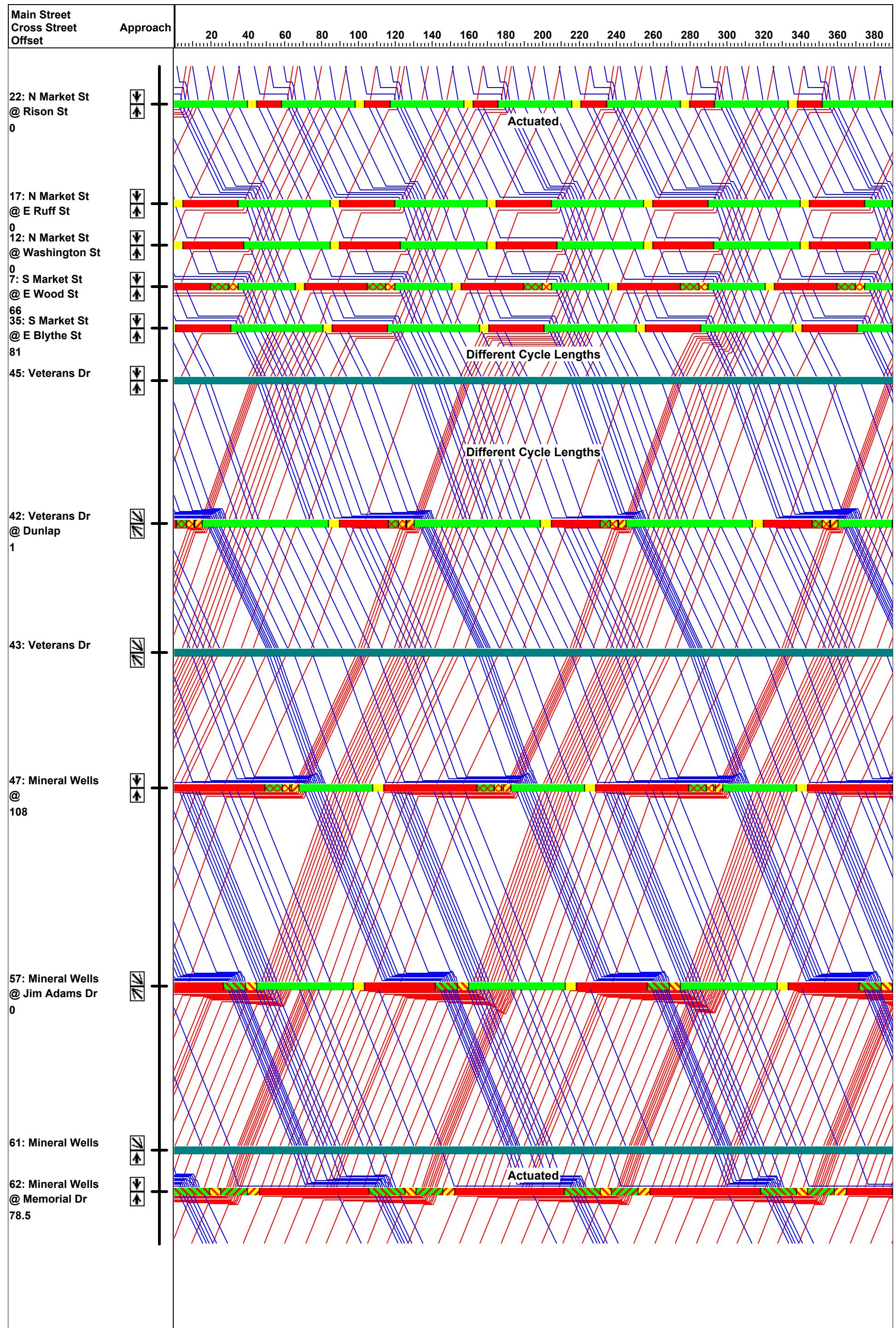


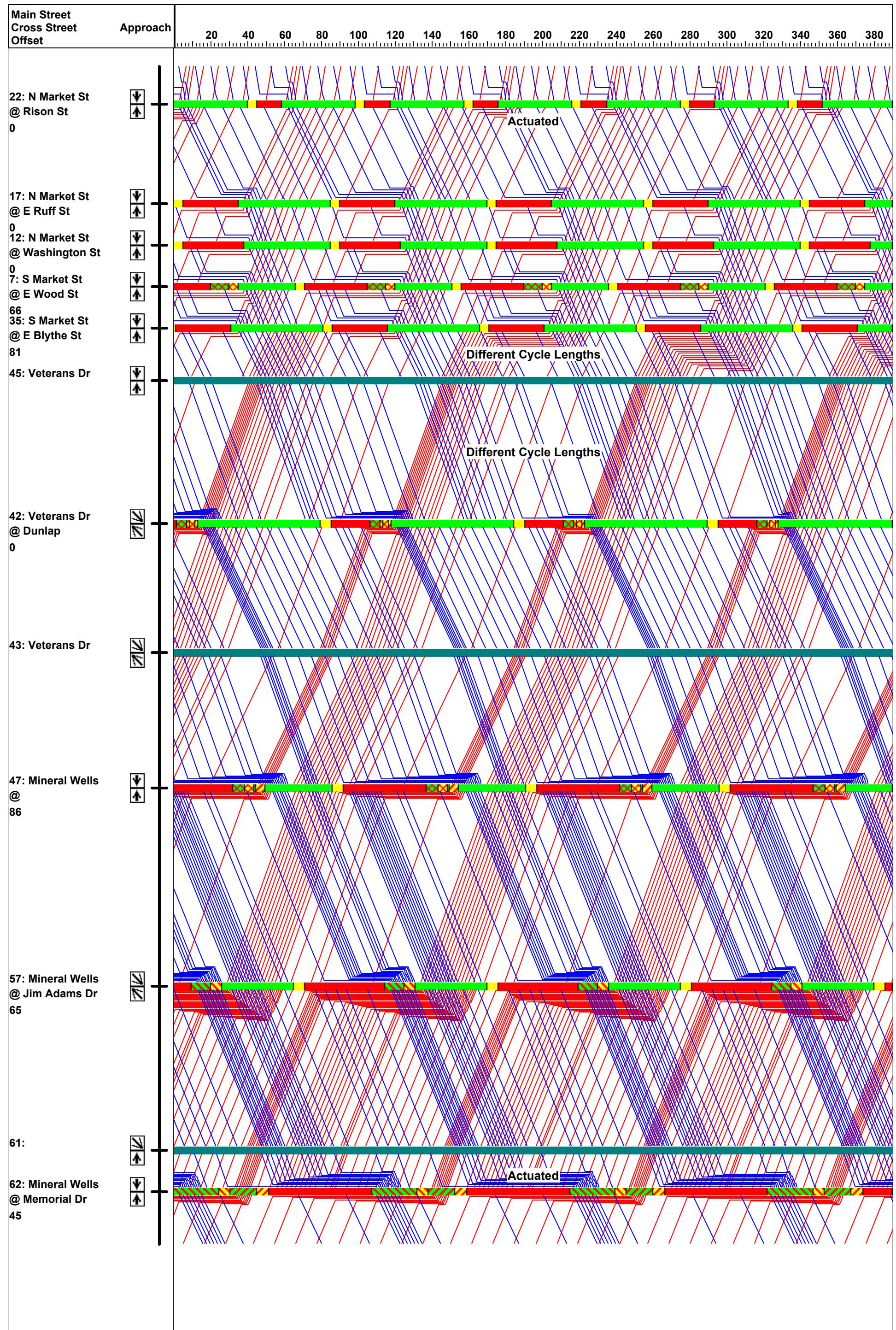
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	35	5	10	25	5	70	30	15	10	25	20
Future Volume (veh/h)	15	35	5	10	25	5	70	30	15	10	25	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1910	1872	1910	1900	1863	1900
Adj Flow Rate, veh/h	16	38	5	11	27	5	76	33	16	11	27	22
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	530	61	243	517	83	379	151	53	156	259	170
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.27	0.27	0.27	0.27	0.27	0.27
Sat Flow, veh/h	303	1279	146	276	1248	201	786	556	197	127	953	625
Grp Volume(v), veh/h	59	0	0	43	0	0	125	0	0	60	0	0
Grp Sat Flow(s),veh/h/ln	1728	0	0	1725	0	0	1539	0	0	1704	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	0.0	0.5	0.0	0.0	2.0	0.0	0.0	0.9	0.0	0.0
Prop In Lane	0.27		0.08	0.26		0.12	0.61		0.13	0.18		0.37
Lane Grp Cap(c), veh/h	847	0	0	844	0	0	583	0	0	584	0	0
V/C Ratio(X)	0.07	0.00	0.00	0.05	0.00	0.00	0.21	0.00	0.00	0.10	0.00	0.00
Avail Cap(c_a), veh/h	847	0	0	844	0	0	583	0	0	584	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.2	0.0	0.0	6.1	0.0	0.0	10.0	0.0	0.0	9.6	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.1	0.0	0.0	0.8	0.0	0.0	0.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.3	0.0	0.0	1.1	0.0	0.0	0.5	0.0	0.0
LnGrp Delay(d),s/veh	6.4	0.0	0.0	6.3	0.0	0.0	10.8	0.0	0.0	10.0	0.0	0.0
LnGrp LOS	A		A			B			A			
Approach Vol, veh/h	59			43			125			60		
Approach Delay, s/veh	6.4			6.3			10.8			10.0		
Approach LOS	A		A			B			A			
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	2		4		6		8					
Phs Duration (G+Y+R <sub>c</sub> ), s	15.0		20.0		15.0		20.0					
Change Period (Y+R <sub>c</sub> ), s	5.5		5.5		5.5		5.5					
Max Green Setting (Gmax), s	9.5		14.5		9.5		14.5					
Max Q Clear Time (g_c+l1), s	0.0		0.0		0.0		0.0					
Green Ext Time (p_c), s	0.0		0.0		0.0		0.0					
<b>Intersection Summary</b>												
HCM 2010 Ctrl Delay			9.0									
HCM 2010 LOS			A									

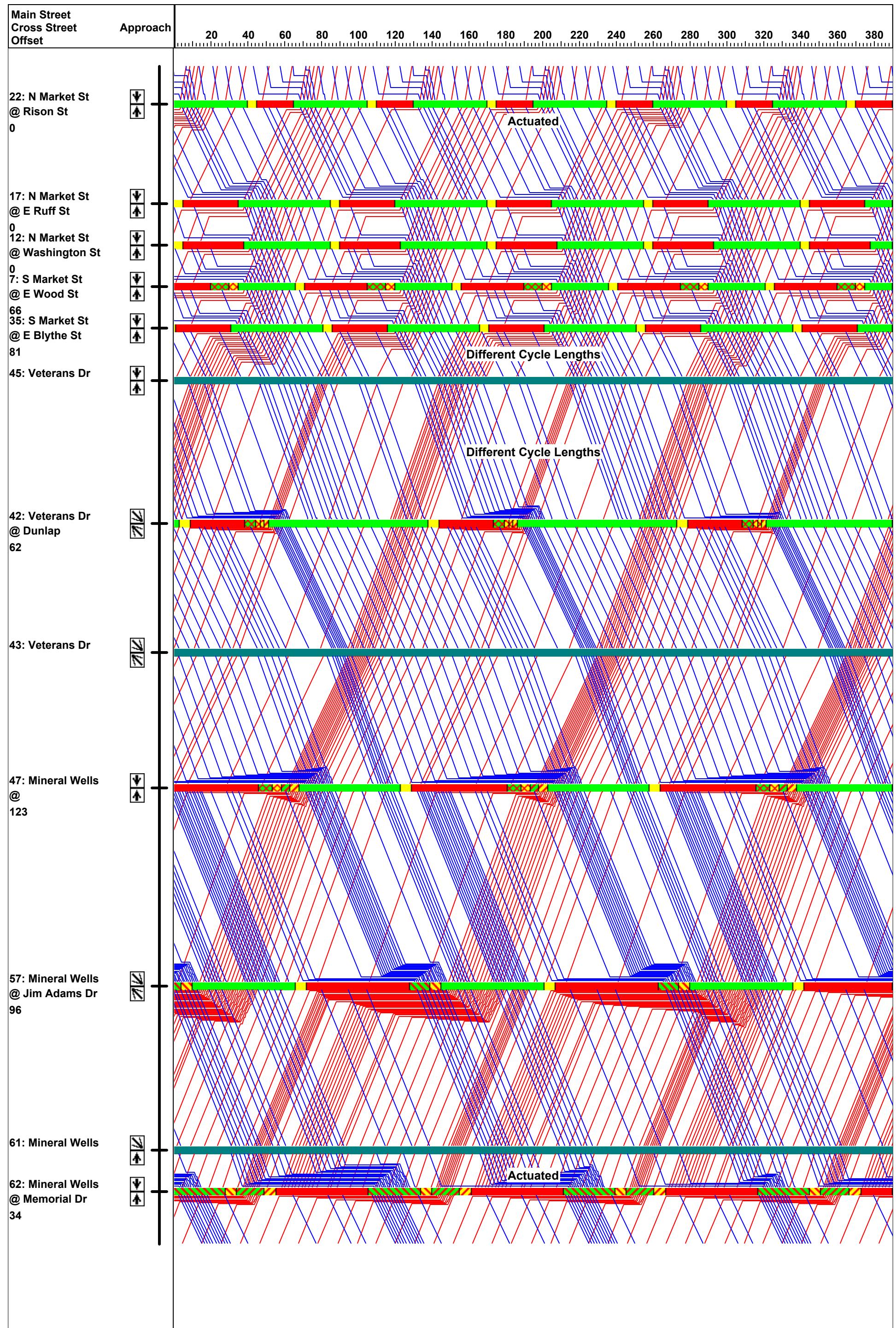














## Appendix G: MEASURE OF EFFECTIVENESS

Prepared on behalf of the  
City of Paris, TN by:

 **NEEL-SCHAFFER**  
Solutions you can build upon

in cooperation with

 **TN** **TDOT**  
Department of  
Transportation

## Measures of Effectiveness

**E. Wood Street**

**Existing vs. Proposed Conditions**

Peak Period	Direction	Average Travel Time (Seconds per Vehicle)			Average Delay (Seconds per Vehicle)			Average Travel Speed (MPH)			Total Stops (All Vehicles, All Approaches)		
		Existing	Proposed	% Change	Existing	Proposed	% Change	Existing	Proposed	% Change	Existing	Proposed	% Change
AM	Eastbound	186	204.7	10%	37.2	18.6	-50%	29	31	7%	727	381	-48%
	Westbound	161.9	143.3	-11%	31.1	18.7	-40%	28	31	11%	998	547	-45%
	Average	174	174	0%	34	19	-44%	29	31	7%	863	464	-46%
MD	Eastbound	150.3	82	-45%	27.3	13.7	-50%	30	29	-3%	807	382	-53%
	Westbound	143.2	130	-9%	20.5	6.8	-67%	30	32	7%	729	363	-50%
	Average	147	106	-28%	24	10	-58%	30	31	3%	768	373	-51%
PM	Eastbound	166.1	148.3	-11%	41.5	17.8	-57%	28	32	14%	1190	573	-52%
	Westbound	160.9	147.5	-8%	26.8	13.4	-50%	29	31	7%	874	503	-42%
	Average	164	148	-10%	34	16	-53%	29	32	10%	1032	538	-48%

<sup>1</sup> Measures of Effectiveness Results are taken from output reports within Synchro 9, and the Engineer shall not be held responsible for the accuracy of these results.

The results are intended to show the improvement of implementing coordinated plans.

## Measures of Effectiveness

Mineral Wells Drive/Veterans Drive

Existing vs. Proposed Conditions

Peak Period	Direction	Average Travel Time (Seconds per Vehicle)			Average Delay (Seconds per Vehicle)			Average Travel Speed (MPH)			Total Stops (All Vehicles, All Approaches)		
		Existing	Proposed	% Change	Existing	Proposed	% Change	Existing	Proposed	% Change	Existing	Proposed	% Change
AM	Northbound	148.4	137.4	-7%	44	22	-50%	25	30	20%	1055	557	-47%
	Southbound	133.8	121.1	-9%	31.9	19.1	-40%	26	31	19%	744	454	-39%
	Average	141	129	-9%	38	21	-45%	26	31	19%	900	506	-44%
MD	Northbound	154.5	146.2	-5%	50.1	33.4	-33%	22	26	18%	1419	748	-47%
	Southbound	136.9	107.8	-21%	45.6	20.7	-55%	21	29	38%	1189	707	-41%
	Average	146	127	-13%	48	27	-44%	22	28	27%	1304	728	-44%
PM	Northbound	156.5	147.6	-6%	44.7	35.8	-20%	23	26	13%	1297	987	-24%
	Southbound	144	120	-17%	48	20	-58%	21	29	38%	1322	674	-49%
	Average	150	134	-11%	46	28	-39%	22	28	27%	1310	831	-37%

<sup>1</sup> Measures of Effectiveness Results are taken from output reports within Synchro 9, and the Engineer shall not be held responsible for the accuracy of these results.

The results are intended to show the improvement of implementing coordinated plans.

## Measures of Effectiveness

**Network-wide statistics: Paris TSMO Proposed Coordinated Signals**  
**Existing vs. Proposed Conditions**

Peak Period	Direction	Average Travel Time (Seconds per Vehicle)			Average Delay (Seconds per Vehicle)			Average Travel Speed (MPH)			Total Stops		
		Existing	Proposed	% Change	Existing	Proposed	% Change	Existing	Proposed	% Change	Existing	Proposed	% Change
AM	All	315	303	-4%	72	40	-44%	28	31	13%	1763	970	-45%
MD	All	293	233	-20%	72	20.5	-72%	26	29.5	13%	2072	1101	-47%
PM	All	314	282	-10%	80	44	-45%	25.5	30	18%	2342	1369	-42%
<b>Average % Change all Peak Periods:</b>			-11%			-54%			15%			-44%	

<sup>1</sup> Measures of Effectiveness Results are taken from output reports within Synchro 9, and the Engineer shall not be held responsible for the accuracy of these results. The results are intended to show the improvement of implementing coordinated plans.

## Measures of Effectiveness

09/04/2019

### E Wood St

Direction	EB	WB	All
Total Delay (hr)	1	2	3
Stops (#)	125	287	412
Average Speed (mph)	18	13	15
Total Travel Time (hr)	2	3	5
Distance Traveled (mi)	40	40	79
Fuel Consumed (gal)	3	4	7
Fuel Economy (mpg)	13.2	8.9	10.6
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0
Performance Index	1.3	2.5	3.8

## Measures of Effectiveness

09/04/2019

### N Market St

Direction	NB	SB	All
Total Delay (hr)	1	2	3
Stops (#)	76	275	351
Average Speed (mph)	17	17	17
Total Travel Time (hr)	1	5	6
Distance Traveled (mi)	24	87	111
Fuel Consumed (gal)	2	7	9
Fuel Economy (mpg)	12.8	13.0	13.0
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0
Performance Index	0.8	2.9	3.7

### S Market St

Direction	NB	SB	All
Total Delay (hr)	2	1	2
Stops (#)	264	82	346
Average Speed (mph)	25	13	23
Total Travel Time (hr)	6	1	7
Distance Traveled (mi)	145	17	162
Fuel Consumed (gal)	9	2	10
Fuel Economy (mpg)	16.8	10.1	15.8
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0
Performance Index	2.5	0.9	3.4

## Measures of Effectiveness

09/04/2019

### Mineral Wells

Direction	NB	SE	All
Total Delay (hr)	4	1	5
Stops (#)	498	201	699
Average Speed (mph)	30	31	30
Total Travel Time (hr)	17	8	25
Distance Traveled (mi)	510	231	741
Fuel Consumed (gal)	26	11	37
Fuel Economy (mpg)	19.8	21.0	20.2
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	40	4	44
Performance Index	5.0	1.5	6.5

### Veterans Dr

Direction	SB	NW	All
Total Delay (hr)	2	0	2
Stops (#)	253	59	312
Average Speed (mph)	29	33	30
Total Travel Time (hr)	11	8	19
Distance Traveled (mi)	313	254	567
Fuel Consumed (gal)	15	10	26
Fuel Economy (mpg)	20.4	24.4	22.0
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	22	4	26
Performance Index	2.8	0.4	3.2

## Measures of Effectiveness

09/04/2019

### E Wood St

Direction	EB	WB	All
Total Delay (hr)	2	3	5
Stops (#)	381	547	928
Average Speed (mph)	31	31	31
Total Travel Time (hr)	22	23	46
Distance Traveled (mi)	695	721	1417
Fuel Consumed (gal)	31	34	65
Fuel Economy (mpg)	22.5	21.5	21.9
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	47	47	94
Performance Index	3.5	4.0	7.5

## Measures of Effectiveness

09/04/2019

### E Wood St

Direction	EB	WB	All
Total Delay (hr)	1	1	3
Stops (#)	222	145	367
Average Speed (mph)	14	13	13
Total Travel Time (hr)	3	2	5
Distance Traveled (mi)	38	32	70
Fuel Consumed (gal)	4	3	7
Fuel Economy (mpg)	9.8	10.1	9.9
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0
Performance Index	2.1	1.8	3.9

## Measures of Effectiveness

09/04/2019

### N Market St

Direction	NB	SB	All
Total Delay (hr)	1	2	3
Stops (#)	113	297	410
Average Speed (mph)	16	17	16
Total Travel Time (hr)	2	5	7
Distance Traveled (mi)	38	85	123
Fuel Consumed (gal)	3	7	10
Fuel Economy (mpg)	12.8	12.4	12.6
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0
Performance Index	1.4	3.1	4.5

### S Market St

Direction	NB	SB	All
Total Delay (hr)	3	1	4
Stops (#)	457	115	572
Average Speed (mph)	24	13	22
Total Travel Time (hr)	9	2	11
Distance Traveled (mi)	219	23	242
Fuel Consumed (gal)	14	2	16
Fuel Economy (mpg)	15.8	9.8	15.0
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0
Performance Index	4.4	1.3	5.8

## Measures of Effectiveness

09/04/2019

### Mineral Wells

Direction	NB	SE	All
Total Delay (hr)	8	2	10
Stops (#)	760	369	1129
Average Speed (mph)	26	29	27
Total Travel Time (hr)	26	12	38
Distance Traveled (mi)	667	355	1023
Fuel Consumed (gal)	36	18	54
Fuel Economy (mpg)	18.3	19.8	18.8
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	68	7	75
Performance Index	9.8	3.2	13.1

### Veterans Dr

Direction	SB	NW	All
Total Delay (hr)	3	0	3
Stops (#)	338	81	419
Average Speed (mph)	29	33	30
Total Travel Time (hr)	14	9	23
Distance Traveled (mi)	407	304	711
Fuel Consumed (gal)	20	13	33
Fuel Economy (mpg)	20.3	24.2	21.8
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	33	4	37
Performance Index	3.6	0.5	4.2

## Measures of Effectiveness

09/04/2019

### E Wood St

Direction	EB	WB	All
Total Delay (hr)	2	1	3
Stops (#)	382	363	745
Average Speed (mph)	29	32	30
Total Travel Time (hr)	12	19	31
Distance Traveled (mi)	348	590	938
Fuel Consumed (gal)	18	26	44
Fuel Economy (mpg)	19.5	22.6	21.3
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	38	15	53
Performance Index	3.1	2.5	5.5

## Measures of Effectiveness

09/04/2019

### E Wood St

Direction	EB	WB	All
Total Delay (hr)	1	2	3
Stops (#)	179	159	338
Average Speed (mph)	16	13	14
Total Travel Time (hr)	3	3	5
Distance Traveled (mi)	44	35	78
Fuel Consumed (gal)	4	3	7
Fuel Economy (mpg)	11.7	10.0	10.9
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0
Performance Index	1.8	2.0	3.8

## Measures of Effectiveness

09/04/2019

### N Market St

Direction	NB	SB	All
Total Delay (hr)	1	4	5
Stops (#)	122	421	543
Average Speed (mph)	16	16	16
Total Travel Time (hr)	3	7	10
Distance Traveled (mi)	43	116	159
Fuel Consumed (gal)	3	10	13
Fuel Economy (mpg)	12.9	12.0	12.2
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0
Performance Index	1.5	4.7	6.2

### S Market St

Direction	NB	SB	All
Total Delay (hr)	3	1	5
Stops (#)	434	120	554
Average Speed (mph)	23	13	21
Total Travel Time (hr)	10	2	12
Distance Traveled (mi)	221	26	247
Fuel Consumed (gal)	14	3	17
Fuel Economy (mpg)	15.8	10.3	14.9
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	0	0	0
Performance Index	4.7	1.4	6.1

## Measures of Effectiveness

09/04/2019

### Mineral Wells

Direction	NB	SE	All
Total Delay (hr)	8	2	10
Stops (#)	920	308	1228
Average Speed (mph)	26	29	27
Total Travel Time (hr)	24	13	37
Distance Traveled (mi)	630	368	998
Fuel Consumed (gal)	37	18	55
Fuel Economy (mpg)	17.1	20.5	18.2
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	32	57	89
Performance Index	10.2	3.0	13.2

### Veterans Dr

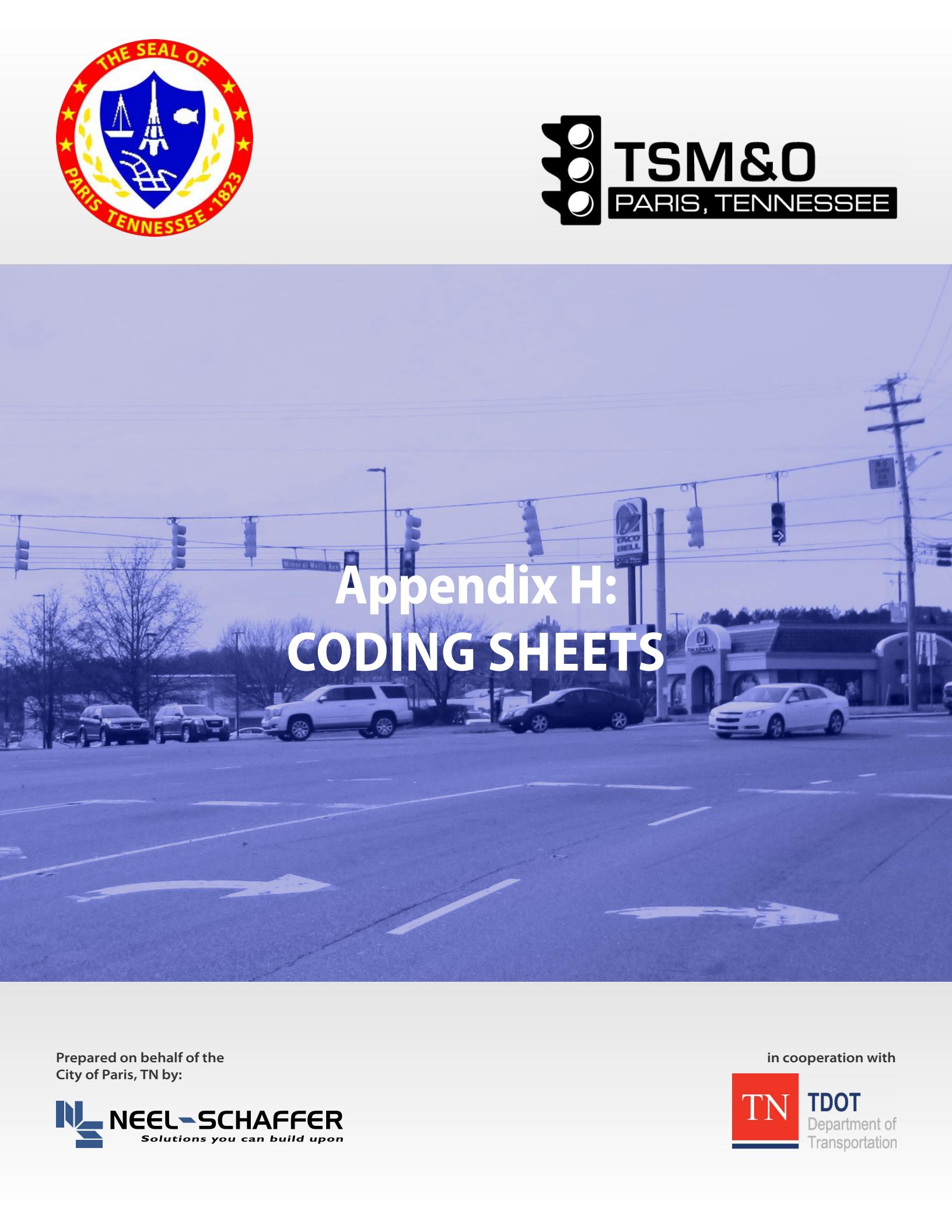
Direction	SB	NW	All
Total Delay (hr)	3	0	4
Stops (#)	366	67	433
Average Speed (mph)	29	33	30
Total Travel Time (hr)	17	9	25
Distance Traveled (mi)	471	290	761
Fuel Consumed (gal)	23	12	35
Fuel Economy (mpg)	20.5	24.2	21.7
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	30	13	43
Performance Index	4.2	0.6	4.8

## Measures of Effectiveness

09/04/2019

### E Wood St

Direction	EB	WB	All
Total Delay (hr)	3	2	5
Stops (#)	573	503	1076
Average Speed (mph)	32	31	32
Total Travel Time (hr)	25	22	47
Distance Traveled (mi)	806	705	1511
Fuel Consumed (gal)	37	32	69
Fuel Economy (mpg)	21.8	21.8	21.8
Unserved Vehicles (#)	0	0	0
Vehicles in dilemma zone (#)	39	38	77
Performance Index	4.7	3.6	8.3



## Appendix H: CODING SHEETS

Prepared on behalf of the  
City of Paris, TN by:



in cooperation with



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	1	West Wood St	AT	Irvine St

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	—	10	—	7	—	10	—	7	—	—	—	—	—	—	—	—
Passage Time .....	:	—	3.0	—	3.0	—	3.0	—	3.0	—	—	—	—	—	—	—	—
Maximum No 1 .....	:	—	30	—	15	—	30	—	15	—	—	—	—	—	—	—	—
Maximum No 2 .....	:	—	40	—	20	—	40	—	20	—	—	—	—	—	—	—	—
Yellow Change .....	:	—	4.0	—	3.5	—	4.0	—	3.5	—	—	—	—	—	—	—	—
Red Clearance .....	:	—	1.5	—	1.5	—	1.5	—	1.5	—	—	—	—	—	—	—	—

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum Initial .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cars B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time To Reduce .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Minimum Gap .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pedestrian Clearance .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Extended Pedestrian Clear .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Act Rest In Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

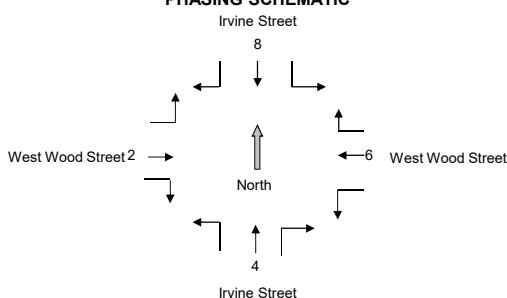
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

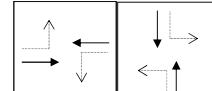
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	—	1	—	1	—	1	—	1	—	—	—	—	—	—	—	—
Dual Entry .....	:	—	1	—	1	—	1	—	1	—	—	—	—	—	—	—	—
Last Car Passage .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	—
Conditional Service .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	—
No Simultaneous Gap .....	:	—	0	—	1	—	0	—	1	—	—	—	—	—	—	—	—

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 1

West Wood St

AT

Irvine St

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5					
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-					
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC						
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-					
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-					
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN										
Force ..... : <u>1</u>	PLAN	CYCLE TIME										
Max Dwell Time ..... : <u>0</u>	Time in Seconds											
Yield Period ..... : <u>0</u>	Time in Seconds											
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>												

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
..... :	—	—	—	—	—	—	—	—	—
<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
..... :	—	—	—	—	—	—	—	—	—

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... :	4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase
Pattern Mode	..... :	0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac			

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** West Wood St AT Irvine St

### TIME BASE DATA MESCELLANEOUS

DST: BEGIN      MONTH      3      WEEK      2  
DST: END      MONTH      11      WEEK      1

COORD CYCLE ZERO      24 : 00 AM

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)  
CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

#### EQUATED DAY: (DEFINE DAY = DAY)

<u>2</u>	=	<u>3</u>	<u>4</u>	<u>5</u>	-----	-----
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DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

### TIME BASE DATA TRAFFIC EVENTS

PDAY	DAY	PATTERN
1	00 : 00	0 / 0 / 4
1	11 : 00	0 / 0 / 0
1	17 : 00	0 / 0 / 4
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#### TRAFFIC EVENT FUNCTIONS

##### MAX II PHASE(S)

Free  
MAX 2  
Free

##### OMIT PHASE(S)

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##### REFERENCE DATA:

PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
PATTERN : (D/S/O)  
Flash - 5 / 5 / 0  
Free - 0 / 0 / 4  
MAX 2 & OMITS: Call Free, Set Pattern To 0 / 0 / 0

2	00 : 00	0 / 0 / 4
2	07 : 00	0 / 0 / 0
2	09 : 00	0 / 0 / 4
2	11 : 00	0 / 0 / 0
2	20 : 00	0 / 0 / 4
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Free  
MAX 2  
Free  
MAX 2  
Free

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6	00 : 00	0 / 0 / 4
6	07 : 00	0 / 0 / 0
6	09 : 00	0 / 0 / 4
6	11 : 00	0 / 0 / 0
6	20 : 00	0 / 0 / 4
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Free  
MAX 2  
Free  
MAX 2  
Free

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7	00 : 00	0 / 0 / 4
7	10 : 00	0 / 0 / 0
7	18 : 00	0 / 0 / 4
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Free  
MAX 2  
Free

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## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	2	West Wood St	AT	Market St

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	4	10	—	7	4	10	—	7	—	—	—	—	—	—	—	—
Passage Time .....	:	2.0	3.0	—	2.0	2.0	3.0	—	3.0	—	—	—	—	—	—	—	—
Maximum No 1 .....	:	15	35	—	20	15	35	—	20	—	—	—	—	—	—	—	—
Maximum No 2 .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Yellow Change .....	:	3.0	3.5	—	3.5	3.0	3.5	—	3.5	—	—	—	—	—	—	—	—
Red Clearance .....	:	2.0	1.5	—	1.5	2.0	1.5	—	1.5	—	—	—	—	—	—	—	—

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum Initial .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cars B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time To Reduce .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Minimum Gap .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:	—	7	—	7	—	7	—	7	—	—	—	—	—	—	—	—
Pedestrian Clearance .....	:	—	19	—	17	—	19	—	17	—	—	—	—	—	—	—	—

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Extended Pedestrian Clear .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Act Rest In Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

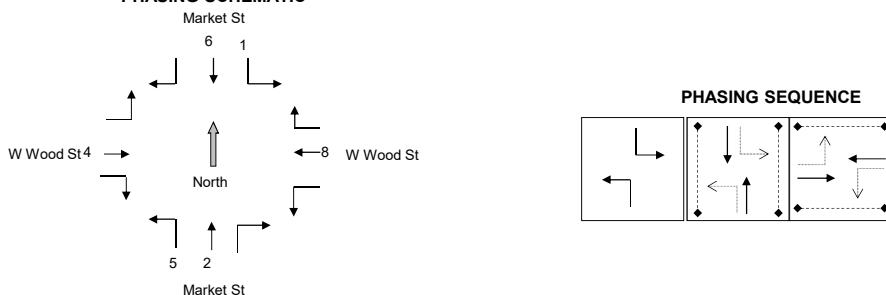
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

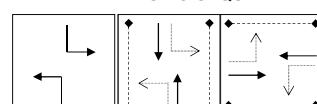
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	1	0	—	0	1	0	—	—	—	—	—	—	—	—	—	—
Dual Entry .....	:	0	0	—	0	0	0	—	—	—	—	—	—	—	—	—	—
Last Car Passage .....	:	0	0	—	0	0	0	—	—	—	—	—	—	—	—	—	—
Conditional Service .....	:	0	0	—	0	0	0	—	—	—	—	—	—	—	—	—	—
No Simultaneous Gap .....	:	1	1	—	1	1	1	—	—	—	—	—	—	—	—	—	—

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



**TSM&O**  
PARIS, TENNESSEE

## COORDINATION AND OPERATION

Intersection ID: 2

West Wood St

AT

Market St

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC	
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN					
Force ..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time ..... : <u>0</u>	Time in Seconds						
Yield Period ..... : <u>0</u>	Time in Seconds						
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>							

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... : <u>85</u>						<u>75</u>		
Phase 01 Time/Mode	..... : <u>15 / 0</u>	—	—	—	—	—	<u>13 / 0</u>	—	—
Phase 02 Time/Mode	..... : <u>36 / 1</u>	—	—	—	—	—	<u>32 / 1</u>	—	—
Phase 03 Time/Mode	..... : <u>/</u>	—	—	—	—	—	—	—	—
Phase 04 Time/Mode	..... : <u>34 / 0</u>	—	—	—	—	—	<u>30 / 0</u>	—	—
Phase 05 Time/Mode	..... : <u>15 / 0</u>	—	—	—	—	—	<u>13 / 0</u>	—	—
Phase 06 Time/Mode	..... : <u>36 / 1</u>	—	—	—	—	—	<u>32 / 1</u>	—	—
Phase 07 Time/Mode	..... : <u>/</u>	—	—	—	—	—	—	—	—
Phase 08 Time/Mode	..... : <u>34 / 0</u>	—	—	—	—	—	<u>30 / 0</u>	—	—
Offset 1	..... : <u>66</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u></u>	—	—	—	—	—	<u>66</u>	—	—
Offset 3	..... : <u></u>	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... : <u>0</u>	—	—	—	—	—	<u>0</u>	—	—
..... : <u></u>	—	—	—	—	—	—	—	—	—

<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... : <u></u>	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Phase 02 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Phase 03 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Phase 04 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Phase 05 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Phase 06 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Phase 07 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Phase 08 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Offset 1	..... : <u></u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u></u>	—	—	—	—	—	—	—	—
Offset 3	..... : <u></u>	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... : <u></u>	—	—	—	—	—	—	—	—
..... : <u></u>	—	—	—	—	—	—	—	—	—

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... :	4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase
Pattern Mode	..... :	0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac			

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** West Wood St AT Market St

## TIME BASE DATA MESCCELLANEOUS

DST: BEGIN	MONTH	<u>3</u>	WEEK	<u>2</u>	DST: Daylight Savings Time
DST: END	MONTH	<u>11</u>	WEEK	<u>1</u>	Month = 01 to 12 (Begin < End)
COORD CYCLE ZERO					Week = 1 to 5 (5= Last Week)
					CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync
					00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (= Last Week)  
CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

**DAY EQUATES:** Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

## TIME BASE DATA TRAFFIC EVENTS

**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
**PATTERN :** (D/S/O)  
    Flash - 5 / 5 / 0  
    Free - 0 / 0 / 4  
**MAX 2 & OMITS:** Call Free, Set  
    Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	3	North Market St	AT	Rison St

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	—	10	—	7	—	10	4	7	—	—	—	—	—	—	—	
Passage Time .....	:	—	3.0	—	3.0	—	3.0	3.0	3.0	—	—	—	—	—	—	—	
Maximum No 1 .....	:	—	40	—	20	—	40	15	20	—	—	—	—	—	—	—	
Maximum No 2 .....	:	—	45	—	35	—	45	15	20	—	—	—	—	—	—	—	
Yellow Change .....	:	—	3.5	—	3.5	—	3.5	3.0	3.5	—	—	—	—	—	—	—	
Red Clearance .....	:	—	1.5	—	1.5	—	1.5	1.5	1.5	—	—	—	—	—	—	—	

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum Initial .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cars B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time To Reduce .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum Gap .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pedestrian Clearance .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Extended Pedestrian Clear .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Act Rest In Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

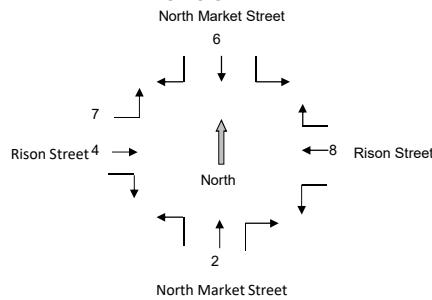
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

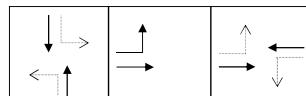
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	—	1	—	1	—	1	1	1	—	—	—	—	—	—	—	
Dual Entry .....	:	—	1	—	1	—	1	0	1	—	—	—	—	—	—	—	
Last Car Passage .....	:	—	0	—	0	—	0	0	0	—	—	—	—	—	—	—	
Conditional Service .....	:	—	0	—	0	—	0	0	0	—	—	—	—	—	—	—	
No Simultaneous Gap .....	:	—	0	—	1	—	0	1	1	—	—	—	—	—	—	—	

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 3

North Market St

AT

Rison St

### COORD DATA MODE

<u>Control</u>		Codes:	0	1	2	3	4	5
Operation	..... : <u>1</u>		FRE	AUT	MAN	-	-	-
Mode	..... : <u>0</u>		PRM	YLD	PYL	POM	SOM	FAC
Maximum	..... : <u>0</u>		INH	MX1	MX2	-	-	-
Correction	..... : <u>2</u>		DW	MDW	SWY	SW+	-	-
Offset (?? Of Green)	..... : <u>1</u>	BEGIN	END OF GREEN					
Force	..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time	..... : <u>0</u>		Time in Seconds					
Yield Period	..... : <u>0</u>		Time in Seconds					
Manual Pattern (Dial/Split/Offset)	<u>1 / 1 / 1</u>							

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	:	—	—	—	—	—	—	—	—
	:								
<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Phase 02 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Phase 03 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Phase 04 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Phase 05 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Phase 06 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Phase 07 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Phase 08 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	:	—	—	—	—	—	—	—	—
	:	—	—	—	—	—	—	—	—

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
		4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase

Pattern Mode ..... : 0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** North Market St AT Rison St

## TIME BASE DATA MESCCELLANEOUS

DST: BEGIN	MONTH	<u>3</u>	WEEK	<u>2</u>	DST: Daylight Savings Time
DST: END	MONTH	<u>11</u>	WEEK	<u>1</u>	Month = 01 to 12 (Begin < End)
					Week = 1 to 5 (5= Last Week)
COORD CYCLE ZERO		<u>24</u> : <u>00</u>	AM	CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync	
					00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)  
CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

## TIME BASED DATA TRAFFIC EVENTS

**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
**PATTERN :** (D/S/O)  
    Flash - 5 / 5 / 0  
    Free - 0 / 0 / 4  
**MAX 2 & OMITS:** Call Free, Set  
    Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	4	North Market St	AT	Ruff St

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	—	10	—	7	—	10	—	7	—	—	—	—	—	—	—	
Passage Time .....	:	—	3.0	—	2.0	—	3.0	—	2.0	—	—	—	—	—	—	—	
Maximum No 1 .....	:	—	35	—	30	—	35	—	30	—	—	—	—	—	—	—	
Maximum No 2 .....	:	—	40	—	35	—	40	—	35	—	—	—	—	—	—	—	
Yellow Change .....	:	—	3.5	—	3.5	—	3.5	—	3.5	—	—	—	—	—	—	—	
Red Clearance .....	:	—	1.5	—	1.5	—	1.5	—	1.5	—	—	—	—	—	—	—	

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum Initial .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cars B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time To Reduce .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum Gap .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:	—	7	—	7	—	7	—	7	—	—	—	—	—	—	—	
Pedestrian Clearance .....	:	—	8	—	16	—	8	—	16	—	—	—	—	—	—	—	

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Extended Pedestrian Clear .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Act Rest In Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

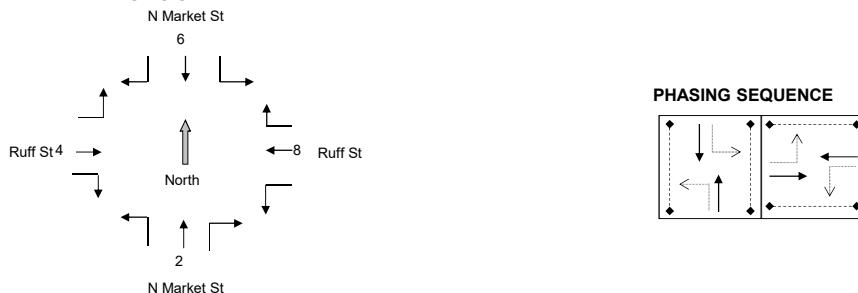
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

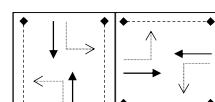
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Dual Entry .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Last Car Passage .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Conditional Service .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
No Simultaneous Gap .....	:	—	1	—	1	—	1	—	1	—	—	—	—	—	—	—	

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 4

North Market St

AT

Ruff St

### COORD DATA MODE

<u>Control</u>		Codes:	0	1	2	3	4	5
Operation	..... : <u>1</u>		FRE	AUT	MAN	-	-	-
Mode	..... : <u>0</u>		PRM	YLD	PYL	POM	SOM	FAC
Maximum	..... : <u>0</u>		INH	MX1	MX2	-	-	-
Correction	..... : <u>2</u>		DW	MDW	SWY	SW+	-	-
Offset (?? Of Green)	..... : <u>1</u>	BEGIN	END OF GREEN					
Force	..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time	..... : <u>0</u>		Time in Seconds					
Yield Period	..... : <u>0</u>		Time in Seconds					
Manual Pattern (Dial/Split/Offset)	<u>1 / 1 / 1</u>							

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... : <u>85</u>	—	—	—	—	—	<u>75</u>	—	—
Phase 01 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 02 Time/Mode	..... : <u>55 / 1</u>	—	—	—	—	—	<u>45 / 1</u>	—	—
Phase 03 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 04 Time/Mode	..... : <u>30 / 0</u>	—	—	—	—	—	<u>30 / 0</u>	—	—
Phase 05 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 06 Time/Mode	..... : <u>55 / 1</u>	—	—	—	—	—	<u>45 / 1</u>	—	—
Phase 07 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 08 Time/Mode	..... : <u>30 / 0</u>	—	—	—	—	—	<u>30 / 0</u>	—	—
Offset 1	..... : <u>0</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u>—</u>	—	—	—	—	—	<u>0</u>	—	—
Offset 3	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... : <u>0</u>	—	—	—	—	—	<u>0</u>	—	—
..... :		—	—	—	—	—	—	—	—

<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... : <u>—</u>	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Phase 02 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Phase 03 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Phase 04 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Phase 05 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Phase 06 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Phase 07 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Phase 08 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Offset 1	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset 3	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... : <u>—</u>	—	—	—	—	—	—	—	—
..... :		—	—	—	—	—	—	—	—

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... : <u>0</u>	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
		4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase

Pattern Mode ..... : 0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac



FEB 02

EPAC300 Actuated Signal Control

Sheet 2 of 3

FEB 02

Sheet 2 of 3

## TIME OF DAY PROGRAMMING

**Intersection:** North Market St AT Ruff St

## TIME BASE DATA MESCCELLANEOUS

DST: BEGIN	MONTH	<u>3</u>	WEEK	<u>2</u>	DST: Daylight Savings Time
DST: END	MONTH	<u>11</u>	WEEK	<u>1</u>	Month = 01 to 12 (Begin < End) Week = 1 to 5 (5= Last Week)
COORD CYCLE ZERO		<u>24</u> : <u>00</u>	AM		CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync 00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)  
CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

**DAY EQUATES:** Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

## TIME BASED DATA TRAFFIC EVENTS

**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
**PATTERN :** (D/S/O)  
    Flash - 5 / 5 / 0  
    Free - 0 / 0 / 4  
**MAX 2 & OMITS:** Call Free, Set  
    Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	5	N Market St	AT	Washington St

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	—	10	—	7	—	10	—	7	—	—	—	—	—	—	—	
Passage Time .....	:	—	3.0	—	2.0	—	3.0	—	2.0	—	—	—	—	—	—	—	
Maximum No 1 .....	:	—	35	—	30	—	35	—	30	—	—	—	—	—	—	—	
Maximum No 2 .....	:	—	40	—	35	—	40	—	35	—	—	—	—	—	—	—	
Yellow Change .....	:	—	3.5	—	3.5	—	3.5	—	3.5	—	—	—	—	—	—	—	
Red Clearance .....	:	—	1.5	—	1.5	—	1.5	—	1.5	—	—	—	—	—	—	—	

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum Initial .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cars B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time To Reduce .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum Gap .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:	—	7	—	7	—	7	—	7	—	—	—	—	—	—	—	
Pedestrian Clearance .....	:	—	19	—	17	—	17	—	19	—	—	—	—	—	—	—	

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Extended Pedestrian Clear .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Act Rest In Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

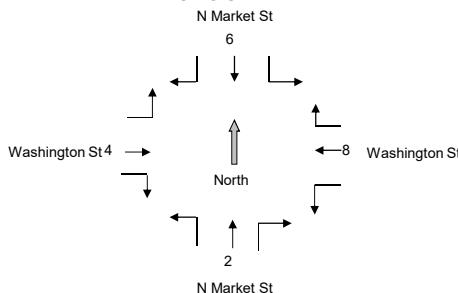
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

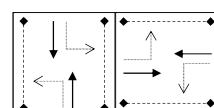
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Dual Entry .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Last Car Passage .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Conditional Service .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
No Simultaneous Gap .....	:	—	1	—	1	—	1	—	1	—	—	—	—	—	—	—	

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 5

N Market St

AT

Washington St

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC	
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN					
Force ..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time ..... : <u>0</u>	Time in Seconds						
Yield Period ..... : <u>0</u>	Time in Seconds						
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>							

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... : <u>85</u>	/	/	/	/	/	75	/	/
Phase 01 Time/Mode	..... : <u>52 / 1</u>	/	/	/	/	/	45 / 1	/	/
Phase 02 Time/Mode	..... : <u>52 / 1</u>	/	/	/	/	/	/	/	/
Phase 03 Time/Mode	..... : <u>33 / 0</u>	/	/	/	/	/	30 / 0	/	/
Phase 04 Time/Mode	..... : <u>33 / 0</u>	/	/	/	/	/	45 / 1	/	/
Phase 05 Time/Mode	..... : <u>52 / 1</u>	/	/	/	/	/	30 / 0	/	/
Phase 06 Time/Mode	..... : <u>52 / 1</u>	/	/	/	/	/	45 / 1	/	/
Phase 07 Time/Mode	..... : <u>33 / 0</u>	/	/	/	/	/	30 / 0	/	/
Phase 08 Time/Mode	..... : <u>33 / 0</u>	/	/	/	/	/	30 / 0	/	/
Offset 1	..... : <u>0</u>								
Offset 2	..... : <u></u>						0		
Offset 3	..... : <u></u>								
Offset Pattern Mode	..... : <u>0</u>						0		
..... : <u></u>									

<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... : <u></u>								
Phase 01 Time/Mode	..... : <u></u>								/
Phase 02 Time/Mode	..... : <u></u>								/
Phase 03 Time/Mode	..... : <u></u>								/
Phase 04 Time/Mode	..... : <u></u>								/
Phase 05 Time/Mode	..... : <u></u>								/
Phase 06 Time/Mode	..... : <u></u>								/
Phase 07 Time/Mode	..... : <u></u>								/
Phase 08 Time/Mode	..... : <u></u>								/
Offset 1	..... : <u></u>								
Offset 2	..... : <u></u>								
Offset 3	..... : <u></u>								
Offset Pattern Mode	..... : <u></u>								
..... : <u></u>									

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... :	4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase
Pattern Mode	..... :	0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac			

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** N Market St AT Washington St

## TIME BASE DATA MESCCELLANEOUS

DST: BEGIN	MONTH	<u>3</u>	WEEK	<u>2</u>	DST: Daylight Savings Time
DST: END	MONTH	<u>11</u>	WEEK	<u>1</u>	Month = 01 to 12 (Begin < End)
					Week = 1 to 5 (5= Last Week)
COORD CYCLE ZERO		<u>24</u> : <u>00</u>	AM	CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync	
					00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (= Last Week)  
CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

**DAY EQUATES:** Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

## TIME BASED DATA TRAFFIC EVENTS

**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
**PATTERN :** (D/S/O)  
    Flash - 5 / 5 / 0  
    Free - 0 / 0 / 4  
**MAX 2 & OMITS:** Call Free, Set  
    Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	6	South Market St	AT	Blythe St

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	—	10	—	7	—	10	—	7	—	—	—	—	—	—	—	
Passage Time .....	:	—	3.0	—	2.0	—	3.0	—	2.0	—	—	—	—	—	—	—	
Maximum No 1 .....	:	—	35	—	30	—	35	—	30	—	—	—	—	—	—	—	
Maximum No 2 .....	:	—	40	—	35	—	40	—	35	—	—	—	—	—	—	—	
Yellow Change .....	:	—	3.5	—	3.5	—	3.5	—	3.5	—	—	—	—	—	—	—	
Red Clearance .....	:	—	1.5	—	1.5	—	1.5	—	1.5	—	—	—	—	—	—	—	

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum Initial .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cars B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time To Reduce .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum Gap .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:	—	7	—	7	—	7	—	7	—	—	—	—	—	—	—	
Pedestrian Clearance .....	:	—	10	—	17	—	9	—	17	—	—	—	—	—	—	—	

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Extended Pedestrian Clear .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Act Rest In Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

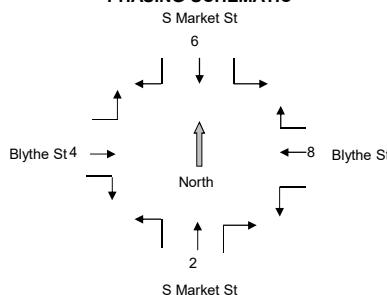
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

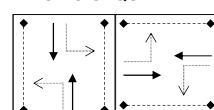
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Dual Entry .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Last Car Passage .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Conditional Service .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
No Simultaneous Gap .....	:	—	1	—	1	—	1	—	1	—	—	—	—	—	—	—	

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 6

South Market St

AT

Blythe St

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC	
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN					
Force ..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time ..... : <u>0</u>	Time in Seconds						
Yield Period ..... : <u>0</u>	Time in Seconds						
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>							

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... : <u>85</u>	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... : <u>55 / 1</u>	—	—	—	—	—	—	—	—
Phase 02 Time/Mode	..... : <u>55 / 1</u>	—	—	—	—	—	—	—	—
Phase 03 Time/Mode	..... : <u>30 / 0</u>	—	—	—	—	—	—	—	—
Phase 04 Time/Mode	..... : <u>30 / 0</u>	—	—	—	—	—	—	—	—
Phase 05 Time/Mode	..... : <u>55 / 1</u>	—	—	—	—	—	—	—	—
Phase 06 Time/Mode	..... : <u>55 / 1</u>	—	—	—	—	—	—	—	—
Phase 07 Time/Mode	..... : <u>30 / 0</u>	—	—	—	—	—	—	—	—
Phase 08 Time/Mode	..... : <u>30 / 0</u>	—	—	—	—	—	—	—	—
Offset 1	..... : <u>81</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u>0</u>	—	—	—	—	—	—	—	—
Offset 3	..... : <u>0</u>	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... : <u>0</u>	—	—	—	—	—	—	—	—
..... :									

<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... : <u>—</u>	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... : <u>—</u>	—	—	—	—	—	—	—	—
Phase 02 Time/Mode	..... : <u>—</u>	—	—	—	—	—	—	—	—
Phase 03 Time/Mode	..... : <u>—</u>	—	—	—	—	—	—	—	—
Phase 04 Time/Mode	..... : <u>—</u>	—	—	—	—	—	—	—	—
Phase 05 Time/Mode	..... : <u>—</u>	—	—	—	—	—	—	—	—
Phase 06 Time/Mode	..... : <u>—</u>	—	—	—	—	—	—	—	—
Phase 07 Time/Mode	..... : <u>—</u>	—	—	—	—	—	—	—	—
Phase 08 Time/Mode	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset 1	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset 3	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... : <u>—</u>	—	—	—	—	—	—	—	—
..... :									

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... : <u>4 - Ped Rec</u>	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase	
Pattern Mode	..... : <u>0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac</u>				

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** South Market St AT Blythe St

## TIME BASE DATA MESCCELLANEOUS

DST: BEGIN	MONTH	<u>3</u>	WEEK	<u>2</u>	DST: Daylight Savings Time
DST: END	MONTH	<u>11</u>	WEEK	<u>1</u>	Month = 01 to 12 (Begin < End)
COORD CYCLE ZERO					Week = 1 to 5 (5= Last Week)
					CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync
					00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (= Last Week)  
CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

## TIME BASED DATA TRAFFIC EVENTS

**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
**PATTERN :** (D/S/O)  
    Flash - 5 / 5 / 0  
    Free - 0 / 0 / 4  
**MAX 2 & OMITS:** Call Free, Set  
    Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	8/28/2018
Approved By:	TT		Date:	
Intersection ID:	7	East Washington St	AT	Poplar St

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....		—	10	—	7	—	10	—	7	—	—	—	—	—	—	—	
Passage Time .....		—	3.0	—	2.0	—	3.0	—	2.0	—	—	—	—	—	—	—	
Maximum No 1 .....		—	35	—	30	—	35	—	30	—	—	—	—	—	—	—	
Maximum No 2 .....		—	40	—	35	—	40	—	35	—	—	—	—	—	—	—	
Yellow Change .....		—	3.5	—	3.5	—	3.5	—	3.5	—	—	—	—	—	—	—	
Red Clearance .....		—	1.5	—	1.5	—	1.5	—	1.5	—	—	—	—	—	—	—	

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum Initial .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time B4 Reduction .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cars B4 Reduction .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time To Reduce .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum Gap .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....		—	7	—	7	—	7	—	7	—	—	—	—	—	—	—	
Pedestrian Clearance .....		—	20	—	15	—	15	—	19	—	—	—	—	—	—	—	

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Extended Pedestrian Clear .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Act Rest In Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

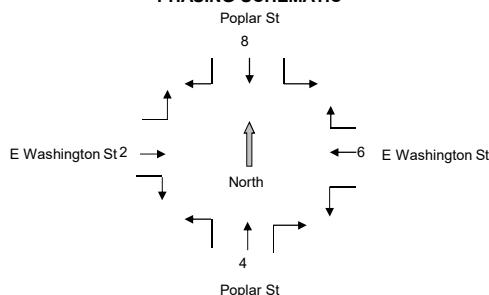
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

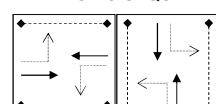
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....		—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Dual Entry .....		—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Last Car Passage .....		—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Conditional Service .....		—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
No Simultaneous Gap .....		—	1	—	1	—	1	—	1	—	—	—	—	—	—	—	

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 7

East Washington St AT Poplar St

### COORD DATA MODE

<u>Control</u>		Codes:	0	1	2	3	4	5
Operation	..... : <u>1</u>		FRE	AUT	MAN	-	-	-
Mode	..... : <u>0</u>		PRM	YLD	PYL	POM	SOM	FAC
Maximum	..... : <u>0</u>		INH	MX1	MX2	-	-	-
Correction	..... : <u>2</u>		DW	MDW	SWY	SW+	-	-
Offset (?? Of Green)	..... : <u>1</u>	BEGIN	END OF GREEN					
Force	..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time	..... : <u>0</u>		Time in Seconds					
Yield Period	..... : <u>0</u>		Time in Seconds					
Manual Pattern (Dial/Split/Offset)	<u>1 / 1 / 1</u>							

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... : <u>85</u>						<u>75</u>		
Phase 01 Time/Mode	..... : <u>/</u>								
Phase 02 Time/Mode	..... : <u>45 / 1</u>						<u>41 / 1</u>		
Phase 03 Time/Mode	..... : <u>/</u>								
Phase 04 Time/Mode	..... : <u>40 / 0</u>						<u>34 / 0</u>		
Phase 05 Time/Mode	..... : <u>/</u>								
Phase 06 Time/Mode	..... : <u>45 / 1</u>						<u>41 / 1</u>		
Phase 07 Time/Mode	..... : <u>/</u>								
Phase 08 Time/Mode	..... : <u>40 / 0</u>						<u>34 / 0</u>		
Offset 1	..... : <u>36</u>								
Offset 2	..... : <u></u>						<u>24</u>		
Offset 3	..... : <u></u>								
Offset Pattern Mode	..... : <u>0</u>						<u>0</u>		
..... : <u></u>									

<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... : <u>/</u>								
Phase 01 Time/Mode	..... : <u>/</u>								
Phase 02 Time/Mode	..... : <u>/</u>								
Phase 03 Time/Mode	..... : <u>/</u>								
Phase 04 Time/Mode	..... : <u>/</u>								
Phase 05 Time/Mode	..... : <u>/</u>								
Phase 06 Time/Mode	..... : <u>/</u>								
Phase 07 Time/Mode	..... : <u>/</u>								
Phase 08 Time/Mode	..... : <u>/</u>								
Offset 1	..... : <u></u>								
Offset 2	..... : <u></u>								
Offset 3	..... : <u></u>								
Offset Pattern Mode	..... : <u></u>								
..... : <u></u>									

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... :	4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase
Pattern Mode	..... :	0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac			

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** East Washington St    AT    Poplar St

### TIME BASE DATA MESCELLANEOUS

DST: BEGIN      MONTH      3  
DST: END      MONTH      11

WEEK      2  
WEEK      1

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)

COORD CYCLE ZERO      24 : 00      AM

CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

<u>2</u>	=	<u>3</u>	<u>4</u>	<u>5</u>	-----	-----
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DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

### TIME BASE DATA TRAFFIC EVENTS

PDAY	DAY	PATTERN
1	00 : 00	2 / 2 / 2
1	11 : 00	1 / 1 / 1
1	17 : 00	2 / 2 / 2
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**TRAFFIC EVENT FUNCTIONS**  
**MAX II PHASE(S)**  
Off peak  
Peak  
Off peak

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2	00 : 00	2 / 2 / 2
2	08 : 00	1 / 1 / 1
2	18 : 30	2 / 2 / 2
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Off peak  
Peak  
Off peak

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6	00 : 00	2 / 2 / 2
6	08 : 00	1 / 1 / 1
6	18 : 30	2 / 2 / 2
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Off peak  
Peak  
Off peak

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7	00 : 00	2 / 2 / 2
7	10 : 00	1 / 1 / 1
7	18 : 00	2 / 2 / 2
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Off peak  
Peak  
Off peak

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**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
PATTERN : (D/S/O)  
Flash - 5 / 5 / 0  
Free - 0 / 0 / 4  
MAX 2 & OMITS: Call Free, Set Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	8/28/2018
Approved By:	TT		Date:	
Intersection ID:	8	East Wood St	AT	Poplar St

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....		—	10	—	7	—	10	—	7	—	—	—	—	—	—	—	
Passage Time .....		—	3.0	—	2.0	—	3.0	—	2.0	—	—	—	—	—	—	—	
Maximum No 1 .....		—	35	—	30	—	35	—	30	—	—	—	—	—	—	—	
Maximum No 2 .....		—	40	—	35	—	40	—	35	—	—	—	—	—	—	—	
Yellow Change .....		—	3.5	—	3.5	—	3.5	—	3.5	—	—	—	—	—	—	—	
Red Clearance .....		—	1.5	—	1.5	—	1.5	—	1.5	—	—	—	—	—	—	—	

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum Initial .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time B4 Reduction .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cars B4 Reduction .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time To Reduce .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum Gap .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....		—	7	—	7	—	7	—	7	—	—	—	—	—	—	—	
Pedestrian Clearance .....		—	15	—	15	—	19	—	19	—	—	—	—	—	—	—	

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Extended Pedestrian Clear .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Act Rest In Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

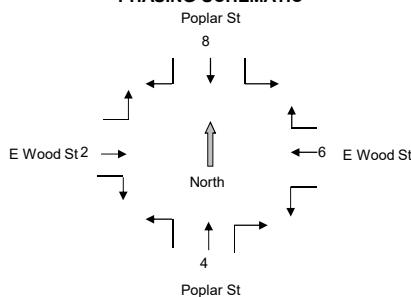
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

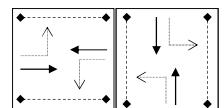
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....		—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Dual Entry .....		—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Last Car Passage .....		—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Conditional Service .....		—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
No Simultaneous Gap .....		—	1	—	1	—	1	—	1	—	—	—	—	—	—	—	

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 8

East Wood St

AT

Poplar St

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5					
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-					
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC						
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-					
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-					
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN										
Force ..... : <u>1</u>	PLAN	CYCLE TIME										
Max Dwell Time ..... : <u>0</u>	Time in Seconds											
Yield Period ..... : <u>0</u>	Time in Seconds											
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>												

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... : <u>85</u>	/	/	/	/	/	<u>75</u>	/	/
Phase 01 Time/Mode	..... : <u>52 / 1</u>	/	/	/	/	/	<u>42 / 1</u>	/	/
Phase 02 Time/Mode	..... : <u>52 / 1</u>	/	/	/	/	/	<u>42 / 1</u>	/	/
Phase 03 Time/Mode	..... : <u>33 / 0</u>	/	/	/	/	/	<u>33 / 0</u>	/	/
Phase 04 Time/Mode	..... : <u>33 / 0</u>	/	/	/	/	/	<u>33 / 0</u>	/	/
Phase 05 Time/Mode	..... : <u>52 / 1</u>	/	/	/	/	/	<u>42 / 1</u>	/	/
Phase 06 Time/Mode	..... : <u>52 / 1</u>	/	/	/	/	/	<u>42 / 1</u>	/	/
Phase 07 Time/Mode	..... : <u>33 / 0</u>	/	/	/	/	/	<u>33 / 0</u>	/	/
Phase 08 Time/Mode	..... : <u>33 / 0</u>	/	/	/	/	/	<u>33 / 0</u>	/	/
Offset 1	..... : <u>29</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u></u>	—	—	—	—	—	<u>29</u>	—	—
Offset 3	..... : <u></u>	—	—	—	—	—	<u>0</u>	—	—
Offset Pattern Mode	..... : <u>0</u>	—	—	—	—	—	<u>0</u>	—	—
..... :									

<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... : <u></u>	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Phase 02 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Phase 03 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Phase 04 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Phase 05 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Phase 06 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Phase 07 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Phase 08 Time/Mode	..... : <u></u>	—	—	—	—	—	—	—	<u>/</u>
Offset 1	..... : <u></u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u></u>	—	—	—	—	—	—	—	—
Offset 3	..... : <u></u>	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... : <u></u>	—	—	—	—	—	—	—	—
..... :									

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... : <u></u>	4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase
Pattern Mode	..... : <u>0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac</u>				

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** East Wood St AT Poplar St

## TIME BASE DATA MESCCELLANEOUS

DST: BEGIN	MONTH	<u>3</u>	WEEK	<u>2</u>	DST: Daylight Savings Time
DST: END	MONTH	<u>11</u>	WEEK	<u>1</u>	Month = 01 to 12 (Begin < End)
					Week = 1 to 5 (5= Last Week)
COORD CYCLE ZERO		<u>24</u> : <u>00</u>	AM	CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync	
					00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (= Last Week)  
CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

## TIME BASED DATA TRAFFIC EVENTS

**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
**PATTERN :** (D/S/O)  
    Flash - 5 / 5 / 0  
    Free - 0 / 0 / 4  
**MAX 2 & OMITS:** Call Free, Set  
    Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	9	East Wood St	AT	Brewer St

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	—	10	—	7	—	10	—	7	—	—	—	—	—	—	—	
Passage Time .....	:	—	3.0	—	2.0	—	3.0	—	2.0	—	—	—	—	—	—	—	
Maximum No 1 .....	:	—	35	—	30	—	35	—	30	—	—	—	—	—	—	—	
Maximum No 2 .....	:	—	40	—	35	—	40	—	35	—	—	—	—	—	—	—	
Yellow Change .....	:	—	3.5	—	3.5	—	3.5	—	3.5	—	—	—	—	—	—	—	
Red Clearance .....	:	—	1.5	—	1.5	—	1.5	—	1.5	—	—	—	—	—	—	—	

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum Initial .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cars B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time To Reduce .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum Gap .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:	—	7	—	7	—	7	—	7	—	—	—	—	—	—	—	
Pedestrian Clearance .....	:	—	9	—	8	—	11	—	15	—	—	—	—	—	—	—	

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Extended Pedestrian Clear .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Act Rest In Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

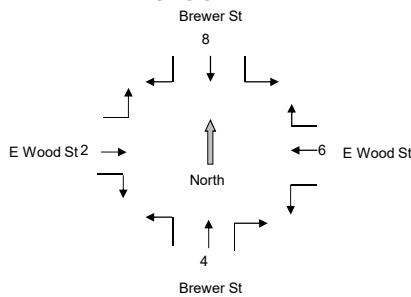
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

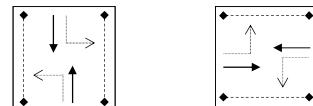
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Dual Entry .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Last Car Passage .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Conditional Service .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
No Simultaneous Gap .....	:	—	1	—	1	—	1	—	1	—	—	—	—	—	—	—	

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 9

**East Wood St**

AT

**Brewer St**

### COORD DATA MODE

<u>Control</u>		Codes:	0	1	2	3	4	5
Operation	..... : <u>1</u>		FRE	AUT	MAN	-	-	-
Mode	..... : <u>0</u>		PRM	YLD	PYL	POM	SOM	FAC
Maximum	..... : <u>0</u>		INH	MX1	MX2	-	-	-
Correction	..... : <u>2</u>		DW	MDW	SWY	SW+	-	-
Offset (?? Of Green)	..... : <u>1</u>	BEGIN	END OF GREEN					
Force	..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time	..... : <u>0</u>		Time in Seconds					
Yield Period	..... : <u>0</u>		Time in Seconds					
Manual Pattern (Dial/Split/Offset)	<u>1 / 1 / 1</u>							

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... : <u>85</u>	—	—	—	—	—	<u>75</u>	—	—
Phase 01 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 02 Time/Mode	..... : <u>55 / 1</u>	—	—	—	—	—	<u>45 / 1</u>	—	—
Phase 03 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 04 Time/Mode	..... : <u>30 / 0</u>	—	—	—	—	—	<u>30 / 0</u>	—	—
Phase 05 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 06 Time/Mode	..... : <u>55 / 1</u>	—	—	—	—	—	<u>45 / 1</u>	—	—
Phase 07 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 08 Time/Mode	..... : <u>30 / 0</u>	—	—	—	—	—	<u>30 / 0</u>	—	—
Offset 1	..... : <u>32</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u>—</u>	—	—	—	—	—	<u>29</u>	—	—
Offset 3	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... : <u>0</u>	—	—	—	—	—	<u>0</u>	—	—
..... :									

<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... : <u>—</u>	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Phase 02 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Phase 03 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Phase 04 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Phase 05 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Phase 06 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Phase 07 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Phase 08 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	<u>— / —</u>
Offset 1	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset 3	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... : <u>—</u>	—	—	—	—	—	—	—	—
..... :									

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... : <u>0</u>	—	—	—	—
		4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase

Pattern Mode ..... : 0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** East Wood St AT Brewer St

## TIME BASE DATA MESCCELLANEOUS

DST: BEGIN	MONTH	<u>3</u>	WEEK	<u>2</u>	DST: Daylight Savings Time
DST: END	MONTH	<u>11</u>	WEEK	<u>1</u>	Month = 01 to 12 (Begin < End)
					Week = 1 to 5 (5= Last Week)
COORD CYCLE ZERO		<u>24</u> : <u>00</u>	AM	CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync	
					00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)  
CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

**DAY EQUATES:** Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

## TIME BASED DATA TRAFFIC EVENTS

**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
**PATTERN :** (D/S/O)  
    Flash - 5 / 5 / 0  
    Free - 0 / 0 / 4  
**MAX 2 & OMITS:** Call Free, Set  
    Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	10	East Wood St AT Highland St		

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	10	7	—	—	—	—	—	—	—	—	—	—	—	—	—	
Passage Time .....	:	3.0	2.0	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum No 1 .....	:	50	25	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum No 2 .....	:	55	30	—	—	—	—	—	—	—	—	—	—	—	—	—	
Yellow Change .....	:	4.0	4.0	—	—	—	—	—	—	—	—	—	—	—	—	—	
Red Clearance .....	:	2.0	1.5	—	—	—	—	—	—	—	—	—	—	—	—	—	

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum Initial .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cars B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time To Reduce .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum Gap .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pedestrian Clearance .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Extended Pedestrian Clear .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Act Rest In Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

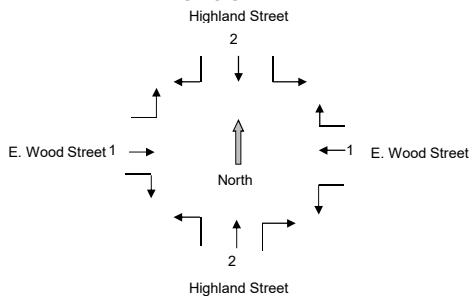
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

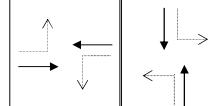
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	0	1	—	—	—	—	—	—	—	—	—	—	—	—	—	
Dual Entry .....	:	0	0	—	—	—	—	—	—	—	—	—	—	—	—	—	
Last Car Passage .....	:	0	0	—	—	—	—	—	—	—	—	—	—	—	—	—	
Conditional Service .....	:	0	0	—	—	—	—	—	—	—	—	—	—	—	—	—	
No Simultaneous Gap .....	:	0	1	—	—	—	—	—	—	—	—	—	—	—	—	—	

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



**TSM&O**  
PARIS, TENNESSEE

## COORDINATION AND OPERATION

Intersection ID: 10

East Wood St

AT

Highland St

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC	
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN					
Force ..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time ..... : <u>0</u>	Time in Seconds						
Yield Period ..... : <u>0</u>	Time in Seconds						
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>							

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... : <u>100</u>						<u>95</u>		
Phase 01 Time/Mode	..... : <u>75 / 1</u>	—	—	—	—	—	<u>70 / 1</u>	—	—
Phase 02 Time/Mode	..... : <u>25 / 0</u>	—	—	—	—	—	<u>25 / 0</u>	—	—
Phase 03 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 04 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 05 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 06 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 07 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 08 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Offset 1	..... : <u>16</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u>—</u>	—	—	—	—	—	<u>61</u>	—	—
Offset 3	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... : <u>0</u>	—	—	—	—	—	<u>0</u>	—	—
..... :									

<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... : <u>—</u>	—	—	<u>115</u>	—	—	—	—	—
Phase 01 Time/Mode	..... : <u>— / —</u>	—	—	<u>85 / 1</u>	—	—	—	—	—
Phase 02 Time/Mode	..... : <u>— / —</u>	—	—	<u>30 / 0</u>	—	—	—	—	—
Phase 03 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 04 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 05 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 06 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 07 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 08 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Offset 1	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset 3	..... : <u>—</u>	—	—	<u>60</u>	—	—	—	—	—
Offset Pattern Mode	..... : <u>—</u>	—	—	<u>0</u>	—	—	—	—	—
..... :					—	—	—	—	—

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... : <u>—</u>	4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase
Pattern Mode	..... : <u>0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac</u>				

Note: Dial, Split, and Offset are all shown in seconds

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** \_\_\_\_\_ **East Wood St** **AT** \_\_\_\_\_ **Highland St** \_\_\_\_\_

### TIME BASE DATA MESCELLANEOUS

DST: BEGIN      MONTH      3      WEEK      2  
DST: END      MONTH      11      WEEK      1

COORD CYCLE ZERO      24 : 00 AM

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)  
CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

#### EQUATED DAY: (DEFINE DAY = DAY)

<u>2</u>	=	<u>3</u>	<u>4</u>	<u>5</u>	-----	-----
-----	=	-----	-----	-----	-----	-----
-----	=	-----	-----	-----	-----	-----
-----	=	-----	-----	-----	-----	-----
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DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

### TIME BASE DATA TRAFFIC EVENTS

PDAY	DAY	PATTERN
1	00 : 00	0 / 0 / 4
1	11 : 00	0 / 0 / 0
1	17 : 00	0 / 0 / 4
-----	-----	-----
-----	-----	-----
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#### TRAFFIC EVENT FUNCTIONS

MAX II PHASE(S)  
Free  
MAX 2  
Free

#### OMIT PHASE(S)

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-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----

2	00 : 00	0 / 0 / 4
2	07 : 00	1 / 1 / 1
2	09 : 00	0 / 0 / 0
2	11 : 00	2 / 2 / 2
2	15 : 30	3 / 3 / 3
2	18 : 30	0 / 0 / 0
2	20 : 00	0 0 4
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-----	-----	-----
-----	-----	-----
-----	-----	-----

Free  
AM peak - 100 Sec  
MAX 2  
MD peak  
PM peak  
MAX 2  
Free

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-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----

6	00 : 00	0 / 0 / 4
6	07 : 00	1 / 1 / 1
6	09 : 00	0 / 0 / 0
6	11 : 00	2 / 2 / 2
6	15 : 30	3 / 3 / 3
6	18 : 30	0 / 0 / 0
6	20 : 00	0 0 4
-----	-----	-----
-----	-----	-----
-----	-----	-----
-----	-----	-----
-----	-----	-----

Free  
AM peak - 100 Sec  
MAX 2  
MD peak  
PM peak  
MAX 2  
Free

-----	-----	-----	-----	-----	-----
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-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----

7	00 : 00	0 / 0 / 4
7	10 : 00	0 / 0 / 0
7	18 : 00	0 / 0 / 4
-----	-----	-----
-----	-----	-----
-----	-----	-----
-----	-----	-----
-----	-----	-----

Free  
MAX 2  
Free

REFERENCE DATA:  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
PATTERN : (D/S/O)  
Flash - 5 / 5 / 0  
Free - 0 / 0 / 4  
MAX 2 & OMITS: Call Free, Set Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### **14 EPAC300 PROGRAM LOG**

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	11	East Wood St	AT	Lake St

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	—	10	—	7	—	10	—	7	—	—	—	—	—	—	—	—
Passage Time .....	:	—	2.0	—	2.0	—	2.0	—	2.0	—	—	—	—	—	—	—	—
Maximum No 1 .....	:	—	40	—	20	—	40	—	20	—	—	—	—	—	—	—	—
Maximum No 2 .....	:	—	50	—	25	—	50	—	25	—	—	—	—	—	—	—	—
Yellow Change .....	:	—	3.5	—	3.5	—	3.5	—	3.5	—	—	—	—	—	—	—	—
Red Clearance .....	:	—	1.5	—	1.5	—	1.5	—	1.5	—	—	—	—	—	—	—	—

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum Initial .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cars B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time To Reduce .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Minimum Gap .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pedestrian Clearance .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Extended Pedestrian Clear .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Act Rest In Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

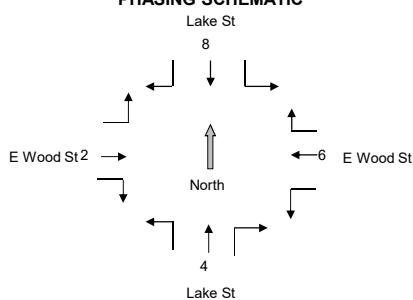
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

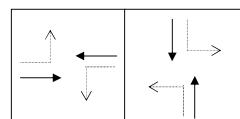
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	—	0	—	1	—	0	—	1	—	—	—	—	—	—	—	—
Dual Entry .....	:	—	1	—	1	—	1	—	1	—	—	—	—	—	—	—	—
Last Car Passage .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	—
Conditional Service .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	—
Max Recall .....	:	—	1	—	0	—	1	—	0	—	—	—	—	—	—	—	—
No Simultaneous Gap .....	:	—	0	—	1	—	0	—	1	—	—	—	—	—	—	—	—

Vehicle Control Entry : "1" = Yes & "0" = No

#### PHASING SCHEMATIC



#### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 11

East Wood St

AT

Lake St

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5					
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-					
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC						
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-					
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-					
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN										
Force ..... : <u>1</u>	PLAN	CYCLE TIME										
Max Dwell Time ..... : <u>0</u>	Time in Seconds											
Yield Period ..... : <u>0</u>	Time in Seconds											
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>												

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... : <u>100</u>	/	/	/	/	/	<u>95</u>	/	/
Phase 01 Time/Mode	..... : <u>70 / 1</u>	/	/	/	/	/	<u>60 / 1</u>	/	/
Phase 02 Time/Mode	..... : <u>70 / 1</u>	/	/	/	/	/	<u>60 / 1</u>	/	/
Phase 03 Time/Mode	..... : <u>30 / 0</u>	/	/	/	/	/	<u>35 / 0</u>	/	/
Phase 04 Time/Mode	..... : <u>30 / 0</u>	/	/	/	/	/	<u>35 / 0</u>	/	/
Phase 05 Time/Mode	..... : <u>70 / 1</u>	/	/	/	/	/	<u>60 / 1</u>	/	/
Phase 06 Time/Mode	..... : <u>70 / 1</u>	/	/	/	/	/	<u>60 / 1</u>	/	/
Phase 07 Time/Mode	..... : <u>30 / 0</u>	/	/	/	/	/	<u>35 / 0</u>	/	/
Phase 08 Time/Mode	..... : <u>30 / 0</u>	/	/	/	/	/	<u>35 / 0</u>	/	/
Offset 1	..... : <u>97</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u>—</u>	—	—	—	—	—	<u>31</u>	—	—
Offset 3	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... : <u>0</u>	—	—	—	—	—	<u>0</u>	—	—
..... :									

<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... : <u>—</u>	—	—	<u>115</u>	—	—	—	—	—
Phase 01 Time/Mode	..... : <u>—</u>	—	—	<u>80 / 1</u>	—	—	—	—	—
Phase 02 Time/Mode	..... : <u>—</u>	—	—	<u>80 / 1</u>	—	—	—	—	—
Phase 03 Time/Mode	..... : <u>—</u>	—	—	<u>—</u>	—	—	—	—	—
Phase 04 Time/Mode	..... : <u>—</u>	—	—	<u>35 / 0</u>	—	—	—	—	—
Phase 05 Time/Mode	..... : <u>—</u>	—	—	<u>—</u>	—	—	—	—	—
Phase 06 Time/Mode	..... : <u>—</u>	—	—	<u>80 / 1</u>	—	—	—	—	—
Phase 07 Time/Mode	..... : <u>—</u>	—	—	<u>—</u>	—	—	—	—	—
Phase 08 Time/Mode	..... : <u>—</u>	—	—	<u>35 / 0</u>	—	—	—	—	—
Offset 1	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset 3	..... : <u>—</u>	—	—	<u>18</u>	—	—	—	—	—
Offset Pattern Mode	..... : <u>—</u>	—	—	<u>0</u>	—	—	—	—	—
..... :									

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... : <u>0</u>	—	—	—	—
		4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase

Pattern Mode ..... : 0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** East Wood St AT Lake St

### TIME BASE DATA MESCELLANEOUS

DST: BEGIN MONTH 3 WEEK 2 DST: Daylight Savings Time  
DST: END MONTH 11 WEEK 1 Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)

COORD CYCLE ZERO 24 : 00 AM CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

#### EQUATED DAY: (DEFINE DAY = DAY)

<u>2</u>	=	<u>3</u>	<u>4</u>	<u>5</u>	-----	-----
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DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

### TIME BASE DATA TRAFFIC EVENTS

PDAY	DAY	PATTERN
1	00 : 00	0 / 0 / 4
1	11 : 00	0 / 0 / 0
1	17 : 00	0 / 0 / 4
-----	-----	-----
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#### TRAFFIC EVENT FUNCTIONS

##### MAX II PHASE(S)

Free  
MAX 2  
Free

##### OMIT PHASE(S)

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##### REFERENCE DATA:

PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
PATTERN : (D/S/O)  
Flash - 5 / 5 / 0  
Free - 0 / 0 / 4  
MAX 2 & OMITS: Call Free, Set Pattern To 0 / 0 / 0

2	00 : 00	0 / 0 / 4
2	07 : 00	1 / 1 / 1
2	09 : 00	0 / 0 / 0
2	11 : 00	2 / 2 / 2
2	15 : 30	3 / 3 / 3
2	18 : 30	0 / 0 / 0
2	20 : 00	0 0 4
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Free  
AM peak - 100 Sec  
MAX 2  
MD peak  
PM peak  
MAX 2  
Free

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-----	-----	-----	-----	-----	-----

6	00 : 00	0 / 0 / 4
6	07 : 00	1 / 1 / 1
6	09 : 00	0 / 0 / 0
6	11 : 00	2 / 2 / 2
6	15 : 30	3 / 3 / 3
6	18 : 30	0 / 0 / 0
6	20 : 00	0 0 4
-----	-----	-----
-----	-----	-----
-----	-----	-----
-----	-----	-----

Free  
AM peak - 100 Sec  
MAX 2  
MD peak  
PM peak  
MAX 2  
Free

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-----	-----	-----	-----	-----	-----

7	00 : 00	0 / 0 / 4
7	10 : 00	0 / 0 / 0
7	18 : 00	0 / 0 / 4
-----	-----	-----
-----	-----	-----
-----	-----	-----
-----	-----	-----

Free  
MAX 2  
Free

-----	-----	-----	-----	-----	-----
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## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	12	East Wood St AT Tyson Ave		

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	4	10	—	7	—	10	—	—	—	—	—	—	—	—	—	—
Passage Time .....	:	2.0	3.0	—	2.0	—	3.0	—	—	—	—	—	—	—	—	—	—
Maximum No 1 .....	:	15	40	—	25	—	40	—	—	—	—	—	—	—	—	—	—
Maximum No 2 .....	:	20	50	—	30	—	50	—	—	—	—	—	—	—	—	—	—
Yellow Change .....	:	3.5	4.5	—	3.5	—	4.5	—	—	—	—	—	—	—	—	—	—
Red Clearance .....	:	2.0	1.5	—	1.5	—	1.5	—	—	—	—	—	—	—	—	—	—

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum Initial .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cars B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time To Reduce .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Minimum Gap .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pedestrian Clearance .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Extended Pedestrian Clear .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Act Rest In Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

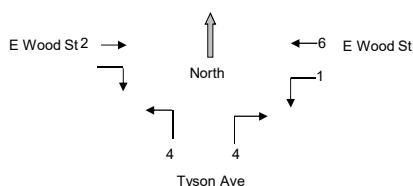
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

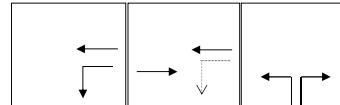
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	1	0	—	1	—	0	—	1	—	—	—	—	—	—	—	—
Dual Entry .....	:	0	1	—	0	—	1	—	—	—	—	—	—	—	—	—	—
Last Car Passage .....	:	0	0	—	0	—	0	—	—	—	—	—	—	—	—	—	—
Conditional Service .....	:	0	0	—	0	—	0	—	—	—	—	—	—	—	—	—	—
No Simultaneous Gap .....	:	1	0	—	1	—	0	—	—	—	—	—	—	—	—	—	—

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 12

East Wood St

AT

Tyson Ave

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC	
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN					
Force ..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time ..... : <u>0</u>		Time in Seconds					
Yield Period ..... : <u>0</u>		Time in Seconds					
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>							

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length ..... :	<u>100</u>						<u>95</u>		
Phase 01 Time/Mode ..... :	<u>25 / 0</u>	—	—	—	—	—	<u>22 / 0</u>	—	—
Phase 02 Time/Mode ..... :	<u>45 / 1</u>	—	—	—	—	—	<u>46 / 1</u>	—	—
Phase 03 Time/Mode ..... :	<u>— / —</u>	—	—	—	—	—	<u>— / —</u>	—	—
Phase 04 Time/Mode ..... :	<u>30 / 0</u>	—	—	—	—	—	<u>27 / 0</u>	—	—
Phase 05 Time/Mode ..... :	<u>— / —</u>	—	—	—	—	—	<u>— / —</u>	—	—
Phase 06 Time/Mode ..... :	<u>70 / 1</u>	—	—	—	—	—	<u>68 / 1</u>	—	—
Phase 07 Time/Mode ..... :	<u>— / —</u>	—	—	—	—	—	<u>— / —</u>	—	—
Phase 08 Time/Mode ..... :	<u>— / —</u>	—	—	—	—	—	<u>— / —</u>	—	—
Offset 1 ..... :	<u>87</u>	—	—	—	—	—	—	—	—
Offset 2 ..... :		—	—	—	—	—	<u>38</u>	—	—
Offset 3 ..... :		—	—	—	—	—	<u>0</u>	—	—
Offset Pattern Mode ..... :	<u>0</u>	—	—	—	—	—	—	—	—
..... :									

<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length ..... :		—	—	<u>115</u>	—	—	—	—	—
Phase 01 Time/Mode ..... :		—	—	<u>25 / 0</u>	—	—	—	—	—
Phase 02 Time/Mode ..... :		—	—	<u>55 / 1</u>	—	—	—	—	—
Phase 03 Time/Mode ..... :		—	—	<u>— / —</u>	—	—	—	—	—
Phase 04 Time/Mode ..... :		—	—	<u>35 / 0</u>	—	—	—	—	—
Phase 05 Time/Mode ..... :		—	—	<u>— / —</u>	—	—	—	—	—
Phase 06 Time/Mode ..... :		—	—	<u>80 / 1</u>	—	—	—	—	—
Phase 07 Time/Mode ..... :		—	—	<u>— / —</u>	—	—	—	—	—
Phase 08 Time/Mode ..... :		—	—	<u>— / —</u>	—	—	—	—	—
Offset 1 ..... :		—	—	—	—	—	—	—	—
Offset 2 ..... :		—	—	—	—	—	—	—	—
Offset 3 ..... :		—	—	<u>35</u>	—	—	—	—	—
Offset Pattern Mode ..... :		—	—	<u>0</u>	—	—	—	—	—
..... :		—	—	—	—	—	—	—	—

<u>Codes</u>	..... :	Phase Mode ..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
			4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase
		Pattern Mode ..... :	0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac			

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** East Wood St AT Tyson Ave

## TIME BASE DATA MESCCELLANEOUS

DST: BEGIN	MONTH	<u>3</u>	WEEK	<u>2</u>	DST: Daylight Savings Time
DST: END	MONTH	<u>11</u>	WEEK	<u>1</u>	Month = 01 to 12 (Begin < End)
					Week = 1 to 5 (5= Last Week)
COORD CYCLE ZERO		<u>24</u> : <u>00</u>	AM	CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync	
					00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)  
CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

**DAY EQUATES:** Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

## TIME BASED DATA TRAFFIC EVENTS

**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
**PATTERN :** (D/S/O)  
    Flash - 5 / 5 / 0  
    Free - 0 / 0 / 4  
**MAX 2 & OMITS:** Call Free, Set  
    Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	13	East Wood St AT Volunteer Dr		

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	4	10	—	7	10	—	—	—	—	—	—	—	—	—	—	—
Passage Time .....	:	2.0	3.0	—	2.0	3.0	—	—	—	—	—	—	—	—	—	—	—
Maximum No 1 .....	:	15	40	—	25	40	—	—	—	—	—	—	—	—	—	—	—
Maximum No 2 .....	:	20	50	—	30	50	—	—	—	—	—	—	—	—	—	—	—
Yellow Change .....	:	3.5	4.5	—	3.5	4.5	—	—	—	—	—	—	—	—	—	—	—
Red Clearance .....	:	2.0	1.5	—	2.0	1.5	—	—	—	—	—	—	—	—	—	—	—

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum Initial .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cars B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time To Reduce .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Minimum Gap .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:	—	8	—	8	—	—	—	—	—	—	—	—	—	—	—	—
Pedestrian Clearance .....	:	—	19	—	18	—	—	—	—	—	—	—	—	—	—	—	—

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Extended Pedestrian Clear .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Act Rest In Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

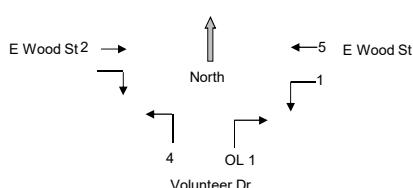
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

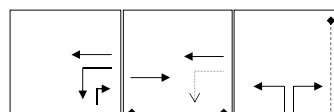
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	1	0	—	1	0	—	—	—	—	—	—	—	—	—	—	—
Dual Entry .....	:	0	1	—	0	1	—	—	—	—	—	—	—	—	—	—	—
Last Car Passage .....	:	0	0	—	0	0	—	—	—	—	—	—	—	—	—	—	—
Conditional Service .....	:	0	0	—	0	0	—	—	—	—	—	—	—	—	—	—	—
No Simultaneous Gap .....	:	1	0	—	1	0	—	—	—	—	—	—	—	—	—	—	—

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 13

**East Wood St**

AT

**Volunteer Dr**

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC	
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN					
Force ..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time ..... : <u>0</u>	Time in Seconds						
Yield Period ..... : <u>0</u>	Time in Seconds						
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>							

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... : <u>100</u>						<u>95</u>		
Phase 01 Time/Mode	..... : <u>18 / 0</u>	—	—	—	—	—	<u>18 / 0</u>	—	—
Phase 02 Time/Mode	..... : <u>47 / 1</u>	—	—	—	—	—	<u>47 / 1</u>	—	—
Phase 03 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 04 Time/Mode	..... : <u>35 / 0</u>	—	—	—	—	—	<u>30 / 0</u>	—	—
Phase 05 Time/Mode	..... : <u>65 / 1</u>	—	—	—	—	—	<u>65 / 1</u>	—	—
Phase 06 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 07 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Phase 08 Time/Mode	..... : <u>— / —</u>	—	—	—	—	—	—	—	—
Offset 1	..... : <u>97</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u>—</u>	—	—	—	—	—	<u>2</u>	—	—
Offset 3	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... : <u>0</u>	—	—	—	—	—	<u>0</u>	—	—
..... :									

<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... : <u>—</u>	—	—	<u>115</u>	—	—	—	—	—
Phase 01 Time/Mode	..... : <u>—</u>	—	—	<u>20 / 0</u>	—	—	—	—	—
Phase 02 Time/Mode	..... : <u>—</u>	—	—	<u>60 / 1</u>	—	—	—	—	—
Phase 03 Time/Mode	..... : <u>—</u>	—	—	<u>—</u>	—	—	—	—	—
Phase 04 Time/Mode	..... : <u>—</u>	—	—	<u>35 / 0</u>	—	—	—	—	—
Phase 05 Time/Mode	..... : <u>—</u>	—	—	<u>80 / 1</u>	—	—	—	—	—
Phase 06 Time/Mode	..... : <u>—</u>	—	—	<u>—</u>	—	—	—	—	—
Phase 07 Time/Mode	..... : <u>—</u>	—	—	<u>—</u>	—	—	—	—	—
Phase 08 Time/Mode	..... : <u>—</u>	—	—	<u>—</u>	—	—	—	—	—
Offset 1	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u>—</u>	—	—	—	—	—	—	—	—
Offset 3	..... : <u>—</u>	—	—	<u>34</u>	—	—	—	—	—
Offset Pattern Mode	..... : <u>—</u>	—	—	<u>0</u>	—	—	—	—	—
..... :					—	—	—	—	—

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... : <u>—</u>	4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase
Pattern Mode	..... : <u>0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac</u>				

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** East Wood St AT Volunteer Dr

### TIME BASE DATA MESCELLANEOUS

DST: BEGIN MONTH 3 WEEK 2 DST: Daylight Savings Time  
DST: END MONTH 11 WEEK 1 Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)

COORD CYCLE ZERO 24 : 00 AM CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

#### EQUATED DAY: (DEFINE DAY = DAY)

<u>2</u>	=	<u>3</u>	<u>4</u>	<u>5</u>	-----	-----
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DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

### TIME BASE DATA TRAFFIC EVENTS

PDAY	DAY	PATTERN
1	00 : 00	0 / 0 / 4
1	11 : 00	0 / 0 / 0
1	17 : 00	0 / 0 / 4
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#### TRAFFIC EVENT FUNCTIONS

##### MAX II PHASE(S)

Free  
MAX 2  
Free

##### OMIT PHASE(S)

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##### REFERENCE DATA:

PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
PATTERN : (D/S/O)  
Flash - 5 / 5 / 0  
Free - 0 / 0 / 4  
MAX 2 & OMITS: Call Free, Set Pattern To 0 / 0 / 0

2	00 : 00	0 / 0 / 4
2	07 : 00	1 / 1 / 1
2	09 : 00	0 / 0 / 0
2	11 : 00	2 / 2 / 2
2	15 : 30	3 / 3 / 3
2	18 : 30	0 / 0 / 0
2	20 : 00	0 0 4
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Free  
AM peak - 100 Sec  
MAX 2  
MD peak  
PM peak  
MAX 2  
Free

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6	00 : 00	0 / 0 / 4
6	07 : 00	1 / 1 / 1
6	09 : 00	0 / 0 / 0
6	11 : 00	2 / 2 / 2
6	15 : 30	3 / 3 / 3
6	18 : 30	0 / 0 / 0
6	20 : 00	0 0 4
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Free  
AM peak - 100 Sec  
MAX 2  
MD peak  
PM peak  
MAX 2  
Free

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7	00 : 00	0 / 0 / 4
7	10 : 00	0 / 0 / 0
7	18 : 00	0 / 0 / 4
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Free  
MAX 2  
Free

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## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	14	East Wood St	AT	Fairgrounds Rd/Chickasaw Rd

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....		7		10		7		10									
Passage Time .....		2.0		3.0		2.0		3.0									
Maximum No 1 .....		25		45		25		45									
Maximum No 2 .....		30		55		30		55									
Yellow Change .....		3.5		4.5		3.5		4.5									
Red Clearance .....		2.0		1.5		2.0		1.5									

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....																	
Maximum Initial .....																	
Time B4 Reduction .....																	
Cars B4 Reduction .....																	
Time To Reduce .....																	
Minimum Gap .....																	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....		7		7		7		7									
Pedestrian Clearance .....		23		14		23		13									

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....																	
Extended Pedestrian Clear .....																	
Act Rest In Walk .....																	

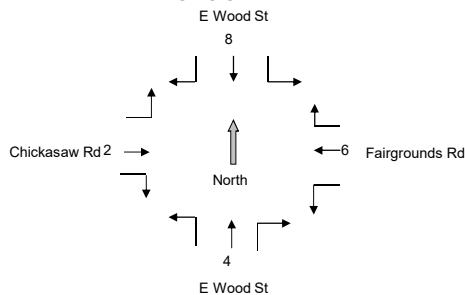
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

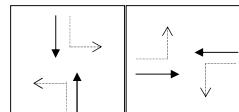
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....		1		0		1		0									
Dual Entry .....		1		1		1		1									
Last Car Passage .....		0		0		0		0									
Conditional Service .....		0		0		0		0									
No Simultaneous Gap .....		1		0		1		0									

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 14

**East Wood St**

AT airgrounds Rd/Chickasaw R

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC	
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN					
Force ..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time ..... : <u>0</u>		Time in Seconds					
Yield Period ..... : <u>0</u>		Time in Seconds					
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>							

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length ..... :	<u>100</u>	—	—	—	—	—	—	—	—
Phase 01 Time/Mode ..... :	<u>— / —</u>	—	—	—	—	—	—	—	—
Phase 02 Time/Mode ..... :	<u>35 / 0</u>	—	—	—	—	—	—	—	—
Phase 03 Time/Mode ..... :	<u>— / —</u>	—	—	—	—	—	—	—	—
Phase 04 Time/Mode ..... :	<u>65 / 1</u>	—	—	—	—	—	—	—	—
Phase 05 Time/Mode ..... :	<u>— / —</u>	—	—	—	—	—	—	—	—
Phase 06 Time/Mode ..... :	<u>35 / 0</u>	—	—	—	—	—	—	—	—
Phase 07 Time/Mode ..... :	<u>— / —</u>	—	—	—	—	—	—	—	—
Phase 08 Time/Mode ..... :	<u>65 / 1</u>	—	—	—	—	—	—	—	—
Offset 1 ..... :	<u>59</u>	—	—	—	—	—	—	—	—
Offset 2 ..... :	<u>—</u>	—	—	—	—	—	—	—	—
Offset 3 ..... :	<u>—</u>	—	—	—	—	—	—	—	—
Offset Pattern Mode ..... :	<u>0</u>	—	—	—	—	—	—	—	—
..... :									
<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length ..... :	<u>—</u>	<u>—</u>	<u>115</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Phase 01 Time/Mode ..... :	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Phase 02 Time/Mode ..... :	<u>—</u>	<u>—</u>	<u>—</u>	<u>30 / 0</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Phase 03 Time/Mode ..... :	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Phase 04 Time/Mode ..... :	<u>—</u>	<u>—</u>	<u>—</u>	<u>85 / 1</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Phase 05 Time/Mode ..... :	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Phase 06 Time/Mode ..... :	<u>—</u>	<u>—</u>	<u>—</u>	<u>30 / 0</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Phase 07 Time/Mode ..... :	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Phase 08 Time/Mode ..... :	<u>—</u>	<u>—</u>	<u>—</u>	<u>85 / 1</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Offset 1 ..... :	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Offset 2 ..... :	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Offset 3 ..... :	<u>—</u>	<u>—</u>	<u>0</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Offset Pattern Mode ..... :	<u>—</u>	<u>—</u>	<u>0</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
..... :									

### Codes

Phase Mode ..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
	4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase
Pattern Mode ..... :	0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac			

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** East Wood St AT Fairgrounds Rd/Chickasaw Rd

## TIME BASE DATA MESCCELLANEOUS

DST: BEGIN	MONTH	<u>3</u>	WEEK	<u>2</u>	DST: Daylight Savings Time Month = 01 to 12 (Begin < End) Week = 1 to 5 (5= Last Week)
DST: END	MONTH	<u>11</u>	WEEK	<u>1</u>	
COORD CYCLE ZERO			<u>24</u> : <u>00</u>	AM	CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync 00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)  
CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

**DAY EQUATES:** Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

## TIME BASED DATA TRAFFIC EVENTS

**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
**PATTERN :** (D/S/O)  
    Flash - 5 / 5 / 0  
    Free - 0 / 0 / 4  
**MAX 2 & OMITS:** Call Free, Set  
    Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	8/28/2018
Approved By:	TT		Date:	
Intersection ID:	15	Veterans Dr	AT	Dunlap St

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....		4	10	7	—	4	10	—	—	—	—	—	—	—	—	—	—
Passage Time .....		2.0	3.0	2.0	—	2.0	3.0	—	—	—	—	—	—	—	—	—	—
Maximum No 1 .....		15	45	20	—	15	45	—	—	—	—	—	—	—	—	—	—
Maximum No 2 .....		20	55	25	—	20	55	—	—	—	—	—	—	—	—	—	—
Yellow Change .....		3.5	4.5	4.0	—	3.5	4.5	—	—	—	—	—	—	—	—	—	—
Red Clearance .....		1.5	1.5	1.5	—	1.5	1.5	—	—	—	—	—	—	—	—	—	—

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum Initial .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time B4 Reduction .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cars B4 Reduction .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time To Reduce .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Minimum Gap .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....		—	—	10	—	—	—	—	—	—	—	—	—	—	—	—	—
Pedestrian Clearance .....		—	—	37	—	—	—	—	—	—	—	—	—	—	—	—	—

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Extended Pedestrian Clear .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Act Rest In Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

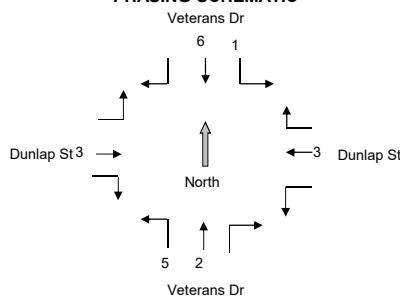
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

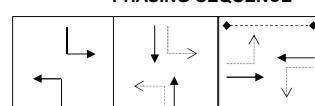
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....		1	0	1	—	1	0	—	—	—	—	—	—	—	—	—	—
Dual Entry .....		0	1	0	—	0	1	—	—	—	—	—	—	—	—	—	—
Last Car Passage .....		0	0	0	—	0	0	—	—	—	—	—	—	—	—	—	—
Conditional Service .....		0	0	0	—	0	0	—	—	—	—	—	—	—	—	—	—
No Simultaneous Gap .....		1	0	1	—	1	0	—	—	—	—	—	—	—	—	—	—

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 15

Veterans Dr

AT

Dunlap St

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5					
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-					
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC						
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-					
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-					
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN										
Force ..... : <u>1</u>	PLAN	CYCLE TIME										
Max Dwell Time ..... : <u>0</u>	Time in Seconds											
Yield Period ..... : <u>0</u>	Time in Seconds											
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>												

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... : <u>115</u>						<u>105</u>		
Phase 01 Time/Mode	..... : <u>15 / 0</u>	—	—	—	—	—	<u>15 / 0</u>	—	—
Phase 02 Time/Mode	..... : <u>57 / 1</u>	—	—	—	—	—	<u>50 / 1</u>	—	—
Phase 03 Time/Mode	..... : <u>43 / 0</u>	—	—	—	—	—	<u>40 / 0</u>	—	—
Phase 04 Time/Mode	..... : <u>/ 0</u>	—	—	—	—	—	—	—	—
Phase 05 Time/Mode	..... : <u>18 / 0</u>	—	—	—	—	—	<u>15 / 0</u>	—	—
Phase 06 Time/Mode	..... : <u>54 / 1</u>	—	—	—	—	—	<u>50 / 1</u>	—	—
Phase 07 Time/Mode	..... : <u>/ 0</u>	—	—	—	—	—	—	—	—
Phase 08 Time/Mode	..... : <u>/ 0</u>	—	—	—	—	—	—	—	—
Offset 1	..... : <u>1</u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u></u>	—	—	—	—	—	<u>0</u>	—	—
Offset 3	..... : <u></u>	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... : <u>0</u>	—	—	—	—	—	<u>0</u>	—	—
..... : <u></u>	—	—	—	—	—	—	—	—	—

<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... : <u>135</u>	—	—	<u>15 / 0</u>	—	—	—	—	—
Phase 01 Time/Mode	..... : <u></u>	—	—	<u>85 / 1</u>	—	—	—	—	—
Phase 02 Time/Mode	..... : <u></u>	—	—	<u>35 / 0</u>	—	—	—	—	—
Phase 03 Time/Mode	..... : <u></u>	—	—	<u>/ 0</u>	—	—	—	—	—
Phase 04 Time/Mode	..... : <u></u>	—	—	<u>15 / 0</u>	—	—	—	—	—
Phase 05 Time/Mode	..... : <u></u>	—	—	<u>85 / 1</u>	—	—	—	—	—
Phase 06 Time/Mode	..... : <u></u>	—	—	<u>/ 0</u>	—	—	—	—	—
Phase 07 Time/Mode	..... : <u></u>	—	—	<u>/ 0</u>	—	—	—	—	—
Phase 08 Time/Mode	..... : <u></u>	—	—	<u>/ 0</u>	—	—	—	—	—
Offset 1	..... : <u></u>	—	—	—	—	—	—	—	—
Offset 2	..... : <u></u>	—	—	—	—	—	—	—	—
Offset 3	..... : <u></u>	—	—	<u>62</u>	—	—	—	—	—
Offset Pattern Mode	..... : <u></u>	—	—	<u>0</u>	—	—	—	—	—
..... : <u></u>	—	—	—	—	—	—	—	—	—

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... :	4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase
Pattern Mode	..... :	0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac			

Note: Dial, Split, and Offset are all shown in seconds

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

Intersection: Veterans Dr AT Dunlap St

### TIME BASE DATA MESCELLANEOUS

DST: BEGIN MONTH 3  
DST: END MONTH 11

WEEK 2  
WEEK 1

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)

COORD CYCLE ZERO 24 : 00 AM

CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

<u>2</u>	=	<u>3</u>	<u>4</u>	<u>5</u>	-----	-----
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DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

### TIME BASE DATA TRAFFIC EVENTS

PDAY	DAY	PATTERN
1	00 : 00	0 / 0 / 4
1	11 : 00	0 / 0 / 0
1	17 : 00	0 / 0 / 4
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#### TRAFFIC EVENT FUNCTIONS

##### MAX II PHASE(S)

Free  
MAX 2  
Free

##### OMIT PHASE(S)

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2	00 : 00	0 / 0 / 4
2	07 : 00	1 / 1 / 1
2	09 : 30	2 / 2 / 2
2	15 : 00	3 / 3 / 3
2	18 : 30	0 / 0 / 0
2	21 : 00	0 / 0 / 4
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Free  
AM peak  
MD peak  
PM peak  
MAX 2  
Free

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6	00 : 00	0 / 0 / 4
6	07 : 00	1 / 1 / 1
6	09 : 30	2 / 2 / 2
6	15 : 00	3 / 3 / 3
6	18 : 30	0 / 0 / 0
6	21 : 00	0 / 0 / 4
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Free  
AM peak  
MD peak  
PM peak  
MAX 2  
Free

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7	00 : 00	0 / 0 / 4
7	10 : 00	0 / 0 / 0
7	18 : 00	0 / 0 / 4
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Free  
MAX 2  
Free

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#### REFERENCE DATA:

PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
PATTERN : (D/S/O)  
Flash - 5 / 5 / 0  
Free - 0 / 0 / 4  
MAX 2 & OMITS: Call Free, Set Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	8/28/2018
Approved By:	TT		Date:	
Intersection ID:	16	Veterans Dr/Mineral Wells	AT	Tyson Ave

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....		7	7	4	10	4	7	4	10	—	—	—	—	—	—	—	—
Passage Time .....		3.0	2.0	2.0	3.0	2.0	2.0	2.0	3.0	—	—	—	—	—	—	—	—
Maximum No 1 .....		20	35	15	45	15	35	15	45	—	—	—	—	—	—	—	—
Maximum No 2 .....		25	45	20	55	20	45	20	55	—	—	—	—	—	—	—	—
Yellow Change .....		3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5	—	—	—	—	—	—	—	—
Red Clearance .....		1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	—	—	—	—	—	—	—	—

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum Initial .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time B4 Reduction .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cars B4 Reduction .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time To Reduce .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Minimum Gap .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pedestrian Clearance .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Extended Pedestrian Clear .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Act Rest In Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

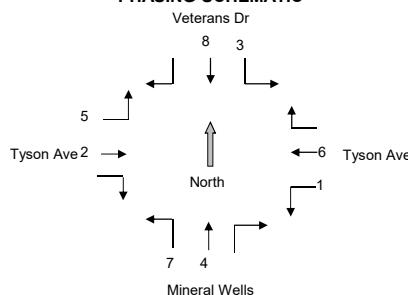
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....		0	1	1	0	1	1	1	0	—	—	—	—	—	—	—	—
Dual Entry .....		0	1	0	1	0	1	0	1	—	—	—	—	—	—	—	—
Last Car Passage .....		0	0	0	0	0	0	0	0	—	—	—	—	—	—	—	—
Conditional Service .....		0	0	0	0	0	0	0	0	—	—	—	—	—	—	—	—
No Simultaneous Gap .....		1	1	1	0	1	1	1	0	—	—	—	—	—	—	—	—

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 16

Veterans Dr/Mineral We AT

Tyson Ave

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC	
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN					
Force ..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time ..... : <u>0</u>		Time in Seconds					
Yield Period ..... : <u>0</u>		Time in Seconds					
Manual Pattern (Dial/Split/Offset)	<u>1 / 1 / 1</u>						

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... :	<u>115</u>					<u>105</u>		
Phase 01 Time/Mode	..... :	<u>24 / 0</u>	—/—	—/—	—/—	—/—	<u>25 / 0</u>	—/—	—/—
Phase 02 Time/Mode	..... :	<u>30 / 0</u>	—/—	—/—	—/—	—/—	<u>25 / 0</u>	—/—	—/—
Phase 03 Time/Mode	..... :	<u>15 / 0</u>	—/—	—/—	—/—	—/—	<u>15 / 0</u>	—/—	—/—
Phase 04 Time/Mode	..... :	<u>46 / 1</u>	—/—	—/—	—/—	—/—	<u>40 / 1</u>	—/—	—/—
Phase 05 Time/Mode	..... :	<u>15 / 0</u>	—/—	—/—	—/—	—/—	<u>15 / 0</u>	—/—	—/—
Phase 06 Time/Mode	..... :	<u>39 / 0</u>	—/—	—/—	—/—	—/—	<u>35 / 0</u>	—/—	—/—
Phase 07 Time/Mode	..... :	<u>15 / 0</u>	—/—	—/—	—/—	—/—	<u>20 / 0</u>	—/—	—/—
Phase 08 Time/Mode	..... :	<u>46 / 1</u>	—/—	—/—	—/—	—/—	<u>35 / 1</u>	—/—	—/—
Offset 1	..... :	<u>108</u>	—/—	—/—	—/—	—/—		—/—	—/—
Offset 2	..... :	—/—	—/—	—/—	—/—	—/—	<u>86</u>	—/—	—/—
Offset 3	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset Pattern Mode	..... :	<u>0</u>	—/—	—/—	—/—	—/—	<u>0</u>	—/—	—/—
	..... :								

<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... :	—/—	—/—	<u>135</u>	—/—	—/—	—/—	—/—	—/—
Phase 01 Time/Mode	..... :	—/—	—/—	<u>35 / 0</u>	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	<u>29 / 0</u>	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	<u>15 / 0</u>	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	<u>56 / 1</u>	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	<u>15 / 0</u>	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	<u>49 / 0</u>	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	<u>21 / 0</u>	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	<u>50 / 1</u>	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 2	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 3	..... :	—/—	—/—	<u>123</u>	—/—	—/—	—/—	—/—	—/—
Offset Pattern Mode	..... :	—/—	—/—	<u>0</u>	—/—	—/—	—/—	—/—	—/—
	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—

<u>Codes</u>	..... :	Phase Mode	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
			4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase
Pattern Mode	..... :		0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac			

Note: Dial, Split, and Offset are all shown in seconds

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

Intersection: Veterans Dr/Mineral Well AT Tyson Ave

### TIME BASE DATA MESCELLANEOUS

DST: BEGIN MONTH 3  
DST: END MONTH 11

WEEK 2  
WEEK 1

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)

COORD CYCLE ZERO 24 : 00 AM

CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

<u>2</u>	=	<u>3</u>	<u>4</u>	<u>5</u>	-----	-----
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DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

### TIME BASE DATA TRAFFIC EVENTS

PDAY	DAY	HH : MM	PATTERN
1	00 : 00	0 / 0 / 4	
1	11 : 00	0 / 0 / 0	
1	17 : 00	0 / 0 / 4	
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#### TRAFFIC EVENT FUNCTIONS

##### MAX II PHASE(S)

Free  
MAX 2  
Free

##### OMIT PHASE(S)

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2	00 : 00	0 / 0 / 4
2	07 : 00	1 / 1 / 1
2	09 : 30	2 / 2 / 2
2	15 : 00	3 / 3 / 3
2	18 : 30	0 / 0 / 0
2	21 : 00	0 / 0 / 4
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Free  
AM peak  
MD peak  
PM peak  
MAX 2  
Free

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6	00 : 00	0 / 0 / 4
6	07 : 00	1 / 1 / 1
6	09 : 30	2 / 2 / 2
6	15 : 00	3 / 3 / 3
6	18 : 30	0 / 0 / 0
6	21 : 00	0 / 0 / 4
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Free  
AM peak  
MD peak  
PM peak  
MAX 2  
Free

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7	00 : 00	0 / 0 / 4
7	10 : 00	0 / 0 / 0
7	18 : 00	0 / 0 / 4
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Free  
MAX 2  
Free

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#### REFERENCE DATA:

PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
PATTERN : (D/S/O)  
Flash - 5 / 5 / 0  
Free - 0 / 0 / 4  
MAX 2 & OMITS: Call Free, Set Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	17	Mineral Wells Ave	AT	Memorial Dr

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....		10	10	—	—	—	—	10	10	—	—	—	—	—	—	—	
Passage Time .....		3.0	3.0	—	—	—	—	3.0	4.0	—	—	—	—	—	—	—	
Maximum No 1 .....		40	40	—	—	—	—	25	25	—	—	—	—	—	—	—	
Maximum No 2 .....		45	50	—	—	—	—	35	40	—	—	—	—	—	—	—	
Yellow Change .....		4.5	4.0	—	—	—	—	4.0	4.5	—	—	—	—	—	—	—	
Red Clearance .....		1.5	2.5	—	—	—	—	2.5	2.5	—	—	—	—	—	—	—	

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum Initial .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time B4 Reduction .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cars B4 Reduction .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time To Reduce .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum Gap .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....		8	10	—	—	—	—	7	—	—	—	—	—	—	—	—	
Pedestrian Clearance .....		23	28	—	—	—	—	19	—	—	—	—	—	—	—	—	

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Extended Pedestrian Clear .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Act Rest In Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

Pedestrian Control Entry : "1" = Yes & "0" = No

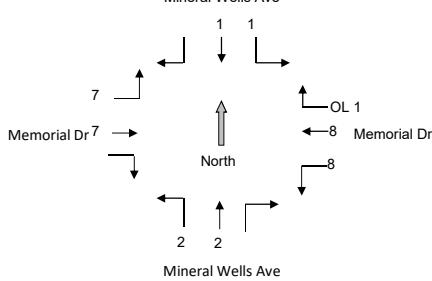
### PHASE DATA VEHICLE CONTROL

<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....		1	1	—	—	—	—	1	1	—	—	—	—	—	—	—	
Dual Entry .....		0	0	—	—	—	—	0	0	—	—	—	—	—	—	—	
Last Car Passage .....		0	0	—	—	—	—	0	0	—	—	—	—	—	—	—	
Conditional Service .....		0	0	—	—	—	—	0	0	—	—	—	—	—	—	—	
No Simultaneous Gap .....		1	1	—	—	—	—	1	1	—	—	—	—	—	—	—	

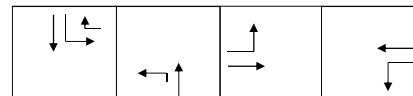
Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC

Mineral Wells Ave



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 17

**Mineral Wells Ave**

AT

**Memorial Dr**

### COORD DATA MODE

<u>Control</u>		Codes:	0	1	2	3	4	5
Operation	..... : <u>1</u>		FRE	AUT	MAN	-	-	-
Mode	..... : <u>0</u>		PRM	YLD	PYL	POM	SOM	FAC
Maximum	..... : <u>0</u>		INH	MX1	MX2	-	-	-
Correction	..... : <u>2</u>		DW	MDW	SWY	SW+	-	-
Offset (?? Of Green)	..... : <u>1</u>	BEGIN	END OF GREEN					
Force	..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time	..... : <u>0</u>		Time in Seconds					
Yield Period	..... : <u>0</u>		Time in Seconds					
Manual Pattern (Dial/Split/Offset)	<u>1 / 1 / 1</u>							

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
	..... :								
<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
	..... :								

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
		4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase

Pattern Mode ..... : 0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** Mineral Wells Ave AT Memorial Dr

## TIME BASE DATA MESCCELLANEOUS

DST: BEGIN	MONTH	<u>3</u>	WEEK	<u>2</u>	DST: Daylight Savings Time
DST: END	MONTH	<u>11</u>	WEEK	<u>1</u>	Month = 01 to 12 (Begin < End)
					Week = 1 to 5 (5= Last Week)
COORD CYCLE ZERO		<u>24</u> : <u>00</u>	AM	CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync	
					00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)

CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

## TIME BASED DATA TRAFFIC EVENTS

**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
**PATTERN :** (D/S/O)  
    Flash - 5 / 5 / 0  
    Free - 0 / 0 / 4  
**MAX 2 & OMITS:** Call Free, Set  
    Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Approved By:	TT	Intersection ID:	18	Neel-Schaffer, Inc	Date:	9/16/2019
						Memorial Dr	Date:	
						AT	Volunteer Dr	

#### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

#### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	<u>Phase</u>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....		4	10	7	7			10									
Passage Time .....		2.0	3.0	2.0	2.0			3.0									
Maximum No 1 .....		15	75	25	15			75									
Maximum No 2 .....		20	85	35	30			105									
Yellow Change .....		3.5	4.5	4.5	3.5			4.5									
Red Clearance .....		2.0	1.5	1.5	2.0			1.5									
<u>Density Times</u>	<u>Phase</u>																
Seconds/Actuation .....																	
Maximum Initial .....																	
Time B4 Reduction .....																	
Cars B4 Reduction .....																	
Time To Reduce .....																	
Minimum Gap .....																	

#### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	<u>Phase</u>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....		7	7	7													
Pedestrian Clearance .....		15	17	17													
<u>Pedestrian Control</u>	<u>Phase</u>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk.....																	
Extended Pedestrian Clear .....																	
Act Rest In Walk .....																	

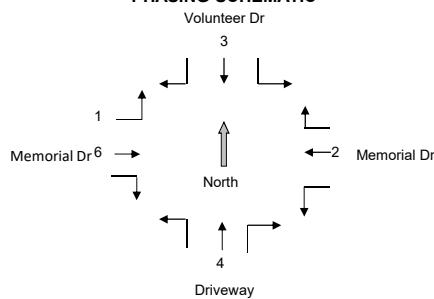
Pedestrian Control Entry : "1" = Yes & "0" = No

#### PHASE DATA VEHICLE CONTROL

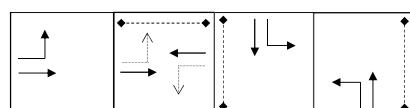
<u>Veh Control</u>	<u>Phase</u>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....		1	1	1	1			1									
Dual Entry .....		0	1	0	0			1									
Last Car Passage .....		0	0	0	0			0									
Conditional Service .....		0	0	0	0			0									
No Simultaneous Gap .....		1	0	1	1			0									

Vehicle Control Entry : "1" = Yes & "0" = No

#### PHASING SCHEMATIC



#### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 18

Memorial Dr

AT

Volunteer Dr

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC	
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN					
Force ..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time ..... : <u>0</u>	Time in Seconds						
Yield Period ..... : <u>0</u>	Time in Seconds						
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>							

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
..... :									
<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
..... :									

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
		4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase

Pattern Mode ..... : 0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:**      Memorial Dr      AT      Volunteer Dr

### TIME BASE DATA MESCELLANEOUS

DST: BEGIN      MONTH      3  
DST: END      MONTH      11

WEEK      2  
WEEK      1

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)

COORD CYCLE ZERO      24 : 00      AM

CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

<u>2</u>	=	<u>3</u>	<u>4</u>	<u>5</u>	-----	-----
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DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

### TIME BASE DATA TRAFFIC EVENTS

PDAY	DAY	PATTERN
1	00 : 00	0 / 0 / 4
1	11 : 00	0 / 0 / 0
1	17 : 00	0 / 0 / 4
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#### TRAFFIC EVENT FUNCTIONS

##### MAX II PHASE(S)

Free  
MAX 2  
Free

##### OMIT PHASE(S)

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2	00 : 00	0 / 0 / 4
2	07 : 00	0 / 0 / 0
2	09 : 30	0 / 0 / 4
2	11 : 00	0 / 0 / 0
2	13 : 30	0 / 0 / 4
2	15 : 00	0 / 0 / 0
2	18 : 30	0 0 4
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Free  
MAX 2  
Free  
MAX 2  
Free  
MAX 2  
Free

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6	00 : 00	0 / 0 / 4
6	07 : 00	0 / 0 / 0
6	09 : 30	0 / 0 / 4
6	11 : 00	0 / 0 / 0
6	13 : 30	0 / 0 / 4
6	15 : 00	0 / 0 / 0
6	18 : 30	0 0 4
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Free  
MAX 2  
Free  
MAX 2  
Free  
MAX 2  
Free

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7	00 : 00	0 / 0 / 4
7	10 : 00	0 / 0 / 0
7	18 : 00	0 / 0 / 4
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Free  
MAX 2  
Free

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#### REFERENCE DATA:

PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
PATTERN : (D/S/O)  
Flash - 5 / 5 / 0  
Free - 0 / 0 / 4  
MAX 2 & OMITS: Call Free, Set Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	19	Memorial Dr	AT	HWY 641 South

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	4	10	—	7	—	—	—	—	—	—	—	—	—	—	—	
Passage Time .....	:	2.0	3.0	—	3.0	—	—	—	—	—	—	—	—	—	—	—	
Maximum No 1 .....	:	20	45	—	25	—	—	—	—	—	—	—	—	—	—	—	
Maximum No 2 .....	:	25	50	—	35	—	—	—	—	—	—	—	—	—	—	—	
Yellow Change .....	:	3.5	4.0	—	3.5	—	—	—	—	—	—	—	—	—	—	—	
Red Clearance .....	:	2.5	2.5	—	2.5	—	—	—	—	—	—	—	—	—	—	—	

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum Initial .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cars B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time To Reduce .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum Gap .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pedestrian Clearance .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Extended Pedestrian Clear .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Act Rest In Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

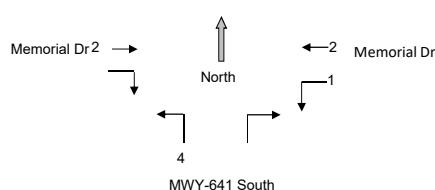
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

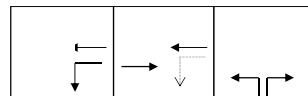
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—	
Dual Entry .....	:	0	0	—	0	—	—	—	—	—	—	—	—	—	—	—	
Last Car Passage .....	:	0	0	—	0	—	—	—	—	—	—	—	—	—	—	—	
Conditional Service .....	:	0	0	—	0	—	—	—	—	—	—	—	—	—	—	—	
No Simultaneous Gap .....	:	1	1	—	1	—	—	—	—	—	—	—	—	—	—	—	

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 19

Memorial Dr

AT

HWY 641 South

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5					
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-					
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC						
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-					
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-					
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN										
Force ..... : <u>1</u>	PLAN	CYCLE TIME										
Max Dwell Time ..... : <u>0</u>	Time in Seconds											
Yield Period ..... : <u>0</u>	Time in Seconds											
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>												

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
..... :	—	—	—	—	—	—	—	—	—
<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
..... :	—	—	—	—	—	—	—	—	—

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... :	4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase
Pattern Mode	..... :	0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac			

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:**      Memorial Dr      AT      HWY 641 South

## TIME BASE DATA MESCCELLANEOUS

DST: BEGIN	MONTH	<u>3</u>	WEEK	<u>2</u>	DST: Daylight Savings Time
DST: END	MONTH	<u>11</u>	WEEK	<u>1</u>	Month = 01 to 12 (Begin < End)
					Week = 1 to 5 (5= Last Week)
COORD CYCLE ZERO		<u>24</u> : <u>00</u>	AM	CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync	
					00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)  
CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

## TIME BASED DATA TRAFFIC EVENTS

**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
**PATTERN :** (D/S/O)  
    Flash - 5 / 5 / 0  
    Free - 0 / 0 / 4  
**MAX 2 & OMITS:** Call Free, Set  
    Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	20	Volunteer Dr	AT	Patriot Ave

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....		4	7	4	10	4	7	4	10	—	—	—	—	—	—	—	
Passage Time .....		2.0	2.0	2.0	3.0	3.0	2.0	2.0	3.0	—	—	—	—	—	—	—	
Maximum No 1 .....		20	30	15	50	20	30	15	50	—	—	—	—	—	—	—	
Maximum No 2 .....		25	35	15	60	25	35	15	60	—	—	—	—	—	—	—	
Yellow Change .....		3.5	4.0	3.5	4.0	3.5	4.0	3.5	4.0	—	—	—	—	—	—	—	
Red Clearance .....		2.0	2.0	2.5	2.5	2.0	2.0	2.5	2.5	—	—	—	—	—	—	—	

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum Initial .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time B4 Reduction .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cars B4 Reduction .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time To Reduce .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum Gap .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....		—	7	—	7	—	7	—	7	—	—	—	—	—	—	—	
Pedestrian Clearance .....		—	9	—	13	—	8	—	16	—	—	—	—	—	—	—	

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Extended Pedestrian Clear .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Act Rest In Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

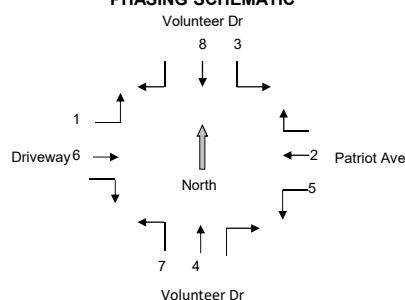
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

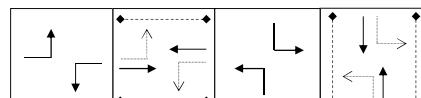
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....		1	1	1	0	1	1	1	0	—	—	—	—	—	—	—	
Dual Entry .....		0	1	0	1	0	1	0	1	—	—	—	—	—	—	—	
Last Car Passage .....		0	0	0	0	0	0	0	0	—	—	—	—	—	—	—	
Conditional Service .....		0	0	0	0	0	0	0	0	—	—	—	—	—	—	—	
No Simultaneous Gap .....		1	1	1	0	1	1	1	0	—	—	—	—	—	—	—	

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 20

Volunteer Dr

AT

Patriot Ave

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC	
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN					
Force ..... : <u>1</u>	PLAN	CYCLE TIME					
Max Dwell Time ..... : <u>0</u>		Time in Seconds					
Yield Period ..... : <u>0</u>		Time in Seconds					
Manual Pattern (Dial/Split/Offset)	<u>1 / 1 / 1</u>						

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
	..... :								
<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
	..... :					—	—	—	—

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
		4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase

Pattern Mode ..... : 0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:**      Volunteer Dr      AT      Patriot Ave

### TIME BASE DATA MESCELLANEOUS

DST: BEGIN      MONTH      3  
DST: END      MONTH      11

WEEK      2  
WEEK      1

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)

COORD CYCLE ZERO      24 : 00      AM

CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

<u>2</u>	=	<u>3</u>	<u>4</u>	<u>5</u>	-----	-----
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DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

### TIME BASE DATA TRAFFIC EVENTS

PDAY	DAY	PATTERN
1	00 : 00	0 / 0 / 4
1	11 : 00	0 / 0 / 0
1	17 : 00	0 / 0 / 4
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#### TRAFFIC EVENT FUNCTIONS

##### MAX II PHASE(S)

Free  
MAX 2  
Free

##### OMIT PHASE(S)

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##### REFERENCE DATA:

PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
PATTERN : (D/S/O)  
Flash - 5 / 5 / 0  
Free - 0 / 0 / 4  
MAX 2 & OMITS: Call Free, Set Pattern To 0 / 0 / 0

2	00 : 00	0 / 0 / 4
2	07 : 00	0 / 0 / 0
2	08 : 15	0 / 0 / 4
2	14 : 30	0 / 0 / 0
2	18 : 00	0 / 0 / 4
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Free  
MAX 2  
Free  
MAX 2  
Free

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6	00 : 00	0 / 0 / 4
6	07 : 00	0 / 0 / 0
6	08 : 15	0 / 0 / 4
6	14 : 30	0 / 0 / 0
6	18 : 00	0 / 0 / 4
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Free  
MAX 2  
Free  
MAX 2  
Free

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7	00 : 00	0 / 0 / 4
7	10 : 00	0 / 0 / 0
7	18 : 00	0 / 0 / 4
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Free  
MAX 2  
Free

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## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	21	Volunteer Dr	AT	Jim Adams Dr

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....		4	10	7	7			10									
Passage Time .....		2.0	2.0	3.0	3.0			2.0									
Maximum No 1 .....		15	40	35	10			40									
Maximum No 2 .....		15	55	35	25			70									
Yellow Change .....		3.5	4.0	3.5	4.0			4.0									
Red Clearance .....		2.5	2.0	2.5	2.0			2.0									

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....																	
Maximum Initial .....																	
Time B4 Reduction .....																	
Cars B4 Reduction .....																	
Time To Reduce .....																	
Minimum Gap .....																	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....			7	7	7			7									
Pedestrian Clearance .....			12	10	9			15									

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....																	
Extended Pedestrian Clear .....																	
Act Rest In Walk .....																	

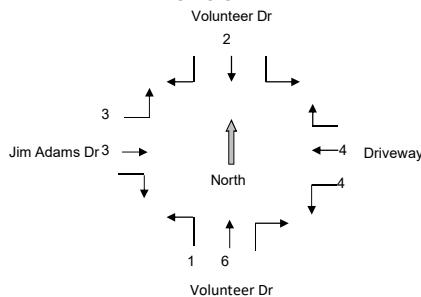
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

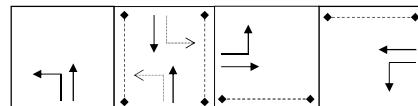
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....		1	1	1	1			1									
Dual Entry .....		0	1	0	0			1									
Last Car Passage .....		0	0	0	0			0									
Conditional Service .....		0	0	0	0			0									
No Simultaneous Gap .....		1	0	1	1			0									

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 21

Volunteer Dr

AT

Jim Adams Dr

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5					
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-					
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC						
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-					
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-					
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN										
Force ..... : <u>1</u>	PLAN	CYCLE TIME										
Max Dwell Time ..... : <u>0</u>	Time in Seconds											
Yield Period ..... : <u>0</u>	Time in Seconds											
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>												

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
..... :	—	—	—	—	—	—	—	—	—
<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
..... :	—	—	—	—	—	—	—	—	—

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
		4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase

Pattern Mode ..... : 0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:**      Volunteer Dr      AT      Jim Adams Dr

## TIME BASE DATA MESCCELLANEOUS

DST: BEGIN	MONTH	<u>3</u>	WEEK	<u>2</u>	DST: Daylight Savings Time
DST: END	MONTH	<u>11</u>	WEEK	<u>1</u>	Month = 01 to 12 (Begin < End)
					Week = 1 to 5 (5= Last Week)
COORD CYCLE ZERO		<u>24</u> : <u>00</u>	AM	CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync	
					00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)  
CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

## TIME BASED DATA TRAFFIC EVENTS

**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
**PATTERN :** (D/S/O)  
    Flash - 5 / 5 / 0  
    Free - 0 / 0 / 4  
**MAX 2 & OMITS:** Call Free, Set  
    Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	22	Tyson Ave	AT	Joy St

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....		4	10	—	7	4	10	—	7	—	—	—	—	—	—	—	
Passage Time .....		2.0	3.0	—	2.0	2.0	3.0	—	2.0	—	—	—	—	—	—	—	
Maximum No 1 .....		20	45	—	30	20	45	—	30	—	—	—	—	—	—	—	
Maximum No 2 .....		25	50	—	45	25	50	—	45	—	—	—	—	—	—	—	
Yellow Change .....		3.5	5.0	—	4.0	3.5	5.0	—	4.0	—	—	—	—	—	—	—	
Red Clearance .....		2.0	1.5	—	1.5	2.0	1.5	—	1.5	—	—	—	—	—	—	—	

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum Initial .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time B4 Reduction .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cars B4 Reduction .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time To Reduce .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum Gap .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....		—	7	—	—	—	8	—	8	—	—	—	—	—	—	—	
Pedestrian Clearance .....		—	20	—	—	—	13	—	22	—	—	—	—	—	—	—	

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Extended Pedestrian Clear .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Act Rest In Walk .....		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

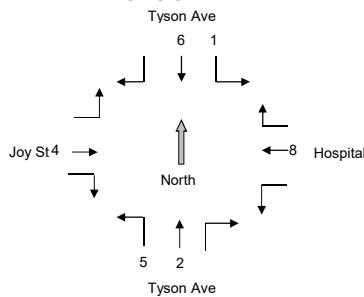
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

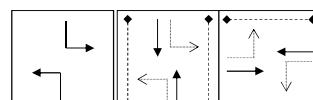
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....		1	1	—	1	1	1	1	1	—	—	—	—	—	—	—	
Dual Entry .....		0	1	—	1	0	1	—	1	—	—	—	—	—	—	—	
Last Car Passage .....		0	0	—	0	0	0	—	0	—	—	—	—	—	—	—	
Conditional Service .....		0	0	—	0	0	0	—	0	—	—	—	—	—	—	—	
No Simultaneous Gap .....		1	0	—	1	1	0	—	1	—	—	—	—	—	—	—	

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



**TSM&O**  
PARIS, TENNESSEE

## COORDINATION AND OPERATION

Intersection ID: 22

Tyson Ave

AT

Joy St

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5					
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-					
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC						
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-					
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-					
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN										
Force ..... : <u>1</u>	PLAN	CYCLE TIME										
Max Dwell Time ..... : <u>0</u>	Time in Seconds											
Yield Period ..... : <u>0</u>	Time in Seconds											
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>												

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
..... :	—	—	—	—	—	—	—	—	—
<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
..... :	—	—	—	—	—	—	—	—	—

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... :	4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase
Pattern Mode	..... :	0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac			

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** Tyson Ave      **AT**      Joy St

### TIME BASE DATA MESCELLANEOUS

DST: BEGIN      MONTH      3  
DST: END      MONTH      11

WEEK      2  
WEEK      1

DST: Daylight Savings Timg  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)

COORD CYCLE ZERO      24 : 00      AM

CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

#### EQUATED DAY: (DEFINE DAY = DAY)

2	=	3	4	5	-----	-----
-----	=	-----	-----	-----	-----	-----
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DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

### TIME BASE DATA TRAFFIC EVENTS

PDAY	DAY	PATTERN
1	00 : 00	0 / 0 / 4
1	11 : 00	0 / 0 / 0
1	17 : 00	0 / 0 / 4
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#### TRAFFIC EVENT FUNCTIONS

**MAX II PHASE(S)**  
Free  
MD-1 peak - 100 Sec  
Free

#### OMIT PHASE(S)

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2	00 : 00	0 / 0 / 4
2	07 : 00	0 / 0 / 0
2	09 : 30	0 / 0 / 4
2	11 : 00	0 / 0 / 0
2	13 : 30	0 / 0 / 4
2	15 : 00	0 / 0 / 0
2	18 : 30	0 0 4
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Free  
MAX 2  
Free  
MAX 2  
Free  
MAX 2  
Free

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6	00 : 00	0 / 0 / 4
6	07 : 00	0 / 0 / 0
6	09 : 30	0 / 0 / 4
6	11 : 00	0 / 0 / 0
6	13 : 30	0 / 0 / 4
6	15 : 00	0 / 0 / 0
6	18 : 30	0 0 4
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Free  
MAX 2  
Free  
MAX 2  
Free  
MAX 2  
Free

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7	00 : 00	0 / 0 / 4
7	10 : 00	0 / 0 / 0
7	18 : 00	0 / 0 / 4
-----	-----	-----
-----	-----	-----
-----	-----	-----
-----	-----	-----

Free  
MAX 2  
Free

**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
PATTERN : (D/S/O)  
Flash - 5 / 5 / 0  
Free - 0 / 0 / 4  
MAX 2 & OMITS: Call Free, Set Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	23	US-76	AT	SR-218

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	—	10	—	7	—	10	—	7	—	—	—	—	—	—	—	
Passage Time .....	:	—	5.0	—	3.0	—	5.0	—	3.0	—	—	—	—	—	—	—	
Maximum No 1 .....	:	—	25	—	25	—	25	—	25	—	—	—	—	—	—	—	
Maximum No 2 .....	:	—	40	—	30	—	40	—	30	—	—	—	—	—	—	—	
Yellow Change .....	:	—	5.0	—	4.5	—	5.0	—	4.5	—	—	—	—	—	—	—	
Red Clearance .....	:	—	1.5	—	1.5	—	1.5	—	1.5	—	—	—	—	—	—	—	

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Maximum Initial .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cars B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Time To Reduce .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Minimum Gap .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Pedestrian Clearance .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Extended Pedestrian Clear .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Act Rest In Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

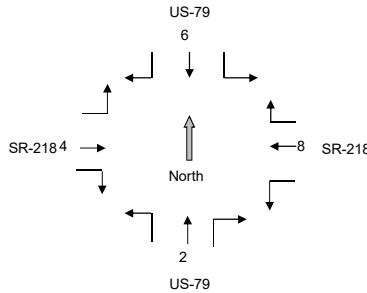
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

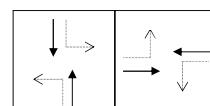
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	—	1	—	1	—	1	—	1	—	—	—	—	—	—	—	
Dual Entry .....	:	—	1	—	1	—	1	—	1	—	—	—	—	—	—	—	
Last Car Passage .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
Conditional Service .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	
No Simultaneous Gap .....	:	—	0	—	1	—	0	—	1	—	—	—	—	—	—	—	

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 23US-76

AT

SR-218

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5					
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-					
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC						
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-					
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-					
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN										
Force ..... : <u>1</u>	PLAN	CYCLE TIME										
Max Dwell Time ..... : <u>0</u>	Time in Seconds											
Yield Period ..... : <u>0</u>	Time in Seconds											
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>												

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
..... :									
<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Phase 02 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Phase 03 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Phase 04 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Phase 05 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Phase 06 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Phase 07 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Phase 08 Time/Mode	..... :	—	—	—	—	—	—	—	/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
..... :									

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
		4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase

Pattern Mode ..... : 0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac

**Note: Dial, Split, and Offset are all shown in seconds****Offsets are referenced from the end of the coordinated phase green**

## TIME OF DAY PROGRAMMING

**Intersection:** US-76 AT SR-218

## TIME BASE DATA MESCCELLANEOUS

DST: BEGIN	MONTH	<u>3</u>	WEEK	<u>2</u>	DST: Daylight Savings Time
DST: END	MONTH	<u>11</u>	WEEK	<u>1</u>	Month = 01 to 12 (Begin < End)
					Week = 1 to 5 (5= Last Week)
COORD CYCLE ZERO		<u>24</u> : <u>00</u>	AM		CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync 00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (= Last Week)  
CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

**DAY EQUATES:** Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

## TIME BASED DATA TRAFFIC EVENTS

**REFERENCE DATA:**  
PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
**PATTERN :** (D/S/O)  
    Flash - 5 / 5 / 0  
    Free - 0 / 0 / 4  
**MAX 2 & OMITS:** Call Free, Set  
    Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	24	Lone Oak Rd	AT	Wilson St

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	—	7	—	10	—	7	—	10	—	—	—	—	—	—	—	—
Passage Time .....	:	—	2.0	—	3.0	—	2.0	—	3.0	—	—	—	—	—	—	—	—
Maximum No 1 .....	:	—	15	—	20	—	15	—	20	—	—	—	—	—	—	—	—
Maximum No 2 .....	:	—	20	—	40	—	20	—	40	—	—	—	—	—	—	—	—
Yellow Change .....	:	—	4.0	—	4.0	—	4.0	—	4.0	—	—	—	—	—	—	—	—
Red Clearance .....	:	—	1.5	—	1.5	—	1.5	—	1.5	—	—	—	—	—	—	—	—

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Maximum Initial .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cars B4 Reduction .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Time To Reduce .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Minimum Gap .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Pedestrian Clearance .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Extended Pedestrian Clear .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Act Rest In Walk .....	:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

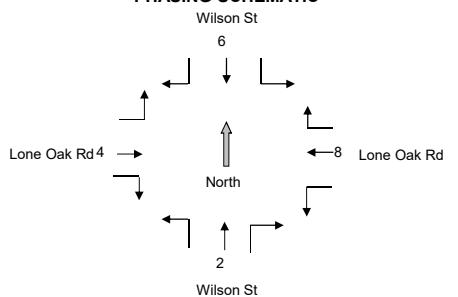
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

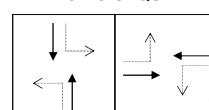
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	—	1	—	1	—	1	—	1	—	—	—	—	—	—	—	—
Dual Entry .....	:	—	1	—	1	—	1	—	1	—	—	—	—	—	—	—	—
Last Car Passage .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	—
Conditional Service .....	:	—	0	—	0	—	0	—	0	—	—	—	—	—	—	—	—
No Simultaneous Gap .....	:	—	1	—	0	—	1	—	0	—	—	—	—	—	—	—	—

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 24

Lone Oak Rd

AT

Wilson St

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5					
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-					
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC						
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-					
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-					
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN										
Force ..... : <u>1</u>	PLAN	CYCLE TIME										
Max Dwell Time ..... : <u>0</u>	Time in Seconds											
Yield Period ..... : <u>0</u>	Time in Seconds											
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>												

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
..... :	—	—	—	—	—	—	—	—	—
<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length	..... :	—	—	—	—	—	—	—	—
Phase 01 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 02 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 03 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 04 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 05 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 06 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 07 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Phase 08 Time/Mode	..... :	—/—	—/—	—/—	—/—	—/—	—/—	—/—	—/—
Offset 1	..... :	—	—	—	—	—	—	—	—
Offset 2	..... :	—	—	—	—	—	—	—	—
Offset 3	..... :	—	—	—	—	—	—	—	—
Offset Pattern Mode	..... :	—	—	—	—	—	—	—	—
..... :	—	—	—	—	—	—	—	—	—

<u>Codes</u>	..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Phase Mode	..... :	4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase
Pattern Mode	..... :	0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac			

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

**Intersection:** Lone Oak Rd      AT      Wilson St

### TIME BASE DATA MESCELLANEOUS

DST: BEGIN      MONTH      3  
DST: END      MONTH      11

WEEK      2  
WEEK      1

DST: Daylight Savings Timg  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)

COORD CYCLE ZERO      24 : 00      AM

CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

<u>2</u>	=	<u>3</u>	<u>4</u>	<u>5</u>	-----	-----
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DAY EQUATES: Care Must Be Used To Insure Days Are Not  
Equated To Undefined Days Or Days That Are Equated To  
Other Days. The Rest Will Be A Day Without Events To Run.

### TIME BASE DATA TRAFFIC EVENTS

PDAY	DAY	PATTERN
1	<u>00</u> : <u>00</u>	<u>0</u> / <u>0</u> / <u>4</u>
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#### TRAFFIC EVENT FUNCTIONS

##### MAX II PHASE(S)

Free

##### OMIT PHASE(S)

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2	<u>00</u> : <u>00</u>	<u>0</u> / <u>0</u> / <u>4</u>
2	<u>07</u> : <u>00</u>	<u>0</u> / <u>0</u> / <u>0</u>
2	<u>08</u> : <u>00</u>	<u>0</u> / <u>0</u> / <u>4</u>
2	<u>14</u> : <u>00</u>	<u>0</u> / <u>0</u> / <u>0</u>
2	<u>15</u> : <u>30</u>	<u>0</u> / <u>0</u> / <u>4</u>
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Free

MAX 2

Free

MAX 2

Free

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6	<u>00</u> : <u>00</u>	<u>0</u> / <u>0</u> / <u>4</u>
6	<u>07</u> : <u>00</u>	<u>0</u> / <u>0</u> / <u>0</u>
6	<u>08</u> : <u>00</u>	<u>0</u> / <u>0</u> / <u>4</u>
6	<u>14</u> : <u>00</u>	<u>0</u> / <u>0</u> / <u>0</u>
6	<u>15</u> : <u>30</u>	<u>0</u> / <u>0</u> / <u>4</u>
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Free

MAX 2

Free

MAX 2

Free

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7	<u>00</u> : <u>00</u>	<u>0</u> / <u>0</u> / <u>4</u>
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Free

#### REFERENCE DATA:

PDAY - 01-99 Program Day

HH:MM - 24 Hour Clock

PATTERN : (D/S/O)

Flash - 5 / 5 / 0

Free - 0 / 0 / 4

MAX 2 & OMITS: Call Free, Set  
Pattern To 0 / 0 / 0



## LOCAL CONTROLLER PROGRAMMING

### 14 EPAC300 PROGRAM LOG

Prepared By:	JC	Neel-Schaffer, Inc	Date:	9/16/2019
Approved By:	TT		Date:	
Intersection ID:	25	Mineral Wells Ave	AT	Jim Adams Dr

### UTILITIES ACCESS

Access Code..... : \_\_\_\_\_ Codes: Four Digits (0000-9999)

### PHASE DATA VEHICLE TIMINGS

<u>Basic Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Minimum Green .....	:	4	10	7	7			10									
Passage Time .....	:	2.0	3.0	2.0	2.0			3.0									
Maximum No 1 .....	:	15	40	15	25			40									
Maximum No 2 .....	:	15	50	15	30			50									
Yellow Change .....	:	3.5	4.5	4.5	4.0			4.5									
Red Clearance .....	:	2.5	1.5	1.5	1.5			1.5									

<u>Density Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seconds/Actuation .....	:																
Maximum Initial .....	:																
Time B4 Reduction .....	:																
Cars B4 Reduction .....	:																
Time To Reduce .....	:																
Minimum Gap .....	:																

### PHASE DATA PEDESTRIAN TIMINGS & CONTROL

<u>Pedestrian Times</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Walk .....	:		7	7													
Pedestrian Clearance .....	:		17	21													

<u>Pedestrian Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Flashing Walk .....	:																
Extended Pedestrian Clear .....	:																
Act Rest In Walk .....	:																

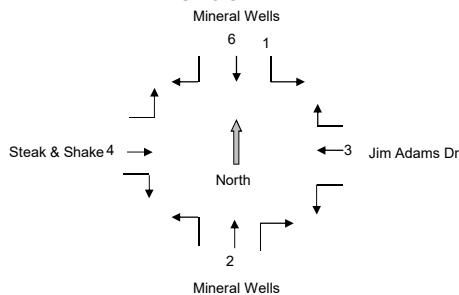
Pedestrian Control Entry : "1" = Yes & "0" = No

### PHASE DATA VEHICLE CONTROL

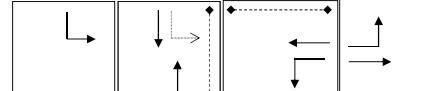
<u>Veh Control</u>	Phase :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Non-Lock Memory .....	:	1	0	1	1			0									
Dual Entry .....	:	0	1	0	0			1									
Last Car Passage .....	:	0	0	0	0			0									
Conditional Service .....	:	0	0	0	0			0									
No Simultaneous Gap .....	:	1	0	1	1			0									

Vehicle Control Entry : "1" = Yes & "0" = No

### PHASING SCHEMATIC



### PHASING SEQUENCE



## COORDINATION AND OPERATION

Intersection ID: 25

Mineral Wells Ave

AT

Jim Adams Dr

### COORD DATA MODE

<u>Control</u>	Codes:	0	1	2	3	4	5					
Operation ..... : <u>1</u>	FRE	AUT	MAN	-	-	-	-					
Mode ..... : <u>0</u>	PRM	YLD	PYL	POM	SOM	FAC						
Maximum ..... : <u>0</u>	INH	MX1	MX2	-	-	-	-					
Correction ..... : <u>2</u>	DW	MDW	SWY	SW+	-	-	-					
Offset (?? Of Green) ..... : <u>1</u>	BEGIN	END OF GREEN										
Force ..... : <u>1</u>	PLAN	CYCLE TIME										
Max Dwell Time ..... : <u>0</u>	Time in Seconds											
Yield Period ..... : <u>0</u>	Time in Seconds											
Manual Pattern (Dial/Split/Offset) ..... : <u>1 / 1 / 1</u>												

### COORD DATA TIMING PLANS

<u>Control</u>	Timing Plan :	D1/S1	D1/S2	D1/S3	D1/S4	D2/S1	D2/S2	D2/S3	D2/S4
Cycle Length ..... :	<u>115</u>						<u>105</u>		
Phase 01 Time/Mode ..... :	<u>18 / 0</u>	—	—	—	—	—	<u>15 / 0</u>	—	—
Phase 02 Time/Mode ..... :	<u>52 / 1</u>	—	—	—	—	—	<u>45 / 1</u>	—	—
Phase 03 Time/Mode ..... :	<u>30 / 0</u>	—	—	—	—	—	<u>30 / 0</u>	—	—
Phase 04 Time/Mode ..... :	<u>15 / 0</u>	—	—	—	—	—	<u>15 / 0</u>	—	—
Phase 05 Time/Mode ..... :	<u>— / —</u>	—	—	—	—	—	<u>— / —</u>	—	—
Phase 06 Time/Mode ..... :	<u>70 / 1</u>	—	—	—	—	—	<u>60 / 1</u>	—	—
Phase 07 Time/Mode ..... :	<u>— / —</u>	—	—	—	—	—	<u>— / —</u>	—	—
Phase 08 Time/Mode ..... :	<u>— / —</u>	—	—	—	—	—	<u>— / —</u>	—	—
Offset 1 ..... :	<u>0</u>	—	—	—	—	—	<u>—</u>	—	—
Offset 2 ..... :	<u>—</u>	—	—	—	—	—	<u>65</u>	—	—
Offset 3 ..... :	<u>—</u>	—	—	—	—	—	<u>—</u>	—	—
Offset Pattern Mode ..... :	<u>0</u>	—	—	—	—	—	<u>0</u>	—	—
..... :	<u>—</u>	—	—	—	—	—	<u>—</u>	—	—

<u>Control</u>	Timing Plan :	D3/S1	D3/S2	D3/S3	D3/S4	D4/S1	D4/S2	D4/S3	D4/S4
Cycle Length ..... :	<u>—</u>	—	<u>135</u>	—	—	—	—	—	—
Phase 01 Time/Mode ..... :	<u>—</u>	—	<u>15 / 0</u>	—	—	—	—	—	<u>— / —</u>
Phase 02 Time/Mode ..... :	<u>—</u>	—	<u>80 / 1</u>	—	—	—	—	—	<u>— / —</u>
Phase 03 Time/Mode ..... :	<u>—</u>	—	<u>25 / 0</u>	—	—	—	—	—	<u>— / —</u>
Phase 04 Time/Mode ..... :	<u>—</u>	—	<u>15 / 0</u>	—	—	—	—	—	<u>— / —</u>
Phase 05 Time/Mode ..... :	<u>—</u>	—	<u>— / —</u>	—	—	—	—	—	<u>— / —</u>
Phase 06 Time/Mode ..... :	<u>—</u>	—	<u>95 / 1</u>	—	—	—	—	—	<u>— / —</u>
Phase 07 Time/Mode ..... :	<u>—</u>	—	<u>— / —</u>	—	—	—	—	—	<u>— / —</u>
Phase 08 Time/Mode ..... :	<u>—</u>	—	<u>— / —</u>	—	—	—	—	—	<u>— / —</u>
Offset 1 ..... :	<u>—</u>	—	—	—	—	—	—	—	—
Offset 2 ..... :	<u>—</u>	—	—	—	—	—	—	—	—
Offset 3 ..... :	<u>—</u>	—	<u>96</u>	—	—	—	—	—	—
Offset Pattern Mode ..... :	<u>—</u>	—	<u>0</u>	—	—	—	—	—	—
..... :	<u>—</u>	—	<u>—</u>	—	—	—	—	—	—

<u>Codes</u>	..... :	Phase Mode ..... :	0 - Actuated	1 - Coord Phase	2 - Min Rec	3 - Max Rec
Pattern Mode ..... :	..... :	4 - Ped Rec	5 - Max+Ped Recall	6 - Phase Omitted	7 - Dual Coord Phase	
..... :	..... :	0-Normal / 1-Perm / 2-Yield / 3-Perm Yield / 4-Perm Omit / 5-Seq Omit / 6-Full Ac				

**Note: Dial, Split, and Offset are all shown in seconds**

Offsets are referenced from the end of the coordinated phase green



## TIME OF DAY PROGRAMMING

Intersection: Mineral Wells Ave AT Jim Adams Dr

### TIME BASE DATA MESCELLANEOUS

DST: BEGIN MONTH 3  
DST: END MONTH 11

WEEK 2  
WEEK 1

DST: Daylight Savings Time  
Month = 01 to 12 (Begin < End)  
Week = 1 to 5 (5= Last Week)

COORD CYCLE ZERO 24 : 00 AM

CYCLE ZERO: Time (HH:MM) Set Reference For Coord Sync  
00:00 = Event Time / Other = That HH:MM

EQUATED DAY: (DEFINE DAY = DAY)

<u>2</u>	=	<u>3</u>	<u>4</u>	<u>5</u>	-----	-----
-----	=	-----	-----	-----	-----	-----
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DAY EQUATES: Care Must Be Used To Insure Days Are Not Equated To Undefined Days Or Days That Are Equated To Other Days. The Rest Will Be A Day Without Events To Run.

### TIME BASE DATA TRAFFIC EVENTS

PDAY	DAY	HH : MM	PATTERN
1	00 : 00	0 / 0 / 4	
1	11 : 00	0 / 0 / 0	
1	17 : 00	0 / 0 / 4	
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#### TRAFFIC EVENT FUNCTIONS

##### MAX II PHASE(S)

Free  
MAX 2  
Free

##### OMIT PHASE(S)

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2	00 : 00	0 / 0 / 4
2	07 : 00	1 / 1 / 1
2	09 : 30	2 / 2 / 2
2	15 : 00	3 / 3 / 3
2	18 : 30	0 / 0 / 0
2	21 : 00	0 / 0 / 4
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Free  
AM peak  
MD peak  
PM peak  
MAX 2  
Free

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6	00 : 00	0 / 0 / 4
6	07 : 00	1 / 1 / 1
6	09 : 30	2 / 2 / 2
6	15 : 00	3 / 3 / 3
6	18 : 30	0 / 0 / 0
6	21 : 00	0 / 0 / 4
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Free  
AM peak  
MD peak  
PM peak  
MAX 2  
Free

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7	00 : 00	0 / 0 / 4
7	10 : 00	0 / 0 / 0
7	18 : 00	0 / 0 / 4
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Free  
MAX 2  
Free

#### REFERENCE DATA:

PDAY - 01-99 Program Day  
HH:MM - 24 Hour Clock  
PATTERN : (D/S/O)  
Flash - 5 / 5 / 0  
Free - 0 / 0 / 4  
MAX 2 & OMITS: Call Free, Set Pattern To 0 / 0 / 0





# Appendix I: FUNCTIONAL LAYOUTS & COST ESTIMATES

Prepared on behalf of the  
City of Paris, TN by:

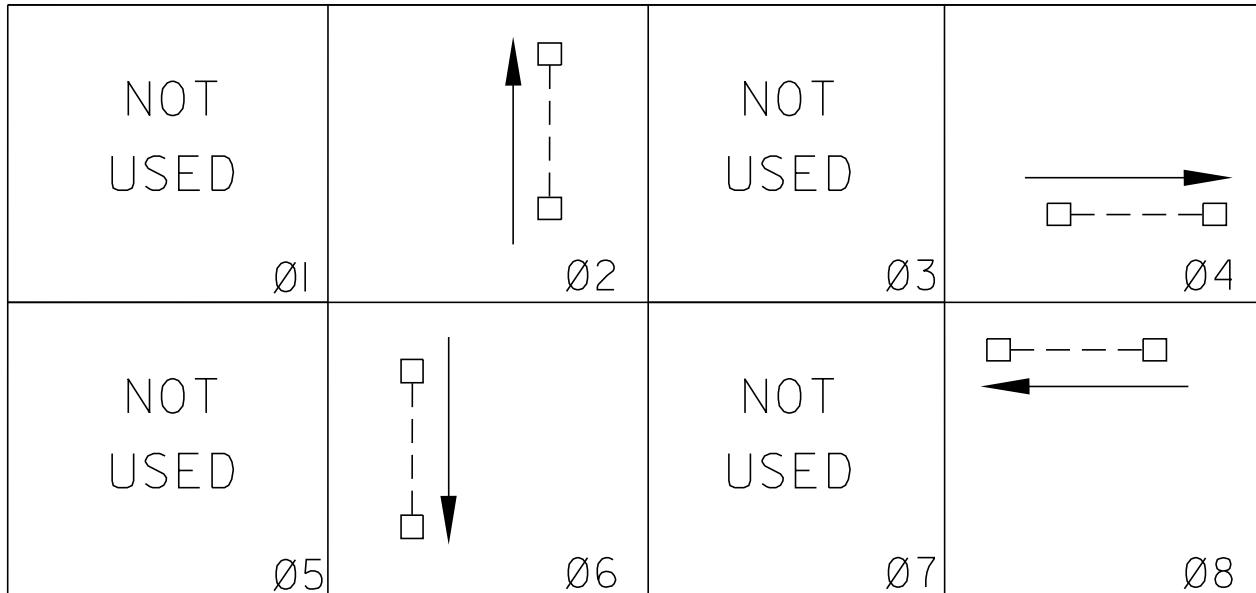


in cooperation with



TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT	2019	13176.006	1

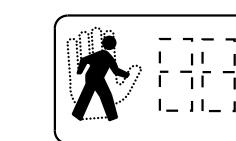
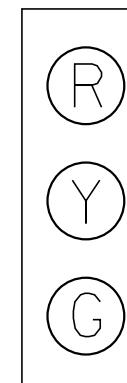
## SIGNAL PHASING DIAGRAM



-MAX RECALL: ALL PHASES (FIXED TIME)

-FLASHING OPERATION: YELLOW - 02, 06; RED - 04, 08

## SIGNAL HEADS

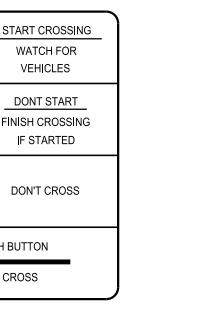


COUNTDOWN PEDESTRIAN SIGNAL HEAD

TYPE 130  
W/ BACKPLATE  
12" L.E.D.  
2, 4, 6, 8

P2, P4, P6, P8

## SIGNS



R10-3  
9"X12"  
A

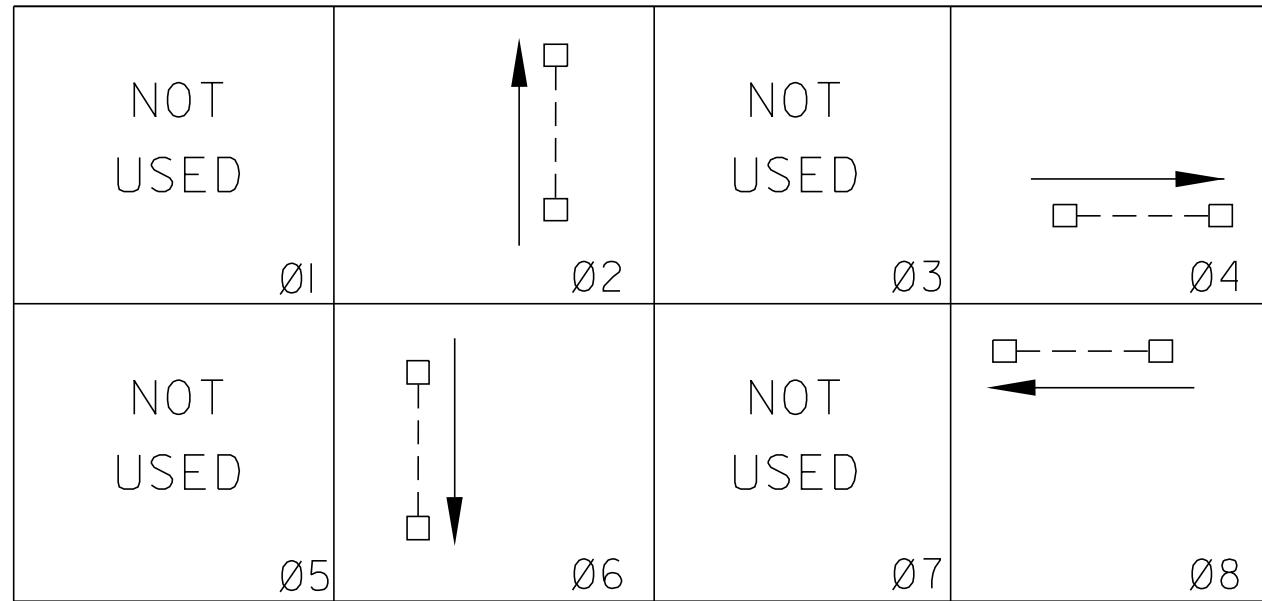


# Market St. & Ruff St. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST TOTAL
202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	85	\$ 20.00	\$ 1,700.00
701-01.01	CONCRETE SIDEWALK (4")	S.F.	220	\$ 12.00	\$ 2,640.00
701-02.01	CONCRETE CURB RAMP (RETROFIT)	S.F.	205	\$ 31.00	\$ 6,355.00
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	2	\$ 390.00	\$ 780.00
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
712-06	SIGNS (CONSTRUCTION)	S.F.	114	\$ 9.00	\$ 1,026.00
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	95	\$ 15.00	\$ 1,425.00
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	205	\$ 30.00	\$ 6,150.00
716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	L.F.	20	\$ 1.00	\$ 20.00
716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	260	\$ 1.50	\$ 390.00
716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	55	\$ 6.00	\$ 330.00
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	LS	1	\$ 6,500.00	\$ 6,500.00
730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	8	\$ 1,200.00	\$ 9,600.00
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	4	\$ 450.00	\$ 1,800.00
730-05.04	MODIFY EXISTING ELECTRICAL SERVICE CONNECTION	EACH	1	\$ 1,750.00	\$ 1,750.00
730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	370	\$ 1.75	\$ 647.50
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	1030	\$ 2.00	\$ 2,060.00
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	70	\$ 10.00	\$ 700.00
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	220	\$ 24.00	\$ 5,280.00
730-12.30	TRENCHING	L.F.	30	\$ 15.00	\$ 450.00
730-15.07	CABINET (EIGHT PHASE POLE MOUNTED)	EACH	1	\$ 12,600.00	\$ 12,600.00
730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	1	\$ 5,000.00	\$ 5,000.00
730-19.01	TIME BASE COORDINATION UNIT	EACH	1	\$ 3,000.00	\$ 3,000.00
730-23.30	PEDESTAL POLE (8' POLE)	EACH	2	\$ 2,500.00	\$ 5,000.00
730-26.11	COUNTDOWN PED SGNL HEAD W/AUDIBLE PUSHBUTTON & 15IN SIGN	EACH	8	\$ 2,500.00	\$ 20,000.00
				SUBTOTAL	\$ 101,303.50
				CONTINGENCY (15%)	\$ 15,195.53
				TOTAL	\$ 116,499.03

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT	2019	13176.006	2

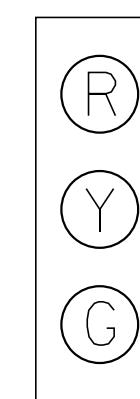
## SIGNAL PHASING DIAGRAM



-MAX RECALL: ALL PHASES (FIXED TIME)

-FLASHING OPERATION: YELLOW - Ø2, Ø6; RED - Ø4, Ø8

## SIGNAL HEADS



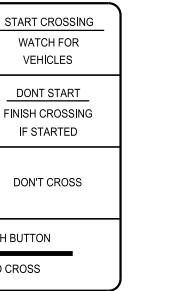
COUNTDOWN PEDESTRIAN SIGNAL HEAD

TYPE 130  
W/ BACKPLATE  
12" L.E.D.  
2, 4, 6, 8



P2, P4, P6, P8

## SIGNS



R10-3  
9"X12"  
A

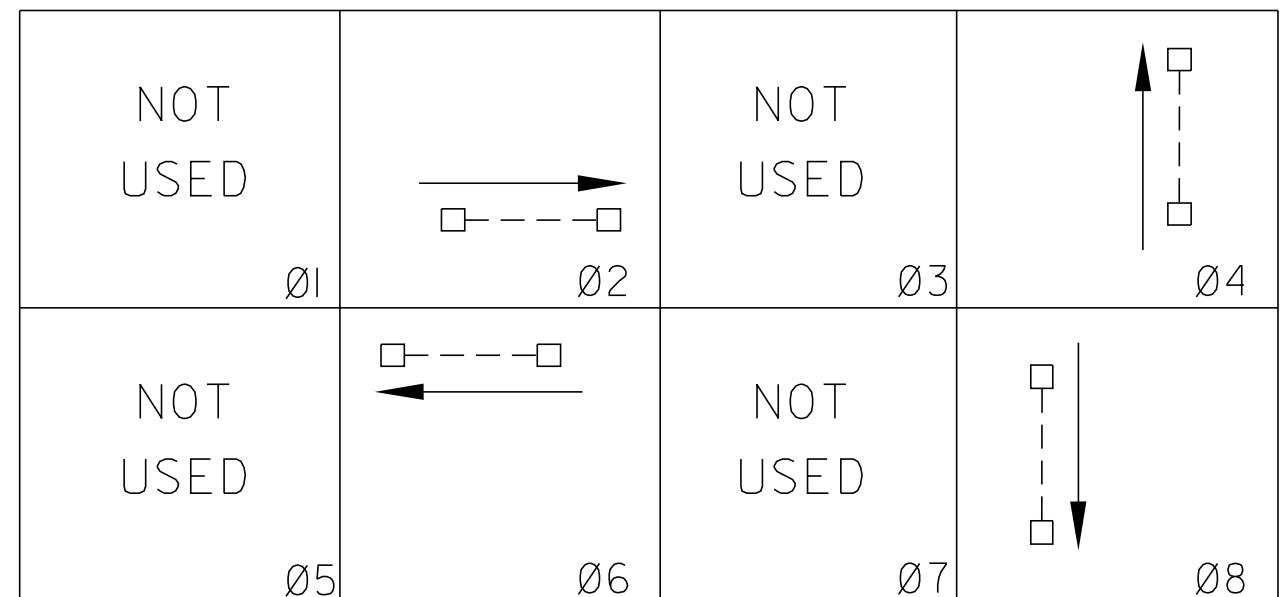


# Market St. & Washington St. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST TOTAL
202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	110	\$ 20.00	\$ 2,200.00
701-01.01	CONCRETE SIDEWALK (4")	S.F.	590	\$ 12.00	\$ 7,080.00
701-02.01	CONCRETE CURB RAMP (RETROFIT)	S.F.	595	\$ 31.00	\$ 18,445.00
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	5	\$ 390.00	\$ 1,950.00
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
712-06	SIGNS (CONSTRUCTION)	S.F.	114	\$ 9.00	\$ 1,026.00
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	100	\$ 15.00	\$ 1,500.00
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	255	\$ 30.00	\$ 7,650.00
716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	L.F.	125	\$ 1.00	\$ 125.00
716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	535	\$ 1.50	\$ 802.50
716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	100	\$ 6.00	\$ 600.00
716-08.06	REMOVAL OF PAVEMENT MARKING (TURN LANE ARROW)	EACH	1	\$ 50.00	\$ 50.00
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	LS	1	\$ 6,500.00	\$ 6,500.00
730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	8	\$ 1,200.00	\$ 9,600.00
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	4	\$ 450.00	\$ 1,800.00
730-05.04	MODIFY EXISTING ELECTRICAL SERVICE CONNECTION	EACH	1	\$ 1,750.00	\$ 1,750.00
730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	455	\$ 1.75	\$ 796.25
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	1210	\$ 2.00	\$ 2,420.00
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	100	\$ 10.00	\$ 1,000.00
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	275	\$ 24.00	\$ 6,600.00
730-12.30	TRENCHING	L.F.	40	\$ 15.00	\$ 600.00
730-15.07	CABINET (EIGHT PHASE POLE MOUNTED)	EACH	1	\$ 12,600.00	\$ 12,600.00
730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	1	\$ 5,000.00	\$ 5,000.00
730-19.01	TIME BASE COORDINATION UNIT	EACH	1	\$ 3,000.00	\$ 3,000.00
730-23.30	PEDESTAL POLE (8' POLE)	EACH	2	\$ 2,500.00	\$ 5,000.00
730-26.11	COUNTDOWN PED SGNL HEAD W/AUDIBLE PUSHBUTTON & 15IN SIGN	EACH	8	\$ 2,500.00	\$ 20,000.00
				SUBTOTAL	\$ 124,194.75
				CONTINGENCY (15%)	\$ 18,629.21
				TOTAL	\$ 142,823.96

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT	2019	13176.006	3

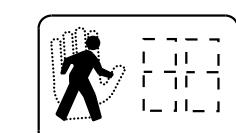
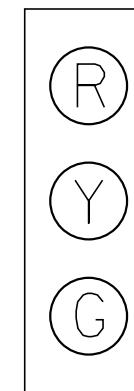
## SIGNAL PHASING DIAGRAM



-MAX RECALL: ALL PHASES (FIXED TIME)

-FLASHING OPERATION: YELLOW - Ø2, Ø6; RED - Ø4, Ø8

## SIGNAL HEADS

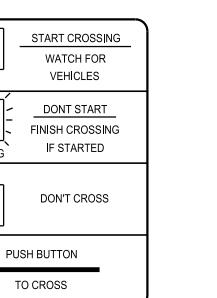


COUNTDOWN PEDESTRIAN SIGNAL HEAD

TYPE 130  
W/ BACKPLATE  
12" L.E.D.  
2, 4, 6, 8

P2, P4, P6, P8

## SIGNS



R10-3  
9"X12"  
A

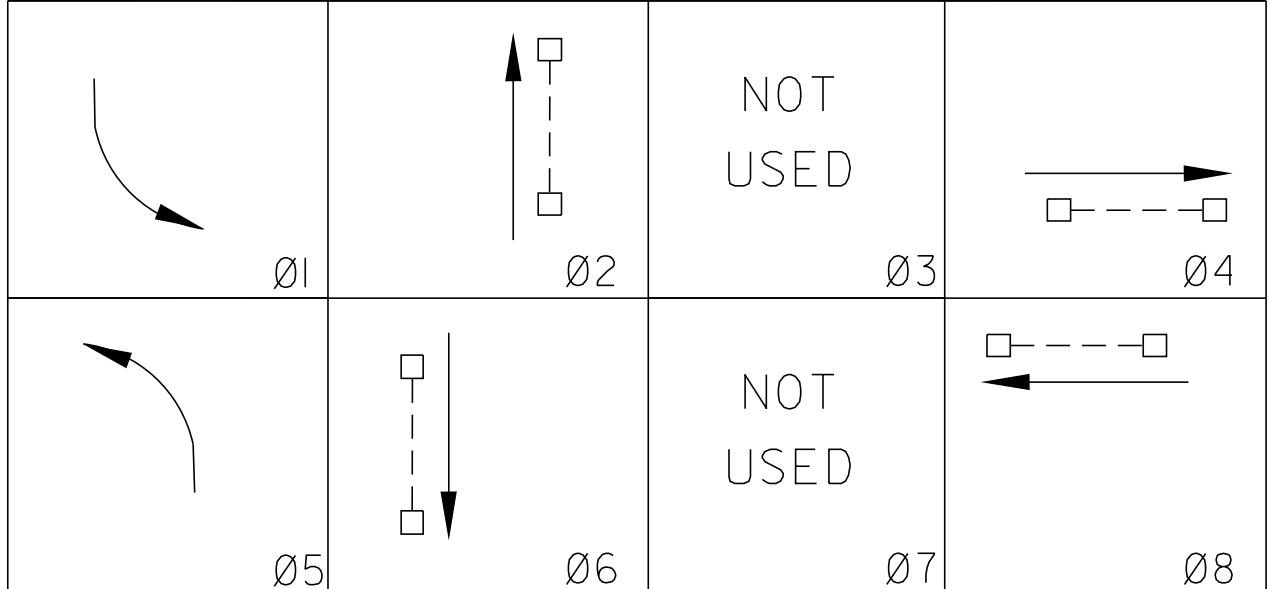


# Washington St. & Poplar St. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST TOTAL
202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	100	\$ 20.00	\$ 2,000.00
701-01.01	CONCRETE SIDEWALK (4")	S.F.	660	\$ 12.00	\$ 7,920.00
701-02.01	CONCRETE CURB RAMP (RETROFIT)	S.F.	605	\$ 31.00	\$ 18,755.00
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	4	\$ 390.00	\$ 1,560.00
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
712-06	SIGNS (CONSTRUCTION)	S.F.	114	\$ 9.00	\$ 1,026.00
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	90	\$ 15.00	\$ 1,350.00
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	255	\$ 30.00	\$ 7,650.00
716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	L.F.	165	\$ 1.00	\$ 165.00
716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	570	\$ 1.50	\$ 855.00
716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	90	\$ 6.00	\$ 540.00
716-08.06	REMOVAL OF PAVEMENT MARKING (TURN LANE ARROW)	EACH	2	\$ 50.00	\$ 100.00
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	LS	1	\$ 6,500.00	\$ 6,500.00
730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	8	\$ 1,200.00	\$ 9,600.00
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	4	\$ 450.00	\$ 1,800.00
730-05.04	MODIFY EXISTING ELECTRICAL SERVICE CONNECTION	EACH	1	\$ 1,750.00	\$ 1,750.00
730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	465	\$ 1.75	\$ 813.75
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	1220	\$ 2.00	\$ 2,440.00
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	95	\$ 10.00	\$ 950.00
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	285	\$ 24.00	\$ 6,840.00
730-12.30	TRENCHING	L.F.	55	\$ 15.00	\$ 825.00
730-15.07	CABINET (EIGHT PHASE POLE MOUNTED)	EACH	1	\$ 12,600.00	\$ 12,600.00
730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	1	\$ 5,000.00	\$ 5,000.00
730-19.01	TIME BASE COORDINATION UNIT	EACH	1	\$ 3,000.00	\$ 3,000.00
730-23.30	PEDESTAL POLE (8' POLE)	EACH	2	\$ 2,500.00	\$ 5,000.00
730-26.11	COUNTDOWN PED SGNL HEAD W/AUDIBLE PUSHBUTTON & 15IN SIGN	EACH	8	\$ 2,500.00	\$ 20,000.00
				SUBTOTAL	\$ 125,139.75
				CONTINGENCY (15%)	\$ 18,770.96
				TOTAL	\$ 143,910.71

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT	2019	13176.006	4

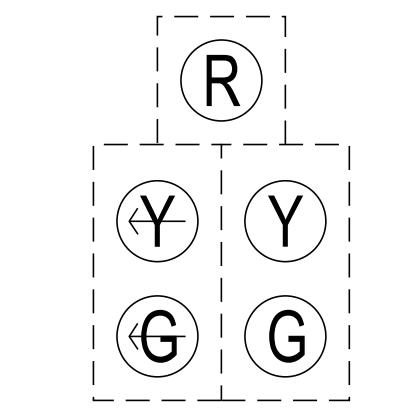
## SIGNAL PHASING DIAGRAM



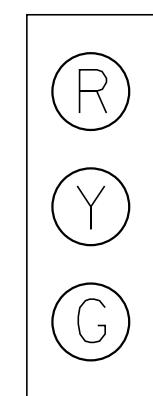
-FLASHING OPERATION: YELLOW - 02, 06; RED - 04, 08

-PROT/PERM LEFT TURN: 01, 05

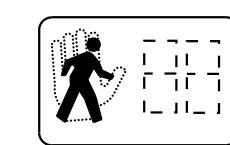
## SIGNAL HEADS



TYPE 150  
W/ BACKPLATE  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
1, 5

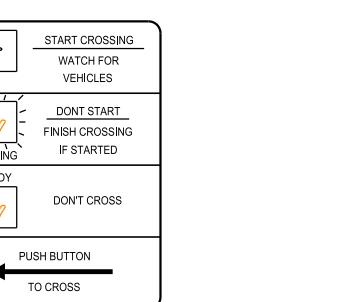


TYPE 130  
W/ BACKPLATE  
12" L.E.D.  
P2, P4, P6, P8  
1, 5  
2, 4, 6, 8

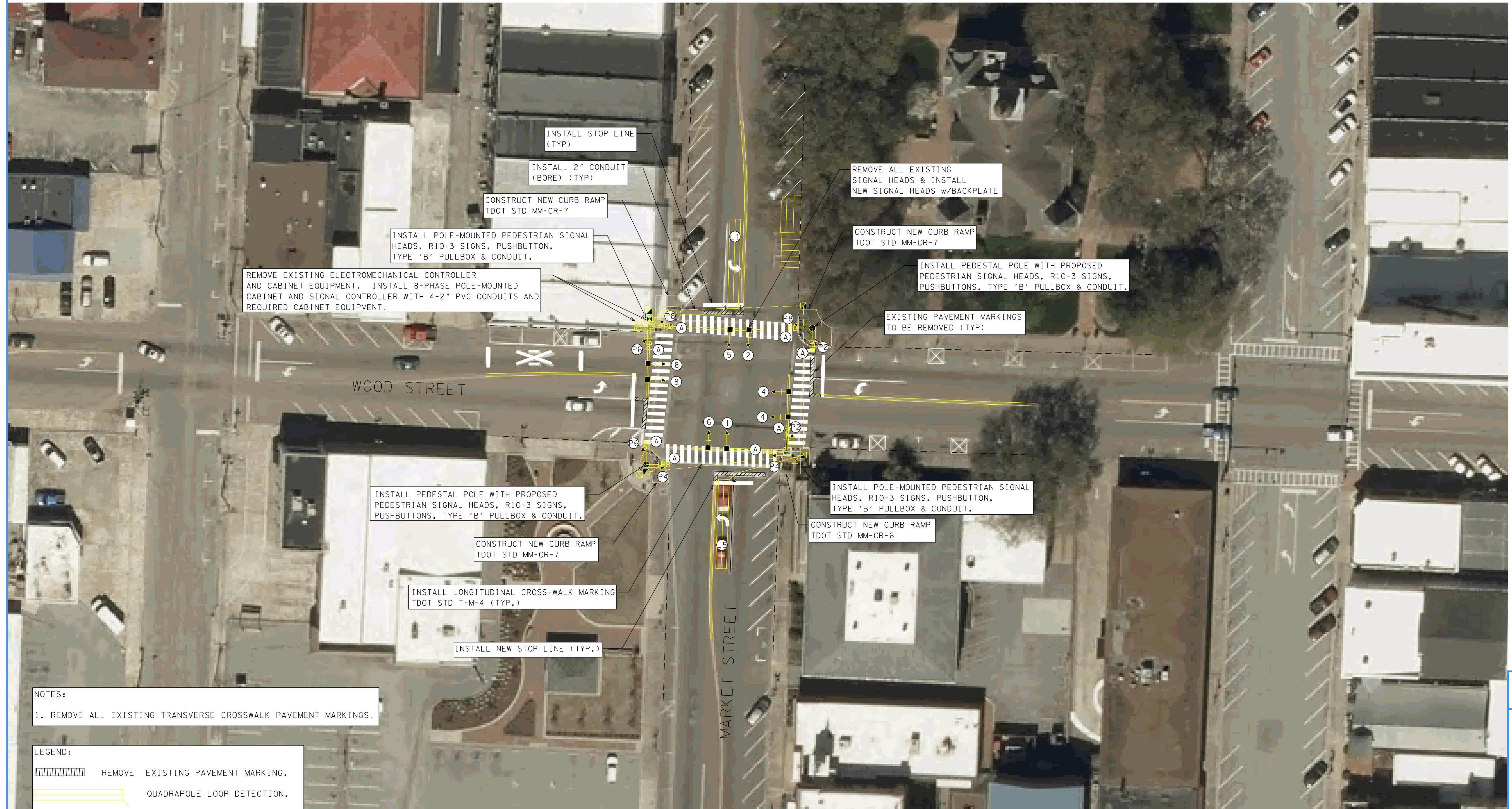


COUNTDOWN PEDESTRIAN  
SIGNAL HEAD

## SIGNS



R10-3  
9"X12"  
A

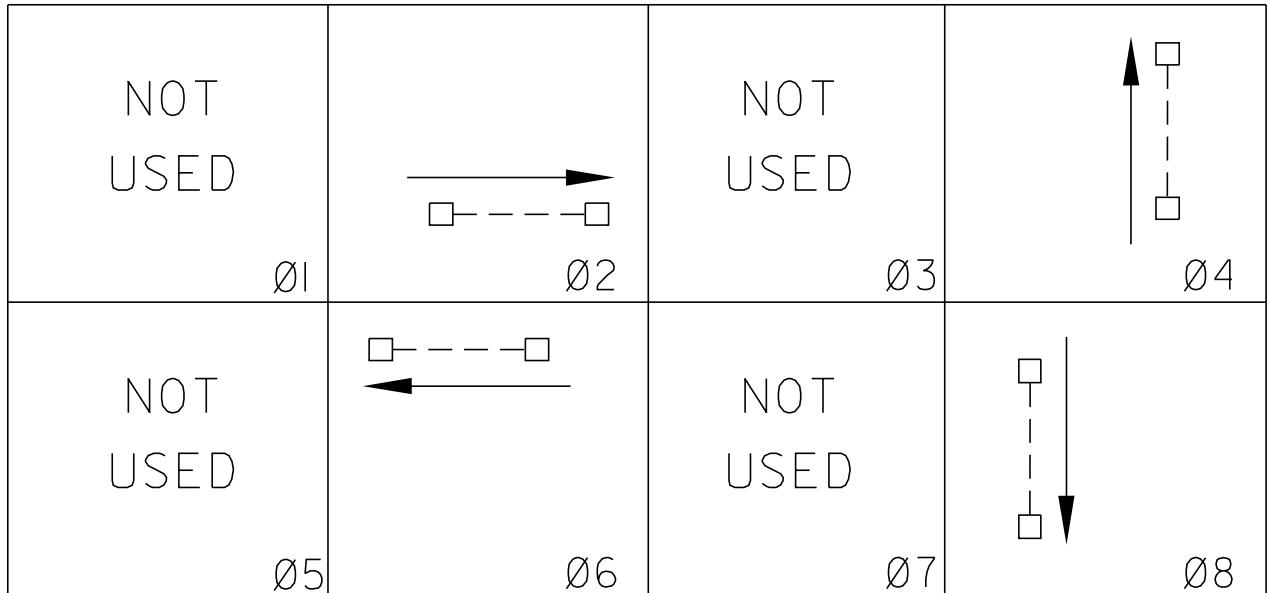


# Market St. & Wood St. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST TOTAL
202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	140	\$ 20.00	\$ 2,800.00
701-01.01	CONCRETE SIDEWALK (4")	S.F.	615	\$ 12.00	\$ 7,380.00
701-02.01	CONCRETE CURB RAMP (RETROFIT)	S.F.	595	\$ 31.00	\$ 18,445.00
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	5	\$ 390.00	\$ 1,950.00
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
712-06	SIGNS (CONSTRUCTION)	S.F.	114	\$ 9.00	\$ 1,026.00
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	110	\$ 15.00	\$ 1,650.00
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	265	\$ 30.00	\$ 7,950.00
716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	L.F.	65	\$ 1.00	\$ 65.00
716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	560	\$ 1.50	\$ 840.00
716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	100	\$ 6.00	\$ 600.00
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	LS	1	\$ 6,500.00	\$ 6,500.00
730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	6	\$ 1,200.00	\$ 7,200.00
730-02.17	SIGNAL HEAD ASSEMBLY (150A2H WITH BACKPLATE)	EACH	2	\$ 1,800.00	\$ 3,600.00
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	4	\$ 450.00	\$ 1,800.00
730-05.04	MODIFY EXISTING ELECTRICAL SERVICE CONNECTION	EACH	1	\$ 1,750.00	\$ 1,750.00
730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	635	\$ 1.75	\$ 1,111.25
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	1385	\$ 2.00	\$ 2,770.00
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	60	\$ 10.00	\$ 600.00
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	285	\$ 24.00	\$ 6,840.00
730-12.30	TRENCHING	L.F.	45	\$ 15.00	\$ 675.00
730-13.05	VEHICLE DETECTOR (EXT. CALL - DELAY CALL)	EACH	2	\$ 250.00	\$ 500.00
730-15.07	CABINET (EIGHT PHASE POLE MOUNTED)	EACH	1	\$ 12,600.00	\$ 12,600.00
730-14.01	SHIELDED DETECTOR CABLE	L.F.	200	\$ 1.50	\$ 300.00
730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	1	\$ 5,000.00	\$ 5,000.00
730-14.02	SAW SLOT	L.F.	425	\$ 3.50	\$ 1,487.50
730-14.03	LOOP WIRE	L.F.	1130	\$ 1.00	\$ 1,130.00
730-19.01	TIME BASE COORDINATION UNIT	EACH	1	\$ 3,000.00	\$ 3,000.00
730-23.30	PEDESTAL POLE (8' POLE)	EACH	2	\$ 2,500.00	\$ 5,000.00
730-26.11	COUNTDOWN PED SGNL HEAD W/AUDIBLE PUSHBUTTON & 15IN SIGN	EACH	8	\$ 2,500.00	\$ 20,000.00
				SUBTOTAL	\$ 130,669.75
				CONTINGENCY (15%)	\$ 19,600.46
				TOTAL	\$ 150,270.21

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT	2019	13176.006	5

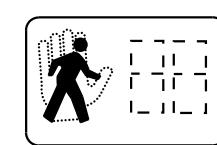
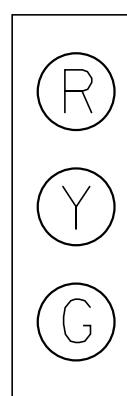
## SIGNAL PHASING DIAGRAM



-MAX RECALL: ALL PHASES (FIXED TIME)

-FLASHING OPERATION: YELLOW - 02, 06; RED - 04, 08

## SIGNAL HEADS

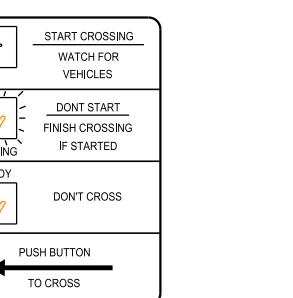


COUNTDOWN PEDESTRIAN SIGNAL HEAD

TYPE 130  
W/ BACKPLATE  
12" L.E.D.  
2, 4, 6, 8

P2, P4, P6, P8

## SIGNS



R10-3  
9"X12"  
A

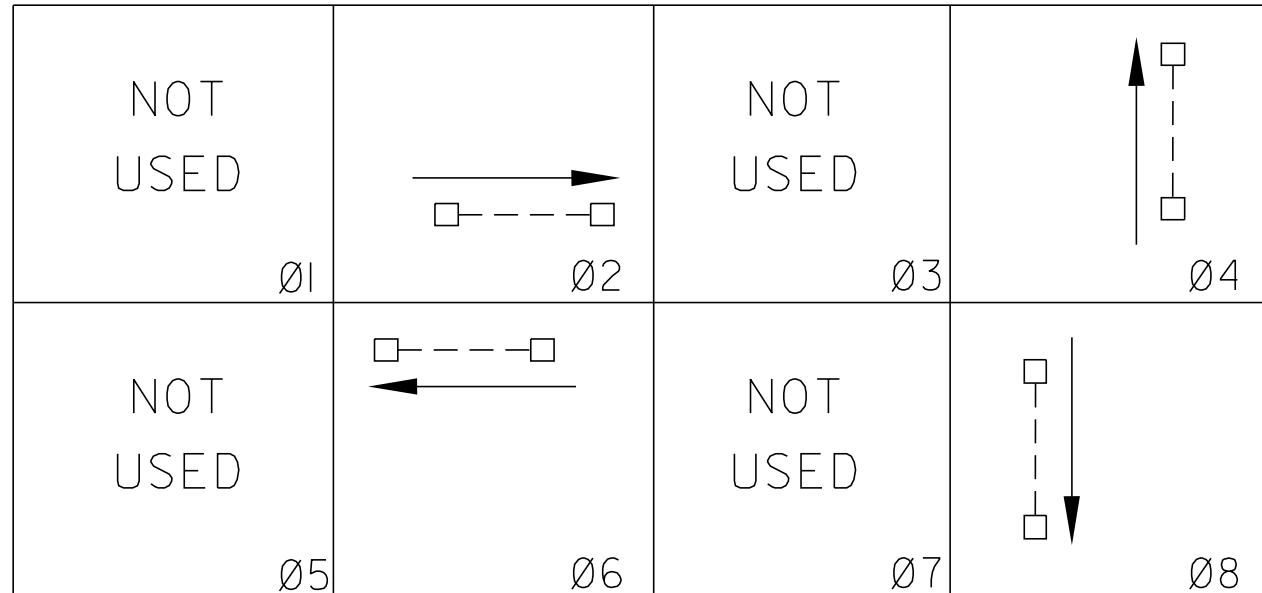


# Wood St. & Poplar St. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST TOTAL
202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	165	\$ 20.00	\$ 3,300.00
701-01.01	CONCRETE SIDEWALK (4")	S.F.	865	\$ 12.00	\$ 10,380.00
701-02.01	CONCRETE CURB RAMP (RETROFIT)	S.F.	505	\$ 31.00	\$ 15,655.00
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	7	\$ 390.00	\$ 2,730.00
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
712-06	SIGNS (CONSTRUCTION)	S.F.	114	\$ 9.00	\$ 1,026.00
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	105	\$ 15.00	\$ 1,575.00
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	245	\$ 30.00	\$ 7,350.00
716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	L.F.	90	\$ 1.00	\$ 90.00
716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	265	\$ 1.50	\$ 397.50
716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	100	\$ 6.00	\$ 600.00
716-08.06	REMOVAL OF PAVEMENT MARKING (TURN LANE ARROW)	EACH	1	\$ 50.00	\$ 50.00
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	LS	1	\$ 6,500.00	\$ 6,500.00
730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	8	\$ 1,200.00	\$ 9,600.00
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	4	\$ 450.00	\$ 1,800.00
730-05.04	MODIFY EXISTING ELECTRICAL SERVICE CONNECTION	EACH	1	\$ 1,750.00	\$ 1,750.00
730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	420	\$ 1.75	\$ 735.00
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	1135	\$ 2.00	\$ 2,270.00
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	60	\$ 10.00	\$ 600.00
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	270	\$ 24.00	\$ 6,480.00
730-12.30	TRENCHING	L.F.	45	\$ 15.00	\$ 675.00
730-15.07	CABINET (EIGHT PHASE POLE MOUNTED)	EACH	1	\$ 12,600.00	\$ 12,600.00
730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	1	\$ 5,000.00	\$ 5,000.00
730-19.01	TIME BASE COORDINATION UNIT	EACH	1	\$ 3,000.00	\$ 3,000.00
730-23.30	PEDESTAL POLE (8' POLE)	EACH	2	\$ 2,500.00	\$ 5,000.00
730-26.11	COUNTDOWN PED SGNL HEAD W/AUDIBLE PUSHBUTTON & 15IN SIGN	EACH	8	\$ 2,500.00	\$ 20,000.00
				SUBTOTAL	\$ 125,263.50
				CONTINGENCY (15%)	\$ 18,789.53
				TOTAL	\$ 144,053.03

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT	2019	13176.006	6

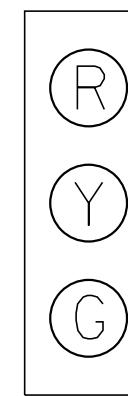
## SIGNAL PHASING DIAGRAM



-MAX RECALL: ALL PHASES (FIXED TIME)

-FLASHING OPERATION: YELLOW - 02, 06; RED - 04, 08

## SIGNAL HEADS



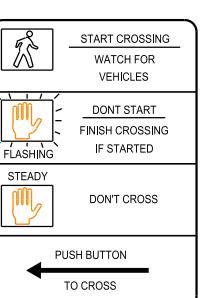
COUNTDOWN PEDESTRIAN SIGNAL HEAD

TYPE 130  
W/ BACKPLATE  
12" L.E.D.  
2, 4, 6, 8



P2, P4, P6, P8

## SIGNS



R10-3  
9"X12"  
A  
R10-11A  
30"X36"  
(EXISTING  
TO REMAIN)  
B

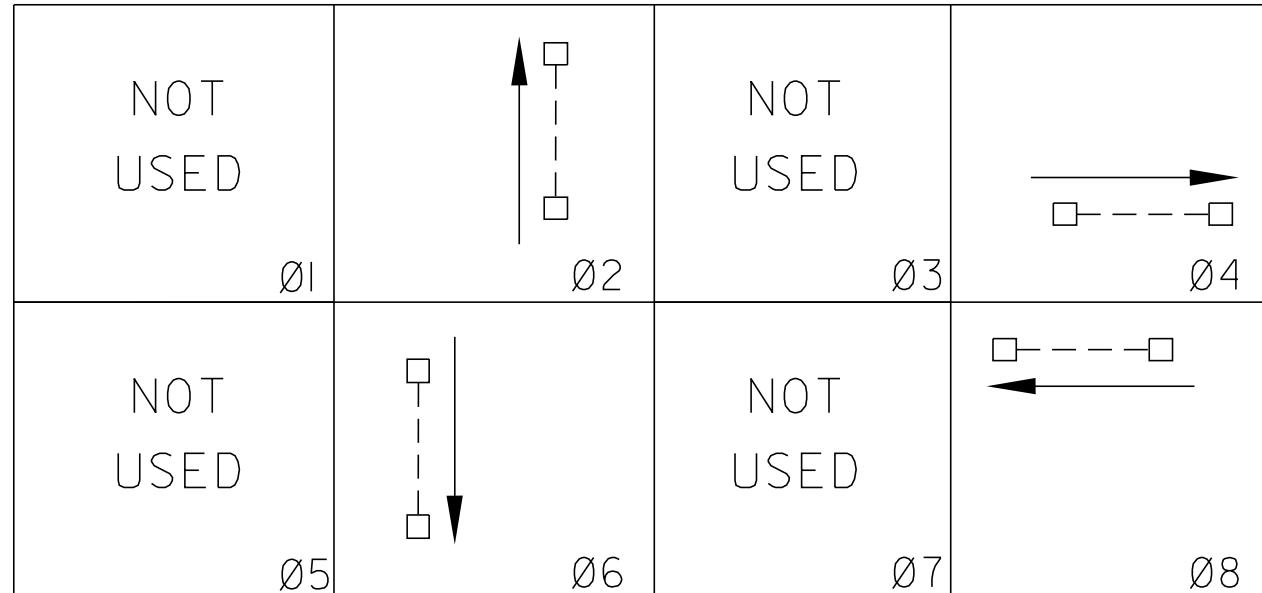


# Wood St. & Brewer St. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST TOTAL
202-03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	S.Y.	70	\$ 20.00	\$ 1,400.00
701-01.01	CONCRETE SIDEWALK (4")	S.F.	365	\$ 12.00	\$ 4,380.00
701-02.01	CONCRETE CURB RAMP (RETROFIT)	S.F.	375	\$ 31.00	\$ 11,625.00
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	4	\$ 390.00	\$ 1,560.00
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
712-06	SIGNS (CONSTRUCTION)	S.F.	114	\$ 9.00	\$ 1,026.00
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	80	\$ 15.00	\$ 1,200.00
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	190	\$ 30.00	\$ 5,700.00
716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	L.F.	25	\$ 1.00	\$ 25.00
716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	410	\$ 1.50	\$ 615.00
716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	75	\$ 6.00	\$ 450.00
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	LS	1	\$ 6,500.00	\$ 6,500.00
730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	8	\$ 1,200.00	\$ 9,600.00
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	4	\$ 450.00	\$ 1,800.00
730-05.04	MODIFY EXISTING ELECTRICAL SERVICE CONNECTION	EACH	1	\$ 1,750.00	\$ 1,750.00
730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	425	\$ 1.75	\$ 743.75
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	865	\$ 2.00	\$ 1,730.00
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	65	\$ 10.00	\$ 650.00
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	200	\$ 24.00	\$ 4,800.00
730-12.30	TRENCHING	L.F.	35	\$ 15.00	\$ 525.00
730-15.07	CABINET (EIGHT PHASE POLE MOUNTED)	EACH	1	\$ 12,600.00	\$ 12,600.00
730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	1	\$ 5,000.00	\$ 5,000.00
730-19.01	TIME BASE COORDINATION UNIT	EACH	1	\$ 3,000.00	\$ 3,000.00
730-23.30	PEDESTAL POLE (8' POLE)	EACH	4	\$ 2,500.00	\$ 10,000.00
730-26.11	COUNTDOWN PED SGNL HEAD W/AUDIBLE PUSHBUTTON & 15IN SIGN	EACH	8	\$ 2,500.00	\$ 20,000.00
773-26.60	WC RELASH EXISTING AERIAL CABLE STRAND	L.F.	286	\$ 5.00	\$ 1,430.00
				SUBTOTAL	\$ 114,209.75
				CONTINGENCY (15%)	\$ 17,131.46
				TOTAL	\$ 131,341.21

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT	2019	13176.006	7

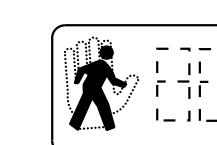
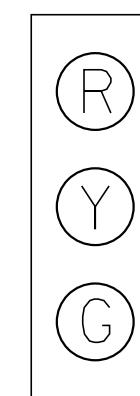
## SIGNAL PHASING DIAGRAM



-MAX RECALL: ALL PHASES (FIXED TIME)

-FLASHING OPERATION: YELLOW - 02 .06; RED - 04, 08

## SIGNAL HEADS

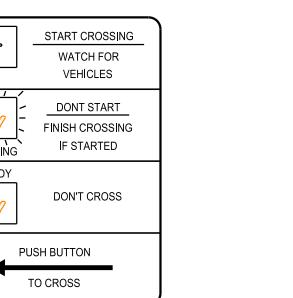


COUNTDOWN PEDESTRIAN SIGNAL HEAD

TYPE 130  
W/ BACKPLATE  
12" L.E.D.  
2, 4, 6, 8

P2, P4, P6, P8

## SIGNS



R10-3  
9"X12"  
A

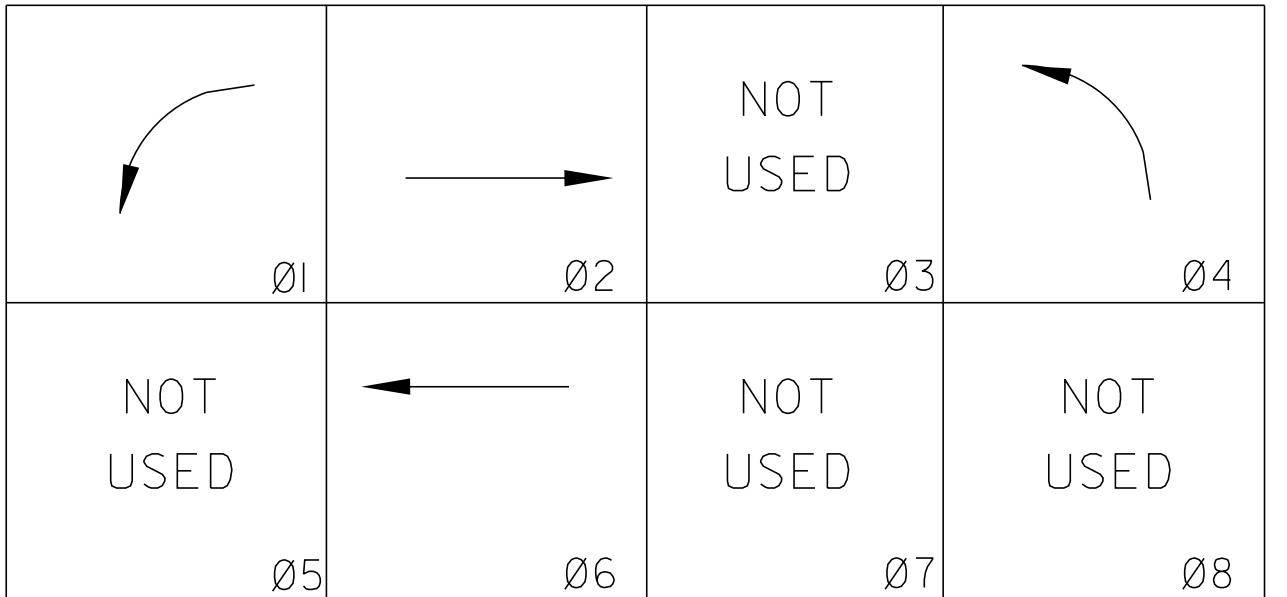


# Market St. & Blythe St. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST TOTAL
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
712-06	SIGNS (CONSTRUCTION)	S.F.	114	\$ 9.00	\$ 1,026.00
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	210	\$ 30.00	\$ 6,300.00
716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	435	\$ 1.50	\$ 652.50
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	LS	1	\$ 6,500.00	\$ 6,500.00
730-02.09	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	8	\$ 1,200.00	\$ 9,600.00
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	4	\$ 450.00	\$ 1,800.00
730-05.04	MODIFY EXISTING ELECTRICAL SERVICE CONNECTION	EACH	1	\$ 1,750.00	\$ 1,750.00
730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	355	\$ 1.75	\$ 621.25
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	1020	\$ 2.00	\$ 2,040.00
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	50	\$ 10.00	\$ 500.00
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	245	\$ 24.00	\$ 5,880.00
730-12.30	TRENCHING	L.F.	35	\$ 15.00	\$ 525.00
730-15.07	CABINET (EIGHT PHASE POLE MOUNTED)	EACH	1	\$ 12,600.00	\$ 12,600.00
730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	1	\$ 5,000.00	\$ 5,000.00
730-19.01	TIME BASE COORDINATION UNIT	EACH	1	\$ 3,000.00	\$ 3,000.00
730-23.30	PEDESTAL POLE (8' POLE)	EACH	2	\$ 2,500.00	\$ 5,000.00
730-26.11	COUNTDOWN PED SGNL HEAD W/AUDIBLE PUSHBUTTON & 15IN SIGN	EACH	8	\$ 2,500.00	\$ 20,000.00
				SUBTOTAL	\$ 88,894.75
				CONTINGENCY (15%)	\$ 13,334.21
				TOTAL	\$ 102,228.96

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT	2019	13176.006	8

## SIGNAL PHASING DIAGRAM



-PROT/PERM LEFT-TURN: 01

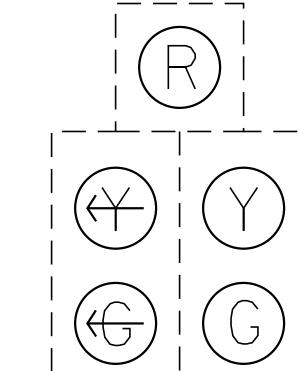
-MIN RECALL: 02,06

-FLASHING OPERATION: YELLOW - 02,06; RED - 04

## SIGNAL HEADS

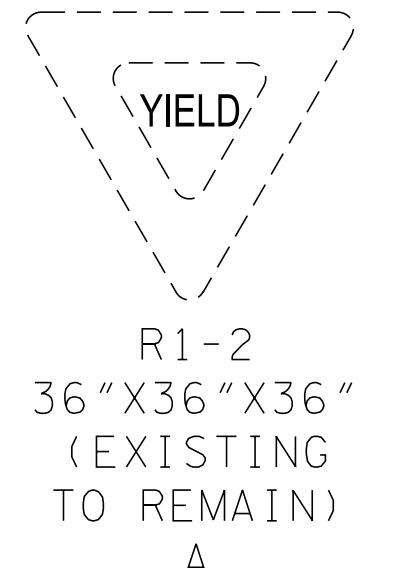


TYPE 130  
12" L.E.D.  
(EXISTING  
TO REMAIN)



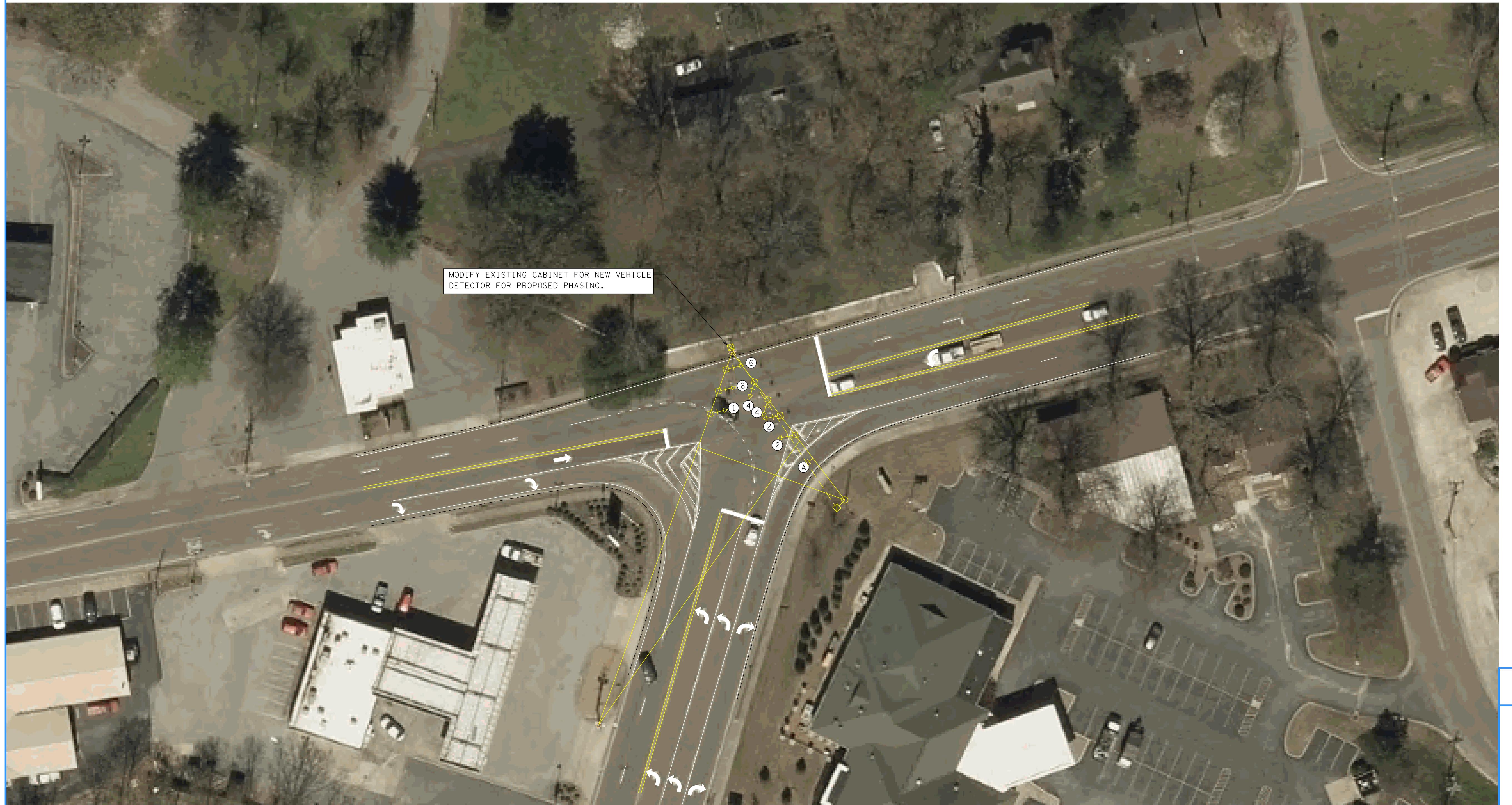
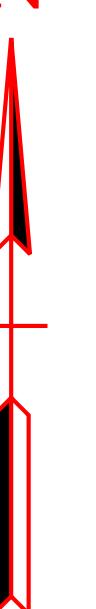
TYPE 150A2L  
12" L.E.D.  
(EXISTING  
TO REMAIN)

## SIGNS



R1-2  
36" X 36" X 36"  
(EXISTING  
TO REMAIN)  
A

N



CITY OF PARIS TSM&O

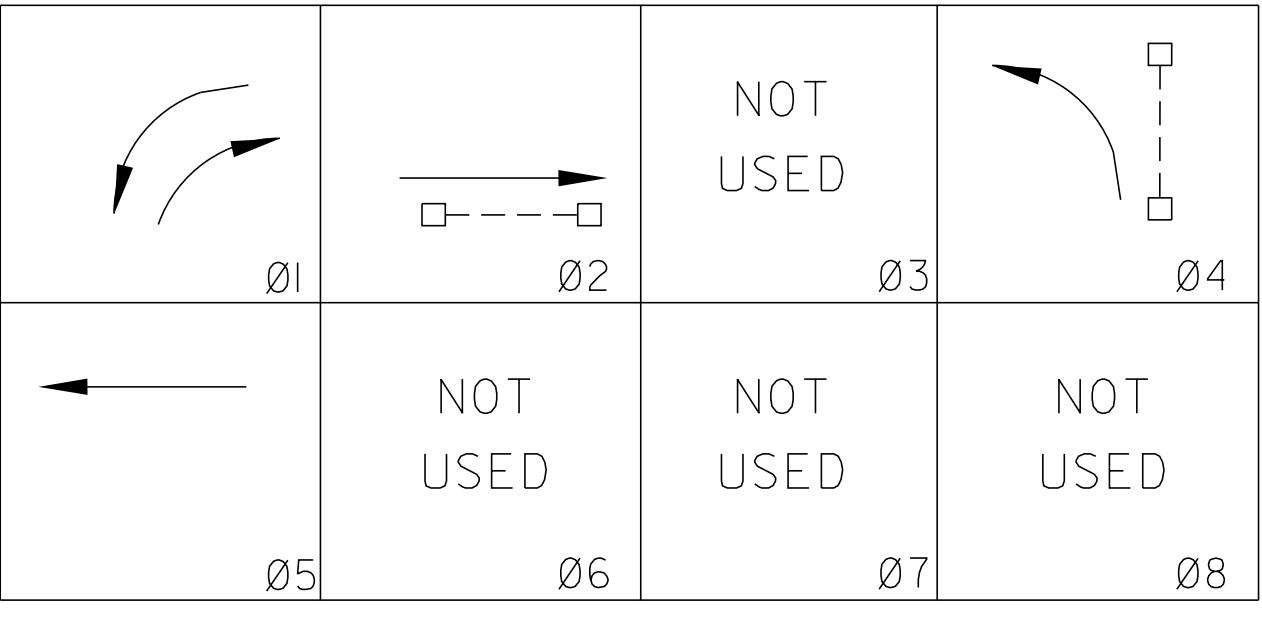
FUNCTIONAL  
LAYOUT  
WOOD STREET AT  
TYSON AVENUE  
SCALE: 1"=30'

# Wood St. & Tyson Ave. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	COST TOTAL
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	300	\$ 2.00	\$ 600.00
730-15.10	MODIFY CABINET (INSTALL COORDINATION UNIT)	EACH	1	\$ 3,500.00	\$ 3,500.00
730-15.11	MODIFY CABINET (INSTALL EIGHT PHASE ACTUATED CONTROLLER)	EACH	1	\$ 5,500.00	\$ 5,500.00
730-13.05	VEHICLE DETECTOR (EXT. CALL - DELAY CALL)	EACH	4	\$ 250.00	\$ 1,000.00
773-26.60	WC RELASH EXISTING AERIAL CABLE STRAND	L.F.	195	\$ 5.00	\$ 973.50
				SUBTOTAL	\$ 17,673.50
				CONTINGENCY (15%)	\$ 2,651.03
				TOTAL	\$ 20,324.53

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT	2019	13176.006	9

## SIGNAL PHASING DIAGRAM

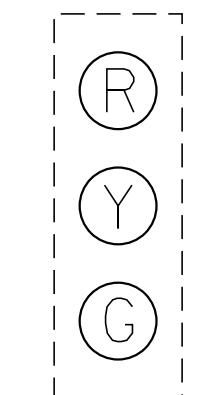


-PROT/PERM LEFT-TURN: 01

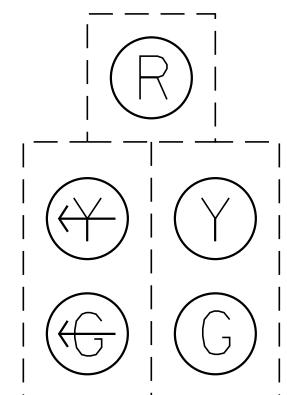
-MIN RECALL: 02,05

-FLASHING OPERATION: YELLOW - 02,05; RED - 04

-DUAL ENTRY: 02,05

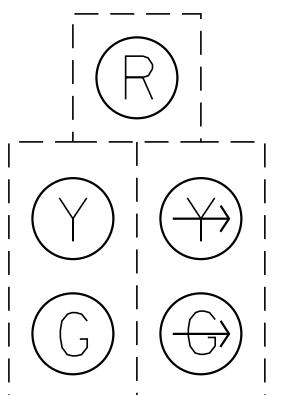


TYPE 130  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
2,4,5

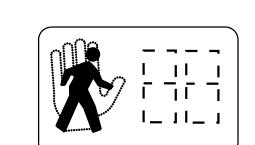


TYPE 150A2L  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
1

## SIGNAL HEADS



TYPE 150A2R  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
1A

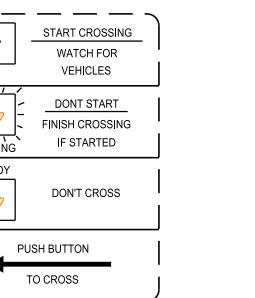


COUNTDOWN PEDESTRIAN SIGNAL HEAD  
P2,P4



VERBAL PEDESTRIAN  
SIGNAL HEAD  
(EXISTING TO  
BE REMOVED)  
P2,P4

## SIGNS



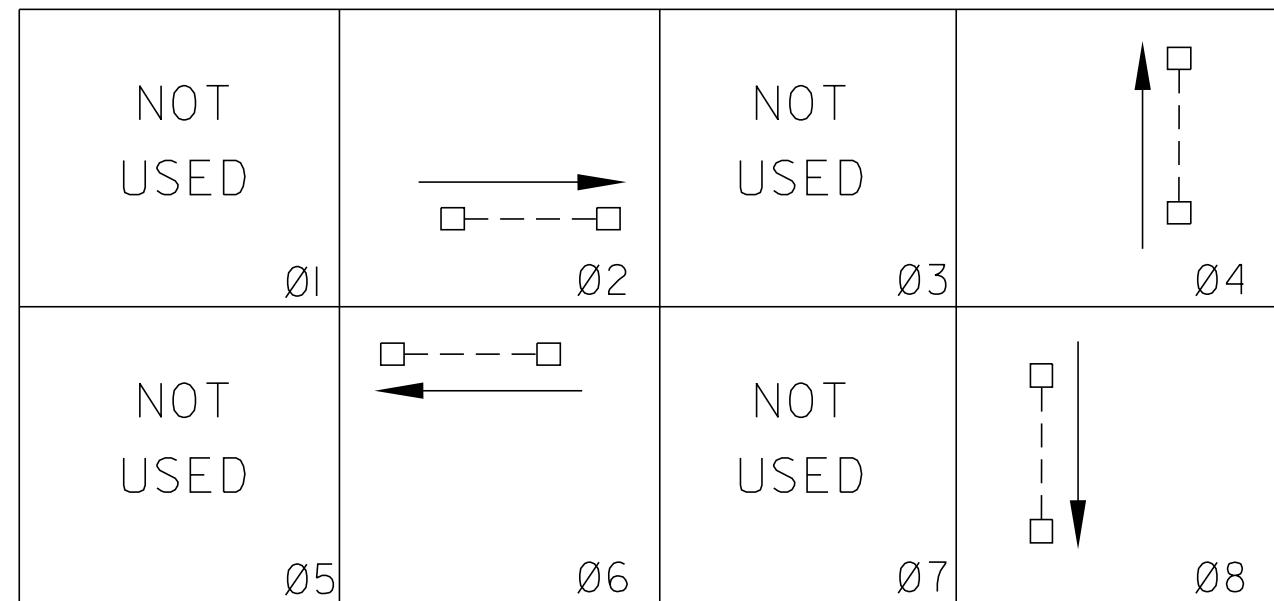
R10-3  
9"X12"  
(EXISTING  
TO REMAIN)  
A



# Wood St. & Volunteer Dr. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	COST TOTAL
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
712-06	SIGNS (CONSTRUCTION)	S.F.	114	\$ 9.00	\$ 1,026.00
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	130	\$ 30.00	\$ 3,891.00
716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	285	\$ 1.50	\$ 427.35
716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	20	\$ 6.00	\$ 121.50
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	LS	1	\$ 4,500.00	\$ 4,500.00
730-15.10	MODIFY CABINET (INSTALL COORDINATION UNIT)	EACH	1	\$ 3,500.00	\$ 3,500.00
730-15.11	MODIFY CABINET (INSTALL EIGHT PHASE ACTUATED CONTROLLER)	EACH	1	\$ 5,500.00	\$ 5,500.00
730-26.11	COUNTDOWN PED SGNL HEAD W/AUDIBLE PUSHBUTTON & 15IN SIGN	EACH	4	\$ 2,500.00	\$ 10,000.00
				SUBTOTAL	\$ 35,065.85
				CONTINGENCY (15%)	\$ 5,259.88
				TOTAL	\$ 40,325.73

## SIGNAL PHASING DIAGRAM

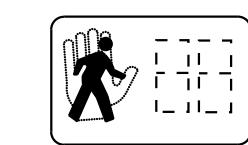
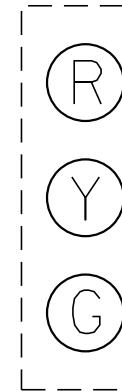


-MIN RECALL: 04,08

-FLASHING OPERATION: YELLOW - 04,08; RED - 02,06

-DUAL ENTRY: 04,08

## SIGNAL HEADS

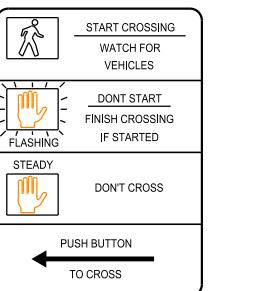


TYPE 130  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
2,4,6,8

COUNTDOWN PEDESTRIAN  
SIGNAL HEAD

P2, P4, P6, P8

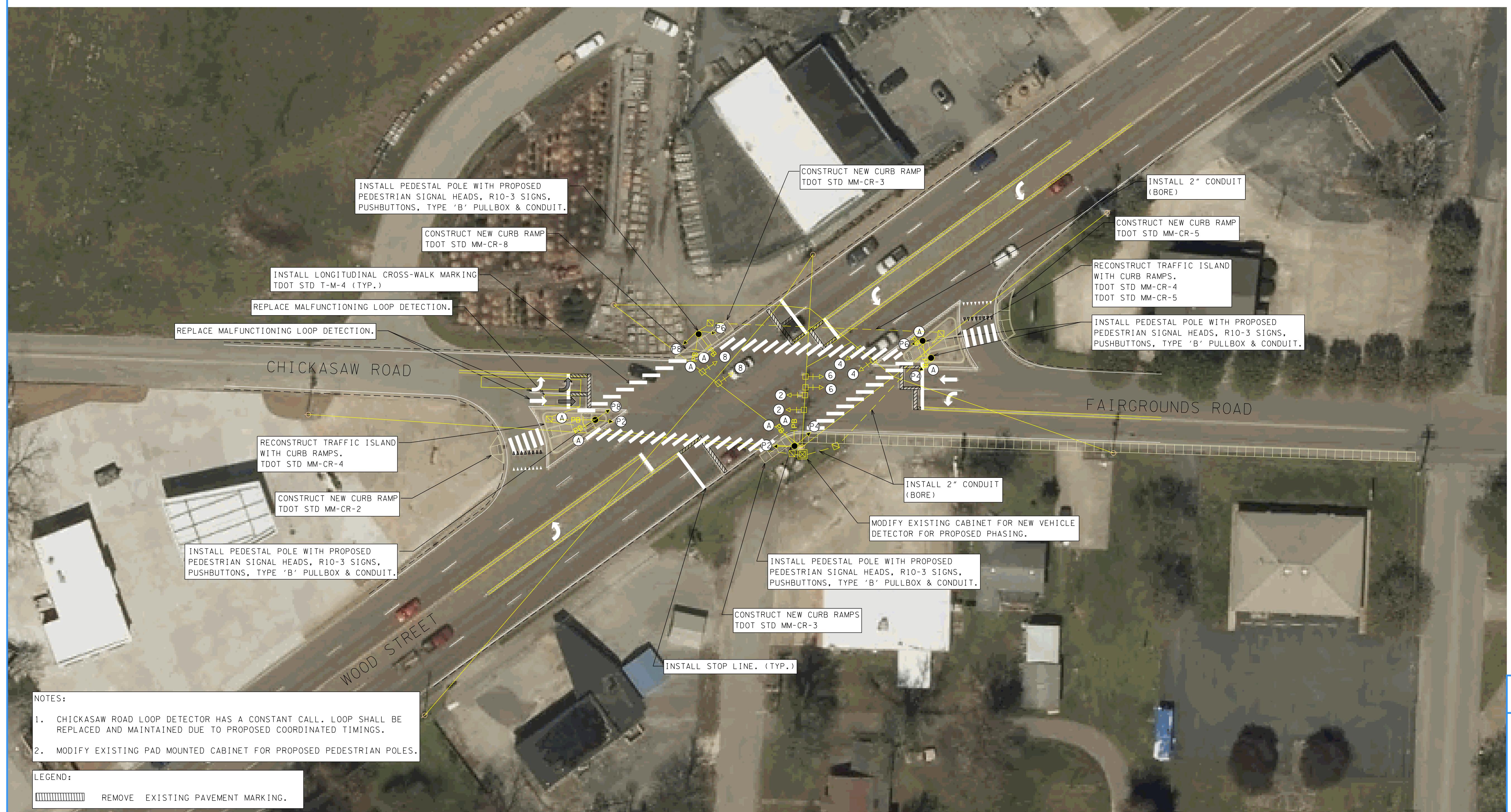
## SIGNS



R10-3  
9"X12"  
A



TYPE	YEAR	PROJECT NO.	sheet no.
FUNCN	2019	13176.006	10

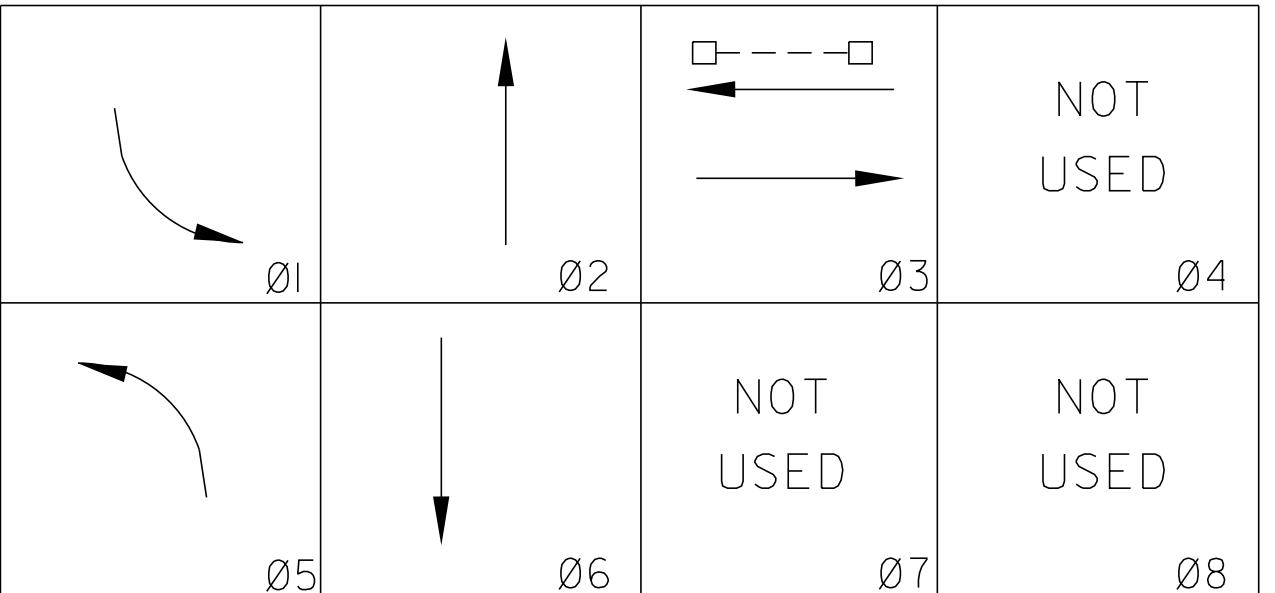


# Wood St. & Fairgrounds Rd /Chickasaw Rd. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	COST TOTAL
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
701-01.01	CONCRETE SIDEWALK (4")	S.F.	405	\$ 12.00	\$ 4,860.00
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
702-03	CONCRETE COMBINED CURB & GUTTER	C.Y.	4	\$ 390.00	\$ 1,560.00
712-06	SIGNS (CONSTRUCTION)	S.F.	114	\$ 9.00	\$ 1,026.00
730-13.05	VEHICLE DETECTOR (EXT. CALL - DELAY CALL)	EACH	4	\$ 250.00	\$ 1,000.00
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	125	\$ 15.00	\$ 1,875.00
730-14.01	SHIELDED DETECTOR CABLE	L.F.	140	\$ 1.50	\$ 209.40
730-14.02	SAW SLOT	L.F.	210	\$ 3.50	\$ 735.00
730-14.03	LOOP WIRE	L.F.	525	\$ 1.00	\$ 524.50
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	415	\$ 30.00	\$ 12,441.00
730-15.10	MODIFY CABINET (INSTALL COORDINATION UNIT)	EACH	1	\$ 3,500.00	\$ 3,500.00
730-15.11	MODIFY CABINET (INSTALL EIGHT PHASE ACTUATED CONTROLLER)	EACH	1	\$ 5,500.00	\$ 5,500.00
716-08.01	REMOVAL OF PAVEMENT MARKING (LINE)	L.F.	125	\$ 1.00	\$ 125.20
773-26.60	WC RELASH EXISTING AERIAL CABLE STRAND	L.F.	300	\$ 5.00	\$ 1,500.00
716-08.05	REMOVAL OF PAVEMENT MARKING (STOP LINE)	L.F.	120	\$ 6.00	\$ 718.20
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	5	\$ 450.00	\$ 2,250.00
730-08.01	SIGNAL CABLE - 3 CONDUCTOR	L.F.	265	\$ 1.50	\$ 397.50
730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	735	\$ 1.75	\$ 1,285.90
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	870	\$ 2.00	\$ 1,739.40
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	95	\$ 10.00	\$ 954.00
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	395	\$ 24.00	\$ 9,468.00
730-12.30	TRENCHING	L.F.	95	\$ 15.00	\$ 1,431.00
730-23.30	PEDESTAL POLE (8' POLE)	EACH	5	\$ 2,500.00	\$ 12,500.00
730-26.11	COUNTDOWN PED SGNL HEAD W/AUDIBLE PUSHBUTTON & 15IN SIGN	EACH	8	\$ 2,500.00	\$ 20,000.00
701-02.03	CONCRETE CURB RAMP	S.F.	520	\$ 24.00	\$ 12,480.00
				SUBTOTAL	\$ 104,180.10
				CONTINGENCY (15%)	\$ 15,627.02
				TOTAL	\$ 119,807.12

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT	2019	13176.006	11

## SIGNAL PHASING DIAGRAM



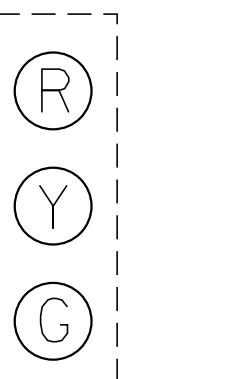
-PROT/PERM LEFT-TURN: 01,05

-MIN RECALL: 02,06

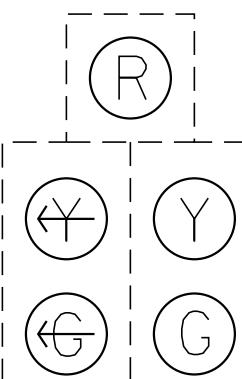
-FLASHING OPERATION: YELLOW - 02,06; RED - 03

-DUAL ENTRY: 02,06

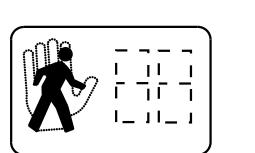
## SIGNAL HEADS



TYPE 130  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
2,3,6



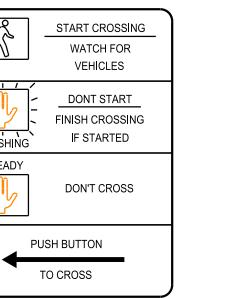
TYPE 150A2L  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
1,5



COUNTDOWN PEDESTRIAN  
SIGNAL HEAD

P3

## SIGNS



R10-3  
9"X12"  
A  
R10-12  
30"X36"  
(EXISTING  
TO REMAIN)  
B

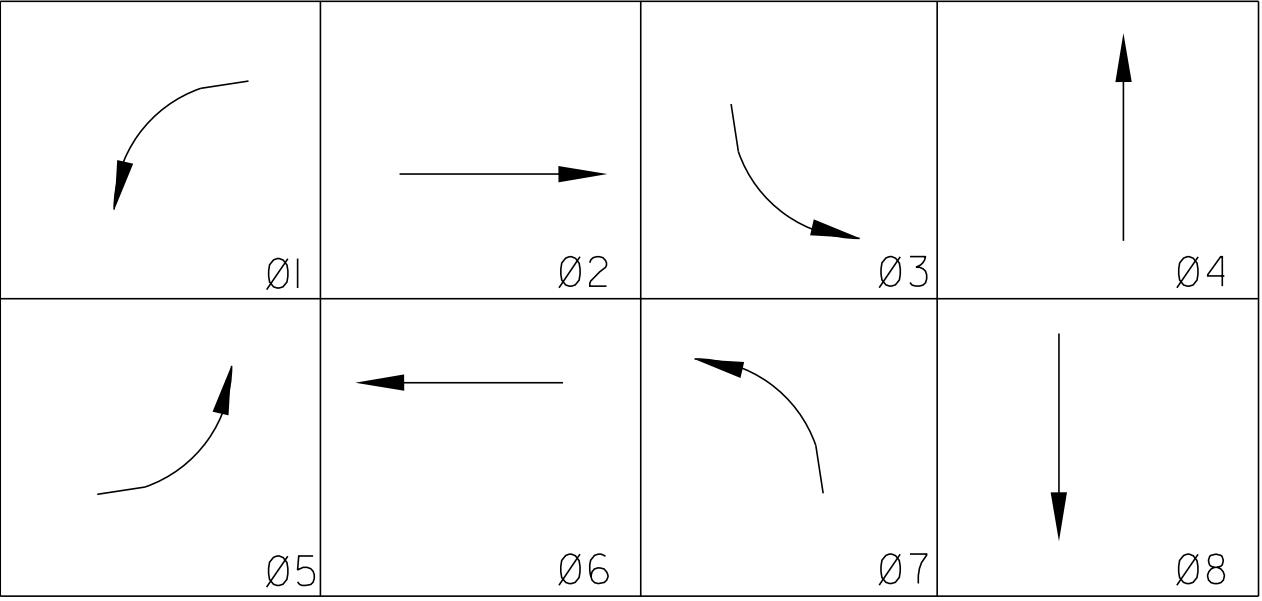


# Veterans Dr. & Dunlap St. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	COST TOTAL
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	125	\$ 30.00	\$ 3,762.00
716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	275	\$ 1.50	\$ 412.05
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	LS	1	\$ 2,500.00	\$ 2,500.00
730-08.01	SIGNAL CABLE - 3 CONDUCTOR	L.F.	365	\$ 1.50	\$ 547.80
730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	380	\$ 1.75	\$ 665.35
730-15.10	MODIFY CABINET (INSTALL COORDINATION UNIT)	EACH	1	\$ 3,500.00	\$ 3,500.00
730-15.11	MODIFY CABINET (INSTALL EIGHT PHASE ACTUATED CONTROLLER)	EACH	1	\$ 5,500.00	\$ 5,500.00
730-23.30	PEDESTAL POLE (8' POLE)	EACH	2	\$ 2,500.00	\$ 5,000.00
730-26.11	COUNTDOWN PED SGNL HEAD W/AUDIBLE PUSHBUTTON & 15IN SIGN	EACH	2	\$ 2,500.00	\$ 5,000.00
				SUBTOTAL	\$ 32,987.20
				CONTINGENCY (15%)	\$ 4,948.08
				TOTAL	\$ 37,935.28

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT	2019	13176.006	12

## SIGNAL PHASING DIAGRAM



-PROT/PERM LEFT-TURN: 03,05,07

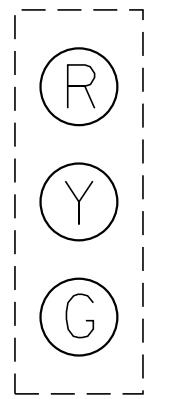
-PROT LEFT-TURN: 01

-MIN RECALL: 02,06

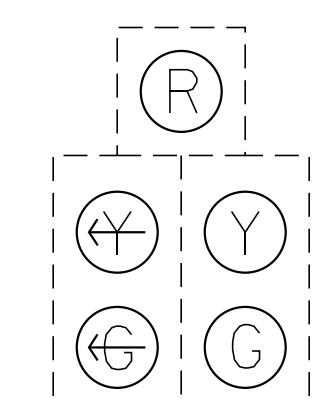
-FLASHING OPERATION: YELLOW - 04,08; RED - 02,06

-DUAL ENTRY: 02,04,06,08

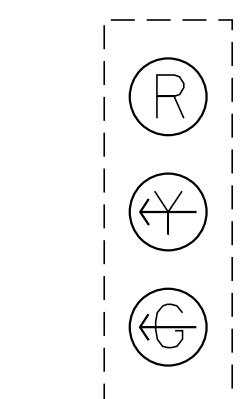
## SIGNAL HEADS



TYPE 130  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
2,4,6,8

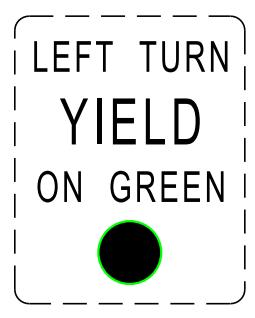


TYPE 150A2L  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
3,5,7

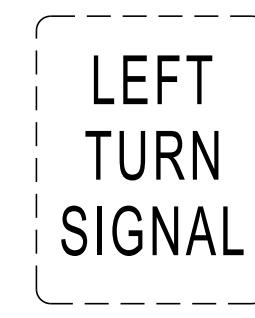


TYPE 130A2L  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
1

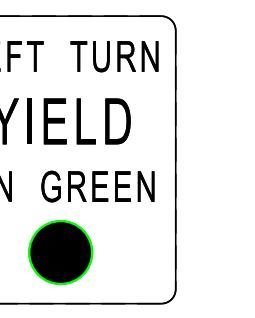
## SIGNS



LEFT TURN  
YIELD  
ON GREEN  
R10-12  
30"X36"  
(EXISTING  
TO REMAIN)  
A

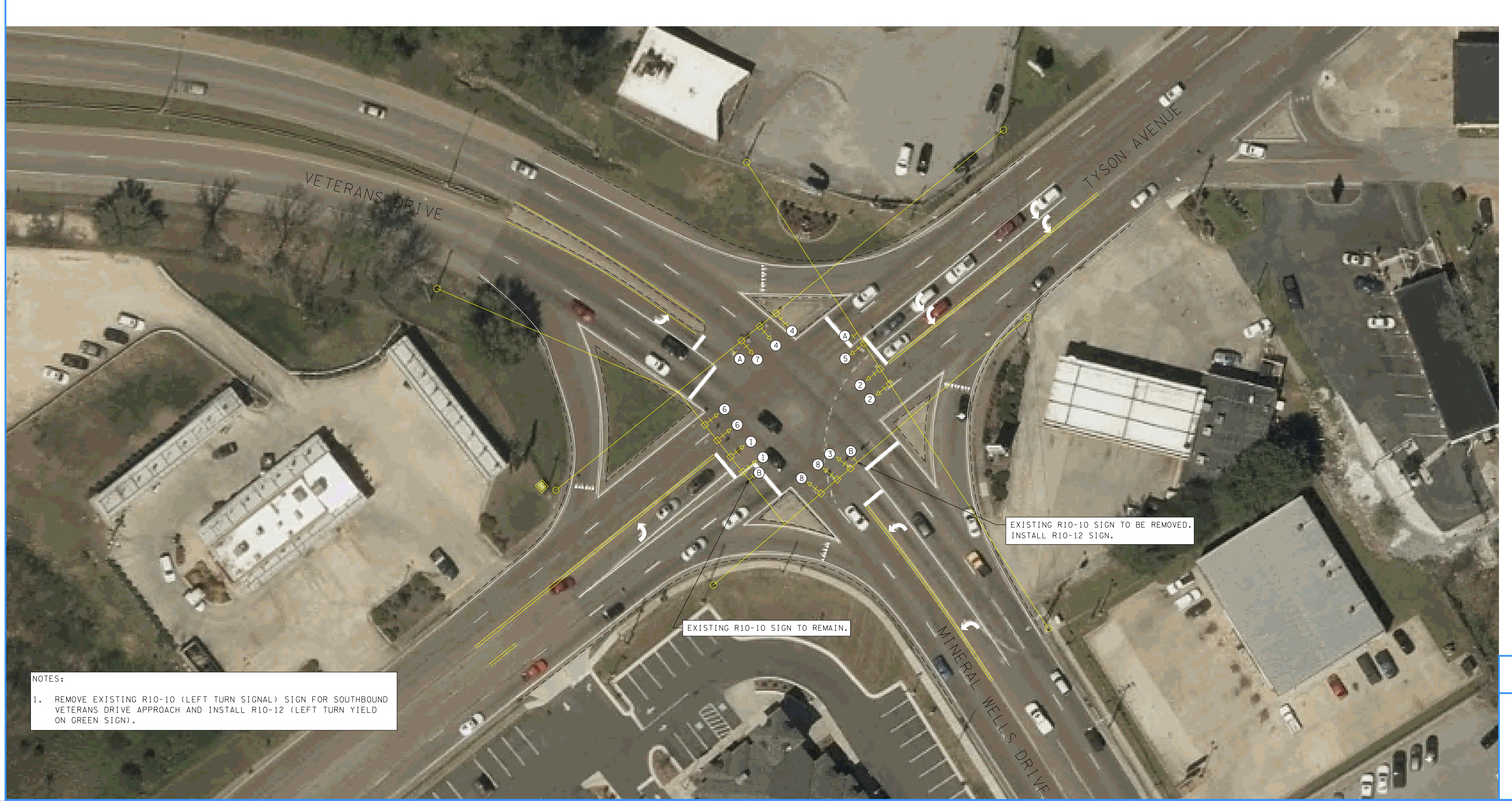
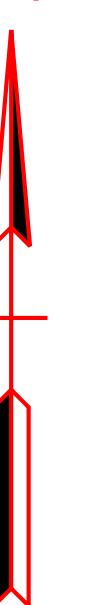


LEFT TURN  
SIGNAL  
R10-10  
30"X36"  
(EXISTING)  
B



LEFT TURN  
YIELD  
ON GREEN  
R10-12  
30"X36"  
B

N



### NOTES:

1. REMOVE EXISTING R10-10 (LEFT TURN SIGNAL) SIGN FOR SOUTHBOUND VETERANS DRIVE APPROACH AND INSTALL R10-12 (LEFT TURN YIELD ON GREEN SIGN).

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## FUNCTIONAL LAYOUT

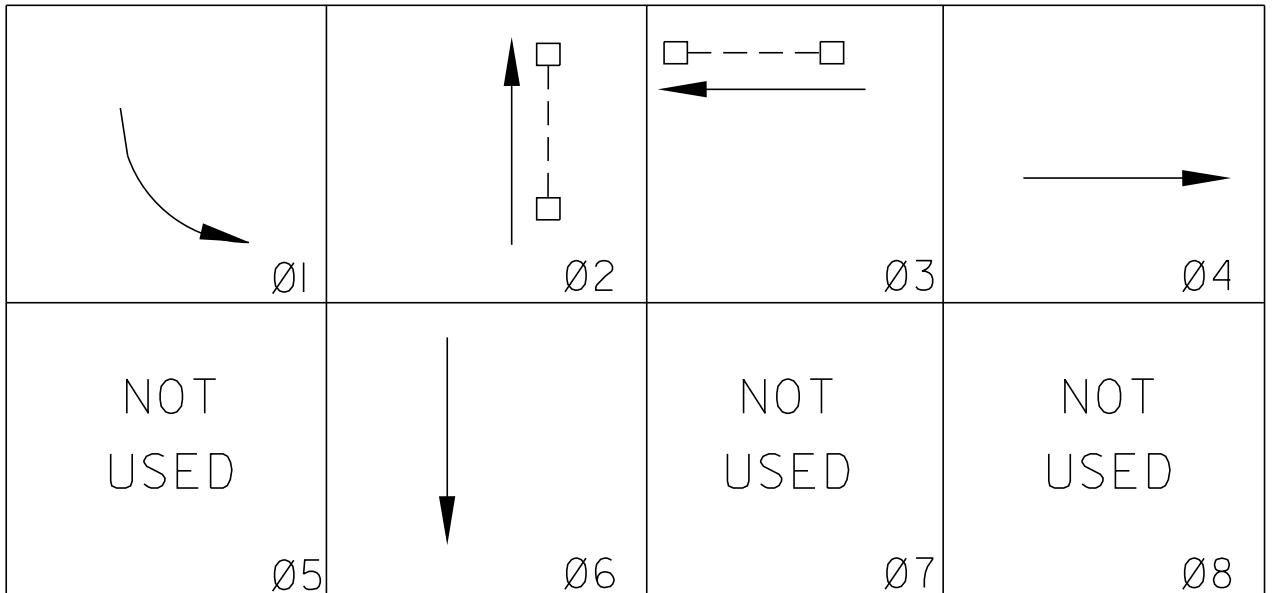
VETERANS DRIVE &  
MINERAL WELLS DRIVE  
AT  
TYSON AVENUE  
SCALE: 1"=30'

# Veterans Dr/Mineral Wells Dr. & Tyson Ave. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST TOTAL
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
730-15.10	MODIFY CABINET (INSTALL COORDINATION UNIT)	EACH	1	\$ 3,500.00	\$ 3,500.00
730-15.11	MODIFY CABINET (INSTALL EIGHT PHASE ACTUATED CONTROLLER)	EACH	1	\$ 5,500.00	\$ 5,500.00
713-16.20	SIGNS (R10-12)	EACH	1	\$ 300.00	\$ 300.00
713-16.50	REMOVE AND REPLACE SIGN (REMOVE R10-10, INSTALL R10-12)	EACH	1	\$ 200.00	\$ 200.00
				SUBTOTAL	\$ 12,000.00
				CONTINGENCY (15%)	\$ 1,800.00
				TOTAL	\$ 13,800.00

TYPE	YEAR	PROJECT NO.
FUNCT	2019	13176.006
		13

## SIGNAL PHASING DIAGRAM

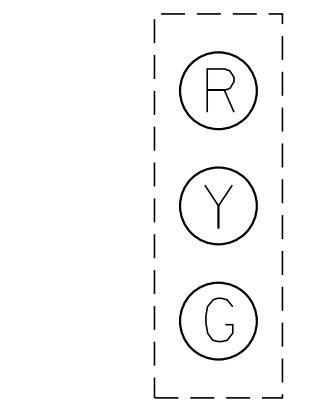
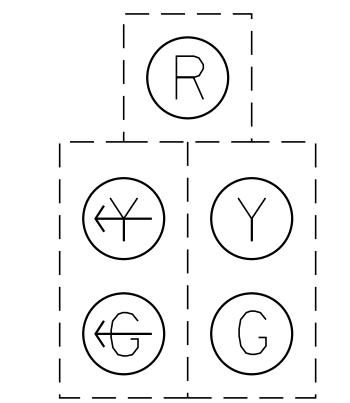
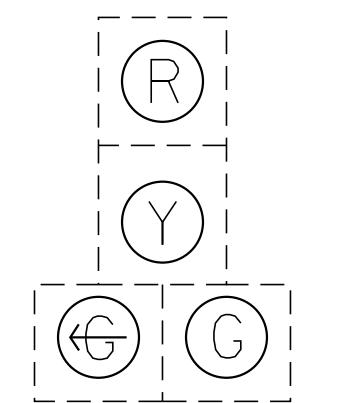
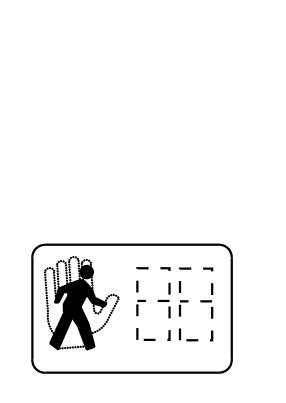


-PROT/PERM LEFT-TURN: 01

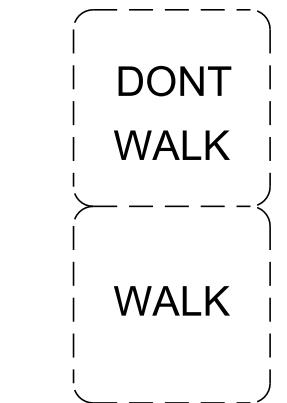
-MIN RECALL: 02,06

-FLASHING OPERATION: YELLOW - 02,06; RED - 03,04

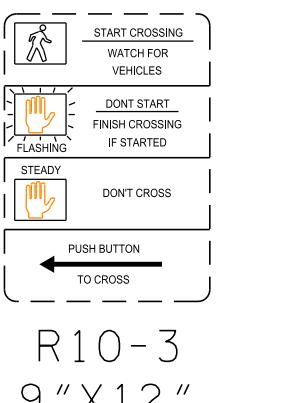
-DUAL ENTRY: 02,06

TYPE 130  
W/ BACKPLATE  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
2,3,4,6TYPE 150A2L  
W/ BACKPLATE  
12" L.E.D.  
(EXISTING  
TO REMAIN)TYPE 150A2L  
W/ BACKPLATE  
12" L.E.D.  
(EXISTING  
TO REMAIN)COUNTDOWN PEDESTRIAN  
SIGNAL HEAD

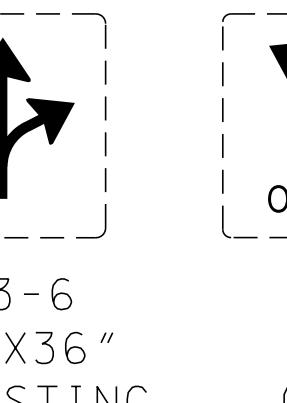
P2,P3

VERBAL PEDESTRIAN  
SIGNAL HEAD  
(EXISTING TO  
BE REMOVED)

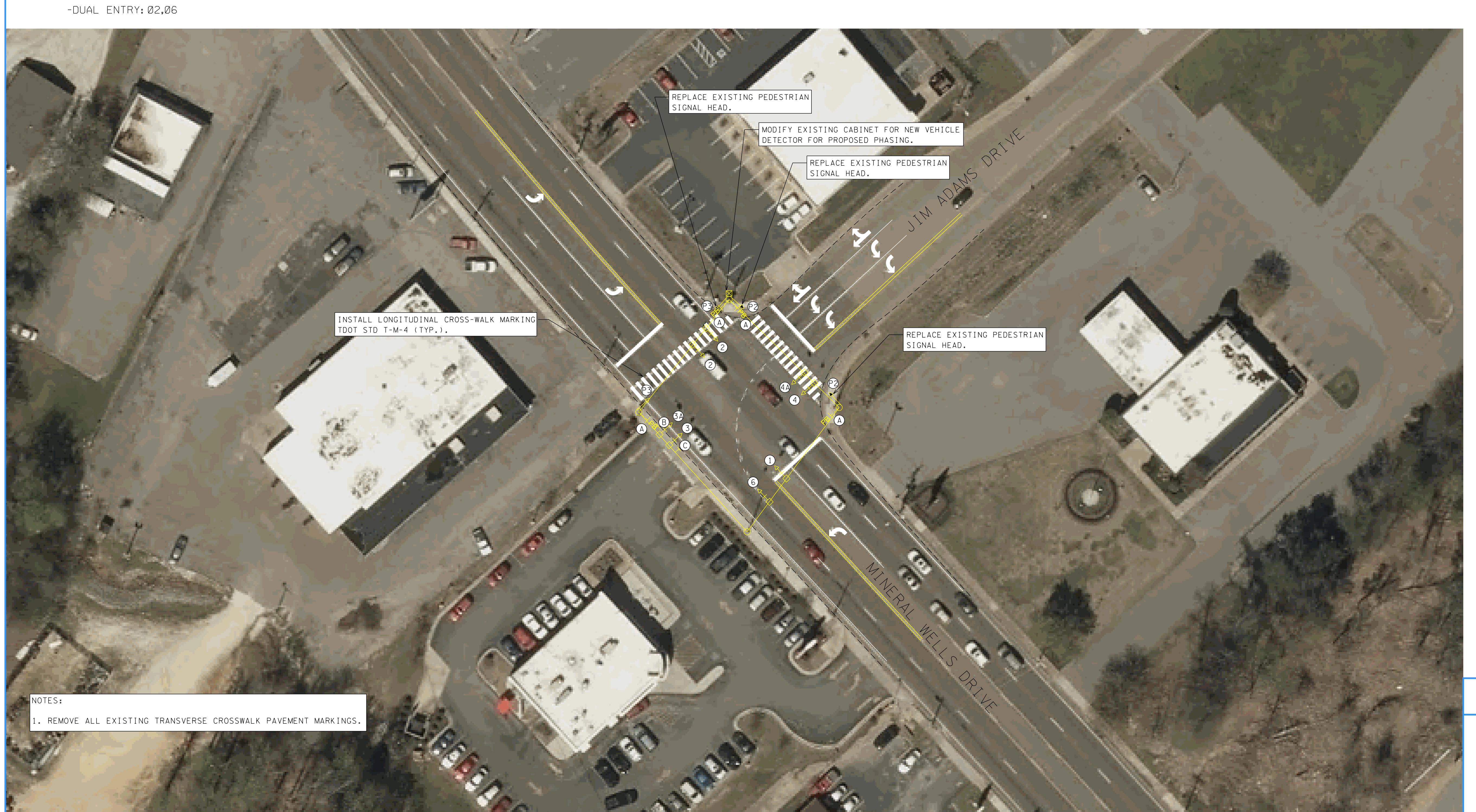
P2,P3

R3-6  
30"X36"  
(EXISTING  
TO REMAIN)

B

R3-5L  
30"X36"  
(EXISTING  
TO REMAIN)

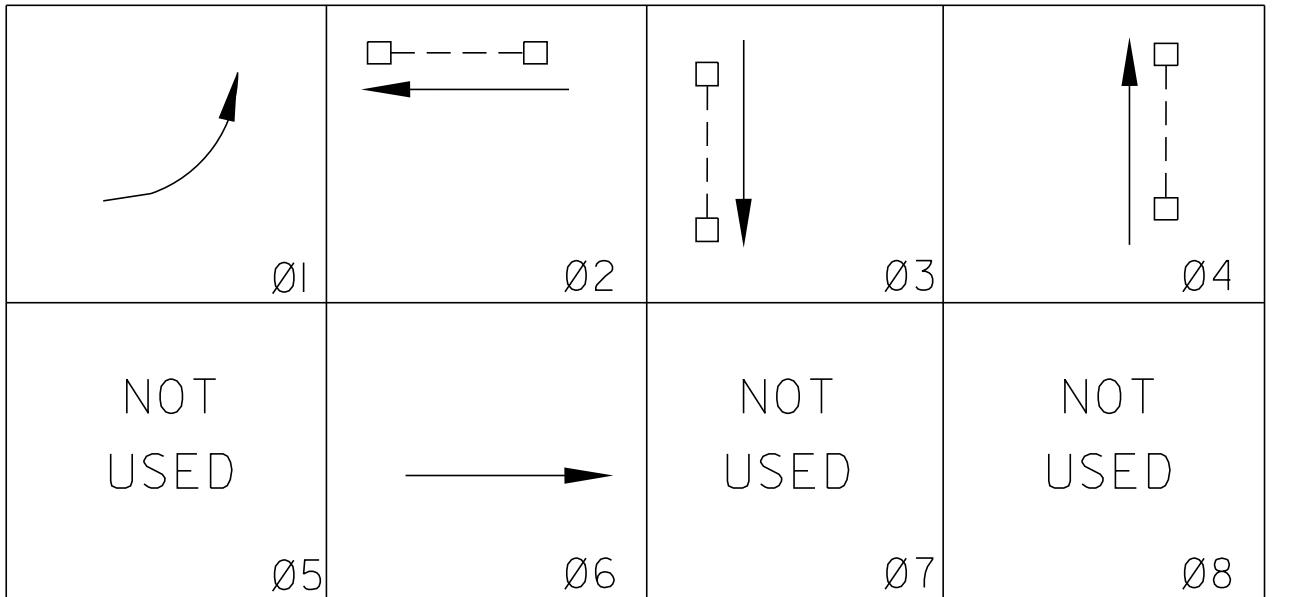
C

N  


# Mineral Wells Dr. & Jim Adams Dr. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	COST TOTAL
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	140	\$ 30.00	\$ 4,194.00
716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	290	\$ 1.50	\$ 435.60
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	180	\$ 2.00	\$ 360.80
730-13.05	VEHICLE DETECTOR (EXT. CALL-DELAY CALL)	EACH	5	\$ 250.00	\$ 1,250.00
730-15.10	MODIFY CABINET (INSTALL COORDINATION UNIT)	EACH	1	\$ 3,500.00	\$ 3,500.00
730-15.11	MODIFY CABINET (INSTALL EIGHT PHASE ACTUATED CONTROLLER)	EACH	1	\$ 5,500.00	\$ 5,500.00
730-26.04	AUDIBLE PEDESTRIAN SIGNAL	EACH	1	\$ 1,500.00	\$ 1,500.00
730-26.11	COUNTDOWN PED SGNL HEAD W/AUDIBLE PUSHBUTTON & 15IN SIGN	EACH	2	\$ 2,500.00	\$ 5,000.00
773-26.60	WC RELASH EXISTING AERIAL CABLE STRAND	L.F.	98	\$ 5.00	\$ 489.50
				SUBTOTAL	\$ 28,329.90
				CONTINGENCY (15%)	\$ 4,249.49
				TOTAL	\$ 32,579.39

## SIGNAL PHASING DIAGRAM



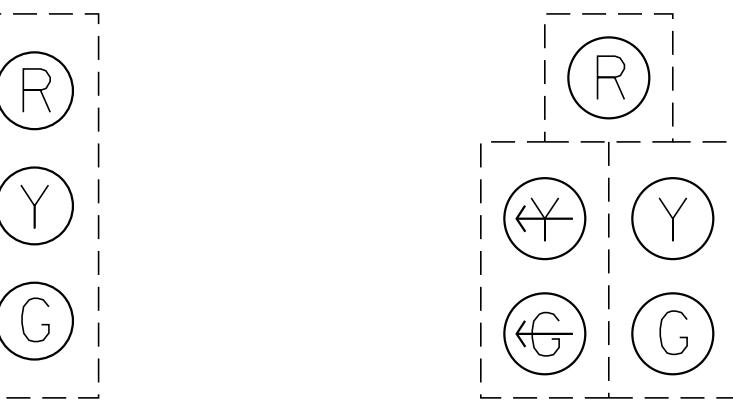
-PROT/PERM LEFT-TURN: 01,03,04

-MIN RECALL: 02,06

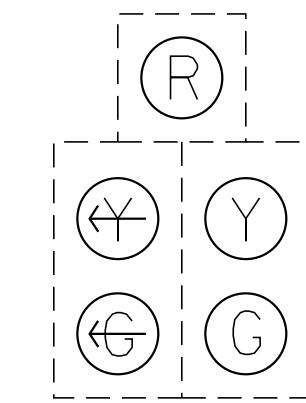
-FLASHING OPERATION: YELLOW - 02,06; RED - 03,04

-DUAL ENTRY: 02,06

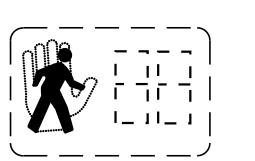
## SIGNAL HEADS



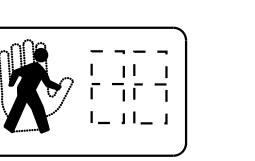
TYPE 130  
W/ BACKPLATE  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
2, 3, 4, 6



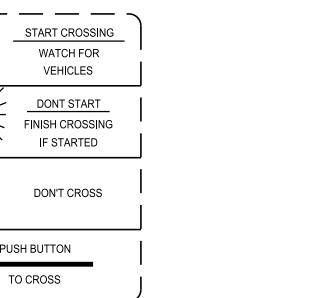
TYPE 150A2L  
W/ BACKPLATE  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
1, 3A, 4A



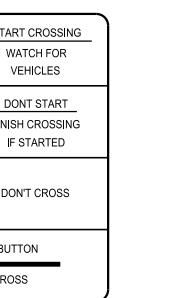
COUNTDOWN PEDESTRIAN  
SIGNAL HEAD  
(EXISTING  
TO REMAIN)  
P2, P4



COUNTDOWN PEDESTRIAN  
SIGNAL HEAD  
P3



R10-3  
9"X12"  
(EXISTING  
TO REMAIN)  
A



R10-3  
9"X12"  
B

N

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**FUNCTIONAL  
LAYOUT**  
MEMORIAL DRIVE AT  
VOLUNTEER DRIVE  
SCALE: 1"=30'

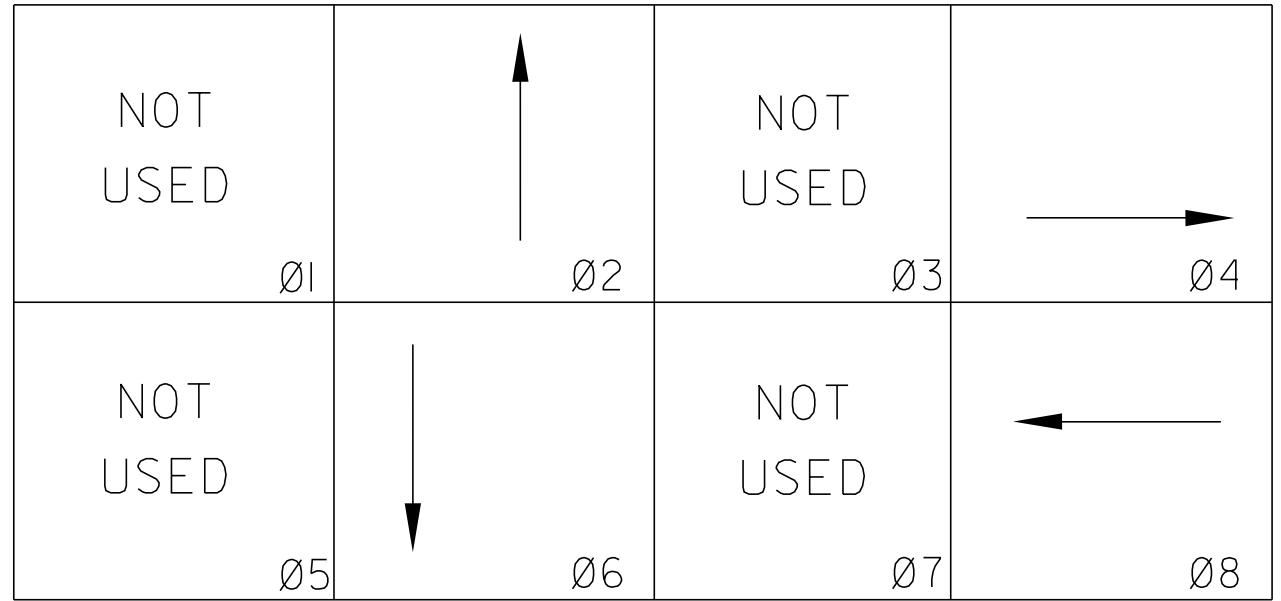
TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT	2019	13176.006	14

# Memorial Dr. & Volunteer Dr. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	COST TOTAL
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	200	\$ 30.00	\$ 6,006.00
716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	400	\$ 1.50	\$ 600.45
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	LS	1	\$ 4,500.00	\$ 4,500.00
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	1	\$ 450.00	\$ 450.00
730-08.01	SIGNAL CABLE - 3 CONDUCTOR	L.F.	113	\$ 1.50	\$ 169.95
730-08.02	SIGNAL CABLE - 5 CONDUCTOR	L.F.	125	\$ 1.75	\$ 219.45
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	95	\$ 24.00	\$ 2,268.00
730-15.10	MODIFY CABINET (INSTALL COORDINATION UNIT)	EACH	1	\$ 3,500.00	\$ 3,500.00
730-15.11	MODIFY CABINET (INSTALL EIGHT PHASE ACTUATED CONTROLLER)	EACH	1	\$ 5,500.00	\$ 5,500.00
730-26.04	AUDIBLE PEDESTRIAN SIGNAL	EACH	1	\$ 1,500.00	\$ 1,500.00
730-26.11	COUNTDOWN PED SGNL HEAD W/AUDIBLE PUSHBUTTON & 15IN SIGN	EACH	2	\$ 2,500.00	\$ 5,000.00
				SUBTOTAL	\$ 35,813.85
				CONTINGENCY (15%)	\$ 5,372.08
				TOTAL	\$ 41,185.93

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT	2019	13176.006	15

## SIGNAL PHASING DIAGRAM

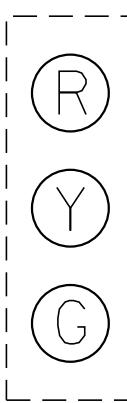


-MIN RECALL: 04,08

-FLASHING OPERATION: YELLOW - 04,08; RED - 02,06

-DUAL ENTRY: 02,04,06,08

## SIGNAL HEADS



TYPE 130  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
2,4,6,8

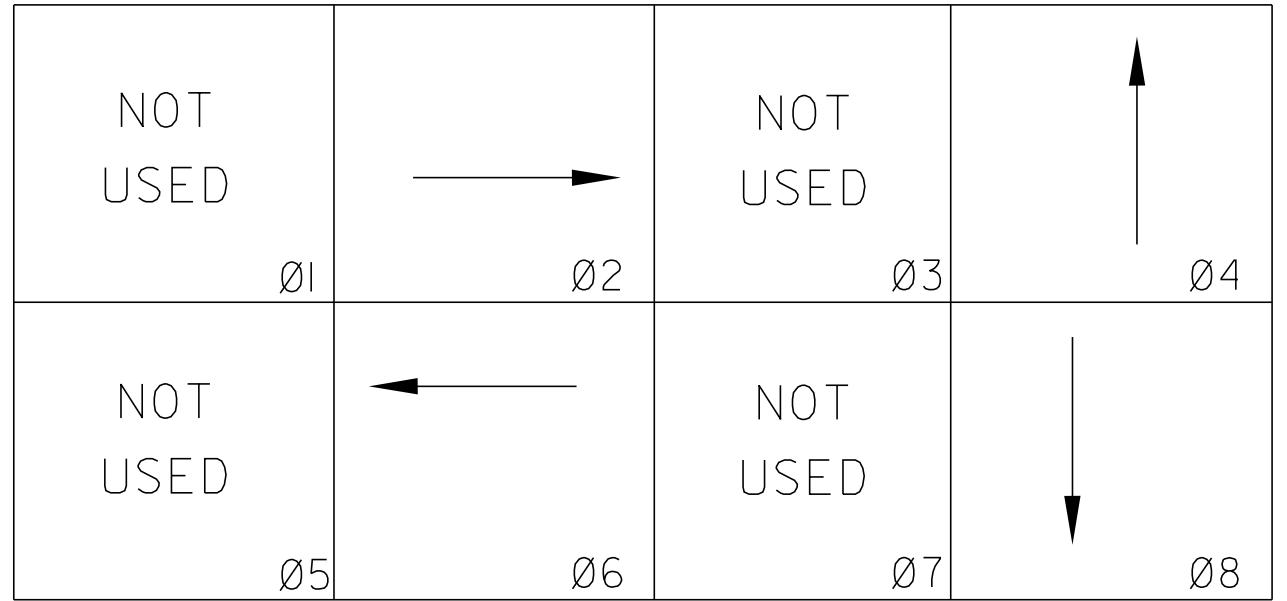


# Lone Oak Rd. & Wilson St. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	COST TOTAL
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
712-06	SIGNS (CONSTRUCTION)	S.F.	114	\$ 9.00	\$ 1,026.00
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	70	\$ 15.00	\$ 1,051.50
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	4	\$ 450.00	\$ 1,800.00
730-05.04	MODIFY EXISTING ELECTRICAL SERVICE CONNECTION	EACH	1	\$ 1,750.00	\$ 1,750.00
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	180	\$ 2.00	\$ 360.80
730-12.01	CONDUIT 1" DIAMETER (PVC)	L.F.	50	\$ 8.00	\$ 396.00
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	130	\$ 10.00	\$ 1,298.00
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	55	\$ 24.00	\$ 1,312.80
730-12.30	TRENCHING	L.F.	110	\$ 15.00	\$ 1,644.00
730-13.05	VEHICLE DETECTOR (EXT. CALL - DELAY CALL)	EACH	4	\$ 250.00	\$ 1,000.00
730-14.01	SHIELDED DETECTOR CABLE	L.F.	925	\$ 1.50	\$ 1,387.50
730-14.02	SAW SLOT	L.F.	820	\$ 3.50	\$ 2,868.25
730-14.03	LOOP WIRE	L.F.	2360	\$ 1.00	\$ 2,359.50
730-15.32	CABINET (EIGHT PHASE BASE MOUNTED)	EACH	1	\$ 14,040.00	\$ 14,040.00
730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	1	\$ 5,000.00	\$ 5,000.00
730-19.01	TIME BASE COORDINATION UNIT	EACH	1	\$ 3,000.00	\$ 3,000.00
773-26.60	WC RELASH EXISTING AERIAL CABLE STRAND	L.F.	225	\$ 5.00	\$ 1,127.00
				SUBTOTAL	\$ 47,521.35
				CONTINGENCY (15%)	\$ 7,128.20
				TOTAL	\$ 54,649.55

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT	2019	13176.006	16

## SIGNAL PHASING DIAGRAM

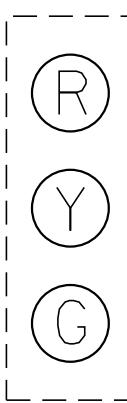


-MIN RECALL: 02,06

-FLASHING OPERATION: YELLOW - 02,06; RED - 04,08

-DUAL ENTRY: 02,04,06,08

## SIGNAL HEADS



TYPE 130  
12" L.E.D.  
(EXISTING  
TO REMAIN)  
2,4,6,8

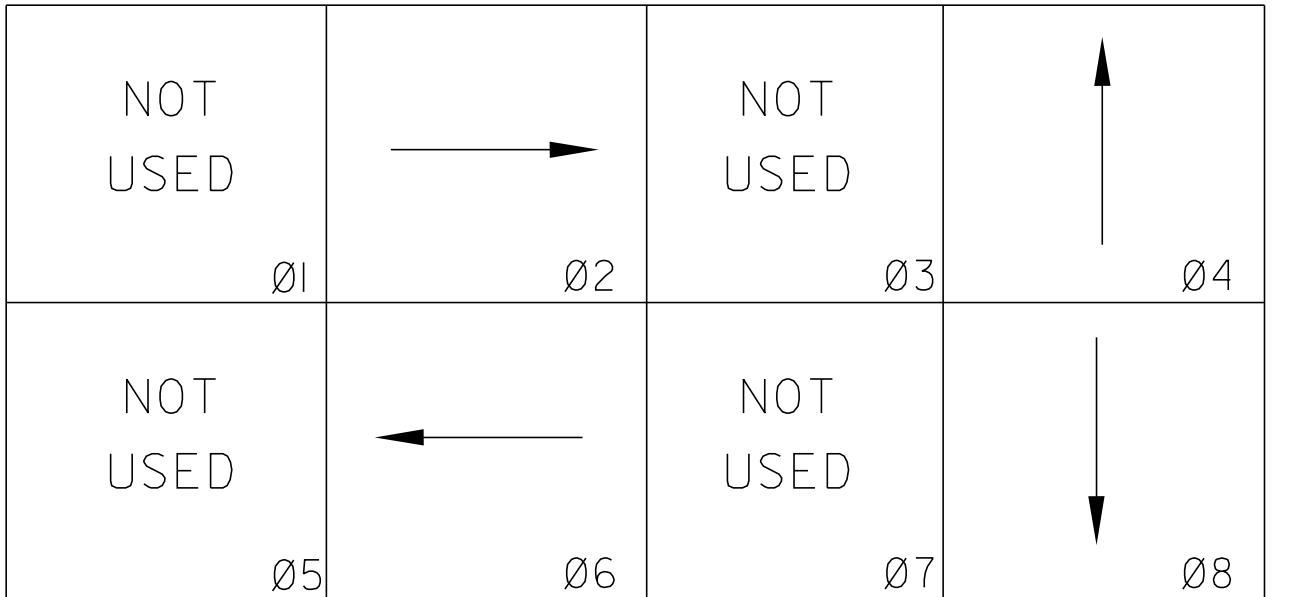


# Wood St. & Irvine St. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	COST TOTAL
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
712-06	SIGNS (CONSTRUCTION)	S.F.	114	\$ 9.00	\$ 1,026.00
716-02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	L.F.	85	\$ 15.00	\$ 1,280.40
716-02.09	PLASTIC PAVEMENT MARKING (LONGITUDINAL CROSS-WALK)	L.F.	95	\$ 30.00	\$ 2,862.00
716-08.03	REMOVAL OF PAVEMENT MARKING (CROSS-WALK)	L.F.	185	\$ 1.50	\$ 277.20
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	4	\$ 450.00	\$ 1,800.00
730-08.03	SIGNAL CABLE - 7 CONDUCTOR	L.F.	125	\$ 2.00	\$ 250.40
730-05.04	MODIFY EXISTING ELECTRICAL SERVICE CONNECTION	EACH	1	\$ 1,750.00	\$ 1,750.00
730-12.01	CONDUIT 1" DIAMETER (PVC)	L.F.	40	\$ 8.00	\$ 316.80
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	50	\$ 10.00	\$ 503.00
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	185	\$ 24.00	\$ 4,442.40
730-13.05	VEHICLE DETECTOR (EXT. CALL - DELAY CALL)	EACH	4	\$ 250.00	\$ 1,000.00
730-14.01	SHIELDED DETECTOR CABLE	L.F.	355	\$ 1.50	\$ 532.50
730-14.02	SAW SLOT	L.F.	1260	\$ 3.50	\$ 4,408.25
730-14.03	LOOP WIRE	L.F.	3590	\$ 1.00	\$ 3,590.00
730-15.07	CABINET (EIGHT PHASE POLE MOUNTED)	EACH	1	\$ 12,600.00	\$ 12,600.00
730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	1	\$ 5,000.00	\$ 5,000.00
730-19.01	TIME BASE COORDINATION UNIT	EACH	1	\$ 3,000.00	\$ 3,000.00
773-26.60	WC RELASH EXISTING AERIAL CABLE STRAND	L.F.	75	\$ 5.00	\$ 372.50
				SUBTOTAL	\$ 51,111.45
				CONTINGENCY (15%)	\$ 7,666.72
				TOTAL	\$ 58,778.17

TYPE	YEAR	PROJECT NO.	SHEET NO.
FUNCT.	2019	13176.006	17

## SIGNAL PHASING DIAGRAM

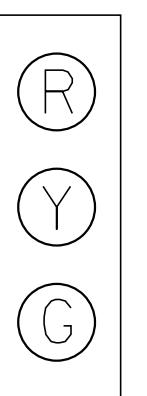


-MAX RECALL: 02, 06

-FLASHING OPERATION: YELLOW - 02, 06; RED - 04, 08

-DUAL ENTRY: 04, 08

## SIGNAL HEADS



TYPE 130  
W/ BACKPLATE  
12" L.E.D.  
2, 4, 6, 8



# Wood St. & Lake St. Probable Cost

ESTIMATED ROADWAY QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT COST	COST TOTAL
712-01	TRAFFIC CONTROL	LS	1	\$ 2,500.00	\$ 2,500.00
717-01	MOBILIZATION	LS	1	\$ 3,600.00	\$ 3,600.00
730-01.02	REMOVAL OF SIGNAL EQUIPMENT	LS	1	\$ 6,500.00	\$ 6,500.00
730-03.21	INSTALL PULL BOX (TYPE B)	EACH	3	\$ 450.00	\$ 1,350.00
730-05.04	MODIFY EXISTING ELECTRICAL SERVICE CONNECTION	EACH	1	\$ 1,750.00	\$ 1,750.00
730-12.01	CONDUIT 1" DIAMETER (PVC)	L.F.	15	\$ 8.00	\$ 123.20
730-12.02	CONDUIT 2" DIAMETER (PVC)	L.F.	220	\$ 10.00	\$ 2,200.00
730-12.13	CONDUIT 2" DIAMETER (JACK AND BORE)	L.F.	75	\$ 24.00	\$ 1,788.00
730-12.30	TRENCHING	L.F.	65	\$ 15.00	\$ 970.50
730-13.05	VEHICLE DETECTOR (EXT. CALL - DELAY CALL)	EACH	2	\$ 250.00	\$ 500.00
730-14.01	SHIELDED DETECTOR CABLE	L.F.	95	\$ 1.50	\$ 143.10
730-14.02	SAW SLOT	L.F.	390	\$ 3.50	\$ 1,366.05
730-14.03	LOOP WIRE	L.F.	1180	\$ 1.00	\$ 1,180.30
730-15.32	CABINET (EIGHT PHASE BASE MOUNTED)	EACH	1	\$ 14,040.00	\$ 14,040.00
730-16.02	EIGHT PHASE ACTUATED CONTROLLER	EACH	1	\$ 5,000.00	\$ 5,000.00
730-19.01	TIME BASE COORDINATION UNIT	EACH	1	\$ 3,000.00	\$ 3,000.00
				SUBTOTAL	\$ 46,011.15
				CONTINGENCY (15%)	\$ 6,901.67
				TOTAL	\$ 52,912.82

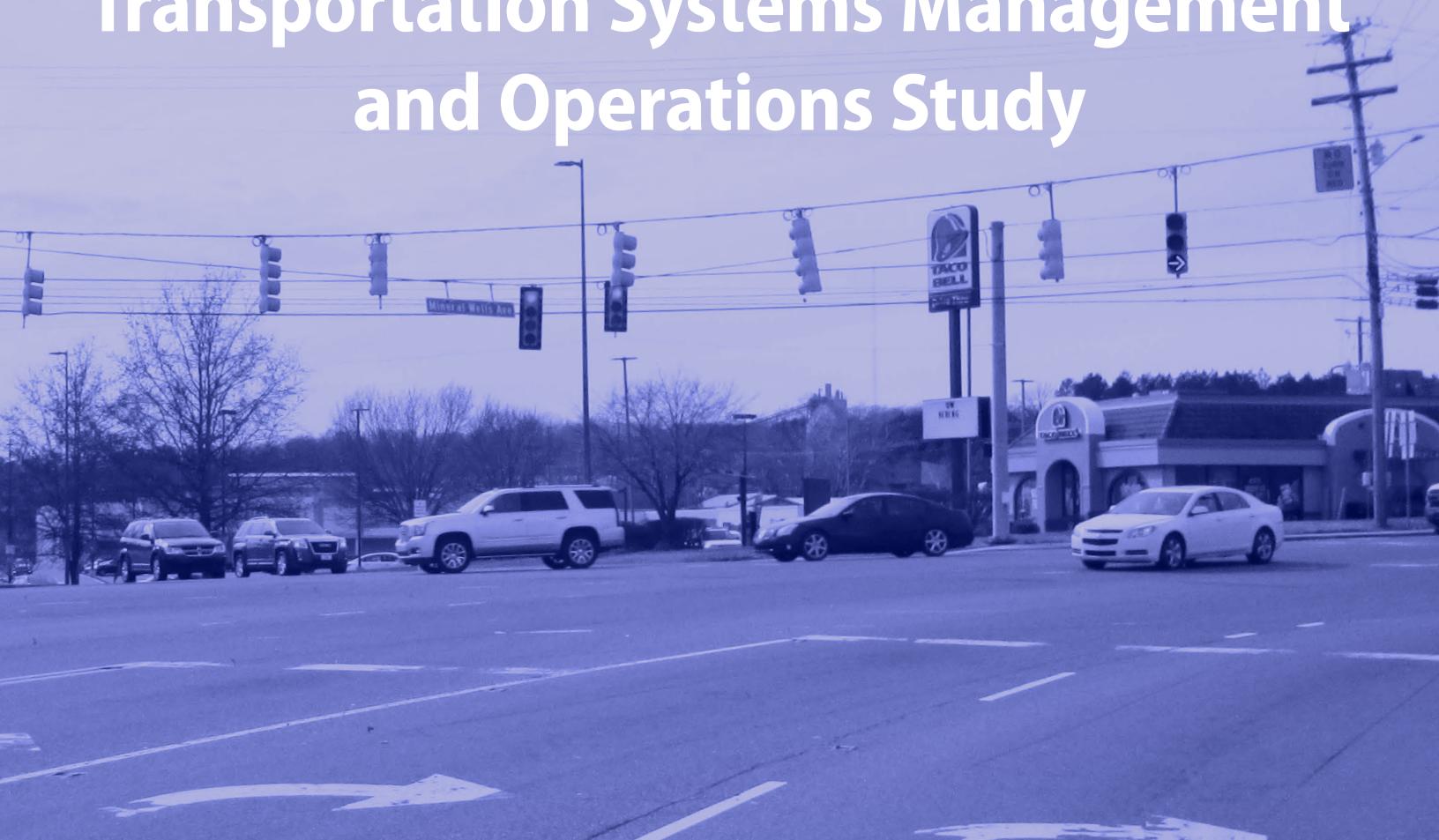
Intersection	Action Plan	Planning Level Cost Estimate
Ruff Street & Market Street	ADA Improvements, Pedestrian and Signal Upgrade	\$ 116,499.03
Washington Street & Market Street	ADA Improvements, Pedestrian and Signal Upgrade	\$ 142,823.96
Washington Street & Poplar Street	ADA Improvements, Pedestrian and Signal Upgrade	\$ 143,910.71
Wood Street & Market Street	ADA Improvements, Pedestrian and Signal Upgrade	\$ 150,270.21
Wood Street & Poplar Street	ADA Improvements, Pedestrian and Signal Upgrade	\$ 144,053.03
Wood Street & Brewer Street	ADA Improvements, Pedestrian and Signal Upgrade	\$ 131,341.21
Blythe Street & Market Street	ADA Improvements, Pedestrian and Signal Upgrade	\$ 102,228.96
Wood Street & Tyson Avenue	Operational Improvement	\$ 20,324.53
Wood Street & Volunteer Drive	Pedestrian Upgrade	\$ 40,325.73
Wood Street & Chickasaw/Fairgrounds	Operational Improvement	\$ 119,807.12
Veterans Drive & Dunlap Street	Pedestrian Upgrade	\$ 37,935.28
Veterans Drive & Tyson Avenue	Sign Replacement and Operational Improvement	\$ 13,800.00
Mineral Wells & Jim Adams	Pedestrian Upgrade	\$ 32,579.39
Memorial Drive & Volunteer	Pedestrian Upgrade	\$ 41,185.93
Lone Oak & Wilson	Signal Upgrade and Operational Improvement	\$ 54,649.55
Wood Street & Irvine Street	Signal Upgrade and Operational Improvement	\$ 58,778.17
Wood Street & Lake Street	Signal Upgrade and Operational Improvement	\$ 52,912.82
City-wide Improvements	Equipment Upgrades and Operational Improvement	\$ 48,222.56
<b>Paris TSMO</b>	<b>Full Implementation of all Proposed Improvements</b>	<b>\$ 1,451,648.19</b>

<b>Phase Priority</b>	<b>Location of Phase</b>	<b>Planning Level Cost Estimate</b>
Phase 1A	Downtown CBD Area - Market Street except Ruff/Market	\$ 395,323.13
Phase 1B	Downtown CBD Area - Remaining Intersections	\$ 535,803.98
Phase 2	Mineral Wells Ave/Veterans Drive	\$ 91,326.42
Phase 3	East Wood Street	\$ 238,835.54
Phase 4	Isolated Intersections (Lone Oak/Memorial/Irvine)	\$ 190,359.12
<b>Paris TSMO</b>	<b>Full Implementation of all Proposed Improvements</b>	<b>\$ 1,451,648.19</b>

<b>Phase Priority</b>	<b>Location of Phase</b>	<b>Planning Level Cost Estimate</b>
Phase 1A	Downtown CBD Area - Market Street except Ruff/Market	\$ 395,300.00
Phase 1B	Downtown CBD Area - Remaining Intersections	\$ 535,800.00
Phase 2	Mineral Wells Ave/Veterans Drive	\$ 91,400.00
Phase 3	East Wood Street	\$ 238,900.00
Phase 4	Isolated Intersections (Lone Oak/Memorial/Irvine)	\$ 190,400.00
<b>Paris TSMO</b>	<b>Full Implementation of all Proposed Improvements</b>	<b>\$ 1,451,800.00</b>



# Transportation Systems Management and Operations Study



OCTOBER 2019

Prepared on behalf of the  
City of Paris, TN by:

 **NEEL-SCHAFFER**  
Solutions you can build upon

in cooperation with

**TN** **TDOT**  
Department of  
Transportation