CITY OF STARKVILLE

TRAFFIC SIGNAL STUDY

November 2015

Prepared by:

NEEL-SCHAFFER

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1.0 Introduction

This report details the findings of a traffic analysis performed by Neel-Schaffer, Inc., at the request of the City of Starkville. The analysis included evaluating the peak hour traffic volumes and capacity restraints at ten existing signalized intersections. The studied intersections are presented in Figure 1 and listed below:

1. Louisville Street at Yellow Jacket Drive
2. Louisville Street at Millsaps Career and Technology Center
3. Louisville Street at Lynn Lane
4. Louisville Street at Academy Road
5. Academy Road at Starkville Academy
6. South Montgomery Street at Academy Road
7. South Montgomery Street at Lynn Lane
8. South Montgomery Street at Locksley Way/Howard Road
9. Locksley Way at Lincoln Green
10. Blackjack Road at Locksley Way

The study area intersections include two primary north/south corridors, Louisville Street and South Montgomery Street, as well as three isolated or semi-isolated intersections. The three intersections that are not part of either the Louisville Street or South Montgomery Street corridors are: Academy Road at Starkville Academy, Locksley Way at Lincoln Green, and Blackjack Road at Locksley Way.

The Louisville Street corridor served as MS State Route 25 prior to the opening of the MS 25 bypass to the west. Since the opening of the bypass, traffic volumes along Louisville Street have decreased. In 1998, several years before the opening of the bypass, the average daily traffic on Louisville Street was 14,000 vehicles per day. The current 2015 average daily traffic is approximately 9,000 vehicles per day. The Louisville Street traffic signal timings provided by the city indicate that a relatively long 140-second cycle length is currently used. The cycle length is recommended to be reduced since the traffic on the corridor has dropped due to the new bypass.

1. LOUISVILLE STREET/ YELLOW JACKET DRIVE
2. LOUISVILLE STREET/MILLSAPS CAREER & TECH CENTER
3. LOUISVILLE STREET/ LYNN LANE
4. ACADEMY ROAD/ LOUISVILLE STREET
5. ACADEMY ROAD/ENTRANCE TO STARKVILLE ACADEMY
6. S MONTGOMERY STREET/ ACADEMY ROAD
7. S MONTGOMERY STREET/ LYNN LANE
8. S MONTGOMERY STREET/ LOCKSLEY WAY
9. LINCOLN GREEN/ LOCKSLEY WAY
10. BLACKJACK ROAD/ LOCKSLEY WAY

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STARKVILLE MAP WITH INTERSECTION LOCATIONS

FIGURE
1

The Montgomery Street corridor extends from Academy Road northward to Locksley Way/Howard Road. The primary focus along this corridor is to improve operations at each intersection as well as identify potential coordination improvements.

Academy Road at the Starkville Academy driveway, Lockley Way at Lincoln Green, and Blackjack Road at Locksley Way are study area intersections that operate independently of either the Louisville Street or South Montgomery Street corridors. Coordination with these signals was determined to be either not practical or better served by coordinating with another corridor such as Blackjack Road. However, signal timing improvements and other recommendations for these intersections are included in this report.

Three intersections were found to not meet traffic signal volume warrants. These three intersections are Louisville Street at the Millsaps Career and Technology Center, Academy Road at Starkville Academy, and Locksley Way at Lincoln Green.

2.0 Warrant Analysis

A traffic signal warrant analysis was performed according to the guidance outlined in the 2009 edition of the Manual on Uniform Traffic Control Devices (MUTCD). The MUTCD outlines nine traffic signal warrants. Satisfaction of any one of the warrants may provide justification for the installation of a traffic control signal, but satisfaction of a signal warrant does not necessarily require the installation of a traffic control signal.

Common practice is to reduce the signal warrant volume thresholds when reevaluating an existing signalized intersection. Typically, if the vehicular volume thresholds are reduced to 60-percent of their full value and the turning movement volumes exceed the reduced thresholds, then the traffic signal can still be considered to be justified due to potential variation in traffic volumes throughout the year.

The warrant analysis found that three of the ten traffic signals evaluated do not meet the 60-percent volume warrant. The unwarranted signalized intersections are Louisville Street at the Millsaps Career & Technology Center, Academy Road at Starkville Academy, and Lincoln Green at Locksley Way.

Table 1. Traffic Signal Warrant Analysis Results

ID	Intersection	Warrant 1 - 8-hour Volume	Warrant 2 - 4-hour Volume	Warrant 3 - Peak Hour	Warrant 4 - Pedestrian Volume	Warrant 5 - School Crossing	Warrant 6 - Coordinated Signals	Warrant 7 - Crash Experience*	Warrant 8 - Roadway Network	Warrant 9 - Adjacent Railroad	Traffic Signal Recommendation
1	Louisville Street at Yellow Jacket Drive	**Yes**	**Yes**	**Yes**	No	No	No	n/a	No	No	***Yes***
2	Louisville Street at the Millsaps Career and Technology Center	No	No	No	No	No	No	n/a	No	No	***No***
3	Louisville Street at Lynn Lane	**Yes**	**Yes**	**Yes**	No	No	No	n/a	No	No	***Yes***
4	Louisville Street at Academy Road	**Yes**	**Yes**	**Yes**	No	No	No	n/a	No	No	***Yes***
5	Academy School Entrance at Academy Road	No	No	No	No	No	No	n/a	No	No	***No***
6	S. Montgomery Street at Academy Road	**Yes**	**Yes**	**Yes**	No	No	No	n/a	No	No	***Yes***
7	S. Montgomery Street at Lynn Lane	**Yes**	**Yes**	**Yes**	No	No	No	n/a	No	No	***Yes***
8	S. Montgomery Street at Locksley Way	**Yes**	**Yes**	**Yes**	No	No	No	n/a	No	No	***Yes***
9	Lincoln Green at Locksley Way	No	No	No	No	No	No	n/a	No	No	***No***
10	Blackjack Road at Locksley Way	**Yes**	**Yes**	**Yes**	No	No	No	n/a	No	No	***Yes***

Source: Neel-Schaffer, Inc., November 2015
** The crash warrant evaluates crashes that are correctable by signalization. The crash warrant is not applicable since the intersections are already signalized.*

3.0 Capacity Analysis

3.1 Methodology

The capacity analysis of the studied intersections was performed using the Transportation Research Board's 2010 *Highway Capacity Manual (HCM)*. The HCM provides analysis methodologies for evaluating various roadway segments, intersections, and interchange components as well as the transit, pedestrian, and bicyclist modes and their interactions with motor vehicles. In general, a measure of effectiveness is calculated to provide a basic understanding of performance that is relatable to other locations and can be assigned a qualitative level of service.

The dominate measure of effectiveness at intersections is average control delay (seconds of control delay per vehicle). Average control delay is used in the evaluation of interrupted flow at intersections controlled by all-way or two-way stops, traffic signals, and roundabouts.

Levels of service (LOS) are assigned to ranges of the various measures of effectiveness to aide in the evaluation, understanding, and presentation of the analysis results. Levels of service are letter designations ranging from A to F. Level of service "A" denotes the most desirable condition and reflects conditions in which a user can expect the least amount of delay and impedance from control devices and/or other users. Level of service "F" indicates conditions in which users can expect significant delays and find their desired routes greatly impeded by other users. Additionally, a LOS F condition may also indicate situations in which demand has exceeded capacity. Typically, a LOS D or better is considered to be reasonable level of operation and delay at intersections in developed areas. A LOS E or F is usually considered to be an indication that delay reducing countermeasures may be needed. Countermeasures may be improvements to intersection geometries and/or traffic control devices. Table 2 presents the level of service criteria for signalized intersections, and Table 3 presents the level of service criteria for unsignalized intersections.

Table 2. Level of Service Criteria for Signalized Intersections

LOS	Average Control Delay per Vehicle (s/veh)
A	0 – 10
B	> 10 – 20
C	> 20 – 35
D	> 35 – 55
E	> 55 – 80
F	> 80

Note: LOS F when the ratio of volume to capacity is greater than 1.0.
Source: HCM 2010

Table 3. Level of Service Criteria for Unsignalized Intersections and Roundabouts

LOS	Average Control Delay per Vehicle (s/veh)
A	0 – 10
B	> 10 – 15
C	> 15 – 25
D	> 25 – 35
E	> 35 – 50
F	> 50

Note: LOS F when the ratio of volume to capacity is greater than 1.0.
Source: HCM 2010

3.2 Capacity Analysis Results

The capacity analysis indicates that the current traffic signal timings allocate more green time than necessary to the Louisville Street and South Montgomery Street corridors. Shortening the overall intersection cycle length was found to reduce delay more than reallocating green time elsewhere in the cycle. The existing levels of service based on the timings and turning movement counts provided by the city are summarized in Table 4.

Table 4. Existing Levels of Service
AM Peak Hour (PM Peak Hour)

ID	Signalized Intersection	Overall LOS	Approach			
			Northbound	Southbound	Eastbound	Westbound
1	Louisville Street at Yellow Jacket Drive	B (C)	Louisville St: B (B)	Louisville St: A (A)	Yellow Jacket Dr: D (D)	Yellow Jacket Dr: D **(E)**
2	Louisville Street at Millsaps Career and Technology Center	C (C)	Louisville St: C (C)	Louisville St: B (B)	n/a	Millsaps Center: B (C)
3	Louisville Street at Lynn Lane	**E** (D)	Louisville St: B (C)	Louisville St: B (D)	Lynn Lane: **F (E)**	Lynn Lane: **E (E)**
4	Louisville Street at Academy Road	C (D)	Louisville St: A (A)	Louisville St: A (A)	n/a	Academy Rd: **F (F)**
5	Academy Road at Starkville Academy	B (A)	n/a	Driveway: D (D)	Academy Rd: A (A)	Academy Rd: B (A)
6	S Montgomery Street at Academy Road	C (C)	S Montgomery St: B (A)	S Montgomery St: A (A)	Academy Rd: D **(E)**	n/a
7	S Montgomery Street at Lynn Lane	C (B)	S Montgomery St: B (A)	S Montgomery St: A (B)	Lynn Lane: **E (E)**	n/a
8	S Montgomery Street at Locksley Way/Howard Rd	D **(F)**	S Montgomery St: D (C)	S Montgomery St: B (B)	Howard Rd: **E** (D)	Locksley Way: D **(F)**
9	Lincoln Green at Locksley Way	A (B)	Lincoln Green: D (C)	Lincoln Green: D (D)	Locksley Way: A (A)	Locksley Way: A (A)
10	Blackjack Road at Locksley Way	D **(F)**	Locksley Way: B (C)	n/a	Blackjack Rd: D (D)	Blackjack Rd: C **(F)**

Source: Neel-Schaffer, Inc., November 2015

Table 5 presents the levels of service that can be achieved by implementing the proposed timings without modifying existing intersection geometries or signal phasing. These are the estimated levels of service based on the proposed traffic signal timings using the 2015 turning movement data provided by the city.

Table 5. Alternate Timing Levels of Service with Existing Signal Configurations
AM Peak Hour (PM Peak Hour)

ID	Signalized Intersection	Overall LOS	Approach			
			Northbound	Southbound	Eastbound	Westbound
1	Louisville Street at Yellow Jacket Drive	B (B)	Louisville St: B (B)	Louisville St: A (A)	Yellow Jacket Dr: D (C)	Yellow Jacket Dr: D (D)
2	Louisville Street at Millsaps Career and Technology Center	B (C)	Louisville St: B (B)	Louisville St: A (A)	n/a	Millsaps Center: C (C)
* 3	Louisville Street at Lynn Lane	C (D)	Louisville St: A (D)	Louisville St: B (D)	Lynn Lane: D **(E)**	Lynn Lane: D **(E)**
4	Louisville Street at Academy Road	B (D)	Louisville St: A (A)	Louisville St: A (A)	n/a	Academy Rd: D (D)
5	Academy Road at Starkville Academy	A (A)	n/a	Driveway: C (D)	Academy Rd: A (A)	Academy Rd: B (A)
6	S Montgomery Street at Academy Road	C (B)	S Montgomery St: B (A)	S Montgomery St: A (A)	Academy Rd: D (D)	n/a
7	S Montgomery Street at Lynn Lane	C (B)	S Montgomery St: B (A)	S Montgomery St: A (B)	Lynn Lane: D (D)	n/a
8	S Montgomery Street at Locksley Way/Howard Rd	C (D)	S Montgomery St: C (D)	S Montgomery St: B (C)	Howard Rd: **E** (D)	Locksley Way: D (D)
9	Lincoln Green at Locksley Way	A (B)	Lincoln Green: D (C)	Lincoln Green: D (C)	Locksley Way: A (A)	Locksley Way: A (A)
10	Blackjack Road at Locksley Way	A **(F)**	Locksley Way: A (C)	n/a	Blackjack Rd: B (D)	Blackjack Rd: B **(F)**

Source: Neel-Schaffer, Inc., November 2015
** The Louisville Street/Lynn Lane analysis in this table retains the existing east/west split phases.*

During the PM peak hours, the Lynn Lane approaches to Louisville Street are at or above the available capacity. Retiming the existing traffic signal phasing is not anticipated to alleviate the congestion on Lynn Lane. Replacing the split-phasing on Lynn Lane with protected-permitted left-turns and concurrent thrus was found to increase the available capacity. Table 6 summarizes the levels of service using the proposed modification to Louisville Street/Lynn Lane.

Table 6. Louisville Street at Lynn Lane – Proposed 8-phase Operation
AM Peak Hour (PM Peak Hour)

ID	Intersection	Overall LOS	Northbound	Southbound	Eastbound	Westbound
3	Louisville Street at Lynn Lane*	C (C)	Louisville St: B (C)	Louisville St: B (C)	Lynn Lane: D (D)	Lynn Lane: C (D)

Source: Neel-Schaffer, Inc., November 2015
** The existing east/west split phase is replaced with protected-permitted left-turns and concurrent thrus to provide an 8-phase operation.*

Table 7 presents the unsignalized intersection levels of service for the three intersections that do not meet MUTCD volume warrants. This capacity analysis was conducted to demonstrate the anticipated levels of service if the signals were removed. All three locations have an alternate access point that can reduce left-turn demand at these locations.

Table 7. Unsignalized Intersection Levels of Service
AM Peak Hour (PM Peak Hour)

ID	Unsignalized Intersection	Overall LOS	Approach			
			Northbound	Southbound	Eastbound	Westbound
2	Louisville Street at Millsaps Career and Technology Center	n/a	Free Flow	Thru: Free Flow Left-turn: A (A)	n/a	Millsaps Center: B (B)
5	Academy Road at Starkville Academy	n/a	n/a	Driveway: C (A)	Thru: Free Flow Left-turn: A (B)	Free Flow
9	Lincoln Green at Locksley Way	n/a	Lincoln Green: D (C)	Lincoln Green: B (C)	Free Flow	Free Flow

Source: Neel-Schaffer, Inc., November 2015

4.0 General Recommendations

The following sections provide general recommendations that apply to the entire study area.

4.1 Daylight Savings Time

Traffic signal timing data provided by the city appears to indicate that some or all of the traffic signal controllers may not have been programmed with the current Daylight Savings Time (DST) start/stop dates. In 2007, Daylight Savings was extended and now begins three to four weeks earlier in the spring and ends one week later in the fall. Since most of the peak hour timings used within the study area are an hour or shorter, the wrong DST dates cause the controllers to trigger the peak hour timings either before or after the actual peak traffic demand. It is recommended that the controllers be set to begin DST on Month 3/Week 2 and end on Month 11/Week 1, concurrent with the beginning and ending of the new DST.

4.2 Traffic Signal Backplates

All of the studied intersections use yellow traffic signal heads. The use of backplates with these heads is inconsistent. Black backplates are recommended to be installed on all traffic signal heads to improve their visibility.

4.3 Tether Wires

Nine of the ten study area intersections use span wire assemblies to support the traffic signal heads and associated signage. Two of these intersections do not include tether wires. Tether wires provide additional stability to traffic signal heads and signs by anchoring the bottom of each. Providing a second anchor point with a bottom tether cable reduces the amount of swaying induced by wind loading and increases the probability that the signal heads will remain in the proper alignment to be seen by oncoming drivers. Additionally, tether lines reduce the occurrence of fatigue on both the main span wire and mounting hardware. Standard polycarbonate traffic signal heads are particularly susceptible to repetitive torsional forces placed on them due to wind induced swaying, thus reinforcing the need for tether wires.

4.4 Advanced Detection Zones

The installation of advance detection zones along the Louisville Street and South Montgomery Street corridors is recommended. In general, the advance detection zones are recommended to be set back approximately 5 seconds from each stop line, but can be adjusted due to side streets and driveways.

4.5 Uninterrupted Power Supply (UPS)

Due to the decreased electrical load at traffic signals that came with the introduction of LED signal heads, Uninterruptible Power Supplies (UPS) capable of operating a traffic signal during a power outage are now available. Advanced features are available that allow a signal to operate at full capacity for a specified period of time and, in the event of a long duration outage, switch to flashing operation so that power can be conserved and the battery life extended. Generator hookups are also available which use the UPS to "clean" the power coming from a generator and protect traffic signal equipment while the generator powers the intersection. UPS systems are also useful to counter the effects of voltage sags/spikes, brownouts, line noise, and harmonic distortions that may affect the traffic signal.

4.6 Flashing Yellow Arrows

The Mississippi Department of Transportation (MDOT) and other agencies nationwide have begun to use flashing yellow arrows (FYA) to control protected-permitted left-turn movements instead of the traditional five section "dog house" heads. Flashing yellow arrows allow for complete control of the left-turn movement independent of the adjacent through indications by eliminating the reliance on the adjacent thru lane's circular green indication. Instead, a FYA indicates that a permissive left-turn is allowed. MDOT has adopted the FYA exclusively for use in new traffic signals, and FYA adoption is increasing on the local level statewide.

Exhibit 1. Flashing Yellow Arrow Assembly

Flashing yellow arrows allow for a number of behaviors that the traditional five section "dog house" signal heads do not. The most beneficial behavior is allowing permissive left-turns from one approach while the other approach is servicing a protected green left-turn and a green thru movement. If a driver arrived too late to be detected by the signal to receive a green arrow themselves, then the flashing yellow arrow allows them to turn as soon as they are permitted to do so instead of waiting for the adjacent thru movement's green. Additional behaviors include switching from protected-permissive operation of left-turns to protected only operation or even split phase operation by time of day, day of the week, or volume density.

However, retrofitting flashing yellow arrows at existing intersections requires more work than simply exchanging signal heads. The MUTCD requires at least two sets of circular indications for each approach. The five-section doghouse helps satisfy this requirement so only one additional three section head is required. Using a FYA assembly may require that a second three-section head be installed overhead or post/shaft mounted. FYA heads also require an additional conductor wire. Where a five-section head requires 7 conductors, 8 conductors would be required to run the FYA and adjacent three section heads. Finally, FYA's require four load switch positions to operate, and some cabinets may not have the necessary number of load switch positions available.

5.0 Intersection Recommendations

The following sections provide recommendations for each of the ten signalized intersections. References to traffic signal head types are made at various points in the discussion. The discussion provides examples and narrative descriptions when discussing signal head types, but Exhibit 2 below is provided for the reader's reference.

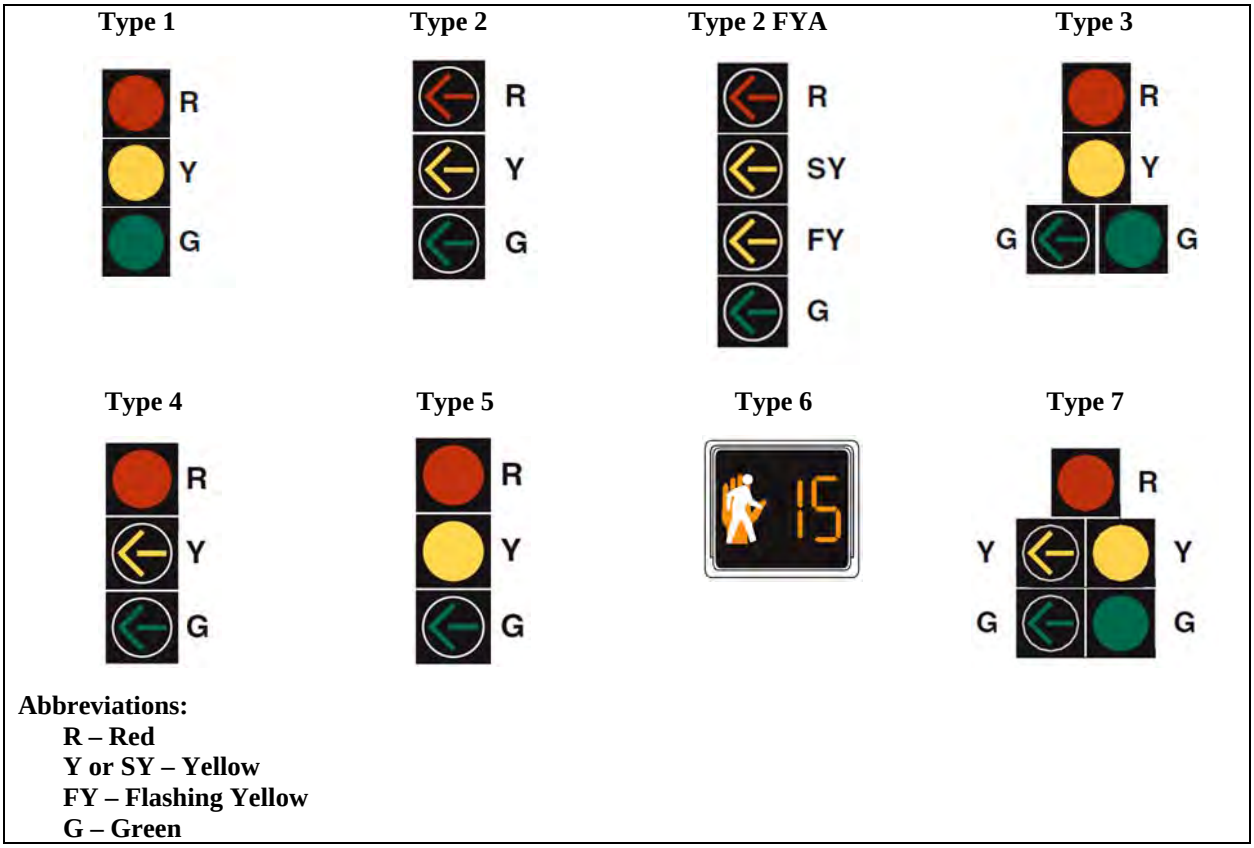


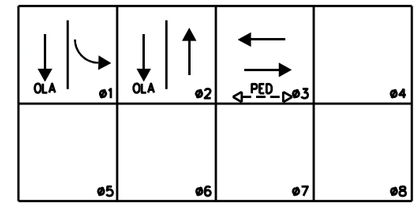
Exhibit 2. Common Traffic Signal Heads and their MDOT Designation

5.1 Louisville Street at Yellow Jacket Drive

The intersection of Louisville Street and Yellow Jacket Drive is a four leg intersection serviced by a span wire traffic signal. Louisville Street travels approximately north/south through the intersection and provides dedicated left-turn lanes for both the northbound and southbound approaches. Yellow Jacket Drive approaches the intersection from the east and provides a dedicated left-turn lane. Opposite of the Yellow Jacket Drive approach, a commercial driveway ties into the intersection as the fourth leg. Concurrent thru phases are provided for both the east/west and north/south approaches. The southbound left-turn is the only protected-permitted left-turn movement. No protected left-turn phases are provided for any other approach. The intersection geometry is presented in Figure 2.

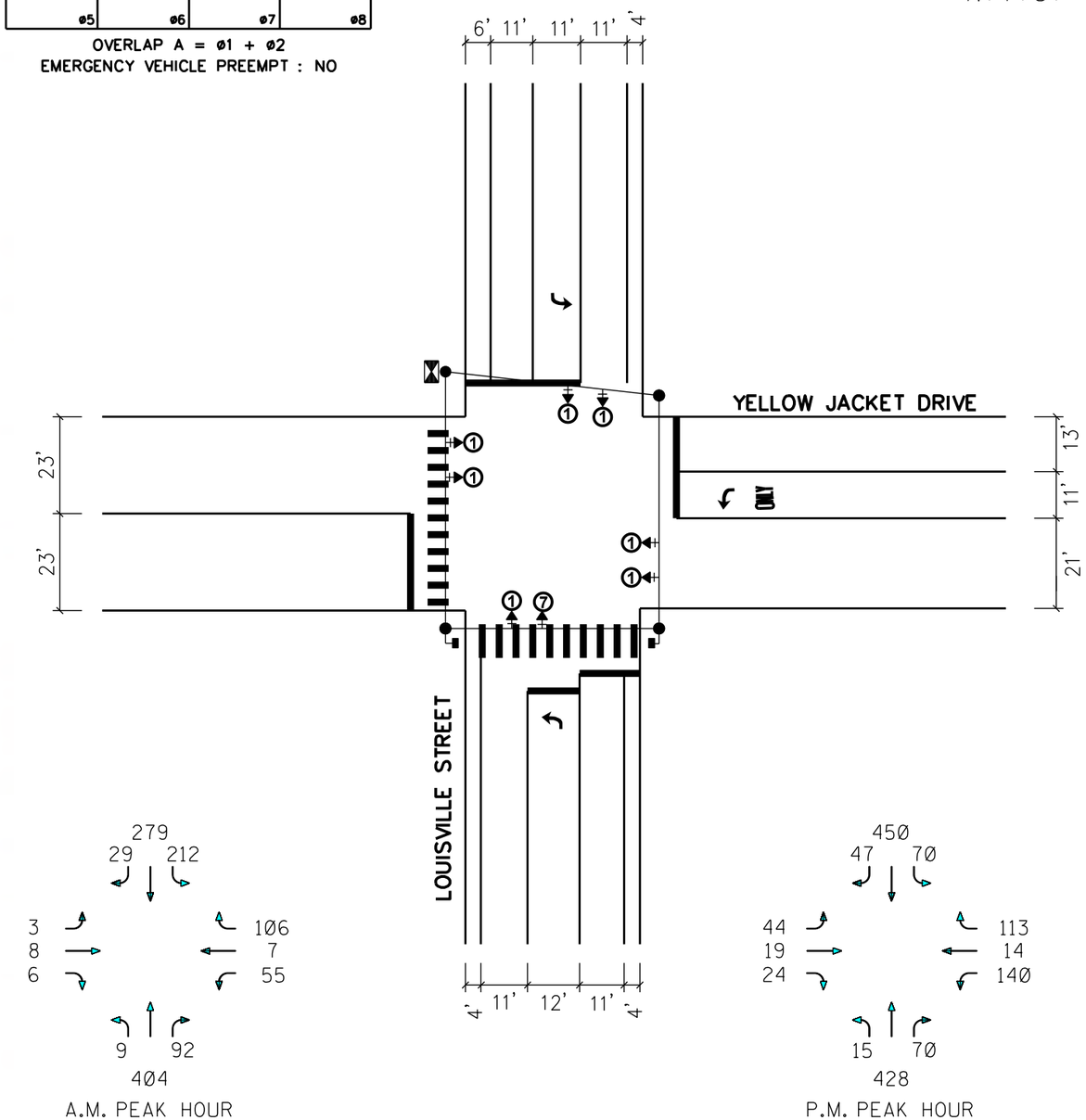
Exhibit 3. Looking South along Louisville Street towards Yellow Jacket Drive

Louisville St / Yellow Jacket Dr
SIGNAL PHASING DIAGRAM



OVERLAP A = ø1 + ø2
EMERGENCY VEHICLE PREEMPT : NO

N.T.S.



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LOUISVILLE STREET AT YELLOW JACKET DRIVE
EXISTING CONDITIONS

FIGURE
2

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5.1.1 Operational Notes

The traffic signal warrant analysis found that the Louisville Street/Yellow Jacket Drive meets the 60-percent volume thresholds. The intersection operates at LOS B during the AM peak and LOS C during the PM peak. The majority of the cycle length is allocated to Louisville Street, and therefore the Yellow Jacket Drive and commercial driveway approaches were calculated to operate at LOS D and E for the AM and PM peak hours respectively.

5.1.2 Recommendations

Controller Cabinet: Although functional and well maintained, the traffic signal cabinet components are older models. The existing traffic signal cabinet and hardware are likely reaching the end of their expected service life. A replacement plan to upgrade the cabinet and/or components within the next five years is recommended.

Cabinet Phasing: The existing cabinet uses an overlap to accommodate the protected-permitted southbound left-turn movement. Current practice is to assign each movement to a dedicated phase and to avoid overlaps when implementing left-turn phases. When upgraded, the cabinet is recommended to include additional load bays to eliminate the need for an overlap. At a minimum, this would require an eight-phase cabinet that includes eight vehicular phases and four pedestrian phases.

Exhibit 4. Traffic Signal Controller Cabinet

Crosswalks: There are presently two marked crosswalks at this intersection. The first crosses the southern leg of Louisville Street and the second crosses the commercial driveway on the western leg. A new sidewalk on the northeast corner implies that there should be crosswalks across the northern leg of Louisville Street and/or the eastern leg of Yellow Jacket Drive. Depending on the intention of the sidewalk on the northeast corner, striping and pedestrian signals for one or both of these potential crossings is recommended. Crosswalks, sidewalks, sidewalk ramps, and crossing signals are recommended to conform to current Americans with Disabilities Act (ADA) and Public Rights-of-Way Accessibility Guidelines (PROWAG) standards.

Currently, only the east-west crosswalk on the southern leg of Louisville Street has pedestrian signal heads. However, the pedestrian signal head on the southwest corner is missing one of its visors and the head on the southeast corner is broken. Both pedestrian signal heads are of an older type that is no longer compliant with the current version of the Manual on Uniform Traffic Control Devices. The existing heads use the verbal indications of "WALK" and "DON'T WALK" rather than the current graphical depictions of a walking person and an upraised hand.

Exhibit 5. Broken Pedestrian Signal

Exhibit 6. MUTCD Pedestrian Signal

Source: 2009 MUTCD

Pedestrian signal heads are recommended for all marked crosswalks at this location. The installation of pedestrian signal heads is recommended to include upgrading pedestrian push buttons and their locations to current ADA specifications. Any additional crosswalks at this location are recommended to meet the same ADA specifications. It is recommended that the existing signal heads be replaced with the current MUTCD crosswalk indications and that they include the crosswalk countdown and push button features as described by the ADA, PROWAG, and MUTCD.

Exhibit 7. Stub Pole Push Button

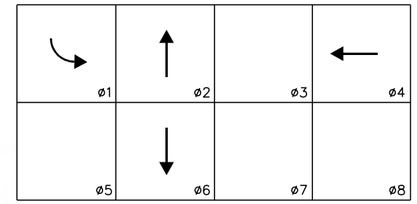
Stub poles and pedestal poles may be used to locate either just the crosswalk button or both the button and pedestrian signal independent of the other traffic signal poles at an intersection. Stub poles range widely in appearance and design, but typically are simple steel pipes with weather tight end caps. Some, such as the one picture in Exhibit 7, are more decorative. Pedestal poles are typically more substantial and include a bored concrete foundation and breakaway anchors. Pedestal poles should be used when mounting both pedestrian signal heads and pushbuttons while simple stub poles may be used when only a push button is needed.

5.2 Louisville Street at Millsaps Career and Technology Center

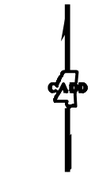
The intersection of Louisville Street with the Millsaps Career and Technology Center driveway is a three leg intersection serviced by a span wire traffic signal. Depicted in Figure 3, Louisville Street extends north/south through the intersection and provides a dedicated left-turn lane on the southbound approach which includes protected-permitted left-turn phasing. The Millsaps Career and Technology Center driveway approaches from the east and has signage indicating that it is one-way westbound into the intersection from 3 p.m. to 4 p.m. The traffic signal timings provided by the city indiate the intersection operates in flash for the majority of the day and runs a pretimed plan between 7:00 and 7:45 a.m. and again from 3:00 to 4:00 p.m.

Exhibit 8. Looking South along Louisville Street towards Millsaps Center

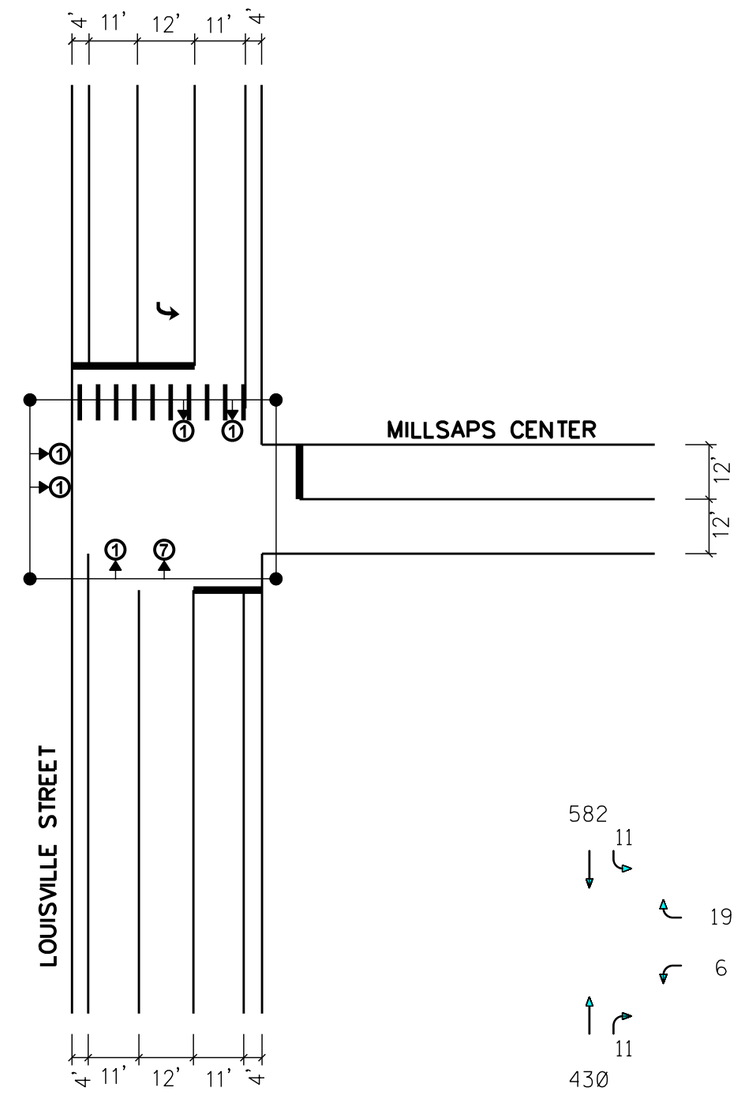
Louisville St / Millsaps Center
SIGNAL PHASING DIAGRAM



EMERGENCY VEHICLE PREEMPT : NO



N.T.S.



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LOUISVILLE STREET AT MILLSAPS CAREER & TECH CENTER
EXISTING CONDITIONS

FIGURE
3

S:\Projects\12735 Starkville Signal\cad\Microstation\LOCATION2.dgn

5.2.1 Operational Notes

The intersection does not satisfy the MUTCD 60-percent volume warrants based the 12-hour turning movement count provided by the city. Under existing conditions, the intersection operates at a LOS C during the AM peak hour and a LOS C during its PM peak hour.

While the traffic signal is in operation during the morning, 33 southbound left turns into the school were reported. Of these, 30 of the southbound left-turns occurred in the last half hour of operation. During the same period, four vehicles turned left out of the school. All four outbound left-turns occurred before 7:30.

While the traffic signal is in operation during the afternoon, 12 southbound left-turns into the school were recorded despite signage indicating the driveway is one-way in the opposite direction during that same hour. During the one hour of operation, 65 vehicles exit the school with 24 turning left and 41 turning right. The majority of exiting traffic (56 of 65 vehicles) exited between 3:30 and 4:00.

If the traffic signal was removed and the driveway was controlled by a stop sign and Louisville Street was allowed to flow freely, calculated delays were found to be minimal. The southbound left-turn into the school is shown to operate at a LOS A during the AM peak hour and the exiting traffic is shown to operate at a LOS B during the PM peak hour.

5.2.2 Recommendations

The existing traffic signal is not warranted and is recommended to be removed.

Coordination with the School: Discussions with the school are recommended so that the their concerns can be identified and discussed. A plan to mitigate potential concerns is recommended to be developed and implemented. A more detailed circulation study may be beneficial to the school. Some discussion topics with the school are recommended to address signal removal concerns. These topics could include:

1. Can on-site circulation be used to detour some or all of the traffic from the Louisville Street entrance?
2. Are left-turns exiting the school necessary at this location? If the exiting traffic primarily consists of buses, can bus routes be modified to minimize left-turns? If left-turns are prohibited, exiting traffic will likely operate the same, if not better, than it presently does.
3. Can the driveway permanently operate one way? If so, which direction is best?
4. During the peak 15 to 30 minute period in the afternoon, are fully equipped and properly trained crossing guards from either the school or the city available to direct traffic and create artificial gaps to allow vehicles to exit and thus eliminate the need for a traffic signal?

Safety Improvements: The vegetation in the southeast corner of the intersection is encroaching on the site triangle and available sight distance needed to view traffic approaching from the south on Louisville Street. This vegetation is recommended to be removed and the site triangle to be maintained.

Exhibit 9. Vegetation to be Removed

Trial Removal: As a prelude to the complete removal of the traffic signal, the intersection is recommended to be placed into permanent flashing operation. In permanent flash, the intersection would not provide stop and go operation during the peak hours.

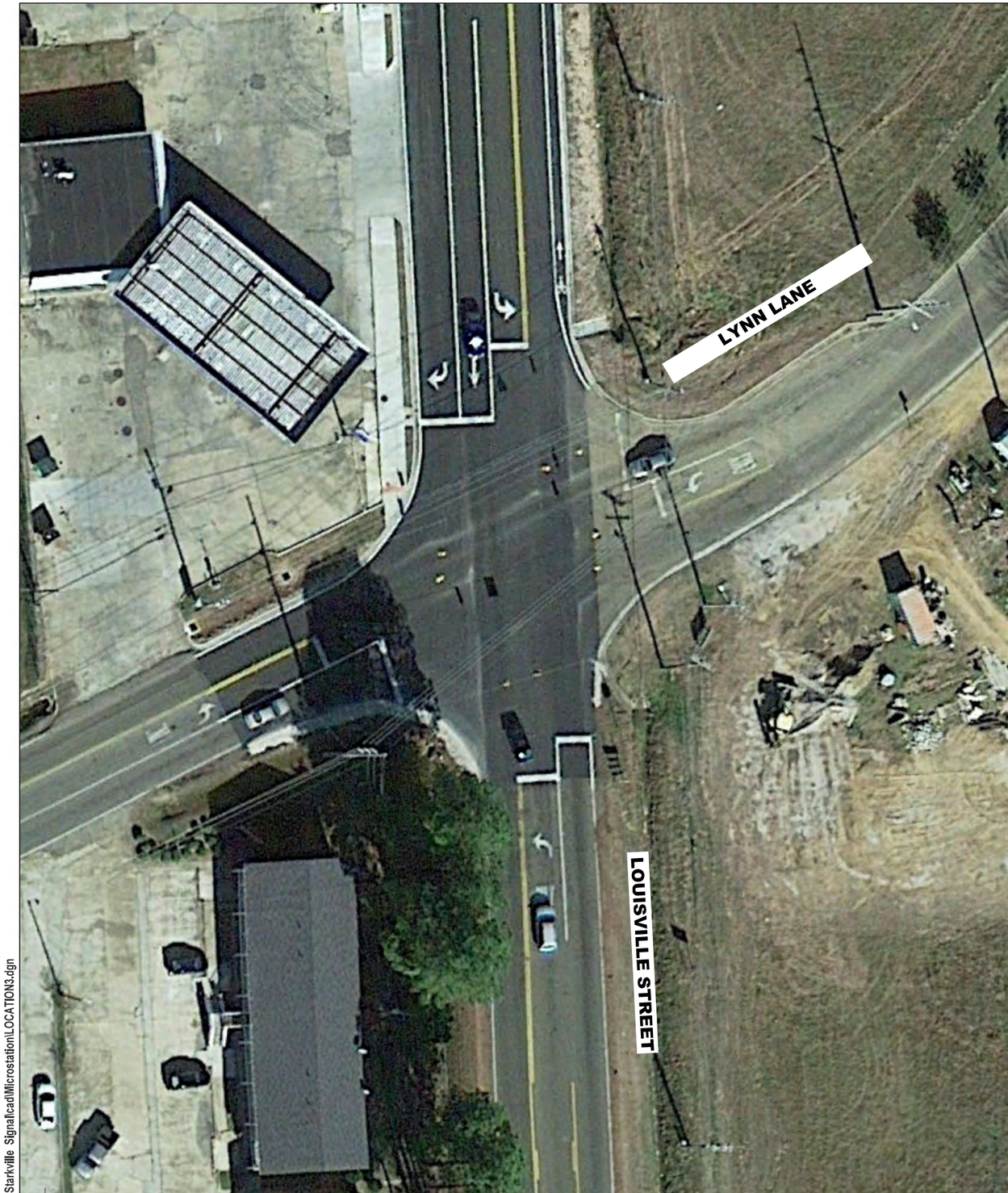
Installation of Flashing Beacons: Upon removal, if the traffic exiting the school is maintained and not diverted to Yellow Jacket Drive, then the traffic signal could be replaced by flashing beacons if desired. These beacons would provide two flashing yellow indications northbound and southbound and two flashing red indications for the driveway approach.

Removal of Crosswalk and Crosswalk Ramps: The crosswalk across Louisville Street does not connect to a sidewalk network on the east side of the street. No worn paths through the grass were observed between the crosswalk and the school's entrance that might indicate pedestrian use. If the signal is removed, the marked crosswalk is recommended to be removed.

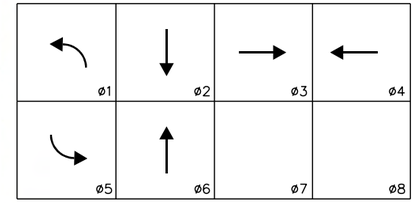
5.3 Louisville Street at Lynn Lane

The intersection of Louisville Street and Lynn Lane is a four leg intersection serviced by a span wire traffic signal. Depicted in Figure 4, Louisville Street travels approximately north/south through the intersection and provides dedicated left-turn lanes for both the northbound and southbound approaches. In the southbound direction, a dedicated right-turn only lane is provided. Lynn Lane traverses the intersection from east to west and also provides dedicated left-turn lanes on each approach. The traffic signal provides protected-permitted left-turn phases on both Louisville Street approaches with concurrent through phases. The Lynn Lane approaches operate as split phases with all eastbound lefts, thrus, and rights running concurrently, terminating, and then all westbound lefts, thrus, and rights running concurrently.

Exhibit 10. Looking North along Louisville Street towards Lynn Lane

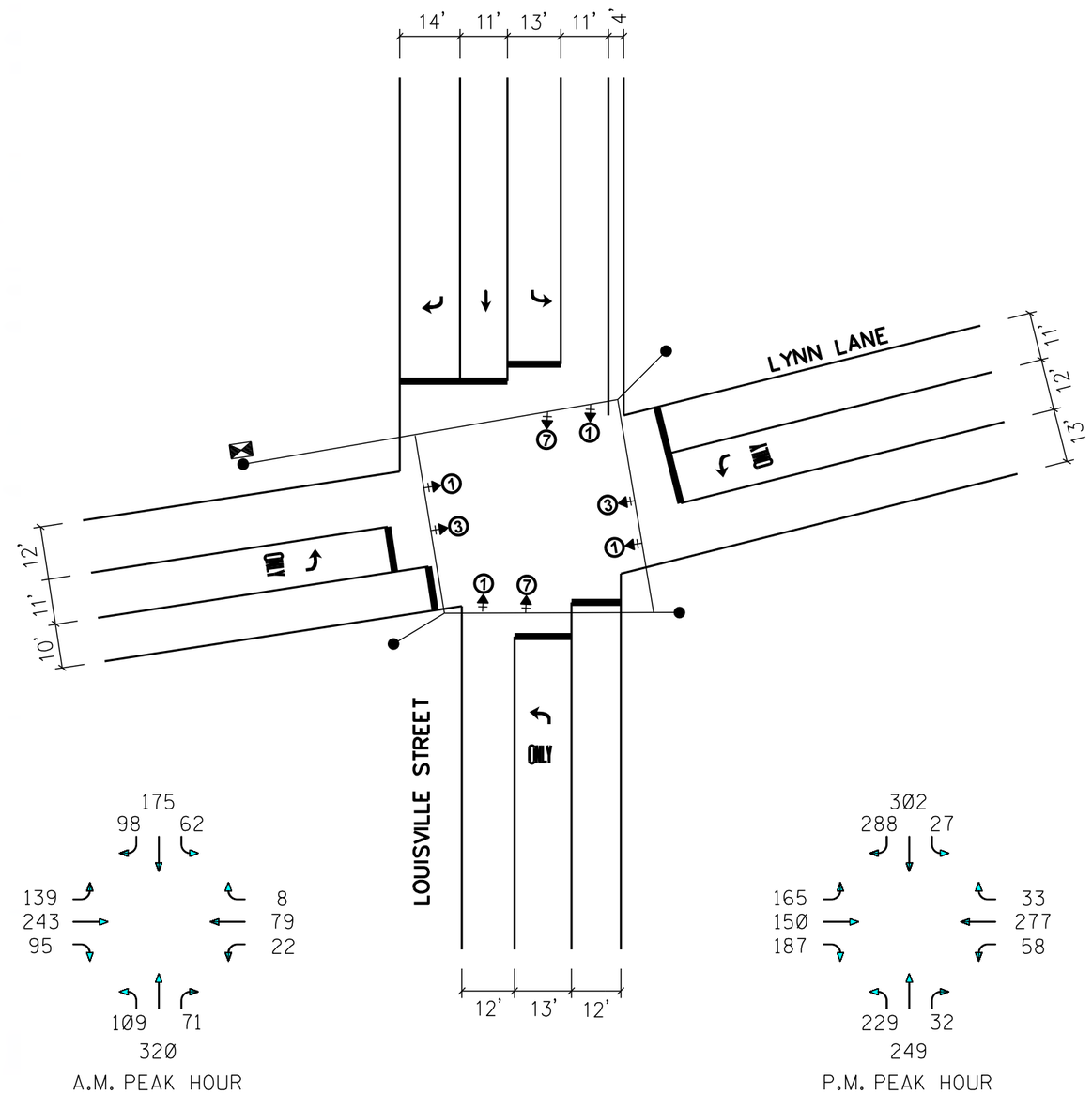


Louisville St / Lynn Lane
SIGNAL PHASING DIAGRAM



EMERGENCY VEHICLE PREEMPT : YES

N.T.S.



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LOUISVILLE STREET AT LYNN LANE
EXISTING CONDITIONS

FIGURE
4

S:\Projects\12735 Starkville Signal\cad\Microstation\LOCATION3.dgn

5.3.1 Operational Notes

The intersection of Louisville Street and Lynn Lane meet the 60-percent volume warrant threshold based the 12-hour turning movement count provided by the city. Under existing conditions, the intersection operates at a LOS E during the AM peak hour and a LOS D during the PM peak hour. Delay is primarily on the Lynn Lane approaches.

Split phase operation is most ideally suited for locations where a distinct imbalance of demand exists on either side of an intersection. However, the 12-hour turning movement count indicates that during the peak hours, particularly the PM peak hour that the two Lynn Lane approaches are relatively balanced. Split phasing can increase the required intersection cycle length at locations where approaches have approximately the same entering volumes, such as at Lynn Lane. An increased cycle length typically leads to more delay on the minor street approaches.

5.3.2 Recommendations

Traffic Signal Configuration: The Louisville Street/Lynn Lane traffic signal phasing is recommended to be reconfigured to allow for full eight-phase operation with protected-permitted left-turn phasing on all four approaches. This recommendation converts the existing east/west split phasing to concurrent east/west phasing. The Type 3 (4-section) traffic signal heads for both eastbound and westbound Lynn Lane will need to be replaced with Type 7 (5-section) traffic signal heads. Exchanging these signal heads will require rewiring the intersection back to the cabinet to accommodate the new phasing and signal heads.

Exhibit 11. Converting from split phase operation to eight-phase operation will require replacing the Type 3 heads (left) with Type 7 heads (right).

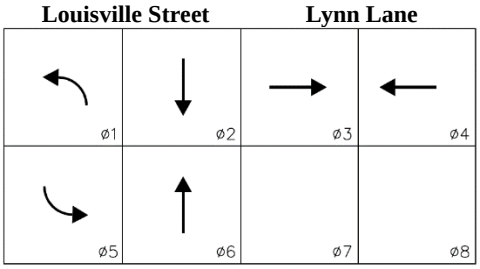


Exhibit 12. Existing Phasing at Louisville Street/Lynn Lane

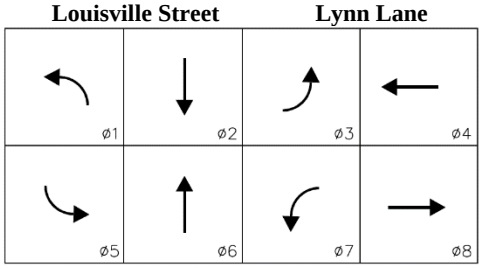


Exhibit 13. Proposed Phasing at Louisville Street/Lynn Lane

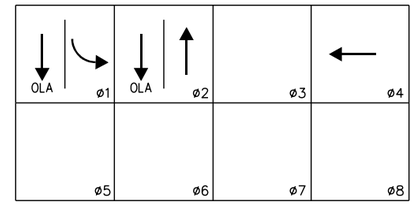
While the existing hardware appears to be able to be repurposed to accommodate the proposed phasing, it may be advisable to replace the existing traffic signal cabinet and heads entirely. A full replacement would allow the new traffic signal cabinet and signal heads to be installed while the old equipment is still in service. Once the new installation is completed, the new controller can be turned on and the old one turned off and removed. This upgrade scenario minimizes impacts to local traffic and results in a spare controller cabinet and signal heads for the city to use elsewhere.

5.4 Louisville Street at Academy Road

The intersection of Louisville Street and Academy Road is a three leg intersection serviced by a span wire mounted traffic signal. Depicted in Figure 5, Louisville Street extends approximately north/south through the intersection and provides a dedicated left-turn lane on the southbound approach. Academy Road approaches the intersection from the east and provides separate left and right turn lanes at the intersection. The traffic signal provides a protected-permitted left-turn phase for southbound left-turns.

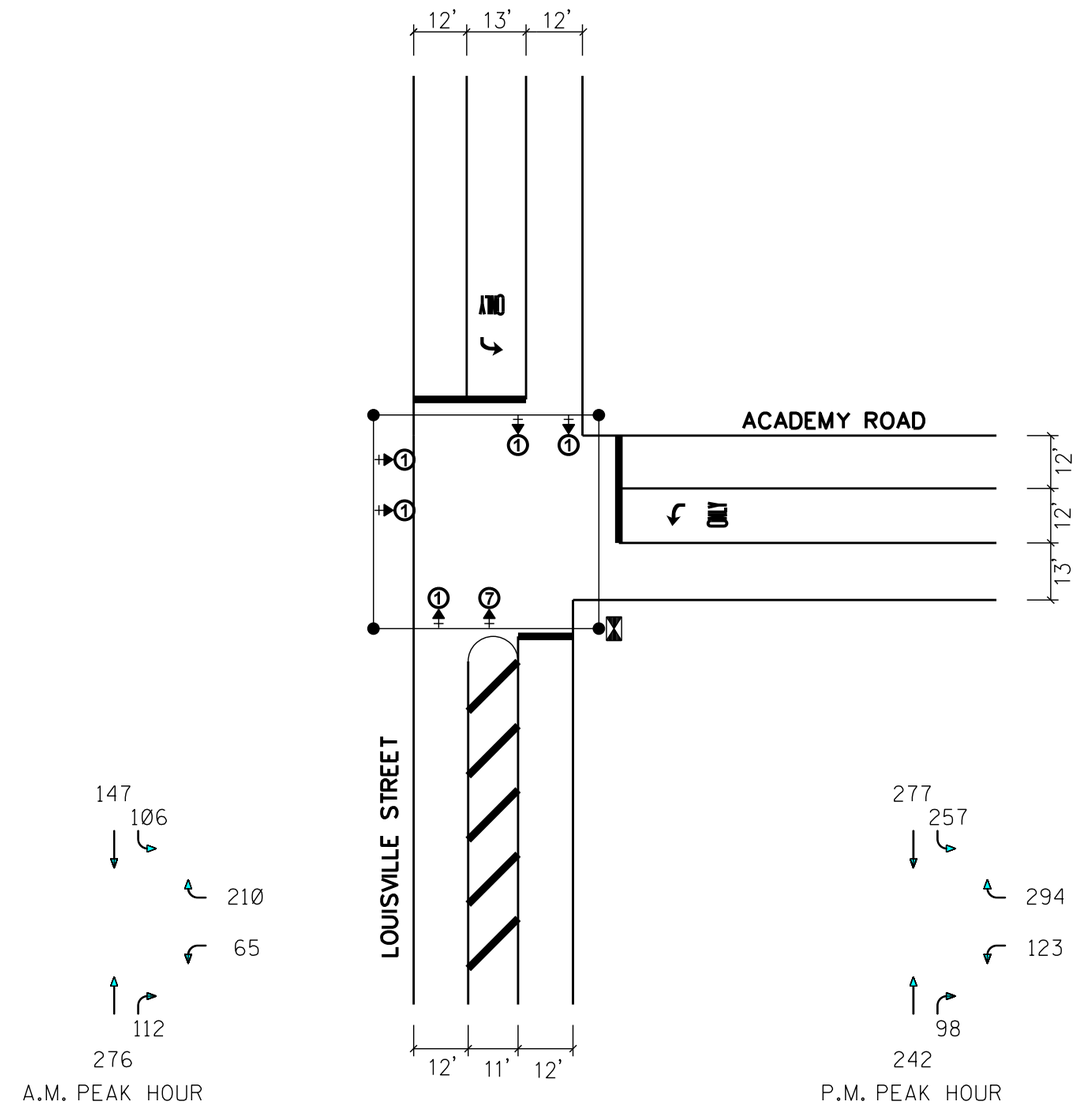
Exhibit 14. Looking North along Louisville Street towards Academy Road

Louisville St / Academy Rd
SIGNAL PHASING DIAGRAM



OVERLAP A = ø1 + ø2
EMERGENCY VEHICLE PREEMPT : NO

N.T.S.



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ACADEMY ROAD AT LOUISVILLE STREET
EXISTING CONDITIONS

FIGURE
5

S:\Projects\12735 Starkville Signalicad\MicrostationLOCATION4.dgn

5.4.1 Operational Notes

The intersection of Louisville Street and Lynn Lane meets the MUTCD 60-percent volume warrant thresholds based the 12-hour turning movement count provided by the city. Under existing conditions, the overall intersection was calculated to operate at a LOS C during the AM peak hour and a LOS D during the PM peak hour. The Academy Road approach was calculated to operate at a LOS F during the AM and PM peak hours. The LOS F on Academy Road is attributed to a relatively large westbound right turn demand during peak periods.

5.4.2 Recommendations

Signal Timings: The intersection capacity at the Louisville Street/Academy Road intersection can be improved by implementing the shorter cycle lengths outlined in the proposed signal timings. Currently, the 140 second AM peak cycle length and the 120-second free operation cycle lengths are based on higher demands on the Louisville Street approaches than currently exists.

Controller Cabinet: Although functional, the traffic signal cabinet and components are older models. The existing traffic signal cabinet and hardware are likely reaching the end of their expected service life. A replacement plan to upgrade the cabinet within the next 5 is recommended.

Cabinet Phasing: The existing traffic signal cabinet uses an overlap to accommodate the protected-permitted southbound left-turn movement. Current practice is to assign each major movement to a dedicated phase and to avoid overlaps when implementing left-turn phases. When upgraded, the cabinet is recommended to include the additional load bays to eliminate the need for an overlap. At a minimum, this would require an eight-phase cabinet that includes eight vehicular phases and four pedestrian phases.

Vehicle Detection: Vehicle detection upgrades are recommended. Vehicle detection is recommended to include stop line detection for the southbound left-turn and the two Academy Road westbound lanes and advance detection on the Louisville Street approaches. Advance detection zones are recommended to be placed approximately 5 seconds in advance of the stop lines, or approximately 255 feet at 35 mph.

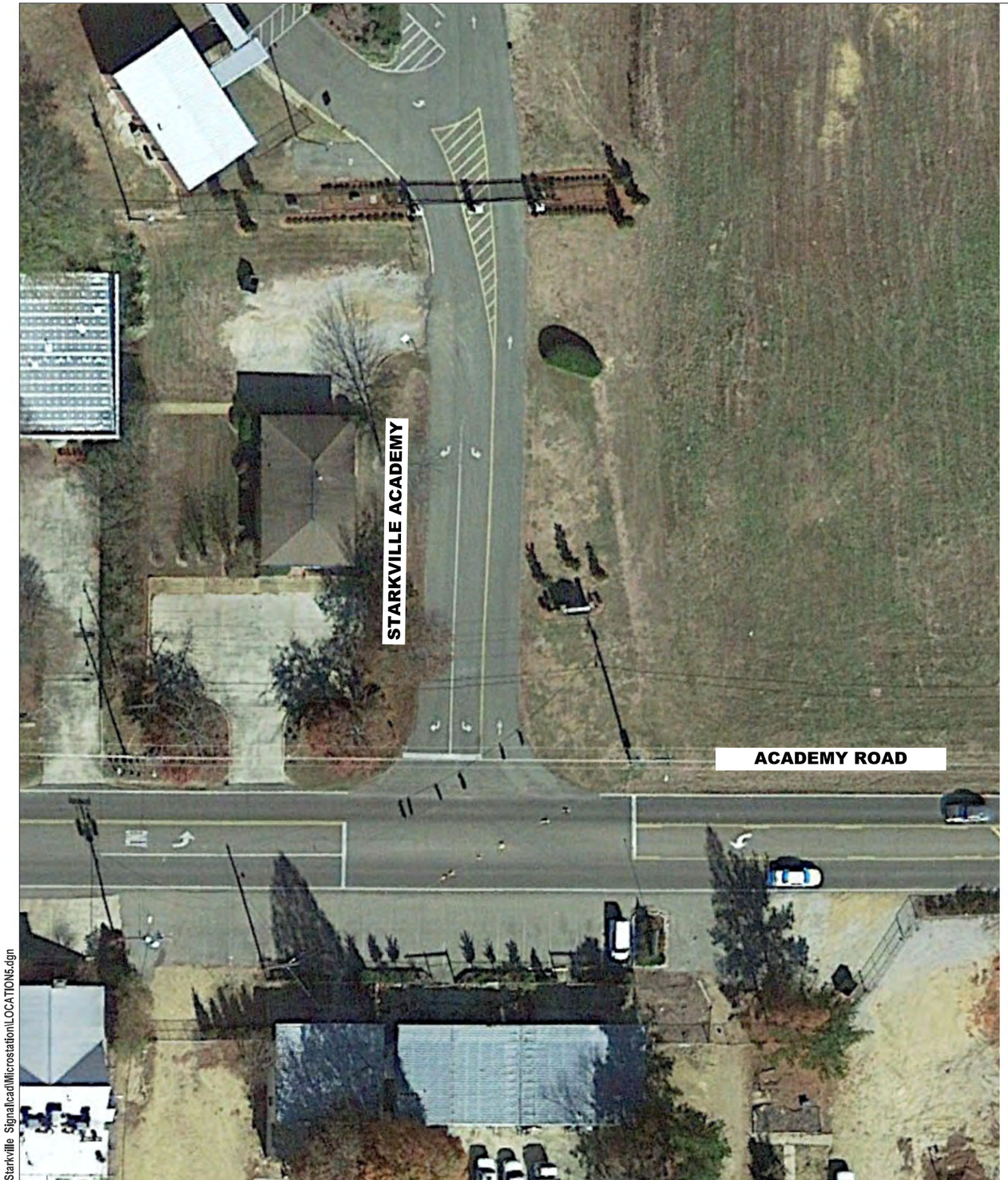
Signal Heads: Some discoloration was noted on the traffic signal head bodies and visors. Discoloration may be an indication that the traffic signal housing is degrading and the head may need to be replaced. It is recommended that the traffic signal heads be inspected for signs of deterioration and replaced as needed.

5.5 Academy Road at Starkville Academy

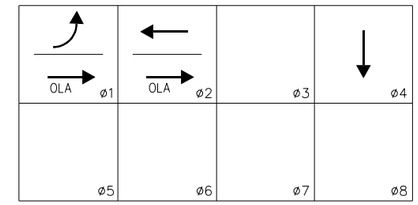
The Academy Road intersection at the southern Starkville Academy driveway is a three leg intersection serviced by a span wire traffic signal. Depicted in Figue 6, Academy Road travels approximately east/west through the intersection and provides a dedicated left-turn lane on the eastbound approach. The traffic signal provides a protected-permitted left-turn phase for eastbound left-turns. The southbound approach exiting the academy provides separate left and right-turn lanes. An evaluation of the current intersection found that the traffic signal is not warranted based on the volumes provided by the city and the 60% threshold of the MUTCD volume warrants.

Off street parking for several small retail stores is provided along the southern edge of Academy Road and extends through the limits of the intersection. The parking lot is paved up to and flush with the southern edge of the roadway. The parking lot appears to be of insufficient width to function indepently from Academy Road. Based on the tax map and aerial photo, the parking appears to be primarily within the existing right-of-way. Allowing continuous access to this parking area through the full length of the intersection limits represents a safety hazard and is inadvisable. The parking lot access within the intersection limits represents a continuous and uncontrolled access to the signalized intersection.

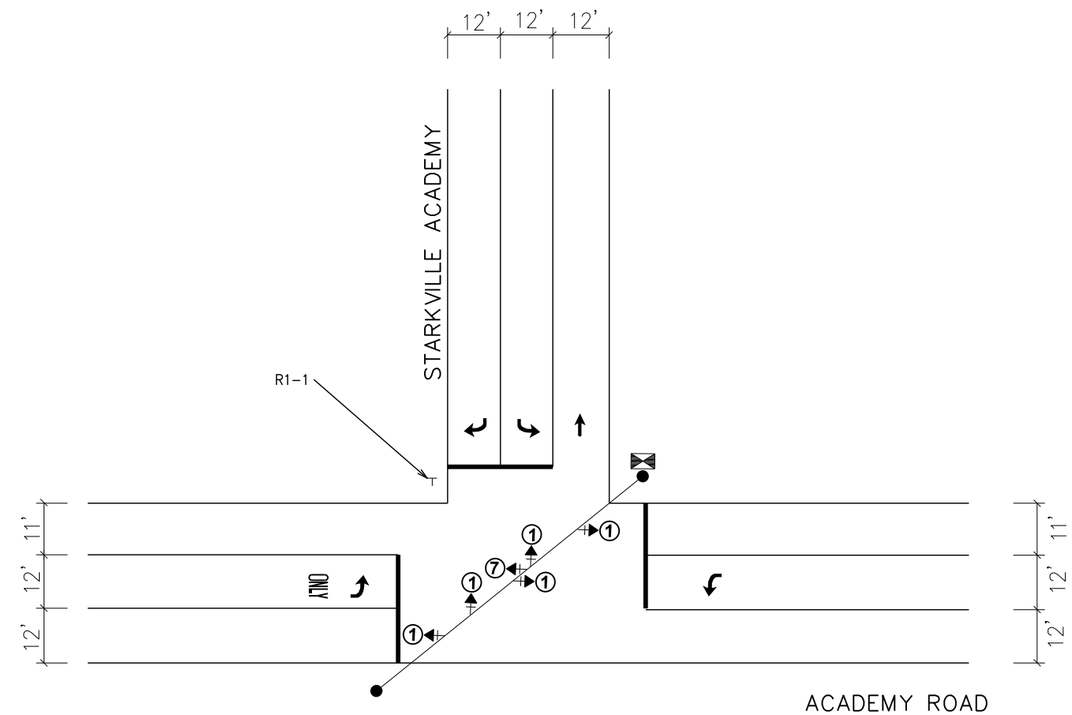
Exhibit 15. Looking East along Academy Road towards Starkville Academy

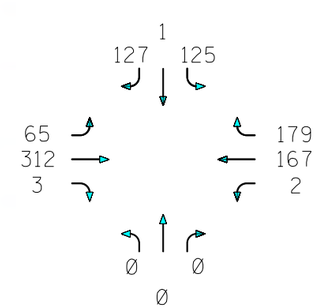


Academy Rd / Starkville Academy
SIGNAL PHASING DIAGRAM

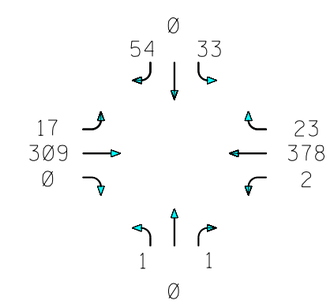


OVERLAP A = ø1 + ø2
EMERGENCY VEHICLE PREEMPT : NO





A.M. PEAK HOUR



P.M. PEAK HOUR

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ACADEMY ROAD AT STARKVILLE ACADEMY
EXISTING CONDITIONS

FIGURE
6

S:\Projects\12735 Starkville Signal\cad\Microstation\LOCATION5.dgn

5.5.1 Operational Notes

The intersection was evaluated to determine how it would perform as an unsignalized intersection with Academy Road free flowing and the Starkville Academy approach controlled by a stop sign. The capacity analysis indicated that the eastbound left-turn into the campus will operate at a LOS A while the southbound movements exiting the campus will operate at a LOS D during the AM and PM peak hours.

Exhibit 16. Stop Sign located on Signalized Approach

There is insufficient demand to justify a traffic signal at the academy driveway. There is also insufficient demand to justify a protected left-turn phase for eastbound Academy Road to turn into the school if the signal remains.

Although the Starkville Academy approach is controlled by the traffic signal, there is also a stop sign installed at the intersection. The stop sign conflicts with the traffic signal's control of the intersection as well as the policies found in the MUTCD. If the signal is retained, the stop sign is recommended to be removed.

Exhibit 17. Uncontrolled Access to Off Street Parking within the Intersection Limits

5.5.2 Recommendations

The existing traffic signal does not meet the MUTCD 60-percent volume warrant and is recommended to be removed. The north approach is recommended to be stop controlled with Academy Road free flowing east/west.

The removal of the signal is recommended to be coordinated with Starkville Academy.

Coordination with the School: Discussions with the school are recommended so that any concerns they may have can be identified. A plan to mitigate these concerns could be developed and implemented. Some example topics to be discussed include:

a. Can site traffic be rerouted to minimize the number of vehicles turning left out of the academy to travel east toward Montgomery Street? Site traffic can divert to the Lynn Lane driveway and turn right instead of turning left at Academy Road.
b. During the peak 15 to 30 minute period in the afternoon, does the school want to provide traffic control with fully equipped and properly trained crossing guards to direct traffic?

Install an Appropriately Sized Stop Sign (R1-1): The existing stop sign, which conflicts with the existing traffic signal, is too small and mounted too low. If the traffic signal is removed, a 36-inch stop sign is recommended to be installed with the bottom edge a minimum of five feet above the top of the nearest edge of pavement.

5.6 South Montgomery Street at Academy Road

The South Mongomery Street/Academy Road intersection is a three leg intersection serviced by a span wire traffic signal. Depicted in Figure 7, Academy Road approaches the intersection from the west and provides separate right and left turn lanes. South Montgomery Street extends north/south through the intersection and provides separate thru and right turn lanes in the southbound direction and separate left and thru lanes in the northbound direction.

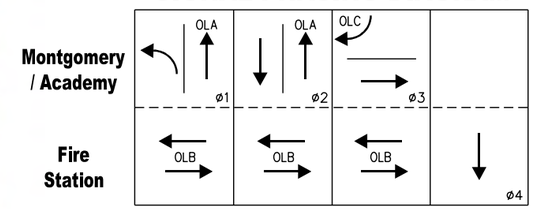
The traffic signal provides a protected/permitted left-turn for northbound traffic on S. Montgomery Street to turn onto Academy Road. The traffic signal provides the southbound right-turn an overlap phase that allows for a protected green arrow while the eastbound left-turn from Academy Road is green.

In addition, the traffic signal controller is used to control the emergency pre-empt signal for Fire Station #4. The emergency pre-empt signal is located on Academy Road approximately 360 feet west of S. Montgomery Street. When activated, the emergency pre-empt stops all movements at both intersections to give a green indication to the Fire Station.

Exhibit 18. Looking South towards Academy Road

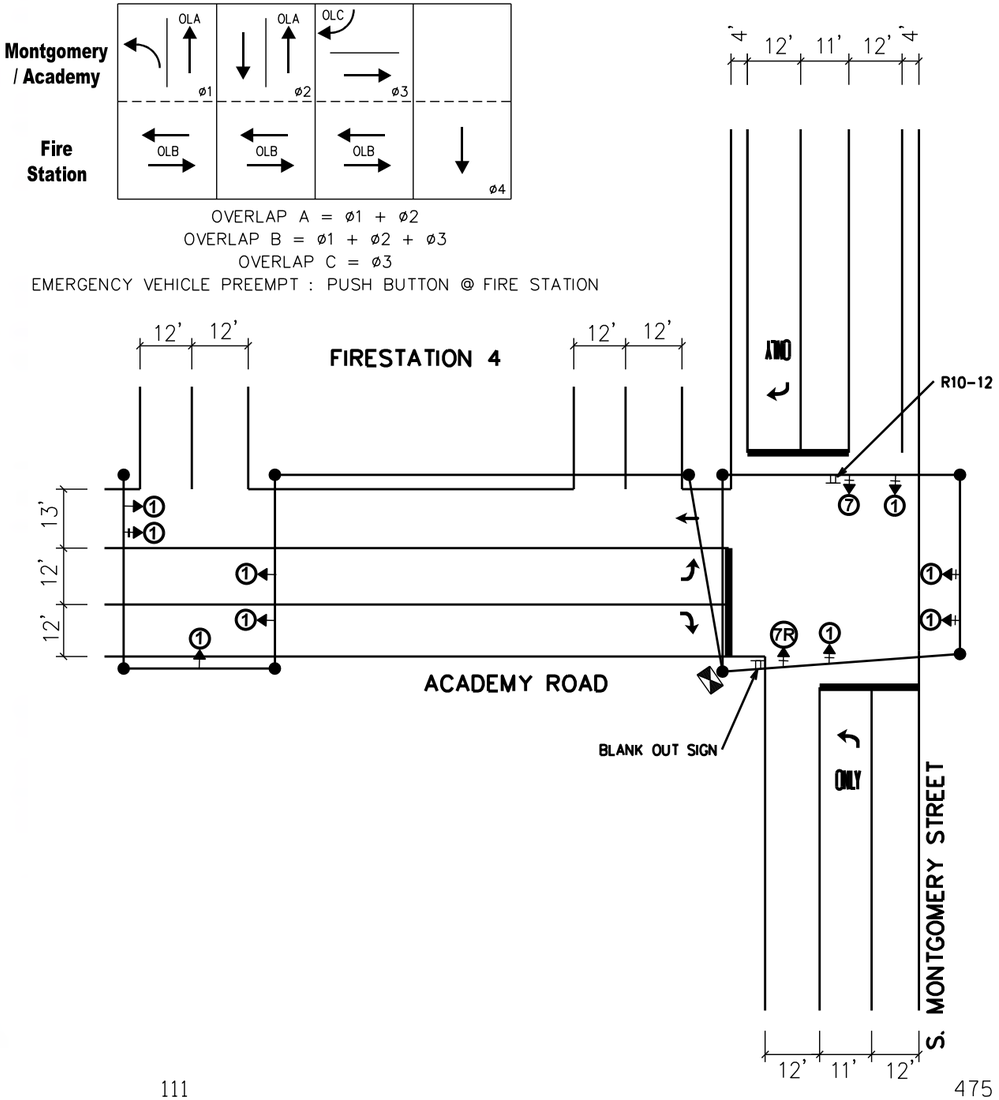
Exhibit 19. Looking East along Academy Road towards South Montgomery Street

Montgomery St / Academy Rd
SIGNAL PHASING DIAGRAM



OVERLAP A = ø1 + ø2
OVERLAP B = ø1 + ø2 + ø3
OVERLAP C = ø3
EMERGENCY VEHICLE PREEMPT : PUSH BUTTON @ FIRE STATION

N. T. S.



A.M. PEAK HOUR

P.M. PEAK HOUR

S:\Projects\12735 Starkville Signal\cad\Microstation\LOCATION6.dgn

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S. MONTGOMERY STREET AT ACADEMY ROAD
EXISTING CONDITIONS

FIGURE
7

5.6.1 Operational Notes

The traffic signal is warranted based on the turning movement count data provided by the city and the MUTCD 60-percent volume warrant thresholds. The intersection was calculated to operate at LOS C during both the AM and PM peak hours. The Academy Road approach was calculated to operate at a LOS D during the AM peak and a LOS E during the PM peak.

5.6.2 Recommendations

Tether Wires: The traffic signal heads are missing tether wires. Tether wires are installed below the main span wire at a height sufficient to be anchored to the bottom of the signal heads. Connecting the bottom of the signals and overhead signs to a tether wire minimizes swaying of the signal heads due to wind and increases the probability of proper visibility. Swaying signals can also introduce more stress on anchor points leading to fatigue related failures at the anchor points and to the main span wire. Modern polycarbonate traffic signal heads are particularly susceptible to these types of stresses. This susceptibility increases with age. Tether wires are recommended to be installed.

Cabinet: The traffic signal cabinet and components are older models. The existing traffic signal cabinet and hardware are likely reaching the end of their expected service life. A replacement plan to upgrade the cabinet and/or components within the next five years is recommended.

Coordination: Interconnection of the Academy Road, Lynn Lane, and Locksley Way traffic signals on South Montgomery Street is recommended. The spacing of these signals is within the appropriate distance to coordinate these signals and use an interconnect to maintain the coordination, particularly during peak hours. Wireless or fiber optic interconnection is recommended.

5.7 South Montgomery Street at Lynn Lane

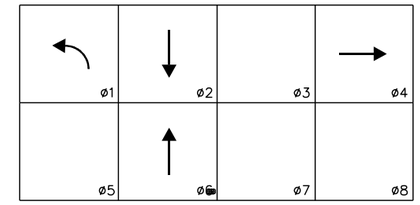
The Mongomery Street/Lynn Lane intersection is a three leg intersection controlled by a span wire traffic signal. Depicted in Figure 8, Lynn Lane approaches the intersection from the west and provides a left-turn lane and a channelized right-turn. South Montgomery Street extends north/south through the intersection and provides a dedicated northbound left-turn lane and a dedicated southbound right-turn lane. The traffic signal provides a protected/permitted left-turn for northbound traffic on S. Montgomery Street to turn left onto Lynn Lane.

Exhibit 20. Looking South along S Montgomery Street towards Lynn Lane

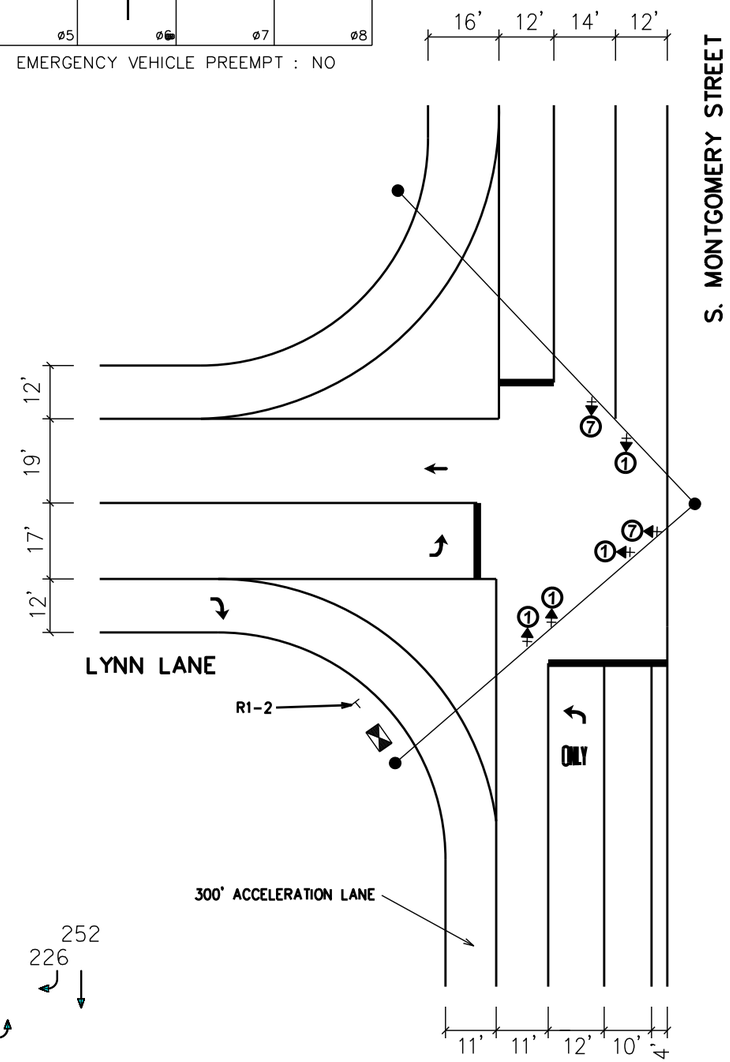
5.7.1 Operational Notes

The South Montgomery Street intersection with Lynn Lane currently meets the 60-percent MUTCD traffic signal volume warrant threshold. The intersection was calculated to operate at a LOS C during the AM peak hour and a LOS B during the PM peak hour. The Lynn Lane approach was calculated to operate at a LOS E during both peak hours.

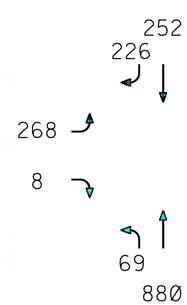
Montgomery St / Lynn Lane
SIGNAL PHASING DIAGRAM



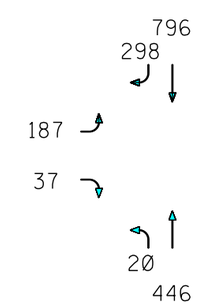
EMERGENCY VEHICLE PREEMPT : NO



N. T. S.



A.M. PEAK HOUR



P.M. PEAK HOUR

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S. MONTGOMERY STREET AT LYNN LANE
EXISTING CONDITIONS

FIGURE
8

S:\Projects\12735 Starkville Signalicad\Microstation\LOCATION7.dgn

5.7.2 Recommendations

Lynn Lane Signal Heads: The Lynn Lane approach to S Montgomery Street intersects as the stem of a "T" intersection. Several signal head configurations are available for approaches similar to Lynn Lane, and the most common is the use of two Type 1 (3 section head, all circular indications). Currently, the Lynn Lane approach displays a Type 7 (5 section head) and a Type 1 head that is typical for approaches with a thru lane and a protected-permitted left-turn phase from a left-turn lane. The Type 7 head is recommended to be replaced with a Type 3 head (4 section head, one green arrow). A Type 3 head is appropriate in this situation, as there is not a conflicting pedestrian crosswalk. Both the existing and recommended alternatives are presented below.

MUTCD Configuration using one Type 3 Head and one Type 1 Head

MUTCD Configuration using two Type 1 Heads

Exhibit 21. Recommended Signal Head Alternatives for the Lynn Lane Approach

Coordination: Interconnection of the Academy Road, Lynn Lane, and Locksley Way traffic signals on South Montgomery Street is recommended. The spacing of these signals is within the appropriate distance to coordinate these signals and use an interconnect to maintain the coordination, particularly during peak hours. Wireless or fiber optic interconnection is recommended.

Pavement Markings: At the time of the site visit, the pavement markings on the Lynn Lane approach showed signs of significant wear or were completely worn off the pavement. Some wear is evident on the South Montgomery approaches as well, but not to the same degree. Restriping of the intersection is recommended. This recommendation may be impacted by the construction of the Lynn Lane multi-use path.

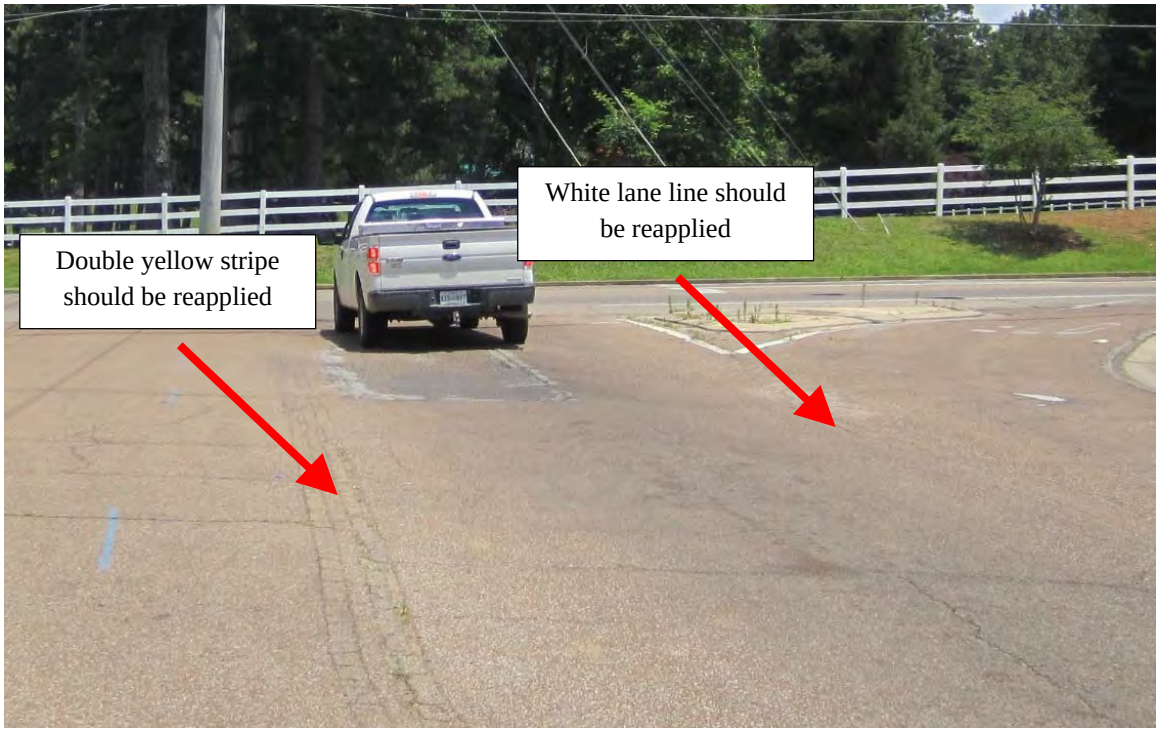


Exhibit 22. Distressed Pavement Markings on Lynn Lane Looking East to South Montgomery Street

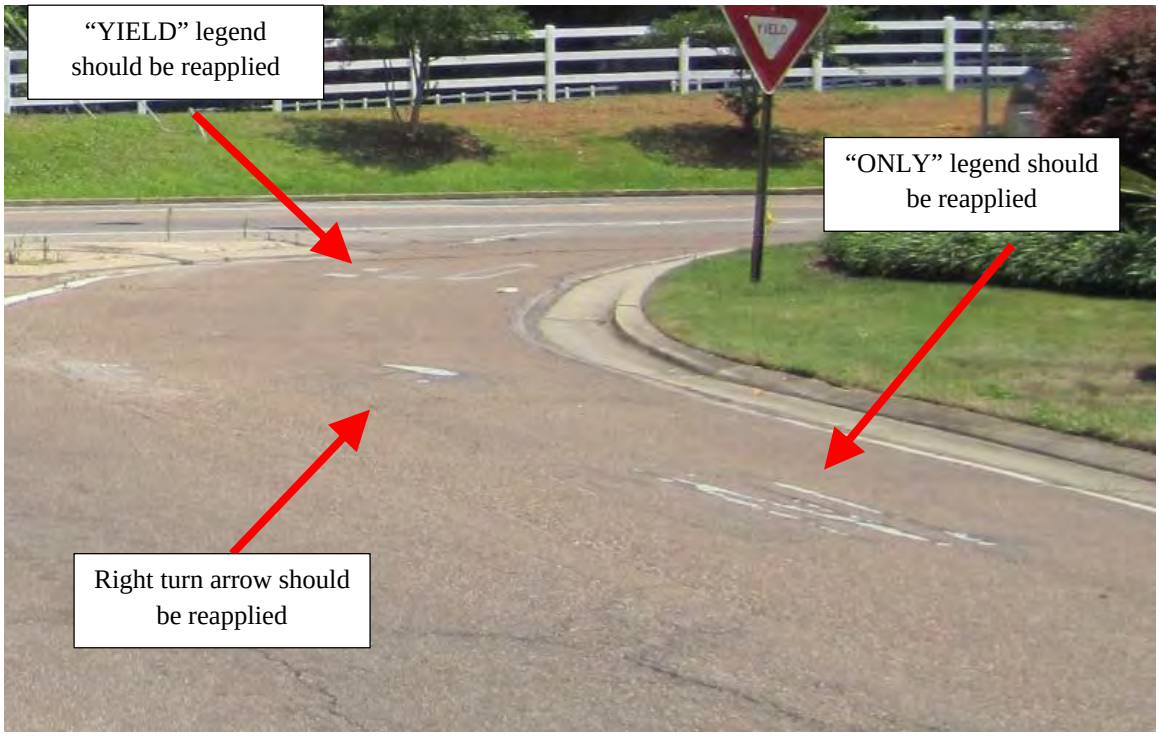


Exhibit 23. Distressed Pavement Markings on Lynn Lane Looking East to South Montgomery Street

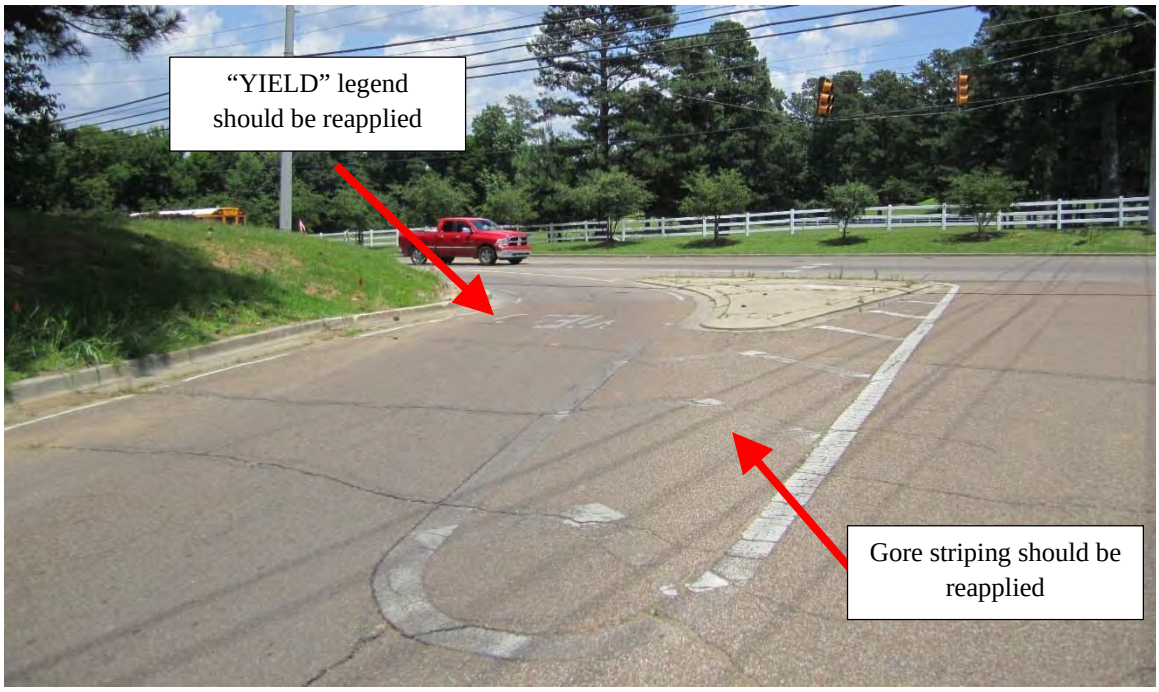


Exhibit 24. Distressed Pavement Markings on Lynn Lane Looking East to South Montgomery Street

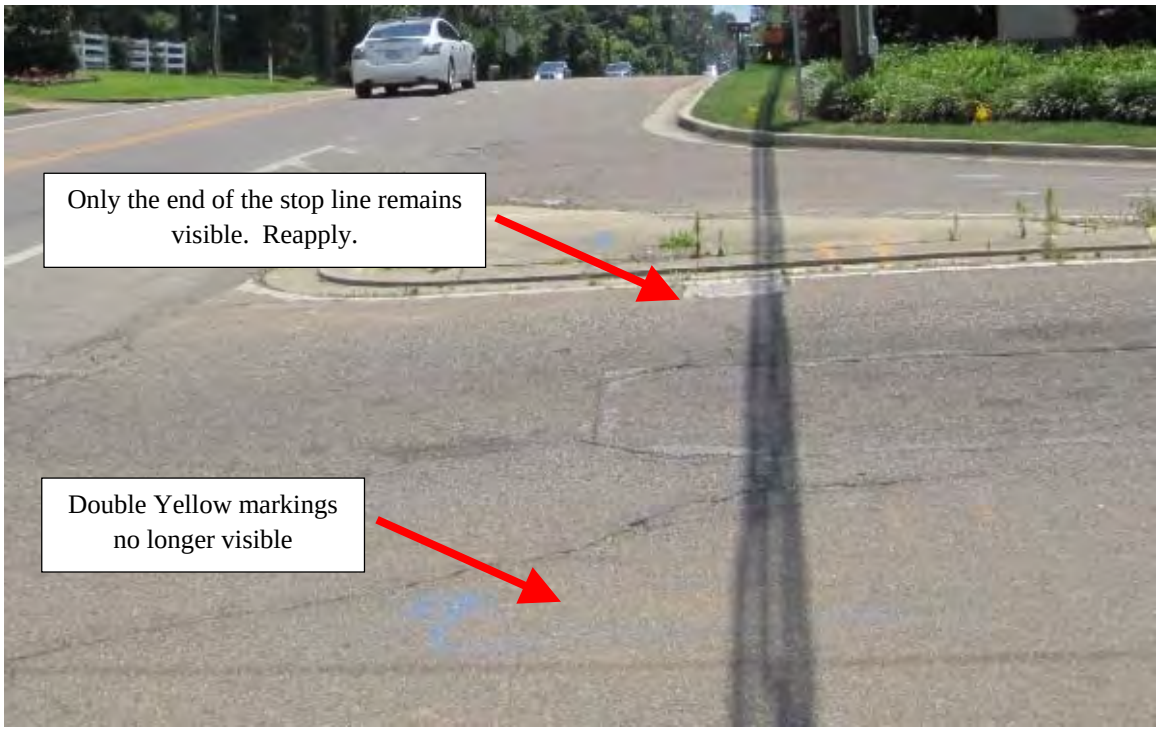


Exhibit 25. Distressed Pavement Markings on Lynn Lane Looking East to South Montgomery Street

5.8 South Montgomery Street at Locksley Way/Howard Road

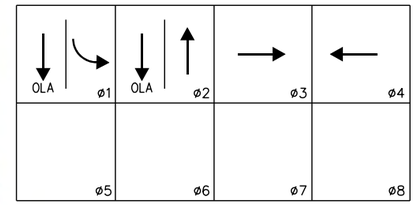
The intersection of South Montgomery Street at Locksley Way is a four leg intersection controlled by a span wire traffic signal. Depicted in Figure 9, South Montgomery Street extends approximately north/south through the intersection and provides a dedicated left-turn lane in the southbound direction and a dedicated right-turn lane in the northbound direction. Northbound left-turns are prohibited per a no left-turn sign. Locksley Way/Howard Road traverses the intersection east-west. The westbound approach, Locksley Way, provides a dedicated left-turn and a shared left/right turn lane while prohibiting the westbound thru movement. On the west side, Howard Road, the eastbound approach provides a single approach lane without turn prohibitions.

A protected-permitted left-turn phase is provided for southbound left-turns from South Montgomery Street to Locksley Way. The traffic signal provides split phasing east/west on Locksley Way/Howard Road. Split phasing allows all movements of one approach to operate simultaneously while the opposing direction is stopped, after the first side of the split ends, then the opposing direction is allowed to go while the first side of the split is stopped. The intersection represents an appropriate application of a split phase since the east/west approach volumes are very unbalanced.

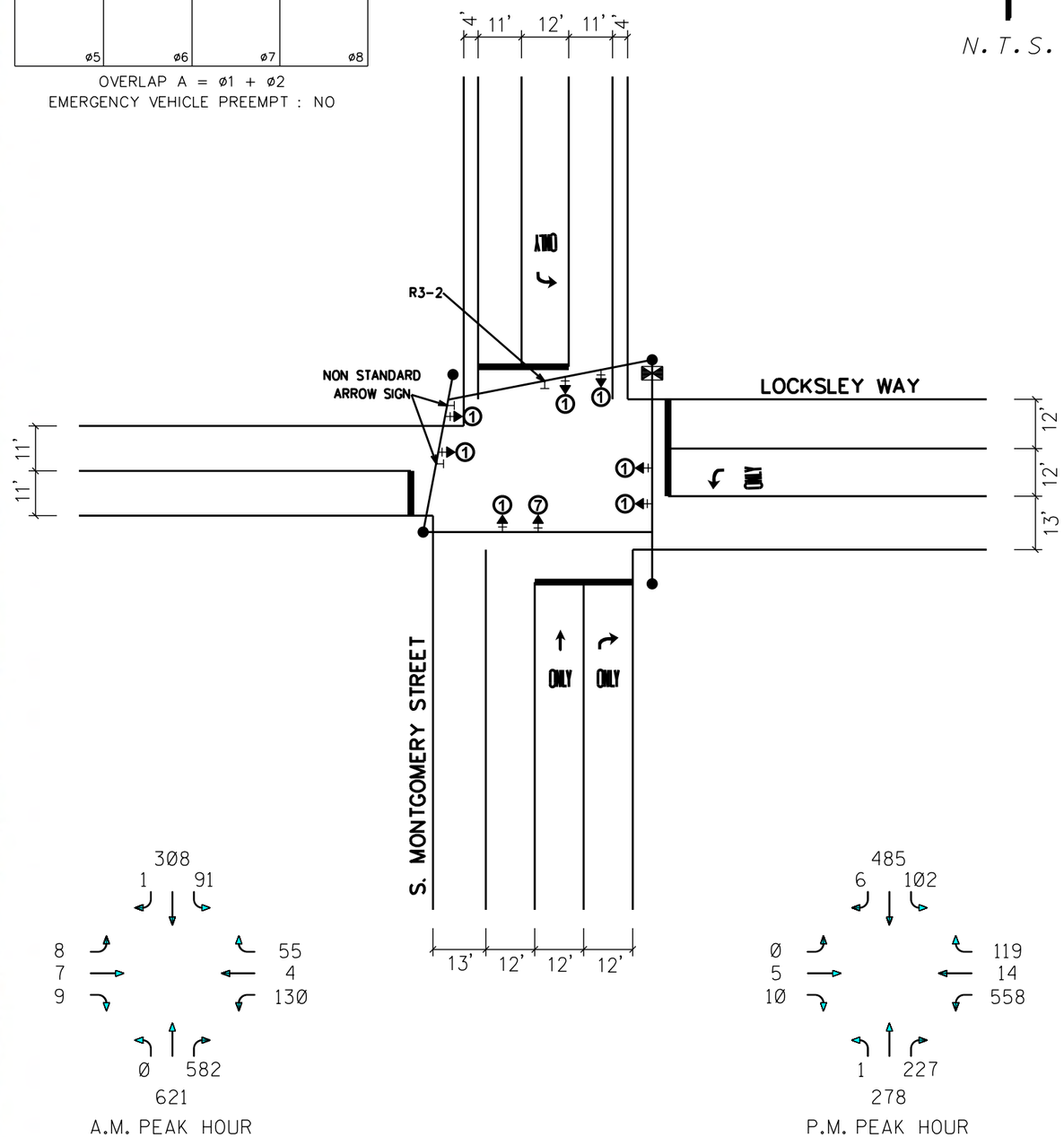
The lane restrictions and striping indicate a possible history of attempts to regulate residential cut-through traffic while also mitigating congestion. The prohibition of the westbound thru movement into Pleasant Acres is likely a traffic calming response to previous cut-thru traffic complaints. The effectiveness of this access restriction is likely minimal without police presence. Traffic calming measures within the neighborhood would likely be more effective. The restriction of the northbound left-turn movement likely arose from the lack or elimination of a dedicated left-turn lane in the northbound direction. Without a dedicated northbound left-turn lane, queued left-turning vehicles may have once represented an impediment to the thru movement.

Exhibit 26 Looking North along S Montgomery Street towards Locksley Way (right) and Howard Road (left)

Montgomery St / Locksley Way
SIGNAL PHASING DIAGRAM



OVERLAP A = ø1 + ø2
EMERGENCY VEHICLE PREEMPT : NO



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S. MONTGOMERY STREET AT LOCKSLEY WAY
EXISTING CONDITIONS

FIGURE
9

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5.8.1 Operational Notes

The intersection currently operates with an overall intersection LOS D during the AM peak and a LOS F in the PM peak. While the South Montgomery Street approaches operate at a LOS D or better during these periods, Locksley Way/Howard Road ranges from a LOS D to a LOS F. However, the Howard Road approach accounts for approximately 1-percent of the total intersection volume.

5.8.2 Recommendations

Controller Cabinet: The traffic signal controller cabinet continues to provide adequate service at the intersection. However, due to the apparent age of the equipment, the cabinet is likely reaching the end of its expected service life. The cabinet is recommended to be upgraded with in the next five years.

Tether Wires: The traffic signal heads are missing tether wires. Tether wires are typically installed below the main span wire at a height sufficient to be anchored to the bottom of the signal heads. Connecting the bottom of the signals and overhead signs to a tether wire minimizes swaying of the signal heads due to wind and increases the probability of proper visibility. Swaying signals can also introduce more stress on anchor points leading to fatigue related failures at the anchor points and to the main span wire. All overhead signs are recommended to be suitably attached to the top span wire and a lower tether wire.

Vehicle Detection: Vehicle detection upgrades are recommended for this intersection. In addition to the existing stop line detection, advanced detection on the South Montgomery Street approaches is recommended.

Westbound Locksley Way: Westbound Locksley Way is striped to provide a dedicated left-turn lane and a shared left/right turn lane. The Locksley Way traffic signals display only a right-turn and left-turn green arrow as well as non-standard arrow signs point left and right. Although implied by this configuration, there is no explicit prohibition to prevent westbound thru movements from entering the Pleasant Acres neighborhood. The significantly faded pavement markings for the Locksley Way turn lanes may contribute to additional confusion by motorists. If the city desires to prohibit the westbound thru movement, the non-standard arrow signs are recommended to be removed from the overhead span wire and replaced with the MUTCD compliant R3-27 sign in Exhibit 27.

Exhibit 28. Westbound Locksley Way Signal Heads and Non-Standard Arrow Signs

Exhibit 27. MUTCD R3-27

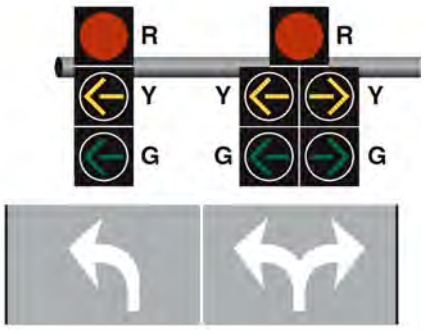


Exhibit 29. Recommended signal configuration for Westbound Locksley Way without Thru

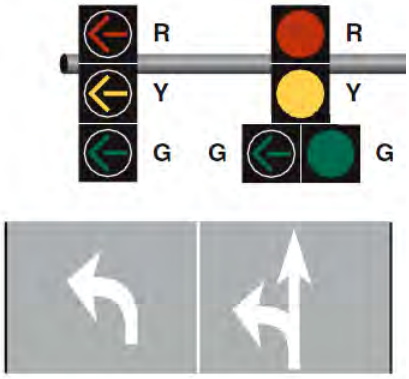


Exhibit 30. Recommended signal configuration for Westbound Locksley Way Allowing Thrus

The traffic signal heads for westbound Locksley Way are recommended to be replaced with an MUTCD compliant configuration. The need for a thru prohibition may no longer be necessary due to the Lynn Lane extension and Yellow Jacket Drive improvements.

If the westbound thru movement is to continue being prohibited, it is recommended that the westbound Locksley Way traffic signals be replaced with the configuration shown in Exhibit 29. A three section head displaying a left green arrow, left yellow arrow, and a red ball would be provided for the left-turn only lane. A five section head displaying a left green arrow beside a right green arrow, a left yellow arrow beside a right yellow arrow, and a red ball would be provided for the shared left/right lane.

If the thru movement is allowed, the westbound Locksley Way traffic signals are recommended to be replaced as shown in Exhibit 30. A three section head displaying green, yellow, and red arrows controls the left-turn lane, and a four section head displaying a left green arrow and green ball side-by-side below a yellow ball and a red ball controls the shared left/thru/right lane.

Eastbound Howard Avenue/Locksley Way: Eastbound Howard Avenue, which operates on a split phase opposite of Locksley Way, does not provide a signal display identifying that the left-turn movement is protected. It is recommended that the eastbound signal heads be replaced to indicate that the left-turn is protected. Currently, the eastbound approach only displays two Type 1 heads (3 section, all circular indications). The left-most signal is recommended to be replaced with a Type 3 head (4 section).

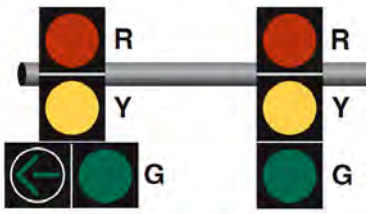


Exhibit 31. Recommended Signal Configuration for Eastbound Howard Avenue

Southbound Montgomery Street: Southbound Montgomery Street provides a dedicated left-turn lane that is controlled by a protected-permissive left-turn phase at the signal. Southbound Montgomery Street is also the only intersection approach that allows access into the Pleasant Acres neighborhood, a right turn. An R10-12, "Left Turn Yield on Green," from the current 2009 MUTCD is recommended to be installed adjacent to the left-turn signal.

Northbound S Montgomery Street:
Northbound S Montgomery Street prohibits left turns westward into the Pleasant Acres neighborhood. The existing R3-2 "No Left Turn" sign is severely faded and is recommended to be replaced. A study to examine the feasibility of channelizing the northbound right-turn movement should be considered. Channelization would allow the northbound right turn to be controlled by a yield sign and eliminates the requirement to come to a full stop on red before making a right turn.

Exhibit 32. Northbound S Montgomery Street

Coordination: Interconnection of the Academy Road, Lynn Lane, and Locksley Way traffic signals on South Montgomery Street is recommended. The spacing of these signals is within the appropriate distance to coordinate these signals and use an interconnect to maintain the coordination, particularly during peak hours. Wireless or fiber optic interconnection is recommended.

5.9 Locksley Way at Lincoln Green

The intersection of Locksley Way and Lincoln Green is a four leg intersection controlled by a span wire mounted traffic signal. The intersection does not meet MUTCD volume warrant criteria. Depicted in Figure 10, Lincoln Green extends approximately north/south through the intersection and Locksley Way traverses the intersection east-west. None of the approaches provide dedicated turn lanes.

Exhibit 33. Locksley Way looking northward toward the Intersection

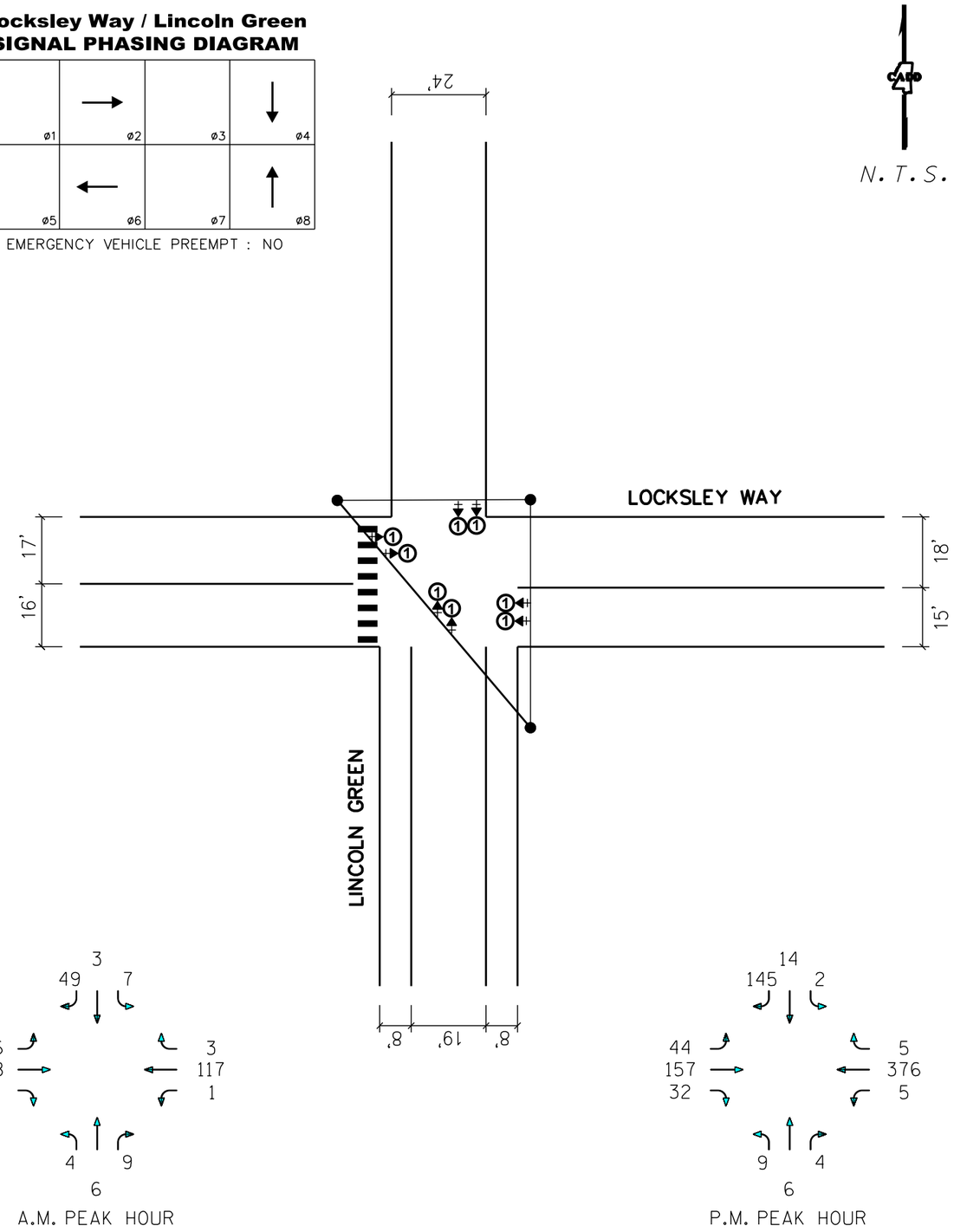
5.9.1 Operational Notes

The Locksley Way/Lincoln Green traffic signal is not warranted based on the traffic volumes provided by the city. The intersection level of service for the existing traffic signal is a LOS A during the AM peak hour and a LOS B during the PM peak hour. Operation as a two-way stop controlled intersection would provide a LOS C or better on southbound Lincoln Green and a LOS D or better on the much lower volume northbound approach (less than 20 vehicles during the peak hours). The presence of unwarranted traffic signals creates additional delays and potentially increases intersection crash rates. Removal of this traffic signal and conversion to a two-way stop controlled intersection is recommended.

Locksley Way / Lincoln Green
SIGNAL PHASING DIAGRAM

ø1	ø2 →	ø3	ø4 ↓
ø5	ø6 ←	ø7	ø8 ↑

EMERGENCY VEHICLE PREEMPT : NO



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LINCOLN GREEN AT LOCKSLEY WAY
EXISTING CONDITIONS

FIGURE
10

S:\Projects\12735 Starkville Signal\cad\Microstation\LOCATION9.dgn

5.9.2 Recommendations

Unsignalized Operation: The existing traffic signal is unwarranted based on the MUTCD volume warrant criteria. The traffic signal is recommended to be removed and replaced with stop signs on the Lincoln Green approaches. The level of service analysis indicates that Lincoln Green will continue to operate at adequate levels of service if it is converted to a two-way stop controlled intersection.

Pavement Markings: Striping improvements are recommended within the intersection and for a distance of at least 100 feet on each approach. There are a number of deficiencies with the existing pavement markings, such as:

1. *Stop Lines:* No stop lines are provided on the intersection approaches. Stop lines are recommended to be installed to satisfy MUTCD specifications.
2. *Crosswalk Removal:* A crosswalk is provided across Locksley Way from the northwest corner to the southeast corner, but the crosswalk is not part of sidewalk network. Crosswalks should not be provided without being part of an ADA/PROWAG compliant sidewalk network. The crosswalk is recommended to be removed, as uncontrolled marked crosswalks have been identified to have a higher vehicle/pedestrian collision rate than unmarked crosswalks at unsignalized intersections.
3. *Removal of Continuous Double Yellow within Intersection:* The center double yellow striping on Locksley Way within the intersection does not comply with the MUTCD. The double yellow is recommended to be removed from the middle of the intersection.
4. *Add Continuous Double Yellow:* There are no pavement markings on Lincoln Green. In addition to adding the recommended stop lines on the Lincoln Green approaches, a center double yellow stripe is recommended to extend at least 100 feet north and south from the intersection.

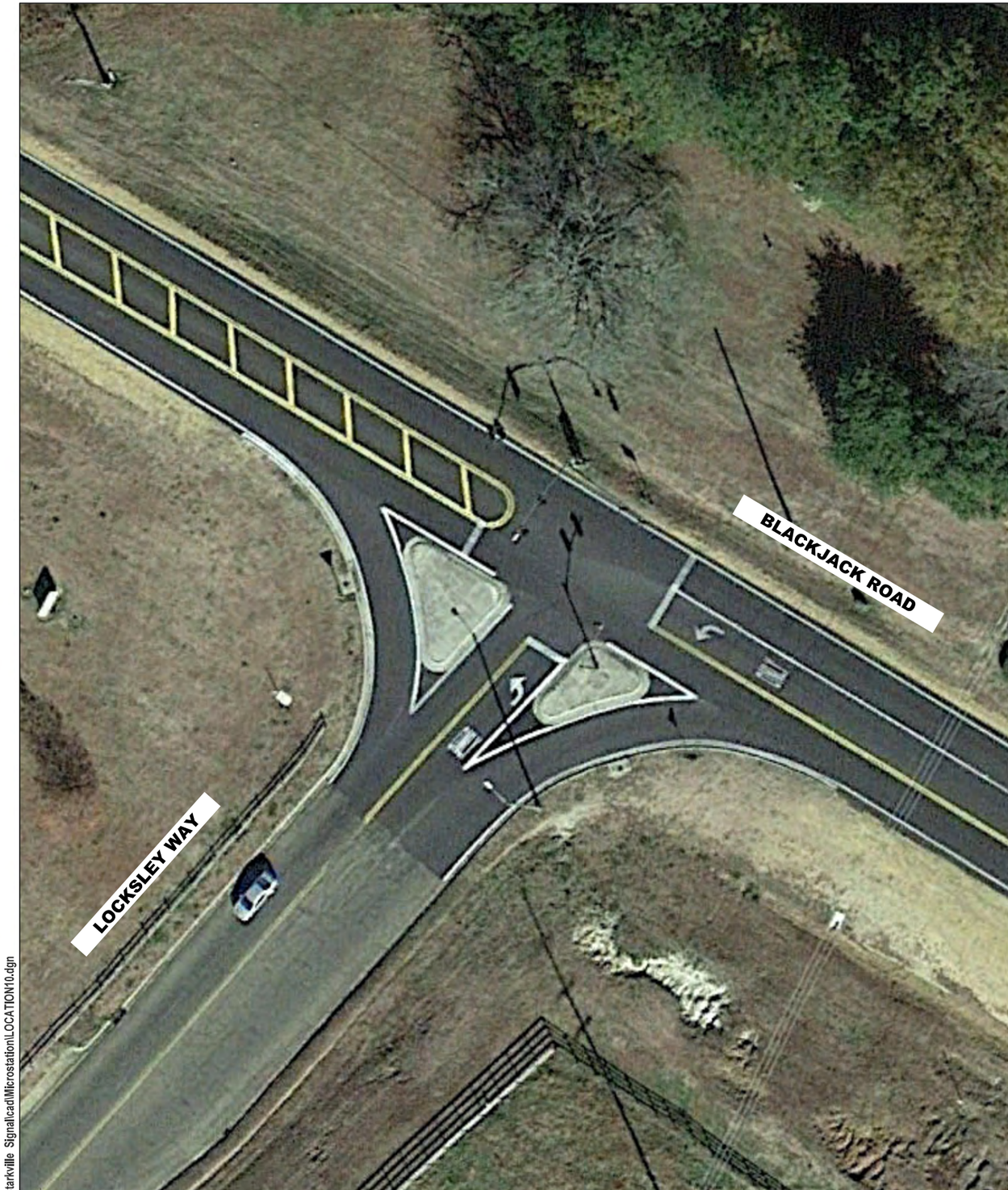
5.10 Blackjack Road at Locksley Way

The Blackjack Road/Locksley Way intersection is a three leg intersection, and Blackjack Road traverses the intersection from northwest to southeast while Locksley Way approaches from the southwest and terminates at Blackjack Road. The intersection is controlled by a traffic signal with mast-arm mounted signal heads. The right-turns to and from Locksley Way are channelized movements controlled by yield signs. A dedicted left-turn lane is provided on Blackjack Road to turn onto Locksley Way and is controlled by a protected-permitted left-turn phase.

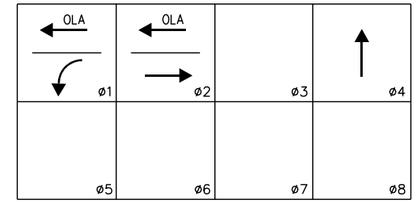
Exhibit 34. Looking Northeast from Locksley Way towards Blackjack Road

5.10.1 Operational Notes

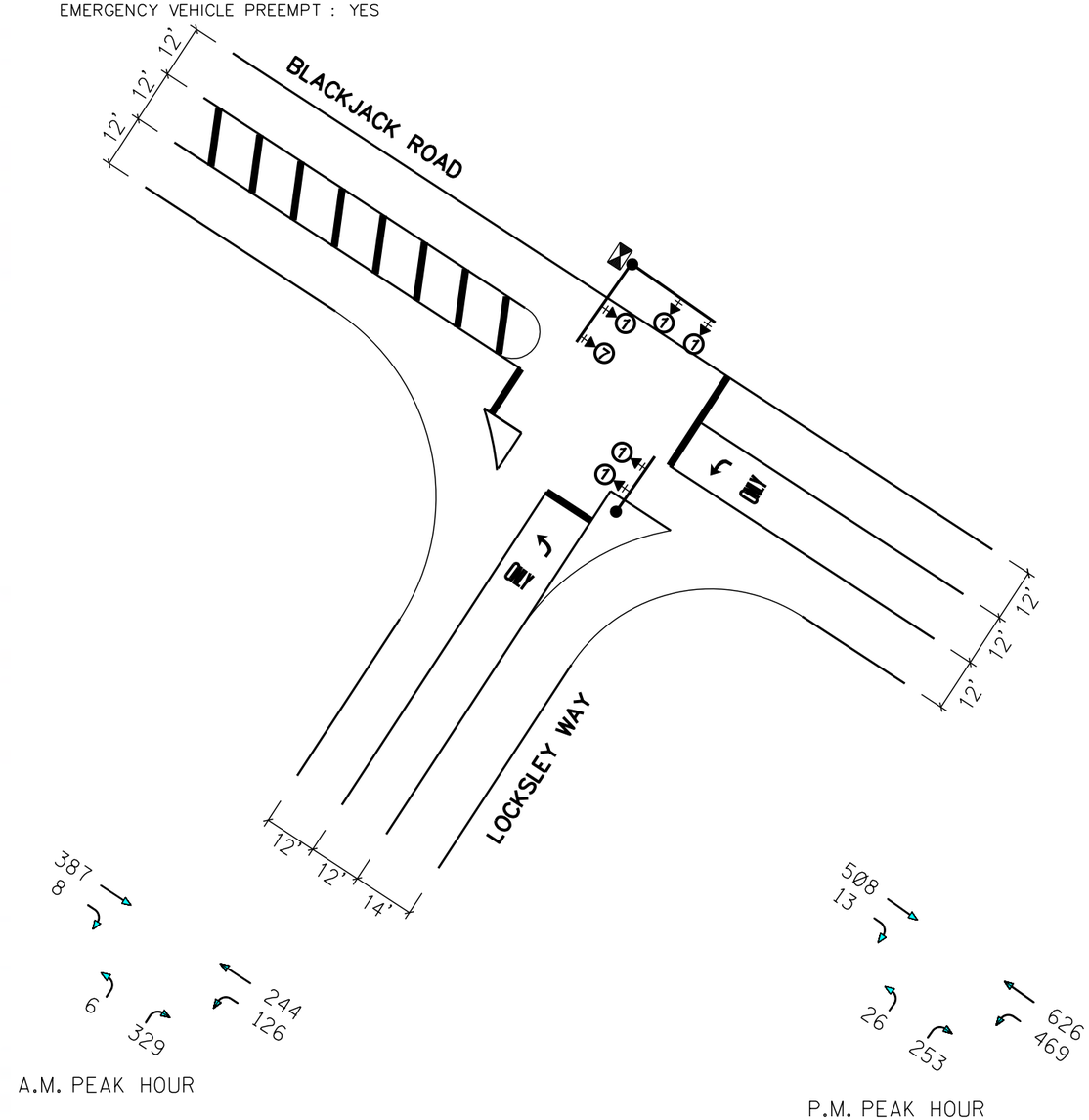
The overall intersection was calculated to operate at a LOS D during the AM peak hour and a LOS F during the PM peak hour. The left-turn from Blackjack Road to Locksley Way and its reciprocal right-turn movement from Locksley Way to Blackjack Road are comparable to the thru traffic on Blackjack Road during peak periods. At the same time, the left-turn from Locksley Way is very low and places few vehicle detection calls to interrupt thru traffic on Blackjack Road. As a result, the traffic signal provides relatively few gaps for right-turns from Locksley Way.



Locksley Way / Blackjack Rd
SIGNAL PHASING DIAGRAM



OVERLAP A = ø1 + ø2
EMERGENCY VEHICLE PREEMPT : YES



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BLACKJACK ROAD AT LOCKSLEY WAY
EXISTING CONDITIONS

FIGURE
11

5.10.2 Recommendations

Right-turn Detection: Excluding geometric modifications to bring the Locksley Way right-turn lane into the intersection as a signal controlled movement, the benefits of retiming the traffic signal are likely to be minimal. However, the performance of the Locksley Way right-turn movement could be improved by assigning it a vehicle detection zone.

The Locksley Way right-turn is currently "Yield" controlled. A vehicle detector is recommended to be installed to detect right-turners from Locksley Way. Instead of using the detector to call the Locksley Way signal phase, it is recommended that the right-turn detector be used to call the overlapping left-turn phase from northbound Blackjack Road instead. Calling the left-turn phase on Blackjack Road stops the southbound Blackjack Road direction, allowing right-turners to enter the road similar to calling Locksley Way. However, using Blackjack Road's northbound left-turn phase instead allows the northbound thru on Blackjack Road to continue uninterrupted. If implemented, a significantly longer than typical presence delay is recommended to be used for the right-turn detector (approximately 15 to 20 seconds with verification in field trials).

Alternatively, the detection zone could be placed approximately three car lengths in advance of the yield point. The detection zone could then be used to trigger the same behavior described above, but only when a queued vehicle is detected over the loop. Due to the setback distance, this would result in the detection zone being triggered only when a suitably long queue develops.

Placing a detector in the right-turn lane from Locksley Way will provide more gaps on Blackjack Road for the right-turn movement. However, drivers will still have to yield as they approach Blackjack Road to confirm the southbound Blackjack Road traffic is stopped by the signal. While this configuration will be more efficient than existing conditions, the most efficient alternative may be to replace the channelized right-turn with a dedicated right-turn lane controlled by a dedicated right-turn phase. The dedicated right-turn phase can then be set to overlap the northbound left-turn from Blackjack Road.

Pavement Markings: MUTCD compliant yield lines are recommended at the desired yield point at both channelized right-turns. Yield line "pennants" or "saw teeth" serve the same function as stop lines, but have a different appearance to indicate a yield condition rather than a stop.

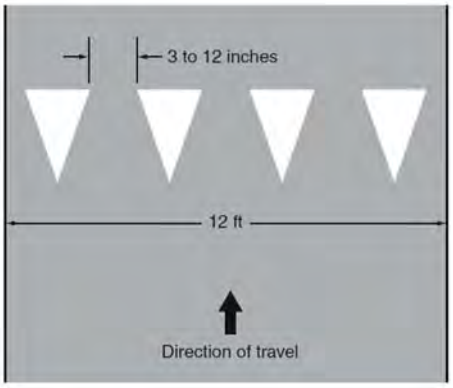


Exhibit 35. Yield Line Markings
Source: 2009 MUTCD

6.0 Proposed Traffic Signal Timings

The following section outlines the recommended traffic signal timings based on the existing traffic signals and their configurations. Implementation of some recommended traffic signal improvements may require changes to the timings provided in this section.

6.1 School Flash Operation

Note: The Millsaps Career and Technology Center traffic signal is recommended to be removed.

The Millsaps Career and Technology Center driveway is currently the only intersection that switches from flashing operation to full operation during school arrival and dismissal. Based on the timing data obtained from the city, the Millsaps signal operates from 7:00 a.m. to 7:45 a.m. and again from 3:00 p.m. to 4:00 p.m.

The driveway volume indicates that the AM peak operation could be extended to 8:00 a.m. and the PM peak operation could be delayed until 3:30 p.m. Exhibit 36 presents the Millsaps driveway volume in 15-minute increments throughout the day.

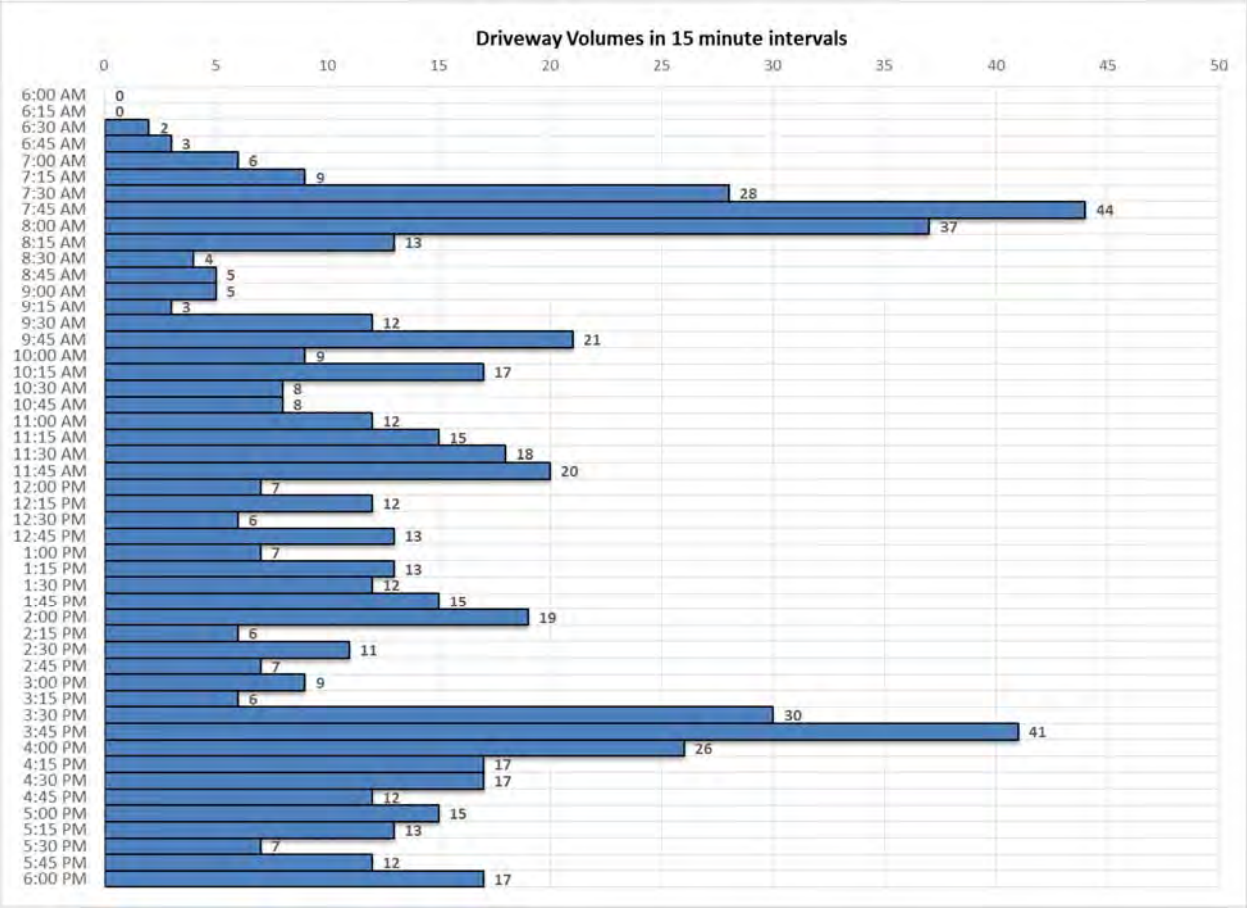


Exhibit 36. Millsaps Career and Technology Center Driveway Volumes

6.2 Time of Day Operation

If used, the existing time of day plans implemented for the AM and PM peak hour periods operate for approximately one hour. It is recommended that these periods be extended to capture more of the peak traffic instead of just the single peak hour traffic. Illustrated below are the proposed periods, 7 a.m. to 9 a.m. and 4 p.m. to 6 p.m., overlaid onto separate plots of the traffic on Louisville Street and on Montgomery Street in 15-minute increments. The remainder of the time, it is proposed that the signals continue to operate as they have.

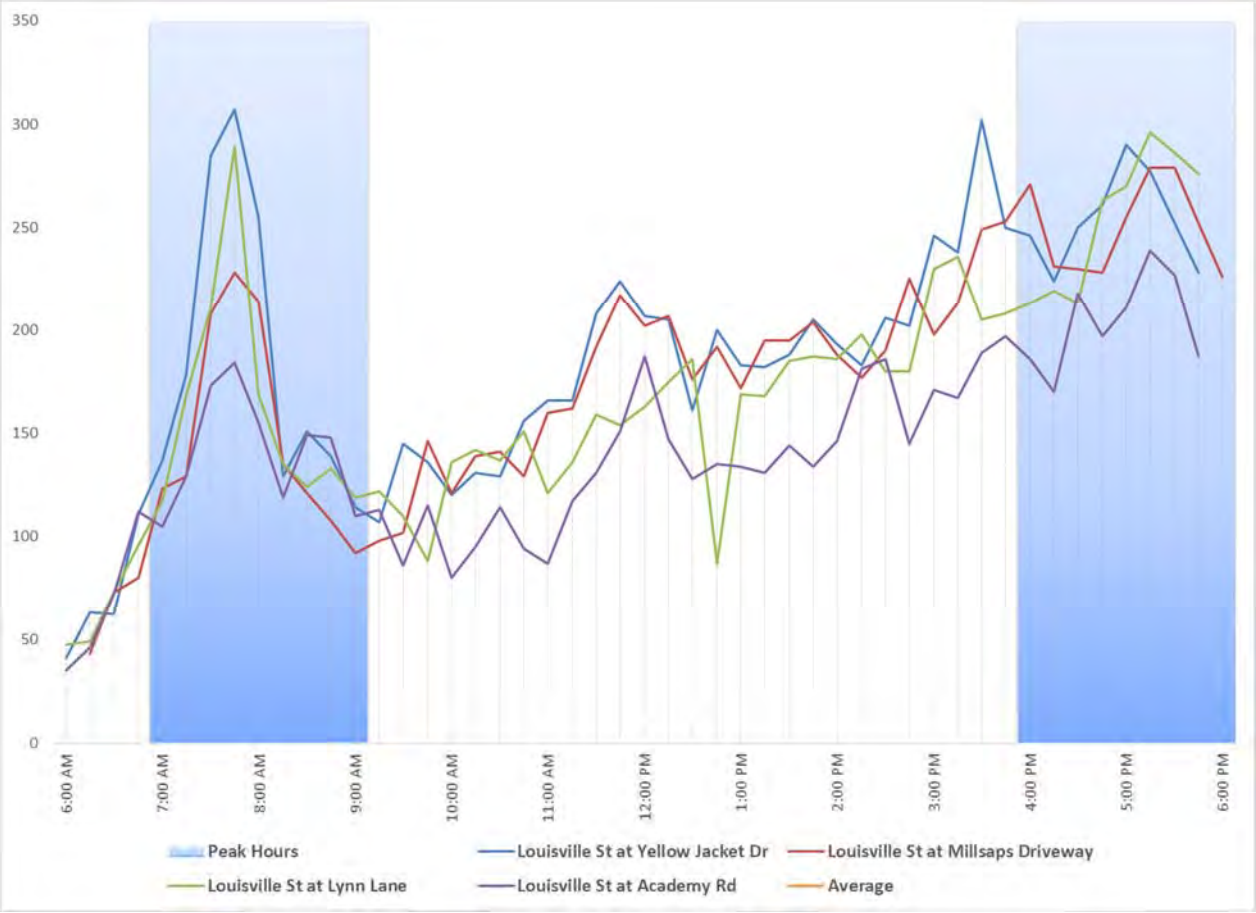


Exhibit 37. Louisville Street Traffic Volume (15-minute increments) with Proposed TOD Periods

Exhibit 38. Montgomery Street Traffic Volume (15-minute increments) with Proposed TOD Periods

6.4 Clearance Intervals

Each phase of a traffic signal terminates using a clearance interval displaying a yellow and then all red indication. The duration of the indications is calculated based on the intersection width and the 85th percentile speed (or speed limit plus 7 mph) per ITE recommended practice. Overall, the calculated total clearance interval for the study area intersections is between 5.2 and 5.9 seconds. The yellow intervals provided by the city ranged from 2.8 to 4.1 seconds while the red intervals ranged from 1.1 to 1.9 seconds.

To maintain consistency throughout the study area, a 6-second clearance interval is recommended. For approaches with thru movements, the clearance interval is recommended to be 4 seconds of yellow and 2 seconds of all red. For approaches without a thru movement, the clearance interval is recommended to be 3 seconds of yellow and 3 seconds of all red.

Table 8. Clearance Intervals

Intersection	Approach	Calculated			Recommended		
		Yellow	All Red	Clearance Interval	Yellow	All Red	Clearance Interval
Louisville St at Yellow Jacket Dr	North-South	4.1	1.8	5.9	4.0	2.0	6.0
	East-West	3.7	1.9	5.7	4.0	2.0	6.0
Louisville St at Millsaps	North-South	4.1	1.5	5.6	4.0	2.0	6.0
	East-West	2.8	2.7	5.6	***3.0***	***3.0***	6.0
Louisville St at Lynn Ln	North-South	4.1	1.8	5.9	4.0	2.0	6.0
	East-West	3.7	1.9	5.7	4.0	2.0	6.0
Louisville St at Academy Rd	North-South	4.1	1.2	5.3	4.0	2.0	6.0
	East-West	2.8	2.7	5.6	***3.0***	***3.0***	6.0
Academy Rd at Starkville Academy	North-South	2.8	2.7	5.6	***3.0***	***3.0***	6.0
	East-West	3.7	2.0	5.7	4.0	2.0	6.0
S Montgomery at Academy Rd	North-South	4.1	1.5	5.5	4.0	2.0	6.0
	East-West	2.8	2.7	5.6	***3.0***	***3.0***	6.0
S Montgomery at Lynn Lane	North-South	4.1	1.2	5.3	4.0	2.0	6.0
	East-West	2.8	2.7	5.6	***3.0***	***3.0***	6.0
S Montgomery at Locksley Lane	North-South	4.1	1.3	5.4	4.0	2.0	6.0
	East-West	4.1	1.5	5.5	4.0	2.0	6.0
Locksley Lane at Lincoln Green	North-South	3.7	1.5	5.2	4.0	2.0	6.0
	East-West	4.1	1.5	5.6	4.0	2.0	6.0
Blackjack Road at Locksley Way	Locksley Way	3.2	2.7	5.9	***3.0***	***3.0***	6.0
	Blackjack	4.1	1.1	5.2	4.0	2.0	6.0

6.5 Signal Timing Data

A uniform coordination pattern identification scheme is recommended. The timings included in the Appendix propose using dial 1 for AM peak and dial 3 for PM peak. Dial 2 was left open so that a future school or midday peak could be added in a logical position, between the AM and PM peak hours. Dial 4 is left open in case an off peak or special event pattern were to be chosen for the future.

Split 1 was used for all timings. However, the city may choose to implement the proposed timings on another split. The existing timings appear to be on split 1 exclusively. If the city chooses to implement the proposed timings on Split 2, then the city can preserve the old timings as a backup on split 1.

Reinforcement of the free mode operation is included in all coordination patterns by including a free mode (0/0/4) instance at 0:01 a.m. each day.

All timings may require field adjustments and verifications to account for normal variations in traffic as well as other factors such as detector delay and passage time settings.

No signal timing adjustments are anticipated for the Millsaps and Starkville Academy driveways due to their limited use. Existing timings were found to be adequate as minor street traffic volume demands are minimal.

7.0 Conclusions

The current traffic signal timings plans include cycle lengths that are longer than those required by the existing traffic demands. Reducing these cycle lengths is anticipated to increase the frequency of service to the side streets. Section 6.0 outlines two time of day timing plans, one for the AM peak and the other for the PM peak. The timings for each intersection are provided in the Appendix.

The intersection of Louisville Street at Lynn Lane and the intersection of South Montgomery Street at Locksley Way/Howard Road are the primary locations where signal and/or geometric design improvements will provide the most benefit. These locations are recommended to be studied in additional detail. In particular, the conversion of the Louisville Street/Lynn Lane traffic signal to full 8-phase operation that will remove the east-west split phasing is anticipated to provide improved levels of service at the intersection. As part of the South Montgomery Street/Locksley Way channelization improvements, the Pleasant Acres neighborhood access could be studied in further detail.

Overall, improvements to vehicle detection capabilities at all locations and planning for the replacement of four traffic signal cabinets are recommended to be near term goals. Cabinet upgrades are recommended within the next five years at the intersections of 1) Louisville Street/Yellow Jacket Drive, 2) Louisville Street/Academy Road, 3) South Montgomery Street/Academy Road, and 4) South Montgomery Street/Locksley Way.

Additionally, consideration is recommended to be given to removing the traffic signals at: 1) the Millsaps Career and Technology Center driveway, 2) the Starkville Academy driveway, and 3) the Locksley Way at Lincoln Green intersection. Existing traffic volumes do not meet the MUTCD volume warrants at 60-percent. Removal of these unwarranted traffic signals will help reduce long term recurring maintenance costs, free up existing hardware for use at other locations, reduce intersection delays, and improve major street progression. Coordination with local stakeholders is recommended if the city desires to explore the removal of these unwarranted signals.

Appendix

Louisville Street at Yellow Jacket Drive

Day	Time	Coordination Pattern	Offset
Weekend	0:01	0/0/4 (Free)	
M-F	0:01	0/0/4 (Free)	
M-F	7:00	1/1/1	80
M-F	9:00	0/0/4 (Free)	
M-F	16:00	3/1/1	20
M-F	18:00	0/0/4 (Free)	

	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 7	Ø 8
Movement	*SBL*	*NBT*	*EB/WB*			*OLA***		
Min Green	6	10	6					
Max 1	30	40	30					
Yellow/10	40	40	40			40		
Red/10	20	20	20			20		
1/1/1 Cycle: 100	21	53	26					
3/1/1 Cycle: 90	15	43	32					

***Overlap A shown for reference. Logic may vary.*

Louisville Street at Lynn Lane

Day	Time	Coordination Pattern	Offset
Weekend	0:01	0/0/4 (Free)	
M-F	0:01	0/0/4 (Free)	
M-F	7:00	1/1/1	
M-F	9:00	0/0/4 (Free)	
M-F	16:00	3/1/1	0
M-F	18:00	0/0/4 (Free)	

	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 7	Ø 8
Movement	*SBL*	*NBT*	*EB*	*WB*	*NBL*	*SBT*		
Min Green	6	10	6	6	6	10		
Max 1	20	40	35	35	25	65		
Yellow/10	40	40	40	40	40	40		
Red/10	20	20	20	20	20	20		
1/1/1 Cycle: 100	15	35	30	25	15	35		
3/1/1 Cycle: 135	15	45	40	35	20	40		

NOTE: The longer PM peak hour cycle length required in 3/1/1 due to the east/west split phase breaks any possible coordination along the Louisville Street corridor.

Louisville Street at Academy Road

Day	Time	Coordination Pattern	Offset
Weekend	0:01	0/0/4 (Free)	
M-F	0:01	0/0/4 (Free)	
M-F	7:00	1/1/1	
M-F	9:00	0/0/4 (Free)	
M-F	16:00	3/1/1	50
M-F	18:00	0/0/4 (Free)	

	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 7	Ø 8
Movement	*SBL*	*NBT*		*WB*		*OLA***		
Min Green	6	10		7				
Max 1	25	40		35				
Yellow/10	40	40		30		40		
Red/10	20	20		30		20		
1/1/1 Cycle: 100	15	55		30				
3/1/1 Cycle: 90	23	39		28				

***Overlap A shown for reference. Logic may vary.*

South Montgomery Street at Academy Road

Day	Time	Coordination Pattern	Offset
Weekend	0:01	0/0/4 (Free)	
M-F	0:01	0/0/4 (Free)	
M-F	7:00	1/1/1	80
M-F	9:00	0/0/4 (Free)	
M-F	16:00	3/1/1	80
M-F	18:00	0/0/4 (Free)	

	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 7	Ø 8
Movement	*NBL*	*SBT*	*EB*	*Fire Station*		*OLA***	*OLB***	*OLC***
Min Green	6	10	6	5				
Max 1	30	70	40	25				
Yellow/10	40	40	30	30		40	40	40
Red/10	20	20	30	30		20	20	20
1/1/1 Cycle: 120	20	50	50	25*				
3/1/1 Cycle: 90	12	52	26	25*				

** Fire Station Max Green should be coordinated with the Fire Stations desired reaction and passage times.*
***Overlaps A, B, and C shown for reference. Logic may vary.*

South Montgomery Street at Lynn Lane

Day	Time	Coordination Pattern	Offset
Weekend	0:01	0/0/4 (Free)	
M-F	0:01	0/0/4 (Free)	
M-F	7:00	1/1/1	40
M-F	9:00	0/0/4 (Free)	
M-F	16:00	3/1/1	40
M-F	18:00	0/0/4 (Free)	

	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 7	Ø 8
Movement	*NBL*	*SBT*		*EB*		*NBT*		
Min Green	6	15		7		15		
Max 1	25	65		40		65		
Yellow/10	40	40		30		40		
Red/10	20	20		30		20		
1/1/1 Cycle: 120	15	55		50		70		
3/1/1 Cycle: 90	12	56		22		68		

South Montgomery Street at Locksley Way/Howard Rd

Day	Time	Coordination Pattern	Offset
Weekend	0:01	0/0/4 (Free)	
M-F	0:01	0/0/4 (Free)	
M-F	7:00	1/1/1	70
M-F	9:00	0/0/4 (Free)	
M-F	16:00	3/1/1	70
M-F	18:00	0/0/4 (Free)	

	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 7	Ø 8
Movement	*SBL*	*NBT*	*WB*	*EB*		*OLA***		
Min Green	6	15	6	6				
Max 1	25	55	35	10				
Yellow/10	40	40	40	40		40		
Red/10	20	20	20	20		20		
1/1/1 Cycle: 120	15	65	25	15				
3/1/1 Cycle: 90	12	31	35	12				

***Overlap A shown for reference. Logic may vary.*

Lincoln Green at Locksley Way

Day	Time	Coordination Pattern	Offset
Weekend	0:01	0/0/4 (Free)	
M-F	0:01	0/0/4 (Free)	

	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 7	Ø 8
Movement		*EB*		*SB*		*WB*		*NB*
Min Green		10		6		10		6
Max 1		35		25		35		25
Yellow/10		40		40		40		40
Red/10		20		20		20		20
1/1/1		n/a		n/a		n/a		n/a
3/1/1		n/a		n/a		n/a		n/a

Blackjack Road at Locksley Way

Note: Coordination with adjacent traffic signals on Blackjack Road is recommended. Offset times are approximate and are based on distances to the adjacent signals on Blackjack Road.

Day	Time	Coordination Pattern	Offset
Weekend	0:01	0/0/4 (Free)	
M-F	0:01	0/0/4 (Free)	
M-F	7:00	1/1/1	35
M-F	9:00	0/0/4 (Free)	
M-F	16:00	3/1/1	85
M-F	18:00	0/0/4 (Free)	

	Ø 1	Ø 2	Ø 3	Ø 4	Ø 5	Ø 6	Ø 7	Ø 8
Movement	*WBL*	*EBT*		*NB*		*OLA***		
Min Green	6	15		6				
Max 1	20	65		35				
Yellow/10	40	40		30		40		
Red/10	20	20		30		20		
1/1/1 Cycle: 120	20	55		45				
3/1/1 Cycle: 120	20	65		35				

***Overlap A shown for reference. Logic may vary.*

City of Starkville

South Starkville Intersection Photo Inventory

August 2015

NEEL-SCHAFFER

Solutions you can build upon

Louisville Street at Yellow Jacket Drive

Controller Cabinet (Exterior)

Controller Cabinet (Interior)

Northbound Louisville Street

Southbound Louisville Street

Eastbound Yellow Jacket Drive

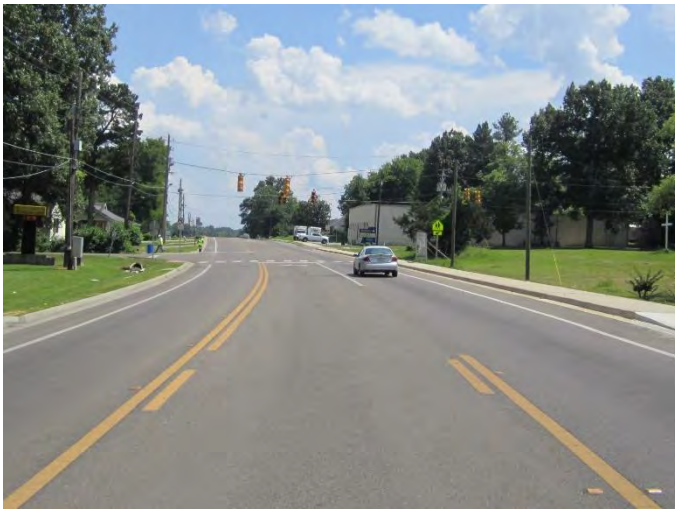
Westbound commercial driveway

Louisville Street at Millsaps Career and Technology Center

Controller Cabinet (Exterior)

Controller Cabinet (Interior)

Northbound Louisville Street



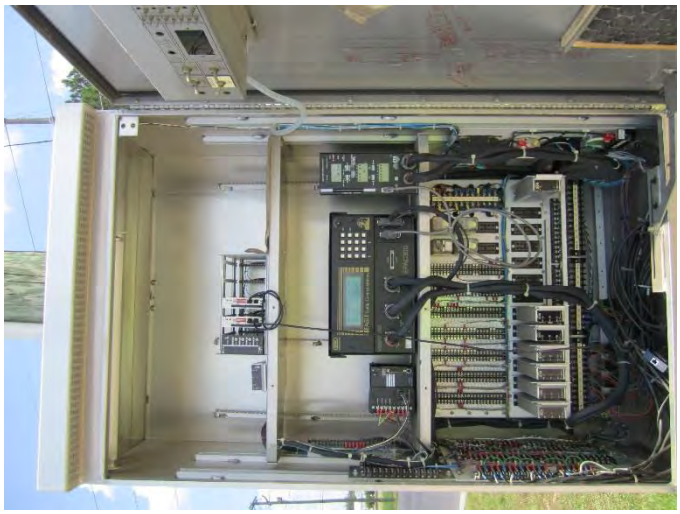
Southbound Louisville Street

Westbound Millsaps Driveway

Northbound Right-turn Prohibition

Louisville Street at Lynn Lane

Controller Cabinet (Exterior)



Controller Cabinet (Interior)

Northbound Louisville Street

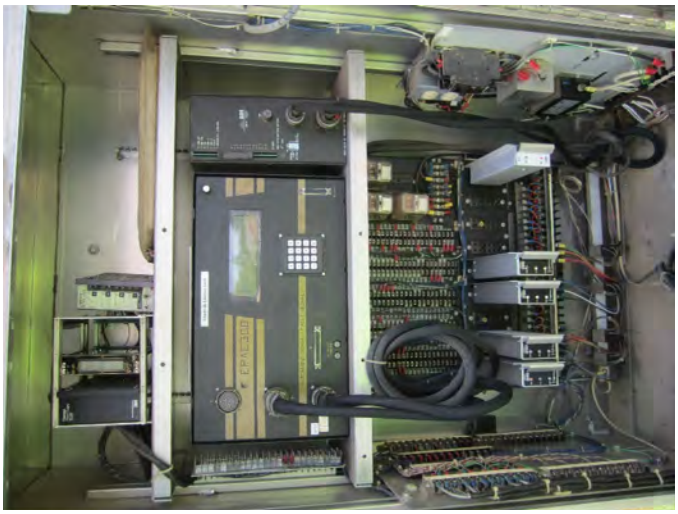
Southbound Louisville Street

Eastbound Lynn Lane

Westbound Lynn Lane

Louisville Street at Academy Road

Controller Cabinet (Exterior)



Controller Cabinet (Interior)

Northbound Louisville Street

Southbound Louisville Street

Eastbound Academy Road

Academy Road at Starkville Academy

Controller Cabinet (Exterior)

Controller Cabinet (Interior)

Southbound Starkville Academy (1 of 2)

Southbound Starkville Academy (2 of 2)

Eastbound Academy Road

Westbound Academy Road

South Montgomery Street at Academy Road (1 of 2)

Controller Cabinet (Exterior)

Controller Cabinet (Interior)

Northbound S. Montgomery Street

Southbound S. Montgomery Street

Eastbound Academy Road at S. Montgomery Street

Southbound from Fire Station

South Montgomery Street at Academy Road (2 of 2)

Eastbound Academy Road at Fire Station

Westbound Academy Road at Fire Station

South Montgomery Street at Lynn Lane

Controller Cabinet (Exterior)

Controller Cabinet (Interior)

Northbound S. Montgomery Street

Southbound S. Montgomery Street

Eastbound Lynn Lane

South Montgomery St at Locksley Way

Controller Cabinet (Exterior)

Controller Cabinet (Interior)

Northbound S. Montgomery Street

Southbound S. Montgomery Street

Eastbound Howard Road

Westbound Locksley Way

Locksley Way at Lincoln Green

Controller Cabinet (Exterior)

Controller Cabinet (Interior)

Northbound Lincoln Green

Southbound Lincoln Green

Eastbound Locksley Way

Westbound Locksley Way

Locksley Way at Blackjack Road

Controller Cabinet (Exterior)

Controller Cabinet (Interior)

Northbound Locksley Way (1 of 2)

Northbound Locksley Way (2 of 2)

Eastbound Blackjack Road

Westbound Blackjack Road

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	8	6	55	7	106	9	404	92	212	279	29
Future Volume (veh/h)	3	8	6	55	7	106	9	404	92	212	279	29
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	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	4	10	7	65	8	126	11	481	110	252	332	35
Adj No. of Lanes	0	1	0	0	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	63	138	83	103	20	144	718	955	218	576	1253	132
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.65	0.65	0.65	0.07	0.76	0.76
Sat Flow, veh/h	184	935	559	431	135	977	1011	1468	336	1774	1657	175
Grp Volume(v), veh/h	21	0	0	199	0	0	11	0	591	252	0	367
Grp Sat Flow(s),veh/h/ln	1677	0	0	1544	0	0	1011	0	1804	1774	0	1832
Q Serve(g_s), s	0.0	0.0	0.0	12.7	0.0	0.0	0.5	0.0	20.4	5.3	0.0	7.3
Cycle Q Clear(g_c), s	1.2	0.0	0.0	15.1	0.0	0.0	0.5	0.0	20.4	5.3	0.0	7.3
Prop In Lane	0.19		0.33	0.33		0.63	1.00		0.19	1.00		0.10
Lane Grp Cap(c), veh/h	284	0	0	268	0	0	718	0	1173	576	0	1386
V/C Ratio(X)	0.07	0.00	0.00	0.74	0.00	0.00	0.02	0.00	0.50	0.44	0.00	0.26
Avail Cap(c_a), veh/h	442	0	0	417	0	0	718	0	1173	906	0	1386
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	44.1	0.0	0.0	49.9	0.0	0.0	7.4	0.0	10.9	7.9	0.0	4.5
Incr Delay (d2), s/veh	0.1	0.0	0.0	4.0	0.0	0.0	0.0	0.0	1.5	0.5	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	0.6	0.0	0.0	6.8	0.0	0.0	0.1	0.0	10.5	2.5	0.0	3.8
LnGrp Delay(d),s/veh	44.2	0.0	0.0	54.0	0.0	0.0	7.4	0.0	12.4	8.4	0.0	4.9
LnGrp LOS	D			D			A		B	A		A
Approach Vol, veh/h		21			199			602			619	
Approach Delay, s/veh		44.2			54.0			12.4			6.4	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	12.7	84.1		23.2		96.8		23.2
Change Period (Y+Rc), s	4.5	6.0		5.5		6.0		5.5
Max Green Setting (Gmax), s	30.5	44.0		29.5		79.0		29.5
Max Q Clear Time (g_c+I1), s	7.3	22.4		3.2		9.3		17.1
Green Ext Time (p_c), s	0.9	4.3		0.9		4.7		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	16.0
HCM 2010 LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	7	29	418	30	56	269
Future Volume (veh/h)	7	29	418	30	56	269
Number	7	14	2	12	1	6
Initial Q (Qb), 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	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	8	35	498	36	67	320
Adj No. of Lanes	0	0	1	0	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	83	365	773	56	462	1149
Arrive On Green	0.28	0.28	0.45	0.45	0.12	0.62
Sat Flow, veh/h	295	1289	1717	124	1774	1863
Grp Volume(v), veh/h	44	0	0	534	67	320
Grp Sat Flow(s),veh/h/ln	1621	0	0	1841	1774	1863
Q Serve(g_s), s	2.4	0.0	0.0	27.0	2.0	9.5
Cycle Q Clear(g_c), s	2.4	0.0	0.0	27.0	2.0	9.5
Prop In Lane	0.18	0.80		0.07	1.00	
Lane Grp Cap(c), veh/h	459	0	0	828	462	1149
V/C Ratio(X)	0.10	0.00	0.00	0.64	0.14	0.28
Avail Cap(c_a), veh/h	459	0	0	828	462	1149
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	0.0	0.0	25.6	14.6	10.6
Incr Delay (d2), s/veh	0.4	0.0	0.0	3.8	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	14.5	1.0	5.1
LnGrp Delay(d),s/veh	32.1	0.0	0.0	29.4	15.3	11.2
LnGrp LOS	C			C	B	B
Approach Vol, veh/h	44		534			387
Approach Delay, s/veh	32.1		29.4			11.9
Approach LOS	C		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	20.0	60.0		40.0		80.0		
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		
Max Green Setting (Gmax), s	14.0	54.0		34.0		74.0		
Max Q Clear Time (g_c+I1), s	4.0	29.0		4.4		11.5		
Green Ext Time (p_c), s	0.1	5.7		0.1		6.3		

Intersection Summary	
HCM 2010 Ctrl Delay	22.5
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	243	95	22	79	8	109	320	71	62	175	98
Future Volume (veh/h)	139	243	95	22	79	8	109	320	71	62	175	98
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	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	174	304	119	28	99	10	136	400	89	78	219	122
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	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	349	251	98	131	123	12	656	851	189	491	1056	898
Arrive On Green	0.20	0.20	0.20	0.07	0.07	0.07	0.05	0.58	0.58	0.04	0.57	0.57
Sat Flow, veh/h	1774	1275	499	1774	1665	168	1774	1476	328	1774	1863	1583
Grp Volume(v), veh/h	174	0	423	28	0	109	136	0	489	78	219	122
Grp Sat Flow(s),veh/h/ln	1774	0	1775	1774	0	1833	1774	0	1805	1774	1863	1583
Q Serve(g_s), s	13.5	0.0	30.5	2.3	0.0	9.1	5.0	0.0	24.4	2.8	8.9	5.6
Cycle Q Clear(g_c), s	13.5	0.0	30.5	2.3	0.0	9.1	5.0	0.0	24.4	2.8	8.9	5.6
Prop In Lane	1.00		0.28	1.00		0.09	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	349	0	349	131	0	135	656	0	1040	491	1056	898
V/C Ratio(X)	0.50	0.00	1.21	0.21	0.00	0.81	0.21	0.00	0.47	0.16	0.21	0.14
Avail Cap(c_a), veh/h	349	0	349	292	0	302	808	0	1040	602	1056	898
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	0.88	0.00	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.4	0.0	62.3	67.6	0.0	70.7	12.8	0.0	19.1	14.6	16.5	15.7
Incr Delay (d2), s/veh	1.1	0.0	118.8	0.8	0.0	10.8	0.1	0.0	1.3	0.1	0.4	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	6.7	0.0	26.5	1.2	0.0	5.0	2.4	0.0	12.5	1.4	4.8	2.5
LnGrp Delay(d),s/veh	56.5	0.0	181.0	68.4	0.0	81.5	13.0	0.0	20.4	14.7	16.9	16.1
LnGrp LOS	E		F	E		F	B		C	B	B	B
Approach Vol, veh/h		597			137			625			419	
Approach Delay, s/veh		144.7			78.8			18.8			16.3	
Approach LOS		F			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.3	93.8		35.0	11.7	92.4		15.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	15.5	65.5		30.5	20.5	60.5		25.5
Max Q Clear Time (g_c+I1), s	4.8	26.4		32.5	7.0	10.9		11.1
Green Ext Time (p_c), s	0.1	2.3		0.0	0.3	2.3		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	65.1
HCM 2010 LOS	E

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	65	210	276	112	106	147
Future Volume (veh/h)	65	210	276	112	106	147
Number	3	18	2	12	1	6
Initial Q (Qb), 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	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	77	250	329	133	126	175
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	303	270	939	380	658	1385
Arrive On Green	0.17	0.17	0.74	0.74	0.00	0.74
Sat Flow, veh/h	1774	1583	1262	510	1774	1863
Grp Volume(v), veh/h	77	250	0	462	126	175
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1773	1774	1863
Q Serve(g_s), s	5.3	21.8	0.0	12.6	0.1	3.7
Cycle Q Clear(g_c), s	5.3	21.8	0.0	12.6	0.1	3.7
Prop In Lane	1.00	1.00		0.29	1.00	
Lane Grp Cap(c), veh/h	303	270	0	1318	658	1385
V/C Ratio(X)	0.25	0.93	0.00	0.35	0.19	0.13
Avail Cap(c_a), veh/h	310	277	0	1318	1309	1385
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.98	0.98
Uniform Delay (d), s/veh	50.3	57.2	0.0	6.2	9.5	5.1
Incr Delay (d2), s/veh	0.4	34.5	0.0	0.7	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	12.1	0.0	6.4	1.9	2.0
LnGrp Delay(d),s/veh	50.8	91.7	0.0	7.0	9.6	5.3
LnGrp LOS	D	F		A	A	A
Approach Vol, veh/h	327		462			301
Approach Delay, s/veh	82.0		7.0			7.1
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	110.6				110.6		29.4
Change Period (Y+Rc), s	3.5	6.5				6.5		5.5
Max Green Setting (Gmax), s	51.5	48.5				103.5		24.5
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		23.8
Green Ext Time (p_c), s	0.0	0.0				0.0		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	29.5
HCM 2010 LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	65	312	167	179	125	127
Future Volume (veh/h)	65	312	167	179	125	127
Number	1	6	2	12	7	14
Initial Q (Qb), 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	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	80	385	206	221	154	157
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	691	1392	490	526	232	207
Arrive On Green	0.10	0.75	0.60	0.60	0.13	0.13
Sat Flow, veh/h	1774	1863	823	883	1774	1583
Grp Volume(v), veh/h	80	385	0	427	154	157
Grp Sat Flow(s),veh/h/ln	1774	1863	0	1707	1774	1583
Q Serve(g_s), s	1.2	5.9	0.0	12.1	7.4	8.6
Cycle Q Clear(g_c), s	1.2	5.9	0.0	12.1	7.4	8.6
Prop In Lane	1.00			0.52	1.00	1.00
Lane Grp Cap(c), veh/h	691	1392	0	1016	232	207
V/C Ratio(X)	0.12	0.28	0.00	0.42	0.66	0.76
Avail Cap(c_a), veh/h	718	1392	0	1016	581	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.99	0.99	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.1	3.6	0.0	9.8	37.2	37.7
Incr Delay (d2), s/veh	0.1	0.5	0.0	1.3	3.2	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.2	0.0	6.1	3.8	4.1
LnGrp Delay(d),s/veh	5.1	4.1	0.0	11.1	40.5	43.4
LnGrp LOS	A	A		B	D	D
Approach Vol, veh/h		465	427		311	
Approach Delay, s/veh		4.3	11.1		41.9	
Approach LOS		A	B		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	13.6	59.1		17.3		72.7		
Change Period (Y+Rc), s	5.0	5.5		5.5		5.5		
Max Green Setting (Gmax), s	10.0	34.5		29.5		49.5		
Max Q Clear Time (g_c+I1), s	3.2	14.1		10.6		7.9		
Green Ext Time (p_c), s	0.1	3.6		1.2		3.9		

Intersection Summary	
HCM 2010 Ctrl Delay	16.4
HCM 2010 LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	314	48	239	488	111	109
Future Volume (veh/h)	314	48	239	488	111	109
Number	3	18	1	6	2	12
Initial Q (Qb), 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	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	378	58	288	588	134	131
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	420	375	781	1235	1023	1244
Arrive On Green	0.24	0.24	0.09	0.66	0.55	0.55
Sat Flow, veh/h	1774	1583	1774	1863	1863	1583
Grp Volume(v), veh/h	378	58	288	588	134	131
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1863	1863	1583
Q Serve(g_s), s	26.9	3.8	8.8	20.2	4.5	2.5
Cycle Q Clear(g_c), s	26.9	3.8	8.8	20.2	4.5	2.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	420	375	781	1235	1023	1244
V/C Ratio(X)	0.90	0.15	0.37	0.48	0.13	0.11
Avail Cap(c_a), veh/h	798	712	851	1235	1023	1244
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	39.3	9.6	10.8	14.2	3.2
Incr Delay (d2), s/veh	6.9	0.2	0.3	1.3	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.9	1.7	4.3	10.7	2.4	1.1
LnGrp Delay(d),s/veh	55.0	39.5	9.9	12.1	14.5	3.4
LnGrp LOS	E	D	A	B	B	A
Approach Vol, veh/h	436			876	265	
Approach Delay, s/veh	53.0			11.4	9.0	
Approach LOS	D			B	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	14.8	77.9				92.7		37.3
Change Period (Y+Rc), s	3.5	6.5				6.5		6.5
Max Green Setting (Gmax), s	16.5	38.5				58.5		58.5
Max Q Clear Time (g_c+I1), s	10.8	6.5				22.2		28.9
Green Ext Time (p_c), s	0.5	3.9				3.9		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	22.5
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	268	8	69	880	252	226
Future Volume (veh/h)	268	8	69	880	252	226
Number	7	14	1	6	2	12
Initial Q (Qb), 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	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	319	0	82	1048	300	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	351	313	750	1361	1242	1055
Arrive On Green	0.20	0.00	0.03	0.73	0.67	0.00
Sat Flow, veh/h	1774	1583	1774	1863	1863	1583
Grp Volume(v), veh/h	319	0	82	1048	300	0
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1863	1863	1583
Q Serve(g_s), s	24.6	0.0	2.0	48.5	9.0	0.0
Cycle Q Clear(g_c), s	24.6	0.0	2.0	48.5	9.0	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	351	313	750	1361	1242	1055
V/C Ratio(X)	0.91	0.00	0.11	0.77	0.24	0.00
Avail Cap(c_a), veh/h	507	452	952	1361	1242	1055
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	54.9	0.0	6.7	11.6	9.3	0.0
Incr Delay (d2), s/veh	15.5	0.0	0.1	4.3	0.5	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	13.6	0.0	1.0	26.1	4.7	0.0
LnGrp Delay(d),s/veh	70.5	0.0	6.7	15.9	9.7	0.0
LnGrp LOS	E		A	B	A	
Approach Vol, veh/h	319			1130	300	
Approach Delay, s/veh	70.5			15.2	9.7	
Approach LOS	E			B	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	9.0	98.3		32.7		107.3		
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0		
Max Green Setting (Gmax), s	20.0	65.0		40.0		90.0		
Max Q Clear Time (g_c+I1), s	4.0	11.0		26.6		50.5		
Green Ext Time (p_c), s	0.2	9.0		1.1		8.8		

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	7	9	130	4	55	0	621	582	91	308	1
Future Volume (veh/h)	8	7	9	130	4	55	0	621	582	91	308	1
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	1900	1863	1900	1863	1863	1900	0	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	9	8	10	104	59	61	0	690	647	101	342	1
Adj No. of Lanes	0	1	0	1	1	0	0	1	1	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	0	2	2	2	2	2
Cap, veh/h	43	38	47	382	181	187	0	862	733	305	1122	3
Arrive On Green	0.07	0.07	0.07	0.22	0.22	0.22	0.00	0.46	0.46	0.11	0.60	0.60
Sat Flow, veh/h	574	510	638	1774	840	869	0	1863	1583	1774	1856	5
Grp Volume(v), veh/h	27	0	0	104	0	120	0	690	647	101	0	343
Grp Sat Flow(s),veh/h/ln	1722	0	0	1774	0	1709	0	1863	1583	1774	0	1862
Q Serve(g_s), s	2.1	0.0	0.0	6.9	0.0	8.4	0.0	44.7	52.5	3.5	0.0	12.6
Cycle Q Clear(g_c), s	2.1	0.0	0.0	6.9	0.0	8.4	0.0	44.7	52.5	3.5	0.0	12.6
Prop In Lane	0.33		0.37	1.00		0.51	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	128	0	0	382	0	368	0	862	733	305	0	1125
V/C Ratio(X)	0.21	0.00	0.00	0.27	0.00	0.33	0.00	0.80	0.88	0.33	0.00	0.30
Avail Cap(c_a), veh/h	128	0	0	382	0	368	0	862	733	305	0	1125
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	1.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.6	0.0	0.0	46.2	0.0	46.8	0.0	32.4	34.5	23.1	0.0	13.6
Incr Delay (d2), s/veh	3.7	0.0	0.0	1.7	0.0	2.3	0.0	7.7	14.5	2.9	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	3.6	0.0	4.2	0.0	24.8	25.8	2.0	0.0	6.7
LnGrp Delay(d),s/veh	65.3	0.0	0.0	48.0	0.0	49.2	0.0	40.1	49.0	26.0	0.0	14.3
LnGrp LOS	E			D		D		D	D	C		B
Approach Vol, veh/h		27			224			1337			444	
Approach Delay, s/veh		65.3			48.6			44.4			16.9	
Approach LOS		E			D			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	20.0	71.5		15.0		91.5		35.0
Change Period (Y+Rc), s	4.5	6.0		4.5		* 6		4.5
Max Green Setting (Gmax), s	15.5	64.0		10.5		* 86		30.5
Max Q Clear Time (g_c+I1), s	5.5	54.5		4.1		14.6		10.4
Green Ext Time (p_c), s	0.1	6.0		0.0		13.8		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	39.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	518	7	1	117	3	4	6	9	7	3	49
Future Volume (veh/h)	156	518	7	1	117	3	4	6	9	7	3	49
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	195	648	9	1	146	4	5	8	11	9	4	61
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	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	329	1029	14	46	1412	38	68	48	52	59	10	87
Arrive On Green	0.78	0.78	0.78	0.78	0.78	0.78	0.07	0.07	0.07	0.07	0.07	0.07
Sat Flow, veh/h	349	1314	18	1	1802	49	203	726	786	123	156	1310
Grp Volume(v), veh/h	852	0	0	151	0	0	24	0	0	74	0	0
Grp Sat Flow(s),veh/h/ln	1681	0	0	1852	0	0	1714	0	0	1589	0	0
Q Serve(g_s), s	11.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	0.0
Cycle Q Clear(g_c), s	16.9	0.0	0.0	1.5	0.0	0.0	1.1	0.0	0.0	3.6	0.0	0.0
Prop In Lane	0.23		0.01	0.01		0.03	0.21		0.46	0.12		0.82
Lane Grp Cap(c), veh/h	1372	0	0	1497	0	0	168	0	0	156	0	0
V/C Ratio(X)	0.62	0.00	0.00	0.10	0.00	0.00	0.14	0.00	0.00	0.47	0.00	0.00
Avail Cap(c_a), veh/h	1372	0	0	1497	0	0	542	0	0	523	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	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	3.6	0.0	0.0	2.0	0.0	0.0	35.3	0.0	0.0	36.5	0.0	0.0
Incr Delay (d2), s/veh	2.1	0.0	0.0	0.1	0.0	0.0	0.4	0.0	0.0	2.2	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	8.6	0.0	0.0	0.8	0.0	0.0	0.5	0.0	0.0	1.7	0.0	0.0
LnGrp Delay(d),s/veh	5.7	0.0	0.0	2.2	0.0	0.0	35.7	0.0	0.0	38.8	0.0	0.0
LnGrp LOS	A			A			D			D		
Approach Vol, veh/h		852			151			24			74	
Approach Delay, s/veh		5.7			2.2			35.7			38.8	
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		68.7		11.3		68.7		11.3
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		44.0		24.0		44.0		24.0
Max Q Clear Time (g_c+I1), s		18.9		5.6		3.5		3.1
Green Ext Time (p_c), s		5.3		0.3		5.7		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	8.1
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	387	8	126	244	6	329
Future Volume (veh/h)	387	8	126	244	6	329
Number	2	12	1	6	7	14
Initial Q (Qb), 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	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	478	0	156	301	7	0
Adj No. of Lanes	1	0	1	1	0	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	539	0	238	754	780	0
Arrive On Green	0.29	0.00	0.08	0.40	0.50	0.00
Sat Flow, veh/h	1863	0	1774	1863	1562	0
Grp Volume(v), veh/h	478	0	156	301	8	0
Grp Sat Flow(s),veh/h/ln	1863	0	1774	1863	1785	0
Q Serve(g_s), s	29.4	0.0	7.1	13.8	0.3	0.0
Cycle Q Clear(g_c), s	29.4	0.0	7.1	13.8	0.3	0.0
Prop In Lane		0.00	1.00		0.87	0.00
Lane Grp Cap(c), veh/h	539	0	238	754	891	0
V/C Ratio(X)	0.89	0.00	0.65	0.40	0.01	0.00
Avail Cap(c_a), veh/h	916	0	329	1226	891	0
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	40.8	0.0	29.9	25.4	15.1	0.0
Incr Delay (d2), s/veh	5.9	0.0	3.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.0	0.0	3.7	7.2	0.1	0.0
LnGrp Delay(d),s/veh	46.6	0.0	33.0	25.7	15.1	0.0
LnGrp LOS	D		C	C	B	
Approach Vol, veh/h	478			457	8	
Approach Delay, s/veh	46.6			28.2	15.1	
Approach LOS	D			C	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	13.8	40.7		65.4		54.6		
Change Period (Y+Rc), s	4.5	6.0		5.5		6.0		
Max Green Setting (Gmax), s	15.5	59.0		29.5		79.0		
Max Q Clear Time (g_c+I1), s	9.1	31.4		2.3		15.8		
Green Ext Time (p_c), s	0.3	3.3		0.0		3.4		

Intersection Summary	
HCM 2010 Ctrl Delay	37.4
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	19	24	140	14	113	15	428	70	70	450	47
Future Volume (veh/h)	44	19	24	140	14	113	15	428	70	70	450	47
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	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	47	20	26	149	15	120	16	455	74	74	479	50
Adj No. of Lanes	0	1	0	0	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	172	75	78	206	19	131	558	957	156	536	1154	120
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.61	0.61	0.61	0.05	0.70	0.70
Sat Flow, veh/h	609	359	376	768	92	629	871	1564	254	1774	1659	173
Grp Volume(v), veh/h	93	0	0	284	0	0	16	0	529	74	0	529
Grp Sat Flow(s),veh/h/ln	1344	0	0	1489	0	0	871	0	1818	1774	0	1832
Q Serve(g_s), s	0.0	0.0	0.0	15.7	0.0	0.0	1.0	0.0	19.1	1.7	0.0	14.8
Cycle Q Clear(g_c), s	6.6	0.0	0.0	22.3	0.0	0.0	5.8	0.0	19.1	1.7	0.0	14.8
Prop In Lane	0.51		0.28	0.52		0.42	1.00		0.14	1.00		0.09
Lane Grp Cap(c), veh/h	326	0	0	357	0	0	558	0	1113	536	0	1274
V/C Ratio(X)	0.29	0.00	0.00	0.80	0.00	0.00	0.03	0.00	0.48	0.14	0.00	0.42
Avail Cap(c_a), veh/h	379	0	0	411	0	0	558	0	1113	905	0	1274
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	40.0	0.0	0.0	46.2	0.0	0.0	11.2	0.0	12.7	8.7	0.0	7.8
Incr Delay (d2), s/veh	0.5	0.0	0.0	9.2	0.0	0.0	0.1	0.0	1.5	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	2.7	0.0	0.0	10.1	0.0	0.0	0.2	0.0	10.0	0.8	0.0	7.8
LnGrp Delay(d),s/veh	40.4	0.0	0.0	55.5	0.0	0.0	11.3	0.0	14.2	8.8	0.0	8.8
LnGrp LOS	D			E			B		B	A		A
Approach Vol, veh/h		93			284			545			603	
Approach Delay, s/veh		40.4			55.5			14.1			8.8	
Approach LOS		D			E			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.0	79.4		30.6		89.4		30.6
Change Period (Y+Rc), s	4.5	6.0		5.5		6.0		5.5
Max Green Setting (Gmax), s	30.5	44.0		29.5		79.0		29.5
Max Q Clear Time (g_c+I1), s	3.7	21.1		8.6		16.8		24.3
Green Ext Time (p_c), s	0.2	4.9		1.5		5.4		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	21.3
HCM 2010 LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	6	19	430	11	11	582
Future Volume (veh/h)	6	19	430	11	11	582
Number	7	14	2	12	1	6
Initial Q (Qb), 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	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	6	20	453	12	12	613
Adj No. of Lanes	0	0	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	118	393	858	23	425	1071
Arrive On Green	0.32	0.32	0.47	0.47	0.05	0.57
Sat Flow, veh/h	363	1208	1806	48	1774	1863
Grp Volume(v), veh/h	27	0	0	465	12	613
Grp Sat Flow(s),veh/h/ln	1631	0	0	1854	1774	1863
Q Serve(g_s), s	1.4	0.0	0.0	21.1	0.4	25.0
Cycle Q Clear(g_c), s	1.4	0.0	0.0	21.1	0.4	25.0
Prop In Lane	0.22	0.74		0.03	1.00	
Lane Grp Cap(c), veh/h	530	0	0	881	425	1071
V/C Ratio(X)	0.05	0.00	0.00	0.53	0.03	0.57
Avail Cap(c_a), veh/h	530	0	0	881	425	1071
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	0.0	0.0	22.1	14.9	16.2
Incr Delay (d2), s/veh	0.2	0.0	0.0	2.3	0.1	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	0.6	0.0	0.0	11.3	0.2	13.4
LnGrp Delay(d),s/veh	28.0	0.0	0.0	24.3	15.1	18.4
LnGrp LOS	C			C	B	B
Approach Vol, veh/h	27		465			625
Approach Delay, s/veh	28.0		24.3			18.3
Approach LOS	C		C			B

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	12.0	63.0		45.0		75.0		
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		
Max Green Setting (Gmax), s	6.0	57.0		39.0		69.0		
Max Q Clear Time (g_c+I1), s	2.4	23.1		3.4		27.0		
Green Ext Time (p_c), s	0.0	8.3		0.1		8.6		

Intersection Summary	
HCM 2010 Ctrl Delay	21.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	150	187	58	277	33	229	249	32	27	302	288
Future Volume (veh/h)	165	150	187	58	277	33	229	249	32	27	302	288
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	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	179	163	203	63	301	36	249	271	35	29	328	313
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	1
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	411	175	218	352	324	39	386	639	83	404	588	499
Arrive On Green	0.23	0.23	0.23	0.20	0.20	0.20	0.11	0.40	0.40	0.03	0.32	0.32
Sat Flow, veh/h	1774	756	941	1774	1633	195	1774	1617	209	1774	1863	1583
Grp Volume(v), veh/h	179	0	366	63	0	337	249	0	306	29	328	313
Grp Sat Flow(s),veh/h/ln	1774	0	1697	1774	0	1828	1774	0	1826	1774	1863	1583
Q Serve(g_s), s	10.8	0.0	26.4	3.7	0.0	22.6	11.4	0.0	15.2	1.4	18.3	21.1
Cycle Q Clear(g_c), s	10.8	0.0	26.4	3.7	0.0	22.6	11.4	0.0	15.2	1.4	18.3	21.1
Prop In Lane	1.00		0.55	1.00		0.11	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	411	0	393	352	0	363	386	0	722	404	588	499
V/C Ratio(X)	0.44	0.00	0.93	0.18	0.00	0.93	0.64	0.00	0.42	0.07	0.56	0.63
Avail Cap(c_a), veh/h	433	0	414	362	0	373	481	0	722	570	588	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	0.88	0.00	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	0.0	47.0	41.6	0.0	49.2	25.1	0.0	27.5	27.3	35.5	36.5
Incr Delay (d2), s/veh	0.7	0.0	27.0	0.2	0.0	28.9	1.8	0.0	1.6	0.1	3.8	5.8
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	5.4	0.0	15.4	1.8	0.0	14.3	5.7	0.0	8.0	0.7	10.0	10.0
LnGrp Delay(d),s/veh	41.8	0.0	74.0	41.9	0.0	78.1	26.8	0.0	29.0	27.4	39.3	42.4
LnGrp LOS	D		E	D		E	C		C	C	D	D
Approach Vol, veh/h		545			400			555			670	
Approach Delay, s/veh		63.4			72.4			28.1			40.2	
Approach LOS		E			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	53.9		33.5	18.3	43.9		29.3
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	15.5	35.5		30.5	20.5	30.5		25.5
Max Q Clear Time (g_c+I1), s	3.4	17.2		28.4	13.4	23.1		24.6
Green Ext Time (p_c), s	0.0	2.5		0.6	0.4	1.8		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	48.9
HCM 2010 LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	123	294	242	98	257	277
Future Volume (veh/h)	123	294	242	98	257	277
Number	3	18	2	12	1	6
Initial Q (Qb), 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	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	132	316	260	105	276	298
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	310	277	934	377	733	1377
Arrive On Green	0.17	0.17	0.74	0.74	0.00	0.74
Sat Flow, veh/h	1774	1583	1263	510	1774	1863
Grp Volume(v), veh/h	132	316	0	365	276	298
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1773	1774	1863
Q Serve(g_s), s	9.3	24.5	0.0	9.5	0.1	7.0
Cycle Q Clear(g_c), s	9.3	24.5	0.0	9.5	0.1	7.0
Prop In Lane	1.00	1.00		0.29	1.00	
Lane Grp Cap(c), veh/h	310	277	0	1311	733	1377
V/C Ratio(X)	0.43	1.14	0.00	0.28	0.38	0.22
Avail Cap(c_a), veh/h	310	277	0	1311	1384	1377
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.00	1.00	0.85	0.85
Uniform Delay (d), s/veh	51.5	57.7	0.0	6.0	10.2	5.7
Incr Delay (d2), s/veh	0.9	96.0	0.0	0.5	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	18.1	0.0	4.8	4.8	3.7
LnGrp Delay(d),s/veh	52.3	153.8	0.0	6.5	10.5	6.0
LnGrp LOS	D	F		A	B	A
Approach Vol, veh/h	448		365			574
Approach Delay, s/veh	123.9		6.5			8.1
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	110.0				110.0		30.0
Change Period (Y+Rc), s	3.5	6.5				6.5		5.5
Max Green Setting (Gmax), s	51.5	48.5				103.5		24.5
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		26.5
Green Ext Time (p_c), s	0.0	0.0				0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.1
HCM 2010 LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	309	378	23	33	54
Future Volume (veh/h)	17	309	378	23	33	54
Number	1	6	2	12	7	14
Initial Q (Qb), 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	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	19	343	420	26	37	60
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	747	1522	1249	77	108	96
Arrive On Green	0.04	0.82	0.72	0.72	0.06	0.06
Sat Flow, veh/h	1774	1863	1736	107	1774	1583
Grp Volume(v), veh/h	19	343	0	446	37	60
Grp Sat Flow(s),veh/h/ln	1774	1863	0	1844	1774	1583
Q Serve(g_s), s	0.2	3.7	0.0	8.1	1.8	3.3
Cycle Q Clear(g_c), s	0.2	3.7	0.0	8.1	1.8	3.3
Prop In Lane	1.00			0.06	1.00	1.00
Lane Grp Cap(c), veh/h	747	1522	0	1326	108	96
V/C Ratio(X)	0.03	0.23	0.00	0.34	0.34	0.62
Avail Cap(c_a), veh/h	869	1522	0	1326	581	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.95	0.95	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	2.7	1.8	0.0	4.7	40.5	41.3
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.7	1.9	6.5
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	1.9	0.0	4.3	0.9	1.6
LnGrp Delay(d),s/veh	2.7	2.2	0.0	5.4	42.4	47.7
LnGrp LOS	A	A		A	D	D
Approach Vol, veh/h		362	446		97	
Approach Delay, s/veh		2.2	5.4		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+Rc), s	8.8	70.2		11.0		79.0		
Change Period (Y+Rc), s	5.0	5.5		5.5		5.5		
Max Green Setting (Gmax), s	10.0	34.5		29.5		49.5		
Max Q Clear Time (g_c+I1), s	2.2	10.1		5.3		5.7		
Green Ext Time (p_c), s	0.0	3.4		0.3		3.6		

Intersection Summary	
HCM 2010 Ctrl Delay	8.4
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	185	177	116	266	475	243
Future Volume (veh/h)	185	177	116	266	475	243
Number	3	18	1	6	2	12
Initial Q (Qb), 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	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	197	188	123	283	505	259
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	249	222	538	1428	1303	1329
Arrive On Green	0.14	0.14	0.04	0.77	0.70	0.70
Sat Flow, veh/h	1774	1583	1774	1863	1863	1583
Grp Volume(v), veh/h	197	188	123	283	505	259
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1863	1863	1583
Q Serve(g_s), s	15.0	16.2	2.5	5.8	15.7	4.4
Cycle Q Clear(g_c), s	15.0	16.2	2.5	5.8	15.7	4.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	249	222	538	1428	1303	1329
V/C Ratio(X)	0.79	0.85	0.23	0.20	0.39	0.19
Avail Cap(c_a), veh/h	425	379	798	1428	1303	1329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.2	58.7	5.8	4.5	8.7	2.2
Incr Delay (d2), s/veh	5.4	8.3	0.2	0.3	0.9	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	7.6	1.2	3.1	8.3	2.0
LnGrp Delay(d),s/veh	63.6	67.0	6.0	4.8	9.6	2.5
LnGrp LOS	E	E	A	A	A	A
Approach Vol, veh/h	385			406	764	
Approach Delay, s/veh	65.3			5.2	7.2	
Approach LOS	E			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	9.4	104.4				113.9		26.1
Change Period (Y+Rc), s	3.5	6.5				6.5		6.5
Max Green Setting (Gmax), s	26.5	63.5				93.5		33.5
Max Q Clear Time (g_c+I1), s	4.5	17.7				7.8		18.2
Green Ext Time (p_c), s	0.4	5.0				5.0		1.4

Intersection Summary	
HCM 2010 Ctrl Delay	21.0
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	187	37	20	446	796	298
Future Volume (veh/h)	187	37	20	446	796	298
Number	7	14	1	6	2	12
Initial Q (Qb), 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	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	212	0	23	507	905	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	246	220	365	1449	1351	1148
Arrive On Green	0.14	0.00	0.01	0.78	0.73	0.00
Sat Flow, veh/h	1774	1583	1774	1863	1863	1583
Grp Volume(v), veh/h	212	0	23	507	905	0
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1863	1863	1583
Q Serve(g_s), s	14.0	0.0	0.4	10.0	31.1	0.0
Cycle Q Clear(g_c), s	14.0	0.0	0.4	10.0	31.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	246	220	365	1449	1351	1148
V/C Ratio(X)	0.86	0.00	0.06	0.35	0.67	0.00
Avail Cap(c_a), veh/h	444	396	641	1449	1351	1148
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	50.5	0.0	8.5	4.1	8.8	0.0
Incr Delay (d2), s/veh	8.6	0.0	0.1	0.7	2.7	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	7.5	0.0	0.2	5.3	16.8	0.0
LnGrp Delay(d),s/veh	59.1	0.0	8.5	4.7	11.5	0.0
LnGrp LOS	E		A	A	B	
Approach Vol, veh/h	212			530	905	
Approach Delay, s/veh	59.1			4.9	11.5	
Approach LOS	E			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	6.3	92.0		21.7		98.3		
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0		
Max Green Setting (Gmax), s	20.0	55.0		30.0		80.0		
Max Q Clear Time (g_c+I1), s	2.4	33.1		16.0		12.0		
Green Ext Time (p_c), s	0.0	7.3		0.7		8.7		

Intersection Summary	
HCM 2010 Ctrl Delay	15.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	5	10	558	14	119	1	278	227	102	485	6
Future Volume (veh/h)	0	5	10	558	14	119	1	278	227	102	485	6
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	1900	1863	1900	1863	1863	1900	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	6	11	384	346	132	1	309	252	113	539	7
Adj No. of Lanes	0	1	0	1	1	0	0	1	1	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	0	142	261	77	56	21	29	743	632	581	1095	14
Arrive On Green	0.00	0.24	0.24	0.04	0.04	0.04	0.40	0.40	0.40	0.16	0.60	0.60
Sat Flow, veh/h	0	590	1082	1774	1286	490	1	1861	1583	1774	1835	24
Grp Volume(v), veh/h	0	0	17	384	0	478	310	0	252	113	0	546
Grp Sat Flow(s),veh/h/ln	0	0	1672	1774	0	1776	1862	0	1583	1774	0	1859
Q Serve(g_s), s	0.0	0.0	1.0	5.5	0.0	5.5	0.0	0.0	14.4	3.6	0.0	21.2
Cycle Q Clear(g_c), s	0.0	0.0	1.0	5.5	0.0	5.5	15.2	0.0	14.4	3.6	0.0	21.2
Prop In Lane	0.00		0.65	1.00		0.28	0.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	0	0	403	77	0	77	772	0	632	581	0	1109
V/C Ratio(X)	0.00	0.00	0.04	4.98	0.00	6.19	0.40	0.00	0.40	0.19	0.00	0.49
Avail Cap(c_a), veh/h	0	0	403	77	0	77	772	0	632	581	0	1109
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	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	36.8	60.5	0.0	60.5	27.4	0.0	27.2	13.4	0.0	14.6
Incr Delay (d2), s/veh	0.0	0.0	0.2	1819.0	0.0	2362.8	1.6	0.0	1.9	0.7	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	0.0	0.0	0.5	41.7	0.0	53.4	8.1	0.0	6.6	1.9	0.0	11.2
LnGrp Delay(d),s/veh	0.0	0.0	37.0	1879.5	0.0	2423.3	28.9	0.0	29.0	14.2	0.0	16.1
LnGrp LOS			D	F		F	C		C	B		B
Approach Vol, veh/h		17			862			562			659	
Approach Delay, s/veh		37.0			2181.1			29.0			15.8	
Approach LOS		D			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	25.0	56.5		35.0		81.5		10.0
Change Period (Y+Rc), s	4.5	6.0		4.5		* 6		4.5
Max Green Setting (Gmax), s	20.5	49.0		30.5		* 76		5.5
Max Q Clear Time (g_c+I1), s	5.6	17.2		3.0		23.2		7.5
Green Ext Time (p_c), s	0.2	7.1		0.0		7.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	908.3
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	157	32	5	376	5	9	6	4	2	14	145
Future Volume (veh/h)	44	157	32	5	376	5	9	6	4	2	14	145
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	55	196	40	6	470	6	11	8	5	2	18	181
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	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	224	774	150	50	1272	16	140	95	45	46	24	222
Arrive On Green	0.70	0.70	0.70	0.70	0.70	0.70	0.15	0.15	0.15	0.15	0.15	0.15
Sat Flow, veh/h	244	1111	216	6	1826	23	486	621	291	4	155	1446
Grp Volume(v), veh/h	291	0	0	482	0	0	24	0	0	201	0	0
Grp Sat Flow(s),veh/h/ln	1571	0	0	1855	0	0	1399	0	0	1606	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	0.8	0.0	0.0
Cycle Q Clear(g_c), s	4.6	0.0	0.0	8.5	0.0	0.0	0.9	0.0	0.0	9.7	0.0	0.0
Prop In Lane	0.19		0.14	0.01		0.01	0.46		0.21	0.01		0.90
Lane Grp Cap(c), veh/h	1148	0	0	1337	0	0	281	0	0	292	0	0
V/C Ratio(X)	0.25	0.00	0.00	0.36	0.00	0.00	0.09	0.00	0.00	0.69	0.00	0.00
Avail Cap(c_a), veh/h	1148	0	0	1337	0	0	490	0	0	527	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	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	4.4	0.0	0.0	5.0	0.0	0.0	29.0	0.0	0.0	32.7	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.8	0.0	0.0	0.1	0.0	0.0	2.9	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	2.4	0.0	0.0	4.6	0.0	0.0	0.5	0.0	0.0	4.5	0.0	0.0
LnGrp Delay(d),s/veh	4.9	0.0	0.0	5.7	0.0	0.0	29.2	0.0	0.0	35.6	0.0	0.0
LnGrp LOS	A			A			C			D		
Approach Vol, veh/h		291			482			24			201	
Approach Delay, s/veh		4.9			5.7			29.2			35.6	
Approach LOS		A			A			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		61.7		18.3		61.7		18.3
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		44.0		24.0		44.0		24.0
Max Q Clear Time (g_c+I1), s		6.6		11.7		10.5		2.9
Green Ext Time (p_c), s		3.6		0.7		3.6		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	12.1
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	508	13	469	626	26	253
Future Volume (veh/h)	508	13	469	626	26	253
Number	2	12	1	6	7	14
Initial Q (Qb), 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	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	571	0	527	703	29	0
Adj No. of Lanes	1	0	1	1	0	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	659	0	346	969	660	0
Arrive On Green	0.35	0.00	0.13	0.52	0.38	0.00
Sat Flow, veh/h	1863	0	1774	1863	1718	0
Grp Volume(v), veh/h	571	0	527	703	30	0
Grp Sat Flow(s),veh/h/ln	1863	0	1774	1863	1777	0
Q Serve(g_s), s	34.3	0.0	15.5	34.9	1.3	0.0
Cycle Q Clear(g_c), s	34.3	0.0	15.5	34.9	1.3	0.0
Prop In Lane		0.00	1.00		0.97	0.00
Lane Grp Cap(c), veh/h	659	0	346	969	682	0
V/C Ratio(X)	0.87	0.00	1.52	0.73	0.04	0.00
Avail Cap(c_a), veh/h	916	0	346	1226	682	0
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	36.2	0.0	28.7	22.2	23.2	0.0
Incr Delay (d2), s/veh	6.6	0.0	249.9	1.6	0.1	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	18.8	0.0	35.4	18.2	0.6	0.0
LnGrp Delay(d),s/veh	42.7	0.0	278.6	23.8	23.3	0.0
LnGrp LOS	D		F	C	C	
Approach Vol, veh/h	571			1230	30	
Approach Delay, s/veh	42.7			133.0	23.3	
Approach LOS	D			F	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	20.0	48.4		51.6		68.4		
Change Period (Y+Rc), s	4.5	6.0		5.5		6.0		
Max Green Setting (Gmax), s	15.5	59.0		29.5		79.0		
Max Q Clear Time (g_c+I1), s	17.5	36.3		3.3		36.9		
Green Ext Time (p_c), s	0.0	6.1		0.1		6.8		

Intersection Summary	
HCM 2010 Ctrl Delay	103.0
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	8	6	55	7	106	9	404	92	212	279	29
Future Volume (veh/h)	3	8	6	55	7	106	9	404	92	212	279	29
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	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	4	10	7	65	8	126	11	481	110	252	332	35
Adj No. of Lanes	0	1	0	0	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	69	145	85	111	22	146	695	905	207	557	1220	129
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.62	0.62	0.62	0.07	0.74	0.74
Sat Flow, veh/h	176	971	574	421	146	979	1011	1468	336	1774	1657	175
Grp Volume(v), veh/h	21	0	0	199	0	0	11	0	591	252	0	367
Grp Sat Flow(s),veh/h/ln	1721	0	0	1547	0	0	1011	0	1804	1774	0	1832
Q Serve(g_s), s	0.0	0.0	0.0	10.2	0.0	0.0	0.4	0.0	18.7	4.8	0.0	6.6
Cycle Q Clear(g_c), s	1.0	0.0	0.0	12.5	0.0	0.0	0.4	0.0	18.7	4.8	0.0	6.6
Prop In Lane	0.19		0.33	0.33		0.63	1.00		0.19	1.00		0.10
Lane Grp Cap(c), veh/h	299	0	0	278	0	0	695	0	1112	557	0	1348
V/C Ratio(X)	0.07	0.00	0.00	0.72	0.00	0.00	0.02	0.00	0.53	0.45	0.00	0.27
Avail Cap(c_a), veh/h	390	0	0	364	0	0	695	0	1112	718	0	1348
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	36.6	0.0	0.0	41.4	0.0	0.0	7.4	0.0	10.9	8.0	0.0	4.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	4.6	0.0	0.0	0.0	0.0	1.8	0.6	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	0.5	0.0	0.0	5.7	0.0	0.0	0.1	0.0	9.8	2.4	0.0	3.4
LnGrp Delay(d),s/veh	36.7	0.0	0.0	46.0	0.0	0.0	7.5	0.0	12.7	8.5	0.0	4.9
LnGrp LOS	D			D			A		B	A		A
Approach Vol, veh/h		21			199			602			619	
Approach Delay, s/veh		36.7			46.0			12.7			6.4	
Approach LOS		D			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	11.9	67.7		20.4		79.6		20.4
Change Period (Y+Rc), s	4.5	6.0		5.5		6.0		5.5
Max Green Setting (Gmax), s	16.5	47.0		20.5		68.0		20.5
Max Q Clear Time (g_c+I1), s	6.8	20.7		3.0		8.6		14.5
Green Ext Time (p_c), s	0.7	4.5		0.8		4.7		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	14.9
HCM 2010 LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	7	29	418	30	56	269
Future Volume (veh/h)	7	29	418	30	56	269
Number	7	14	2	12	1	6
Initial Q (Qb), 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	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	8	35	498	36	67	320
Adj No. of Lanes	0	0	1	0	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	59	258	927	67	519	1267
Arrive On Green	0.20	0.20	0.54	0.54	0.08	0.68
Sat Flow, veh/h	295	1289	1717	124	1774	1863
Grp Volume(v), veh/h	44	0	0	534	67	320
Grp Sat Flow(s),veh/h/ln	1621	0	0	1841	1774	1863
Q Serve(g_s), s	2.2	0.0	0.0	18.8	1.4	6.6
Cycle Q Clear(g_c), s	2.2	0.0	0.0	18.8	1.4	6.6
Prop In Lane	0.18	0.80		0.07	1.00	
Lane Grp Cap(c), veh/h	324	0	0	994	519	1267
V/C Ratio(X)	0.14	0.00	0.00	0.54	0.13	0.25
Avail Cap(c_a), veh/h	324	0	0	994	519	1267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.9	0.0	0.0	14.9	9.1	6.2
Incr Delay (d2), s/veh	0.9	0.0	0.0	2.1	0.5	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	1.1	0.0	0.0	10.1	0.7	3.5
LnGrp Delay(d),s/veh	33.8	0.0	0.0	17.0	9.6	6.7
LnGrp LOS	C			B	A	A
Approach Vol, veh/h	44		534			387
Approach Delay, s/veh	33.8		17.0			7.2
Approach LOS	C		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.0	60.0		26.0		74.0		
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		
Max Green Setting (Gmax), s	8.0	54.0		20.0		68.0		
Max Q Clear Time (g_c+I1), s	3.4	20.8		4.2		8.6		
Green Ext Time (p_c), s	0.0	6.0		0.1		6.3		

Intersection Summary	
HCM 2010 Ctrl Delay	13.8
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	243	95	22	79	8	109	320	71	62	175	98
Future Volume (veh/h)	139	243	95	22	79	8	109	320	71	62	175	98
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	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	174	304	119	28	99	10	136	400	89	78	219	122
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	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	451	324	127	141	132	13	542	640	142	487	790	672
Arrive On Green	0.25	0.25	0.25	0.08	0.08	0.08	0.12	0.87	0.87	0.05	0.42	0.42
Sat Flow, veh/h	1774	1275	499	1774	1665	168	1774	1476	328	1774	1863	1583
Grp Volume(v), veh/h	174	0	423	28	0	109	136	0	489	78	219	122
Grp Sat Flow(s),veh/h/ln	1774	0	1775	1774	0	1833	1774	0	1805	1774	1863	1583
Q Serve(g_s), s	8.1	0.0	23.3	1.5	0.0	5.8	4.3	0.0	7.9	2.4	7.7	4.8
Cycle Q Clear(g_c), s	8.1	0.0	23.3	1.5	0.0	5.8	4.3	0.0	7.9	2.4	7.7	4.8
Prop In Lane	1.00		0.28	1.00		0.09	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	451	0	451	141	0	146	542	0	782	487	790	672
V/C Ratio(X)	0.39	0.00	0.94	0.20	0.00	0.75	0.25	0.00	0.63	0.16	0.28	0.18
Avail Cap(c_a), veh/h	452	0	453	328	0	339	565	0	782	526	790	672
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	0.88	0.00	0.88	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	0.0	36.5	43.1	0.0	45.1	13.7	0.0	4.3	14.5	18.8	18.0
Incr Delay (d2), s/veh	0.5	0.0	27.5	0.7	0.0	7.5	0.2	0.0	3.3	0.2	0.9	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	4.0	0.0	14.8	0.8	0.0	3.2	2.1	0.0	4.2	1.2	4.1	2.2
LnGrp Delay(d),s/veh	31.4	0.0	64.0	43.7	0.0	52.5	13.9	0.0	7.6	14.7	19.6	18.5
LnGrp LOS	C		E	D		D	B		A	B	B	B
Approach Vol, veh/h		597			137			625			419	
Approach Delay, s/veh		54.5			50.7			9.0			18.4	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	47.8		29.9	10.7	46.9		12.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	30.5		25.5	7.5	30.5		18.5
Max Q Clear Time (g_c+I1), s	4.4	9.9		25.3	6.3	9.7		7.8
Green Ext Time (p_c), s	0.0	2.2		0.0	0.0	2.2		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	29.7
HCM 2010 LOS	C

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	65	210	276	112	106	147
Future Volume (veh/h)	65	210	276	112	106	147
Number	3	18	2	12	1	6
Initial Q (Qb), 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	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	77	250	329	133	126	175
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	323	289	881	356	621	1300
Arrive On Green	0.18	0.18	0.70	0.70	0.00	1.00
Sat Flow, veh/h	1774	1583	1262	510	1774	1863
Grp Volume(v), veh/h	77	250	0	462	126	175
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1773	1774	1863
Q Serve(g_s), s	3.7	15.3	0.0	10.7	0.1	0.0
Cycle Q Clear(g_c), s	3.7	15.3	0.0	10.7	0.1	0.0
Prop In Lane	1.00	1.00		0.29	1.00	
Lane Grp Cap(c), veh/h	323	289	0	1237	621	1300
V/C Ratio(X)	0.24	0.87	0.00	0.37	0.20	0.13
Avail Cap(c_a), veh/h	452	404	0	1237	788	1300
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.96	0.96
Uniform Delay (d), s/veh	35.0	39.7	0.0	6.2	9.4	0.0
Incr Delay (d2), s/veh	0.4	13.3	0.0	0.9	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.8	0.0	5.4	1.6	0.1
LnGrp Delay(d),s/veh	35.3	53.0	0.0	7.0	9.5	0.2
LnGrp LOS	D	D		A	A	A
Approach Vol, veh/h	327		462			301
Approach Delay, s/veh	48.9		7.0			4.1
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	76.3				76.3		23.7
Change Period (Y+Rc), s	3.5	6.5				6.5		5.5
Max Green Setting (Gmax), s	9.5	49.5				62.5		25.5
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		17.3
Green Ext Time (p_c), s	0.0	0.0				0.0		0.9

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	65	312	167	179	125	127
Future Volume (veh/h)	65	312	167	179	125	127
Number	1	6	2	12	7	14
Initial Q (Qb), 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	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	80	385	206	221	154	157
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	567	1172	327	350	271	242
Arrive On Green	0.13	0.63	0.40	0.40	0.15	0.15
Sat Flow, veh/h	1774	1863	823	883	1774	1583
Grp Volume(v), veh/h	80	385	0	427	154	157
Grp Sat Flow(s),veh/h/ln	1774	1863	0	1707	1774	1583
Q Serve(g_s), s	1.0	4.9	0.0	10.2	4.1	4.7
Cycle Q Clear(g_c), s	1.0	4.9	0.0	10.2	4.1	4.7
Prop In Lane	1.00			0.52	1.00	1.00
Lane Grp Cap(c), veh/h	567	1172	0	677	271	242
V/C Ratio(X)	0.14	0.33	0.00	0.63	0.57	0.65
Avail Cap(c_a), veh/h	927	2456	0	1506	791	706
HCM Platoon Ratio	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	1.00
Uniform Delay (d), s/veh	6.5	4.4	0.0	12.2	19.8	20.1
Incr Delay (d2), s/veh	0.1	0.2	0.0	1.0	1.9	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.5	0.0	4.9	2.1	2.2
LnGrp Delay(d),s/veh	6.6	4.5	0.0	13.2	21.7	23.0
LnGrp LOS	A	A		B	C	C
Approach Vol, veh/h		465	427		311	
Approach Delay, s/veh		4.9	13.2		22.4	
Approach LOS		A	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	11.7	25.5		13.2		37.2		
Change Period (Y+Rc), s	5.0	5.5		5.5		5.5		
Max Green Setting (Gmax), s	17.0	44.5		22.5		66.5		
Max Q Clear Time (g_c+I1), s	3.0	12.2		6.7		6.9		
Green Ext Time (p_c), s	0.2	3.8		1.1		3.9		

Intersection Summary	
HCM 2010 Ctrl Delay	12.4
HCM 2010 LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	314	48	239	488	111	109
Future Volume (veh/h)	314	48	239	488	111	109
Number	3	18	1	6	2	12
Initial Q (Qb), 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	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	378	58	288	588	134	131
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	421	376	774	1219	995	1222
Arrive On Green	0.24	0.24	0.09	0.65	0.53	0.53
Sat Flow, veh/h	1774	1583	1774	1863	1863	1583
Grp Volume(v), veh/h	378	58	288	588	134	131
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1863	1863	1583
Q Serve(g_s), s	24.8	3.5	8.3	19.1	4.3	2.5
Cycle Q Clear(g_c), s	24.8	3.5	8.3	19.1	4.3	2.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	421	376	774	1219	995	1222
V/C Ratio(X)	0.90	0.15	0.37	0.48	0.13	0.11
Avail Cap(c_a), veh/h	643	574	857	1219	995	1222
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.3	36.2	9.4	10.5	14.0	3.4
Incr Delay (d2), s/veh	10.4	0.2	0.3	1.4	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.4	1.5	4.1	10.3	2.3	1.1
LnGrp Delay(d),s/veh	54.8	36.4	9.7	11.8	14.3	3.6
LnGrp LOS	D	D	A	B	B	A
Approach Vol, veh/h	436			876	265	
Approach Delay, s/veh	52.3			11.1	9.0	
Approach LOS	D			B	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	14.4	70.6				85.0		35.0
Change Period (Y+Rc), s	3.5	6.5				6.5		6.5
Max Green Setting (Gmax), s	16.5	43.5				63.5		43.5
Max Q Clear Time (g_c+I1), s	10.3	6.3				21.1		26.8
Green Ext Time (p_c), s	0.6	3.9				4.0		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	22.2
HCM 2010 LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	268	8	69	880	252	226
Future Volume (veh/h)	268	8	69	880	252	226
Number	7	14	1	6	2	12
Initial Q (Qb), 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	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	319	0	82	1048	300	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	359	320	728	1331	1207	1026
Arrive On Green	0.20	0.00	0.03	0.71	0.65	0.00
Sat Flow, veh/h	1774	1583	1774	1863	1863	1583
Grp Volume(v), veh/h	319	0	82	1048	300	0
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1863	1863	1583
Q Serve(g_s), s	21.0	0.0	1.8	44.1	8.1	0.0
Cycle Q Clear(g_c), s	21.0	0.0	1.8	44.1	8.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	359	320	728	1331	1207	1026
V/C Ratio(X)	0.89	0.00	0.11	0.79	0.25	0.00
Avail Cap(c_a), veh/h	665	594	728	1331	1207	1026
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	46.6	0.0	6.5	11.2	8.9	0.0
Incr Delay (d2), s/veh	7.6	0.0	0.1	4.8	0.5	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	11.0	0.0	0.9	24.2	4.3	0.0
LnGrp Delay(d),s/veh	54.1	0.0	6.6	16.0	9.4	0.0
LnGrp LOS	D		A	B	A	
Approach Vol, veh/h	319			1130	300	
Approach Delay, s/veh	54.1			15.3	9.4	
Approach LOS	D			B	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	8.0	82.7		29.3		90.7		
Change Period (Y+Rc), s	5.0	5.0		5.0		5.0		
Max Green Setting (Gmax), s	3.0	57.0		45.0		65.0		
Max Q Clear Time (g_c+I1), s	3.8	10.1		23.0		46.1		
Green Ext Time (p_c), s	0.0	8.9		1.3		7.1		

Intersection Summary	
HCM 2010 Ctrl Delay	21.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	7	9	130	4	55	0	621	582	91	308	1
Future Volume (veh/h)	8	7	9	130	4	55	0	621	582	91	308	1
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	1900	1863	1900	1863	1863	1900	0	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	9	8	10	104	59	61	0	690	647	101	342	1
Adj No. of Lanes	0	1	0	1	1	0	0	1	1	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	0	2	2	2	2	2
Cap, veh/h	35	31	39	299	142	147	0	974	828	311	1199	4
Arrive On Green	0.06	0.06	0.06	0.17	0.17	0.17	0.00	0.52	0.52	0.09	0.65	0.65
Sat Flow, veh/h	574	510	638	1774	840	869	0	1863	1583	1774	1856	5
Grp Volume(v), veh/h	27	0	0	104	0	120	0	690	647	101	0	343
Grp Sat Flow(s),veh/h/ln	1722	0	0	1774	0	1709	0	1863	1583	1774	0	1862
Q Serve(g_s), s	1.8	0.0	0.0	6.3	0.0	7.6	0.0	34.1	40.1	2.7	0.0	9.7
Cycle Q Clear(g_c), s	1.8	0.0	0.0	6.3	0.0	7.6	0.0	34.1	40.1	2.7	0.0	9.7
Prop In Lane	0.33		0.37	1.00		0.51	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	106	0	0	299	0	288	0	974	828	311	0	1203
V/C Ratio(X)	0.25	0.00	0.00	0.35	0.00	0.42	0.00	0.71	0.78	0.32	0.00	0.29
Avail Cap(c_a), veh/h	106	0	0	299	0	288	0	974	828	311	0	1203
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	1.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.3	0.0	0.0	44.6	0.0	45.1	0.0	22.0	23.4	16.2	0.0	9.3
Incr Delay (d2), s/veh	5.7	0.0	0.0	3.2	0.0	4.4	0.0	4.4	7.3	2.8	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	1.0	0.0	0.0	3.4	0.0	4.0	0.0	18.6	19.1	1.6	0.0	5.2
LnGrp Delay(d),s/veh	60.0	0.0	0.0	47.8	0.0	49.5	0.0	26.3	30.7	18.9	0.0	9.9
LnGrp LOS	E			D		D		C	C	B		A
Approach Vol, veh/h		27			224			1337			444	
Approach Delay, s/veh		60.0			48.7			28.4			12.0	
Approach LOS		E			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	15.0	69.5		12.0		84.5		25.0
Change Period (Y+Rc), s	4.5	6.0		4.5		* 6		4.5
Max Green Setting (Gmax), s	10.5	62.0		7.5		* 79		20.5
Max Q Clear Time (g_c+I1), s	4.7	42.1		3.8		11.7		9.6
Green Ext Time (p_c), s	0.1	9.7		0.0		13.8		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	27.5
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	156	518	7	1	117	3	4	6	9	7	3	49
Future Volume (veh/h)	156	518	7	1	117	3	4	6	9	7	3	49
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	195	648	9	1	146	4	5	8	11	9	4	61
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	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	340	1070	15	35	1488	41	52	47	49	45	10	82
Arrive On Green	0.83	0.83	0.83	0.83	0.83	0.83	0.06	0.06	0.06	0.06	0.06	0.06
Sat Flow, veh/h	362	1296	18	2	1801	49	188	744	788	117	163	1312
Grp Volume(v), veh/h	852	0	0	151	0	0	24	0	0	74	0	0
Grp Sat Flow(s),veh/h/ln	1675	0	0	1852	0	0	1720	0	0	1591	0	0
Q Serve(g_s), s	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0	0.0
Cycle Q Clear(g_c), s	18.6	0.0	0.0	1.7	0.0	0.0	1.4	0.0	0.0	4.9	0.0	0.0
Prop In Lane	0.23		0.01	0.01		0.03	0.21		0.46	0.12		0.82
Lane Grp Cap(c), veh/h	1424	0	0	1563	0	0	148	0	0	137	0	0
V/C Ratio(X)	0.60	0.00	0.00	0.10	0.00	0.00	0.16	0.00	0.00	0.54	0.00	0.00
Avail Cap(c_a), veh/h	1424	0	0	1563	0	0	330	0	0	316	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	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	3.2	0.0	0.0	1.8	0.0	0.0	48.0	0.0	0.0	49.6	0.0	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.0	0.1	0.0	0.0	0.5	0.0	0.0	3.3	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	9.3	0.0	0.0	0.9	0.0	0.0	0.7	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	5.0	0.0	0.0	1.9	0.0	0.0	48.5	0.0	0.0	52.9	0.0	0.0
LnGrp LOS	A			A			D			D		
Approach Vol, veh/h		852			151			24			74	
Approach Delay, s/veh		5.0			1.9			48.5			52.9	
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+Rc), s		95.0		12.7		95.0		12.7
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		89.0		19.0		89.0		19.0
Max Q Clear Time (g_c+I1), s		20.6		6.9		3.7		3.4
Green Ext Time (p_c), s		5.8		0.2		5.8		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	8.8
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	387	8	126	244	6	329
Future Volume (veh/h)	387	8	126	244	6	329
Number	2	12	1	6	7	14
Initial Q (Qb), 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	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	478	0	156	301	7	0
Adj No. of Lanes	1	0	1	1	0	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	679	0	487	1071	228	0
Arrive On Green	0.36	0.00	0.10	0.57	0.15	0.00
Sat Flow, veh/h	1863	0	1774	1863	1562	0
Grp Volume(v), veh/h	478	0	156	301	8	0
Grp Sat Flow(s),veh/h/ln	1863	0	1774	1863	1785	0
Q Serve(g_s), s	9.0	0.0	1.9	3.4	0.2	0.0
Cycle Q Clear(g_c), s	9.0	0.0	1.9	3.4	0.2	0.0
Prop In Lane		0.00	1.00		0.87	0.00
Lane Grp Cap(c), veh/h	679	0	487	1071	260	0
V/C Ratio(X)	0.70	0.00	0.32	0.28	0.03	0.00
Avail Cap(c_a), veh/h	2218	0	975	3123	1713	0
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	11.2	0.0	7.1	4.4	15.1	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.4	0.1	0.0	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	4.8	0.0	0.9	1.7	0.1	0.0
LnGrp Delay(d),s/veh	12.5	0.0	7.5	4.6	15.1	0.0
LnGrp LOS	B		A	A	B	
Approach Vol, veh/h	478			457	8	
Approach Delay, s/veh	12.5			5.6	15.1	
Approach LOS	B			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	8.7	21.0		11.5		29.7		
Change Period (Y+Rc), s	4.5	6.0		5.5		6.0		
Max Green Setting (Gmax), s	15.5	49.0		39.5		69.0		
Max Q Clear Time (g_c+I1), s	3.9	11.0		2.2		5.4		
Green Ext Time (p_c), s	0.4	3.4		0.0		3.4		

Intersection Summary	
HCM 2010 Ctrl Delay	9.2
HCM 2010 LOS	A

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	19	24	140	14	113	15	428	70	70	450	47
Future Volume (veh/h)	44	19	24	140	14	113	15	428	70	70	450	47
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	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	47	20	26	149	15	120	16	455	74	74	479	50
Adj No. of Lanes	0	1	0	0	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	188	82	81	224	24	137	531	835	136	478	1090	114
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.53	0.53	0.53	0.06	0.66	0.66
Sat Flow, veh/h	610	392	389	779	112	652	871	1564	254	1774	1659	173
Grp Volume(v), veh/h	93	0	0	284	0	0	16	0	529	74	0	529
Grp Sat Flow(s),veh/h/ln	1391	0	0	1544	0	0	871	0	1818	1774	0	1832
Q Serve(g_s), s	0.0	0.0	0.0	11.2	0.0	0.0	0.8	0.0	17.2	1.5	0.0	12.5
Cycle Q Clear(g_c), s	4.7	0.0	0.0	15.9	0.0	0.0	2.3	0.0	17.2	1.5	0.0	12.5
Prop In Lane	0.51		0.28	0.52		0.42	1.00		0.14	1.00		0.09
Lane Grp Cap(c), veh/h	352	0	0	384	0	0	531	0	971	478	0	1204
V/C Ratio(X)	0.26	0.00	0.00	0.74	0.00	0.00	0.03	0.00	0.54	0.15	0.00	0.44
Avail Cap(c_a), veh/h	466	0	0	501	0	0	531	0	971	513	0	1204
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	29.8	0.0	0.0	34.1	0.0	0.0	10.7	0.0	13.8	9.3	0.0	7.4
Incr Delay (d2), s/veh	0.4	0.0	0.0	4.1	0.0	0.0	0.1	0.0	2.2	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	2.0	0.0	0.0	7.2	0.0	0.0	0.2	0.0	9.1	0.7	0.0	6.7
LnGrp Delay(d),s/veh	30.2	0.0	0.0	38.2	0.0	0.0	10.8	0.0	16.0	9.4	0.0	8.6
LnGrp LOS	C			D			B		B	A		A
Approach Vol, veh/h		93			284			545			603	
Approach Delay, s/veh		30.2			38.2			15.8			8.7	
Approach LOS		C			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	11.1	54.1		24.9		65.1		24.9
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s	6.8	39.2		26.0		52.0		26.0
Max Q Clear Time (g_c+I1), s	3.5	19.2		6.7		14.5		17.9
Green Ext Time (p_c), s	0.0	4.8		1.5		5.3		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	18.0
HCM 2010 LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	6	19	430	11	11	582
Future Volume (veh/h)	6	19	430	11	11	582
Number	7	14	2	12	1	6
Initial Q (Qb), 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	1863	1900	1863	1900	1863	1863
Adj Flow Rate, veh/h	6	20	453	12	12	613
Adj No. of Lanes	0	0	1	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	77	255	903	24	545	1221
Arrive On Green	0.21	0.21	0.50	0.50	0.09	0.66
Sat Flow, veh/h	363	1208	1806	48	1774	1863
Grp Volume(v), veh/h	27	0	0	465	12	613
Grp Sat Flow(s),veh/h/ln	1631	0	0	1854	1774	1863
Q Serve(g_s), s	1.2	0.0	0.0	15.1	0.2	15.2
Cycle Q Clear(g_c), s	1.2	0.0	0.0	15.1	0.2	15.2
Prop In Lane	0.22	0.74		0.03	1.00	
Lane Grp Cap(c), veh/h	344	0	0	927	545	1221
V/C Ratio(X)	0.08	0.00	0.00	0.50	0.02	0.50
Avail Cap(c_a), veh/h	344	0	0	927	545	1221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	0.0	0.0	15.0	8.5	8.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	1.9	0.1	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	8.1	0.1	8.2
LnGrp Delay(d),s/veh	28.9	0.0	0.0	17.0	8.6	9.4
LnGrp LOS	C			B	A	A
Approach Vol, veh/h	27		465			625
Approach Delay, s/veh	28.9		17.0			9.4
Approach LOS	C		B			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.0	51.0		25.0		65.0		
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		
Max Green Setting (Gmax), s	8.0	45.0		19.0		59.0		
Max Q Clear Time (g_c+I1), s	2.2	17.1		3.2		17.2		
Green Ext Time (p_c), s	0.0	7.9		0.0		8.6		

Intersection Summary	
HCM 2010 Ctrl Delay	13.0
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	150	187	58	277	33	229	249	32	27	302	288
Future Volume (veh/h)	165	150	187	58	277	33	229	249	32	27	302	288
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	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	179	163	203	63	301	36	249	271	35	29	328	313
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	1
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	412	176	219	353	325	39	343	584	75	354	535	455
Arrive On Green	0.23	0.23	0.23	0.20	0.20	0.20	0.10	0.36	0.36	0.03	0.29	0.29
Sat Flow, veh/h	1774	756	941	1774	1633	195	1774	1617	209	1774	1863	1583
Grp Volume(v), veh/h	179	0	366	63	0	337	249	0	306	29	328	313
Grp Sat Flow(s),veh/h/ln	1774	0	1697	1774	0	1828	1774	0	1826	1774	1863	1583
Q Serve(g_s), s	11.6	0.0	28.5	4.0	0.0	24.4	13.1	0.0	17.4	1.5	20.6	23.7
Cycle Q Clear(g_c), s	11.6	0.0	28.5	4.0	0.0	24.4	13.1	0.0	17.4	1.5	20.6	23.7
Prop In Lane	1.00		0.55	1.00		0.11	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	412	0	394	353	0	364	343	0	660	354	535	455
V/C Ratio(X)	0.43	0.00	0.93	0.18	0.00	0.93	0.73	0.00	0.46	0.08	0.61	0.69
Avail Cap(c_a), veh/h	447	0	427	381	0	393	343	0	660	420	535	455
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	0.86	0.00	0.86	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.2	0.0	50.7	44.9	0.0	53.1	30.5	0.0	33.1	32.3	41.6	42.8
Incr Delay (d2), s/veh	0.7	0.0	25.6	0.2	0.0	26.7	6.5	0.0	2.0	0.1	5.2	8.3
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	5.8	0.0	16.1	2.0	0.0	15.1	7.0	0.0	9.1	0.8	11.3	11.4
LnGrp Delay(d),s/veh	45.0	0.0	76.3	45.1	0.0	79.8	37.0	0.0	35.1	32.4	46.8	51.0
LnGrp LOS	D		E	D		E	D		D	C	D	D
Approach Vol, veh/h		545			400			555			670	
Approach Delay, s/veh		66.0			74.3			35.9			48.2	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	54.8		37.4	20.0	44.8		32.9
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	9.0	39.0		34.0	14.0	34.0		29.0
Max Q Clear Time (g_c+I1), s	3.5	19.4		30.5	15.1	25.7		26.4
Green Ext Time (p_c), s	0.0	2.5		0.9	0.0	1.9		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	54.3
HCM 2010 LOS	D

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	123	294	242	98	257	277
Future Volume (veh/h)	123	294	242	98	257	277
Number	3	18	2	12	1	6
Initial Q (Qb), 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	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	132	316	260	105	276	298
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	394	352	814	329	641	1201
Arrive On Green	0.22	0.22	0.64	0.64	0.00	0.64
Sat Flow, veh/h	1774	1583	1263	510	1774	1863
Grp Volume(v), veh/h	132	316	0	365	276	298
Grp Sat Flow(s),veh/h/ln	1774	1583	0	1773	1774	1863
Q Serve(g_s), s	5.6	17.5	0.0	8.3	0.1	6.1
Cycle Q Clear(g_c), s	5.6	17.5	0.0	8.3	0.1	6.1
Prop In Lane	1.00	1.00		0.29	1.00	
Lane Grp Cap(c), veh/h	394	352	0	1143	641	1201
V/C Ratio(X)	0.33	0.90	0.00	0.32	0.43	0.25
Avail Cap(c_a), veh/h	434	387	0	1143	974	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.94	0.00	1.00	0.82	0.82
Uniform Delay (d), s/veh	29.4	34.0	0.0	7.2	12.2	6.8
Incr Delay (d2), s/veh	0.5	20.8	0.0	0.7	0.4	0.4
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	9.7	0.0	4.3	4.2	3.2
LnGrp Delay(d),s/veh	29.9	54.8	0.0	7.9	12.6	7.2
LnGrp LOS	C	D		A	B	A
Approach Vol, veh/h	448		365			574
Approach Delay, s/veh	47.5		7.9			9.8
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	64.0				64.0		26.0
Change Period (Y+Rc), s	6.0	6.0				6.0		6.0
Max Green Setting (Gmax), s	17.0	33.0				56.0		22.0
Max Q Clear Time (g_c+I1), s	0.0	0.0				0.0		19.5
Green Ext Time (p_c), s	0.0	0.0				0.0		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	21.5
HCM 2010 LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	309	378	23	33	54
Future Volume (veh/h)	17	309	378	23	33	54
Number	1	6	2	12	7	14
Initial Q (Qb), 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	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	19	343	420	26	37	60
Adj No. of Lanes	1	1	1	0	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	719	1501	1211	75	108	96
Arrive On Green	0.04	0.81	0.70	0.70	0.06	0.06
Sat Flow, veh/h	1774	1863	1736	107	1774	1583
Grp Volume(v), veh/h	19	343	0	446	37	60
Grp Sat Flow(s),veh/h/ln	1774	1863	0	1844	1774	1583
Q Serve(g_s), s	0.2	3.9	0.0	8.7	1.8	3.3
Cycle Q Clear(g_c), s	0.2	3.9	0.0	8.7	1.8	3.3
Prop In Lane	1.00			0.06	1.00	1.00
Lane Grp Cap(c), veh/h	719	1501	0	1286	108	96
V/C Ratio(X)	0.03	0.23	0.00	0.35	0.34	0.62
Avail Cap(c_a), veh/h	881	1501	0	1286	217	194
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.93	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	3.2	2.1	0.0	5.4	40.5	41.3
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.7	1.9	6.5
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	2.1	0.0	4.6	0.9	1.6
LnGrp Delay(d),s/veh	3.3	2.4	0.0	6.2	42.4	47.7
LnGrp LOS	A	A		A	D	D
Approach Vol, veh/h		362	446		97	
Approach Delay, s/veh		2.5	6.2		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+Rc), s	9.8	68.7		11.5		78.5		
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		
Max Green Setting (Gmax), s	12.0	49.0		11.0		67.0		
Max Q Clear Time (g_c+I1), s	2.2	10.7		5.3		5.9		
Green Ext Time (p_c), s	0.0	3.6		0.1		3.6		

Intersection Summary	
HCM 2010 Ctrl Delay	8.9
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	185	177	116	266	475	243
Future Volume (veh/h)	185	177	116	266	475	243
Number	3	18	1	6	2	12
Initial Q (Qb), 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	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	197	188	123	283	505	259
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	263	235	497	1338	1096	1166
Arrive On Green	0.15	0.15	0.06	0.72	0.59	0.59
Sat Flow, veh/h	1774	1583	1774	1863	1863	1583
Grp Volume(v), veh/h	197	188	123	283	505	259
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1863	1863	1583
Q Serve(g_s), s	9.6	10.3	2.2	4.5	13.8	4.6
Cycle Q Clear(g_c), s	9.6	10.3	2.2	4.5	13.8	4.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	263	235	497	1338	1096	1166
V/C Ratio(X)	0.75	0.80	0.25	0.21	0.46	0.22
Avail Cap(c_a), veh/h	394	352	503	1338	1096	1166
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.96	0.96	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	37.1	6.8	4.2	10.5	3.7
Incr Delay (d2), s/veh	4.1	7.4	0.3	0.4	1.4	0.4
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	5.0	1.1	2.4	7.4	2.1
LnGrp Delay(d),s/veh	40.8	44.5	7.1	4.6	11.9	4.2
LnGrp LOS	D	D	A	A	B	A
Approach Vol, veh/h	385			406	764	
Approach Delay, s/veh	42.6			5.3	9.3	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	11.7	58.9				70.7		19.3
Change Period (Y+Rc), s	6.0	6.0				6.0		6.0
Max Green Setting (Gmax), s	6.0	46.0				58.0		20.0
Max Q Clear Time (g_c+I1), s	4.2	15.8				6.5		12.3
Green Ext Time (p_c), s	0.1	4.8				5.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay	16.5
HCM 2010 LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	187	37	20	446	796	298
Future Volume (veh/h)	187	37	20	446	796	298
Number	7	14	1	6	2	12
Initial Q (Qb), 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	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	212	0	23	507	905	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	249	223	296	1355	1211	1029
Arrive On Green	0.14	0.00	0.01	0.73	0.65	0.00
Sat Flow, veh/h	1774	1583	1774	1863	1863	1583
Grp Volume(v), veh/h	212	0	23	507	905	0
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1863	1863	1583
Q Serve(g_s), s	10.6	0.0	0.4	9.3	30.1	0.0
Cycle Q Clear(g_c), s	10.6	0.0	0.4	9.3	30.1	0.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	249	223	296	1355	1211	1029
V/C Ratio(X)	0.85	0.00	0.08	0.37	0.75	0.00
Avail Cap(c_a), veh/h	312	278	353	1355	1211	1029
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	38.2	0.0	10.5	4.6	10.8	0.0
Incr Delay (d2), s/veh	16.4	0.0	0.1	0.8	4.2	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	6.3	0.0	0.2	4.9	16.8	0.0
LnGrp Delay(d),s/veh	54.5	0.0	10.6	5.4	15.1	0.0
LnGrp LOS	D		B	A	B	
Approach Vol, veh/h	212			530	905	
Approach Delay, s/veh	54.5			5.7	15.1	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	7.1	65.2		18.8		72.2		
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		
Max Green Setting (Gmax), s	4.0	53.0		16.0		63.0		
Max Q Clear Time (g_c+I1), s	2.4	32.1		12.6		11.3		
Green Ext Time (p_c), s	0.0	7.2		0.2		8.6		

Intersection Summary	
HCM 2010 Ctrl Delay	17.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	5	10	558	14	119	1	278	227	102	485	6
Future Volume (veh/h)	0	5	10	558	14	119	1	278	227	102	485	6
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	1900	1863	1900	1863	1863	1900	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	6	11	384	346	132	1	309	252	113	539	7
Adj No. of Lanes	0	1	0	1	1	0	0	1	1	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	0	59	108	513	371	142	40	517	440	311	754	10
Arrive On Green	0.00	0.10	0.10	0.29	0.29	0.29	0.28	0.28	0.28	0.07	0.41	0.41
Sat Flow, veh/h	0	590	1082	1774	1286	490	1	1861	1583	1774	1835	24
Grp Volume(v), veh/h	0	0	17	384	0	478	310	0	252	113	0	546
Grp Sat Flow(s),veh/h/ln	0	0	1672	1774	0	1776	1862	0	1583	1774	0	1859
Q Serve(g_s), s	0.0	0.0	0.8	17.7	0.0	23.6	0.0	0.0	12.3	3.9	0.0	22.0
Cycle Q Clear(g_c), s	0.0	0.0	0.8	17.7	0.0	23.6	13.0	0.0	12.3	3.9	0.0	22.0
Prop In Lane	0.00		0.65	1.00		0.28	0.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	0	0	167	513	0	513	557	0	440	311	0	764
V/C Ratio(X)	0.00	0.00	0.10	0.75	0.00	0.93	0.56	0.00	0.57	0.36	0.00	0.71
Avail Cap(c_a), veh/h	0	0	167	513	0	513	557	0	440	311	0	764
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	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	36.8	29.0	0.0	31.1	28.2	0.0	27.9	20.7	0.0	22.1
Incr Delay (d2), s/veh	0.0	0.0	1.2	9.7	0.0	25.9	4.0	0.0	5.3	3.3	0.0	5.6
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	0.0	0.0	0.4	10.0	0.0	15.2	7.2	0.0	6.0	2.1	0.0	12.4
LnGrp Delay(d),s/veh	0.0	0.0	38.0	38.7	0.0	57.1	32.1	0.0	33.3	24.0	0.0	27.7
LnGrp LOS			D	D		E	C		C	C		C
Approach Vol, veh/h		17			862			562			659	
Approach Delay, s/veh		38.0			48.9			32.6			27.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	12.0	31.0		15.0		43.0		32.0
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s	6.0	25.0		9.0		37.0		26.0
Max Q Clear Time (g_c+I1), s	5.9	15.0		2.8		24.0		25.6
Green Ext Time (p_c), s	0.0	4.4		0.0		5.1		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	37.6
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	157	32	5	376	5	9	6	4	2	14	145
Future Volume (veh/h)	44	157	32	5	376	5	9	6	4	2	14	145
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	55	196	40	6	470	6	11	8	5	2	18	181
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	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	216	734	140	64	1170	15	174	116	53	61	25	231
Arrive On Green	0.64	0.64	0.64	0.64	0.64	0.64	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	225	1147	219	5	1827	23	540	725	333	5	155	1446
Grp Volume(v), veh/h	291	0	0	482	0	0	24	0	0	201	0	0
Grp Sat Flow(s),veh/h/ln	1591	0	0	1855	0	0	1597	0	0	1606	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	0.5	0.0	0.0
Cycle Q Clear(g_c), s	4.1	0.0	0.0	7.6	0.0	0.0	0.7	0.0	0.0	7.2	0.0	0.0
Prop In Lane	0.19		0.14	0.01		0.01	0.46		0.21	0.01		0.90
Lane Grp Cap(c), veh/h	1090	0	0	1249	0	0	343	0	0	317	0	0
V/C Ratio(X)	0.27	0.00	0.00	0.39	0.00	0.00	0.07	0.00	0.00	0.63	0.00	0.00
Avail Cap(c_a), veh/h	1090	0	0	1249	0	0	567	0	0	569	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	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	4.6	0.0	0.0	5.2	0.0	0.0	21.5	0.0	0.0	24.2	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.9	0.0	0.0	0.1	0.0	0.0	2.1	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	2.2	0.0	0.0	4.1	0.0	0.0	0.3	0.0	0.0	3.4	0.0	0.0
LnGrp Delay(d),s/veh	5.2	0.0	0.0	6.1	0.0	0.0	21.6	0.0	0.0	26.3	0.0	0.0
LnGrp LOS	A			A			C			C		
Approach Vol, veh/h		291			482			24			201	
Approach Delay, s/veh		5.2			6.1			21.6			26.3	
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+Rc), s		44.4		15.6		44.4		15.6
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0
Max Green Setting (Gmax), s		29.0		19.0		29.0		19.0
Max Q Clear Time (g_c+I1), s		6.1		9.2		9.6		2.7
Green Ext Time (p_c), s		3.4		0.6		3.3		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	10.3
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	508	13	469	626	26	253
Future Volume (veh/h)	508	13	469	626	26	253
Number	2	12	1	6	7	14
Initial Q (Qb), 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	1863	1900	1863	1863	1863	1900
Adj Flow Rate, veh/h	571	0	527	703	29	0
Adj No. of Lanes	1	0	1	1	0	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	659	0	324	969	652	0
Arrive On Green	0.35	0.00	0.12	0.52	0.38	0.00
Sat Flow, veh/h	1863	0	1774	1863	1718	0
Grp Volume(v), veh/h	571	0	527	703	30	0
Grp Sat Flow(s),veh/h/ln	1863	0	1774	1863	1777	0
Q Serve(g_s), s	34.3	0.0	14.0	34.9	1.3	0.0
Cycle Q Clear(g_c), s	34.3	0.0	14.0	34.9	1.3	0.0
Prop In Lane		0.00	1.00		0.97	0.00
Lane Grp Cap(c), veh/h	659	0	324	969	675	0
V/C Ratio(X)	0.87	0.00	1.63	0.73	0.04	0.00
Avail Cap(c_a), veh/h	916	0	324	1226	675	0
HCM Platoon Ratio	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
Uniform Delay (d), s/veh	36.2	0.0	27.6	22.2	23.5	0.0
Incr Delay (d2), s/veh	6.6	0.0	296.3	1.6	0.1	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	18.8	0.0	37.3	18.2	0.6	0.0
LnGrp Delay(d),s/veh	42.7	0.0	323.9	23.8	23.6	0.0
LnGrp LOS	D		F	C	C	
Approach Vol, veh/h	571			1230	30	
Approach Delay, s/veh	42.7			152.4	23.6	
Approach LOS	D			F	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	20.0	48.4		51.6		68.4		
Change Period (Y+Rc), s	6.0	6.0		6.0		6.0		
Max Green Setting (Gmax), s	14.0	59.0		29.0		79.0		
Max Q Clear Time (g_c+I1), s	16.0	36.3		3.3		36.9		
Green Ext Time (p_c), s	0.0	6.1		0.1		6.8		

Intersection Summary	
HCM 2010 Ctrl Delay	116.1
HCM 2010 LOS	F

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	243	95	22	79	8	109	320	71	62	175	98
Future Volume (veh/h)	139	243	95	22	79	8	109	320	71	62	175	98
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	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	174	304	119	28	99	10	136	400	89	78	219	122
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	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	479	344	135	218	391	39	546	646	144	373	800	680
Arrive On Green	0.09	0.27	0.27	0.06	0.23	0.23	0.06	0.44	0.44	0.05	0.43	0.43
Sat Flow, veh/h	1774	1275	499	1774	1665	168	1774	1476	328	1774	1863	1583
Grp Volume(v), veh/h	174	0	423	28	0	109	136	0	489	78	219	122
Grp Sat Flow(s),veh/h/ln	1774	0	1775	1774	0	1833	1774	0	1805	1774	1863	1583
Q Serve(g_s), s	7.2	0.0	22.9	1.1	0.0	4.8	4.2	0.0	20.9	2.4	7.6	4.8
Cycle Q Clear(g_c), s	7.2	0.0	22.9	1.1	0.0	4.8	4.2	0.0	20.9	2.4	7.6	4.8
Prop In Lane	1.00		0.28	1.00		0.09	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	479	0	478	218	0	430	546	0	789	373	800	680
V/C Ratio(X)	0.36	0.00	0.88	0.13	0.00	0.25	0.25	0.00	0.62	0.21	0.27	0.18
Avail Cap(c_a), veh/h	585	0	736	244	0	614	571	0	789	411	800	680
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	1.00	1.00
Uniform Delay (d), s/veh	24.4	0.0	35.0	27.2	0.0	31.1	14.4	0.0	21.7	16.2	18.5	17.6
Incr Delay (d2), s/veh	0.5	0.0	8.3	0.3	0.0	0.3	0.2	0.0	3.6	0.3	0.8	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	3.5	0.0	12.3	0.6	0.0	2.5	2.1	0.0	11.1	1.2	4.1	2.2
LnGrp Delay(d),s/veh	24.9	0.0	43.3	27.5	0.0	31.4	14.6	0.0	25.3	16.5	19.3	18.2
LnGrp LOS	C		D	C		C	B		C	B	B	B
Approach Vol, veh/h		597			137			625			419	
Approach Delay, s/veh		37.9			30.6			23.0			18.5	
Approach LOS		D			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+Rc), s	9.8	48.2	10.5	31.5	10.6	47.4	14.0	28.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	25.5	7.5	41.5	7.5	25.5	15.5	33.5
Max Q Clear Time (g_c+I1), s	4.4	22.9	3.1	24.9	6.2	9.6	9.2	6.8
Green Ext Time (p_c), s	0.0	0.8	0.0	2.1	0.0	2.1	0.3	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	27.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	150	187	58	277	33	229	249	32	27	302	288
Future Volume (veh/h)	165	150	187	58	277	33	229	249	32	27	302	288
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	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	179	163	203	63	301	36	249	271	35	29	328	313
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	1
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	291	185	230	235	345	41	397	627	81	424	600	510
Arrive On Green	0.10	0.24	0.24	0.07	0.21	0.21	0.10	0.39	0.39	0.03	0.32	0.32
Sat Flow, veh/h	1774	756	941	1774	1633	195	1774	1617	209	1774	1863	1583
Grp Volume(v), veh/h	179	0	366	63	0	337	249	0	306	29	328	313
Grp Sat Flow(s),veh/h/ln	1774	0	1697	1774	0	1828	1774	0	1826	1774	1863	1583
Q Serve(g_s), s	7.0	0.0	18.7	2.4	0.0	16.0	8.2	0.0	11.1	1.0	13.0	15.0
Cycle Q Clear(g_c), s	7.0	0.0	18.7	2.4	0.0	16.0	8.2	0.0	11.1	1.0	13.0	15.0
Prop In Lane	1.00		0.55	1.00		0.11	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	291	0	415	235	0	387	397	0	708	424	600	510
V/C Ratio(X)	0.61	0.00	0.88	0.27	0.00	0.87	0.63	0.00	0.43	0.07	0.55	0.61
Avail Cap(c_a), veh/h	292	0	415	432	0	538	397	0	708	501	600	510
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	1.00	1.00
Uniform Delay (d), s/veh	25.5	0.0	32.8	25.8	0.0	34.3	18.0	0.0	20.3	19.1	25.1	25.8
Incr Delay (d2), s/veh	3.8	0.0	19.4	0.6	0.0	11.0	3.1	0.0	1.9	0.1	3.6	5.4
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	3.6	0.0	11.0	1.2	0.0	9.2	4.2	0.0	5.9	0.5	7.2	7.3
LnGrp Delay(d),s/veh	29.3	0.0	52.2	26.4	0.0	45.3	21.2	0.0	22.2	19.2	28.6	31.2
LnGrp LOS	C		D	C		D	C		C	B	C	C
Approach Vol, veh/h		545			400			555			670	
Approach Delay, s/veh		44.7			42.3			21.7			29.4	
Approach LOS		D			D			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+Rc), s	9.1	40.9	12.0	28.0	15.0	35.0	15.0	25.0
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Max Green Setting (Gmax), s	7.0	23.5	16.0	19.5	9.0	21.5	9.0	26.5
Max Q Clear Time (g_c+I1), s	3.0	13.1	4.4	20.7	10.2	17.0	9.0	18.0
Green Ext Time (p_c), s	0.0	2.1	0.1	0.0	0.0	1.3	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	33.7
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	7	29	418	30	56	269
Future Vol, veh/h	7	29	418	30	56	269
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	35	498	36	67	320

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	969	515	0	0	533	0
Stage 1	515	-	-	-	-	-
Stage 2	454	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	281	560	-	-	1035	-
Stage 1	600	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	263	560	-	-	1035	-
Mov Cap-2 Maneuver	394	-	-	-	-	-
Stage 1	600	-	-	-	-	-
Stage 2	599	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.6	0	1.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	518	1035	-
HCM Lane V/C Ratio	-	-	0.083	0.064	-
HCM Control Delay (s)	-	-	12.6	8.7	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.2	-

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	65	312	167	179	125	127
Future Vol, veh/h	65	312	167	179	125	127
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	400	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	80	385	206	221	154	157

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	427	0	-	0	863	317
Stage 1	-	-	-	-	317	-
Stage 2	-	-	-	-	546	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1132	-	-	-	325	724
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	580	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1132	-	-	-	302	724
Mov Cap-2 Maneuver	-	-	-	-	416	-
Stage 1	-	-	-	-	738	-
Stage 2	-	-	-	-	539	-

Approach	EB	WB	SB
HCM Control Delay, s	1.5	0	15
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1132	-	-	-	416	724
HCM Lane V/C Ratio	0.071	-	-	-	0.371	0.217
HCM Control Delay (s)	8.4	-	-	-	18.7	11.3
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.2	-	-	-	1.7	0.8

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	156	518	7	1	117	3	4	6	9	7	3	49
Future Vol, veh/h	156	518	7	1	117	3	4	6	9	7	3	49
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	195	648	9	1	146	4	5	8	11	9	4	61

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	150	0	0	656	0	0	1225	1195	652	1202	1197	148
Stage 1	-	-	-	-	-	-	1042	1042	-	151	151	-
Stage 2	-	-	-	-	-	-	183	153	-	1051	1046	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1431	-	-	931	-	-	156	186	468	161	186	899
Stage 1	-	-	-	-	-	-	277	307	-	851	772	-
Stage 2	-	-	-	-	-	-	819	771	-	274	305	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1431	-	-	931	-	-	119	146	468	126	146	899
Mov Cap-2 Maneuver	-	-	-	-	-	-	119	146	-	126	146	-
Stage 1	-	-	-	-	-	-	217	241	-	668	771	-
Stage 2	-	-	-	-	-	-	759	770	-	203	239	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.8	0.1	25.2	14.5
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	202	1431	-	-	931	-	-	452
HCM Lane V/C Ratio	0.118	0.136	-	-	0.001	-	-	0.163
HCM Control Delay (s)	25.2	7.9	0	-	8.9	0	-	14.5
HCM Lane LOS	D	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0.5	-	-	0	-	-	0.6

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	6	19	430	11	11	582
Future Vol, veh/h	6	19	430	11	11	582
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	20	453	12	12	613

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1094	458	0	0	464	0
Stage 1	458	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	237	603	-	-	1097	-
Stage 1	637	-	-	-	-	-
Stage 2	527	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	234	603	-	-	1097	-
Mov Cap-2 Maneuver	367	-	-	-	-	-
Stage 1	637	-	-	-	-	-
Stage 2	521	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.3	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	522	1097	-
HCM Lane V/C Ratio	-	-	0.05	0.011	-
HCM Control Delay (s)	-	-	12.3	8.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Traffic Vol, veh/h	17	309	378	23	33	54
Future Vol, veh/h	17	309	378	23	33	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	400	-	-	-	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	19	343	420	26	37	60

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	446	0	-	0	814	433
Stage 1	-	-	-	-	433	-
Stage 2	-	-	-	-	381	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1114	-	-	-	347	623
Stage 1	-	-	-	-	654	-
Stage 2	-	-	-	-	691	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1114	-	-	-	341	623
Mov Cap-2 Maneuver	-	-	-	-	460	-
Stage 1	-	-	-	-	654	-
Stage 2	-	-	-	-	679	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1114	-	-	-	460	623
HCM Lane V/C Ratio	0.017	-	-	-	0.08	0.096
HCM Control Delay (s)	8.3	-	-	-	13.5	11.4
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.3	0.3

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	44	157	32	5	376	5	9	6	4	2	14	145
Future Vol, veh/h	44	157	32	5	376	5	9	6	4	2	14	145
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	80	80	80	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	55	196	40	6	470	6	11	8	5	3	18	181

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	476	0	0	236	0	0	911	815	216	819	832	473
Stage 1	-	-	-	-	-	-	326	326	-	486	486	-
Stage 2	-	-	-	-	-	-	585	489	-	333	346	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1086	-	-	1331	-	-	255	312	824	294	305	591
Stage 1	-	-	-	-	-	-	687	648	-	563	551	-
Stage 2	-	-	-	-	-	-	497	549	-	681	635	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1086	-	-	1331	-	-	160	292	824	272	285	591
Mov Cap-2 Maneuver	-	-	-	-	-	-	160	292	-	272	285	-
Stage 1	-	-	-	-	-	-	646	610	-	530	548	-
Stage 2	-	-	-	-	-	-	332	546	-	629	598	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.6	0.1	22.2	15.8
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	233	1086	-	-	1331	-	-	533
HCM Lane V/C Ratio	0.102	0.051	-	-	0.005	-	-	0.378
HCM Control Delay (s)	22.2	8.5	0	-	7.7	0	-	15.8
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.3	0.2	-	-	0	-	-	1.7

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary

Major Street Approaches

Northbound: **LOUISVILLE**
Number of Lanes: **1**
85% Speed > 40 MPH.
Total Approach Volume: **4,524**

Southbound: **LOUISVILLE**
Number of Lanes: **1**
85% Speed > 40 MPH.
Total Approach Volume: **4,515**

Minor Street Approaches

Eastbound: **YELLOWJACKET DR**
Number of Lanes: **1**

Total Approach Volume: **678**

Westbound: **YELLOWJACKET DR**
Number of Lanes: **1**

Total Approach Volume: **1,765**

Warrant Summary **(Rural values apply.)**

Warrant 1 - Eight Hour Vehicular Volumes ..... **Satisfied**

Warrant 1A - Minimum Vehicular Volume ..... **Satisfied**
Required volumes reached for 10 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic ..... **Satisfied**
Required volumes reached for 12 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants ..... **Satisfied**
Required volumes reached for 11 hours, 8 are needed

Warrant 2 - Four Hour Volumes ..... **Satisfied**
Number of hours (9) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour ..... **Satisfied**

Warrant 3A - Peak Hour Delay ..... **Satisfied**
Number of hours (32) volumes exceed minimum >= required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes ..... **Satisfied**
Volumes exceed minimums for at least one hour.

Warrant 4 - Pedestrian Volumes ..... **Not Evaluated**

Warrant 5 - School Crossing ..... **Not Evaluated**

Warrant 6 - Coordinated Signal System ..... **Not Evaluated**

Warrant 7 - Crash Experience ..... **Not Evaluated**

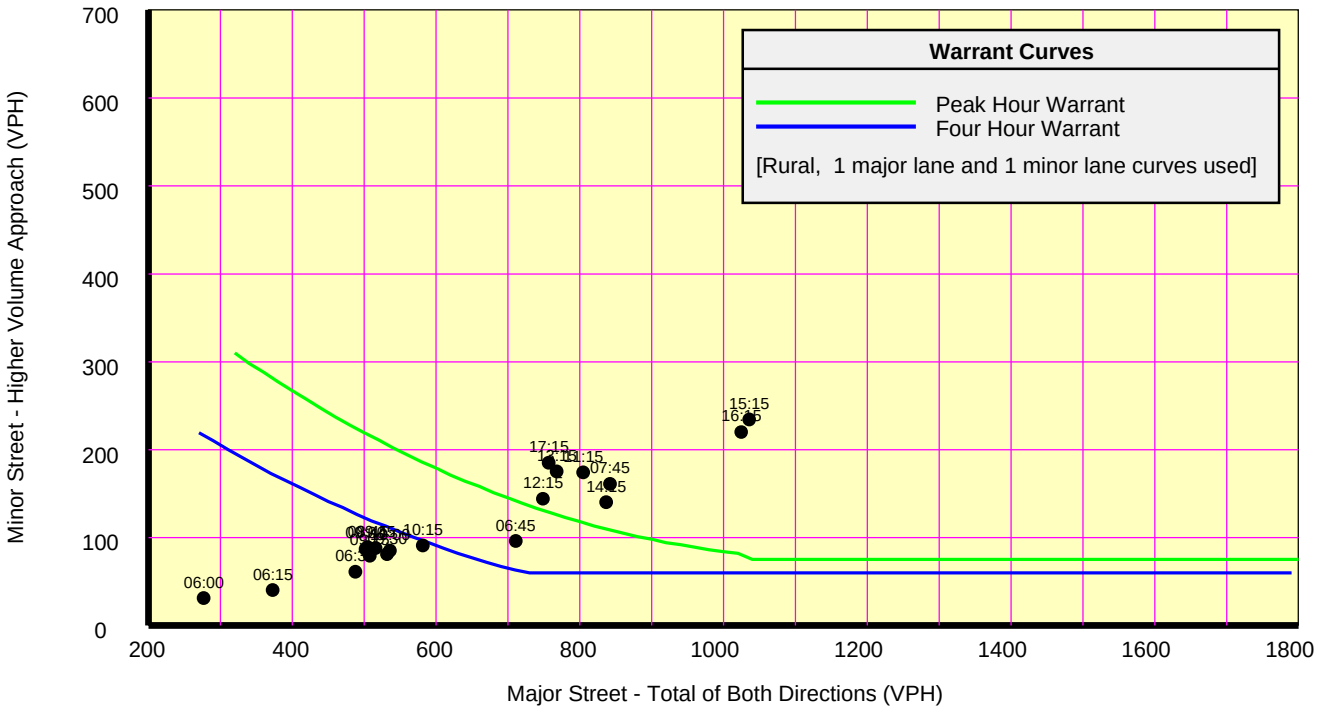
Warrant 8 - Roadway Network ..... **Not Evaluated**

Warrant 9 - Intersection Near a Grade Crossing ..... **Not Evaluated**

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

War 1A-Minimum Volume

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 300	Min 90
15:15	1,036	234	W	Yes	Yes
16:15	1,025	220	W	Yes	Yes
07:45	842	161	W	Yes	Yes
14:15	837	140	W	Yes	Yes
11:15	805	174	W	Yes	Yes
13:15	768	175	W	Yes	Yes
17:15	757	185	W	Yes	Yes
12:15	749	144	W	Yes	Yes
06:45	711	96	W	Yes	Yes
10:15	582	91	W	Yes	Yes
10:00	536	85	W	Yes	No
09:30	532	81	W	Yes	No
09:45	516	88	W	Yes	No
09:15	508	79	W	Yes	No
08:45	505	89	W	Yes	No
09:00	502	87	W	Yes	No
06:30	488	61	W	Yes	No
06:15	373	40	W	Yes	No
06:00	277	31	W	No	No
05:45	166	14	W	No	No
05:30	104	9	W	No	No
05:15	41	5	W	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No

War 1B-Interruption of Traffic

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 450	Min 45
16:30	1,078	249	W	Yes	Yes
15:30	1,022	253	W	Yes	Yes
07:30	976	172	W	Yes	Yes
14:30	892	139	W	Yes	Yes
11:30	844	186	W	Yes	Yes
13:30	769	163	W	Yes	Yes
12:30	726	152	W	Yes	Yes
10:30	617	102	W	Yes	Yes
09:30	532	81	W	Yes	Yes
08:30	511	99	W	Yes	Yes
06:30	488	61	W	Yes	Yes
17:30	480	99	W	Yes	Yes
06:15	373	40	W	No	No
06:00	277	31	W	No	No
05:45	166	14	W	No	No
05:30	104	9	W	No	No
05:15	41	5	W	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No

War 1C-Combination of Warrants

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 360	Min 72
16:45	1,080	267	W	Yes	Yes
14:45	988	175	W	Yes	Yes
15:45	970	225	W	Yes	Yes
07:45	842	161	W	Yes	Yes
11:45	797	175	W	Yes	Yes
13:45	787	157	W	Yes	Yes
12:45	753	153	W	Yes	Yes
06:45	711	96	W	Yes	Yes
10:45	696	124	W	Yes	Yes
09:45	516	88	W	Yes	Yes
08:45	505	89	W	Yes	Yes
06:30	488	61	W	Yes	No
06:15	373	40	W	Yes	No
06:00	277	31	W	No	No
17:45	228	41	W	No	No
05:45	166	14	W	No	No
05:30	104	9	W	No	No
05:15	41	5	W	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary

Major Street Approaches

Northbound: **LOUISVILLE ST**
Number of Lanes: **1**
85% Speed > 40 MPH.
Total Approach Volume: **4,352**

Southbound: **LOUISVILLE ST**
Number of Lanes: **1**
85% Speed > 40 MPH.
Total Approach Volume: **4,315**

Minor Street Approaches

Eastbound: **MILLSAP**
Number of Lanes: **1**
Total Approach Volume: **312**

Westbound: **MILLSAPS CAREER & TECH**
Number of Lanes: **1**
Total Approach Volume: **186**

Warrant Summary **(Rural values apply.)**

Warrant 1 - Eight Hour Vehicular Volumes ..... **Not Satisfied**

Warrant 1A - Minimum Vehicular Volume ..... **Not Satisfied**
Required volumes reached for 0 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic ..... **Not Satisfied**
Required volumes reached for 2 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants ..... **Not Satisfied**
Required volumes reached for 1 hours, 8 are needed

Warrant 2 - Four Hour Volumes ..... **Not Satisfied**
Number of hours (1) volumes exceed minimum < minimum required (4).

Warrant 3 - Peak Hour ..... **Not Satisfied**

Warrant 3A - Peak Hour Delay ..... **Not Satisfied**
Approach volumes on minor street don't exceed minimums for any hour. Delay data not evaluated.

Warrant 3B - Peak Hour Volumes ..... **Not Satisfied**
Volumes do not exceed minimums for any hour.

Warrant 4 - Pedestrian Volumes ..... **Not Evaluated**

Warrant 5 - School Crossing ..... **Not Evaluated**

Warrant 6 - Coordinated Signal System ..... **Not Evaluated**

Warrant 7 - Crash Experience ..... **Not Evaluated**

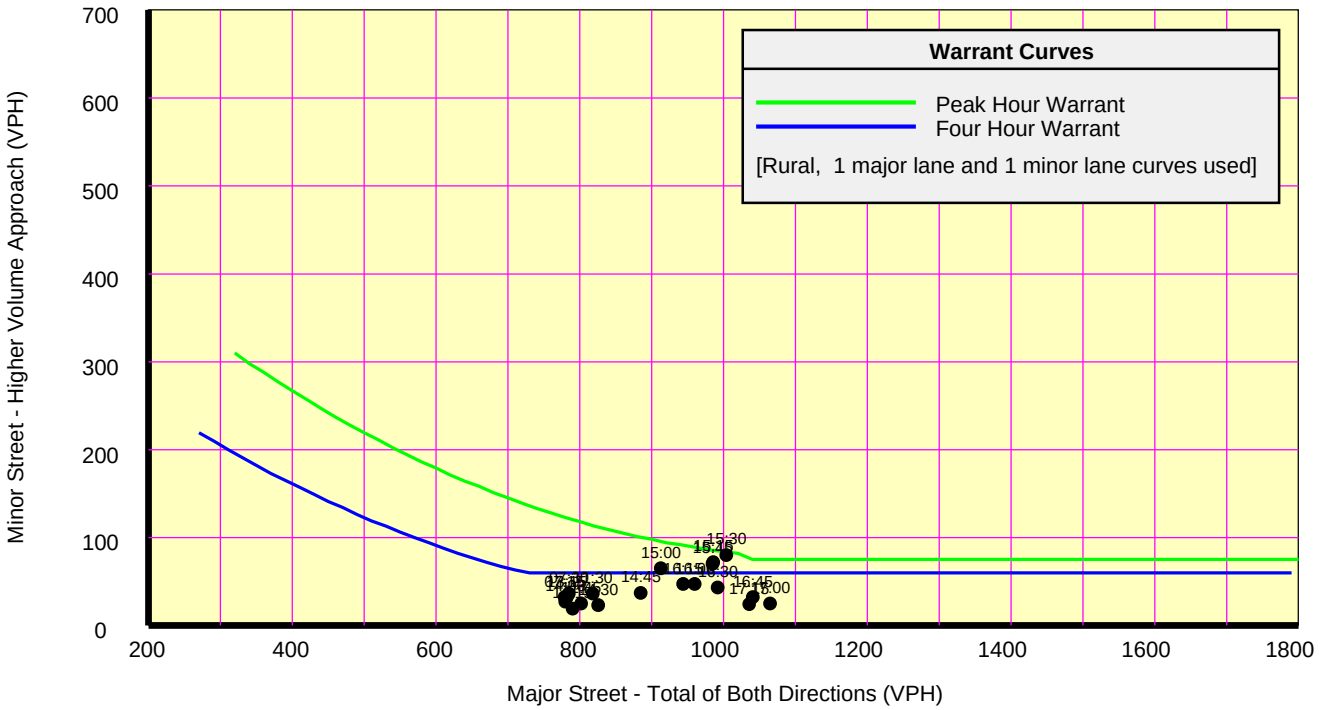
Warrant 8 - Roadway Network ..... **Not Evaluated**

Warrant 9 - Intersection Near a Grade Crossing ..... **Not Evaluated**

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

War 1A-Minimum Volume

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 300	Min 90
17:00	1,065	25	EB	Yes	No
16:45	1,041	32	EB	Yes	No
17:15	1,036	24	W	Yes	No
15:30	1,004	80	EB	Yes	No
16:30	992	43	EB	Yes	No
15:15	986	72	EB	Yes	No
15:45	985	70	EB	Yes	No
16:00	960	47	EB	Yes	No
16:15	944	47	EB	Yes	No
15:00	913	65	EB	Yes	No
14:45	885	37	EB	Yes	No
14:30	826	23	W	Yes	No
11:30	818	36	EB	Yes	No
11:45	802	25	W	Yes	No
14:15	790	19	W	Yes	No
07:30	785	36	EB	Yes	No
13:15	782	32	EB	Yes	No
14:00	780	27	EB	Yes	No
07:15	779	32	EB	Yes	No
12:00	777	28	W	Yes	No
17:30	776	20	W	Yes	No
11:15	773	34	EB	Yes	No
13:00	766	24	W	Yes	No
13:30	764	32	EB	Yes	No

War 1B-Interruption of Traffic

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 450	Min 45
16:00	960	47	EB	Yes	Yes
15:00	913	65	EB	Yes	Yes
17:00	1,065	25	EB	Yes	No
17:15	1,036	24	W	Yes	No
14:45	885	37	EB	Yes	No
14:30	826	23	W	Yes	No
11:30	818	36	EB	Yes	No
11:45	802	25	W	Yes	No
14:15	790	19	W	Yes	No
07:30	785	36	EB	Yes	No
13:15	782	32	EB	Yes	No
14:00	780	27	EB	Yes	No
07:15	779	32	EB	Yes	No
12:00	777	28	W	Yes	No
17:30	776	20	W	Yes	No
11:15	773	34	EB	Yes	No
13:00	766	24	W	Yes	No
13:30	764	32	EB	Yes	No
13:45	759	30	EB	Yes	No
12:45	754	30	W	Yes	No
12:15	747	34	W	Yes	No
12:30	735	35	W	Yes	No
11:00	731	36	EB	Yes	No
07:45	698	38	EB	Yes	No

War 1C-Combination of Warrants

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 360	Min 72
15:15	986	72	EB	Yes	Yes
17:00	1,065	25	EB	Yes	No
16:45	1,041	32	EB	Yes	No
17:15	1,036	24	W	Yes	No
16:30	992	43	EB	Yes	No
16:15	944	47	EB	Yes	No
15:00	913	65	EB	Yes	No
14:45	885	37	EB	Yes	No
14:30	826	23	W	Yes	No
11:30	818	36	EB	Yes	No
11:45	802	25	W	Yes	No
14:15	790	19	W	Yes	No
07:30	785	36	EB	Yes	No
13:15	782	32	EB	Yes	No
14:00	780	27	EB	Yes	No
07:15	779	32	EB	Yes	No
12:00	777	28	W	Yes	No
17:30	776	20	W	Yes	No
11:15	773	34	EB	Yes	No
13:00	766	24	W	Yes	No
13:30	764	32	EB	Yes	No
13:45	759	30	EB	Yes	No
12:45	754	30	W	Yes	No
12:15	747	34	W	Yes	No

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary

Major Street Approaches

Northbound: **LOUISVILLE ST**
Number of Lanes: **1**
85% Speed > 40 MPH.
Total Approach Volume: **4,199**

Southbound: **LOUISVILLE ST**
Number of Lanes: **1**
85% Speed > 40 MPH.
Total Approach Volume: **3,963**

Minor Street Approaches

Eastbound: **LYNN LANE**
Number of Lanes: **1**

Total Approach Volume: **3,783**

Westbound: **LYNN LANE**
Number of Lanes: **1**

Total Approach Volume: **1,874**

Warrant Summary **(Rural values apply.)**

Warrant 1 - Eight Hour Vehicular Volumes ..... **Satisfied**

Warrant 1A - Minimum Vehicular Volume ..... **Satisfied**
Required volumes reached for 12 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic ..... **Satisfied**
Required volumes reached for 12 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants ..... **Satisfied**
Required volumes reached for 12 hours, 8 are needed

Warrant 2 - Four Hour Volumes ..... **Satisfied**
Number of hours (12) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour ..... **Satisfied**

Warrant 3A - Peak Hour Delay ..... **Satisfied**
Number of hours (40) volumes exceed minimum >= required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes ..... **Satisfied**
Volumes exceed minimums for at least one hour.

Warrant 4 - Pedestrian Volumes ..... **Not Evaluated**

Warrant 5 - School Crossing ..... **Not Evaluated**

Warrant 6 - Coordinated Signal System ..... **Not Evaluated**

Warrant 7 - Crash Experience ..... **Not Evaluated**

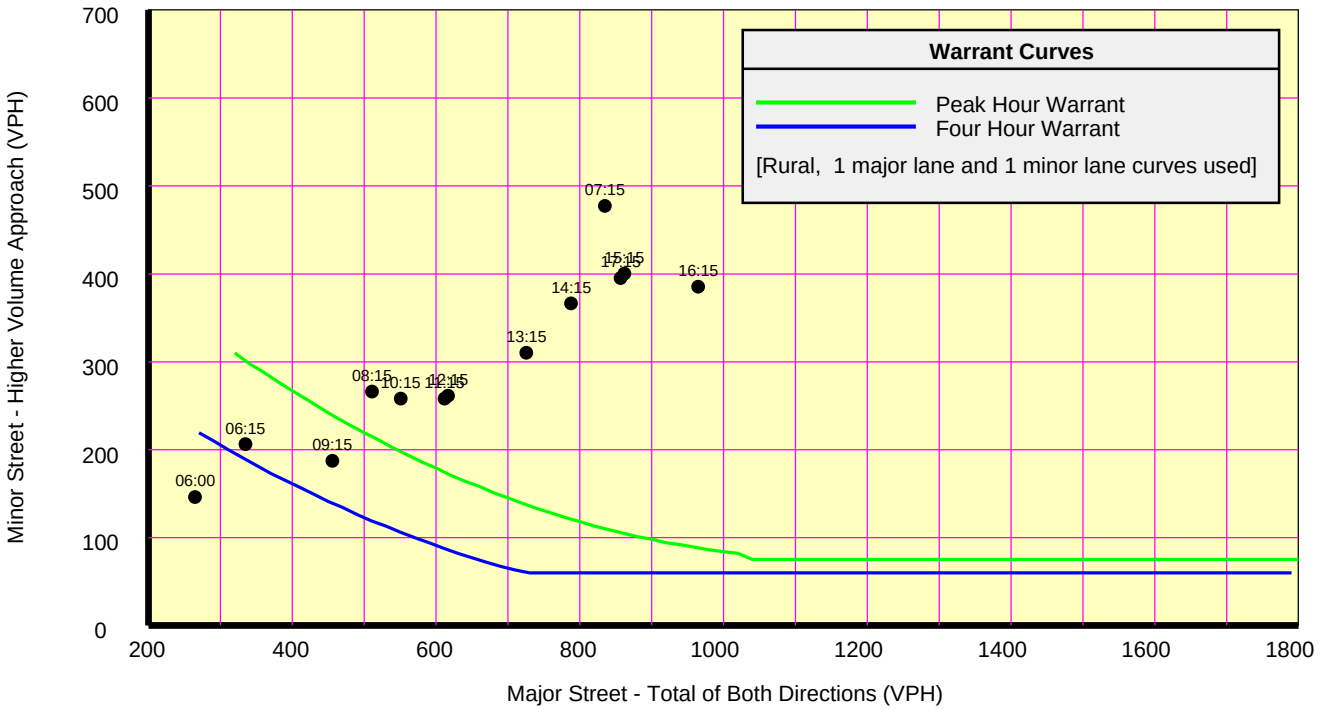
Warrant 8 - Roadway Network ..... **Not Evaluated**

Warrant 9 - Intersection Near a Grade Crossing ..... **Not Evaluated**

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

War 1A-Minimum Volume

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 300	Min 90
16:15	965	385	EB	Yes	Yes
15:15	862	400	EB	Yes	Yes
17:15	857	395	EB	Yes	Yes
07:15	835	477	EB	Yes	Yes
14:15	788	366	EB	Yes	Yes
13:15	726	310	EB	Yes	Yes
12:15	617	261	EB	Yes	Yes
11:15	612	258	EB	Yes	Yes
10:15	551	258	EB	Yes	Yes
08:15	511	266	EB	Yes	Yes
09:15	456	187	EB	Yes	Yes
06:15	335	206	EB	Yes	Yes
06:00	265	146	EB	No	Yes
05:45	169	89	EB	No	No
05:30	96	48	EB	No	No
05:15	47	14	EB	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No
21:00	0	0	W	No	No

War 1B-Interruption of Traffic

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 450	Min 45
16:30	1,042	415	EB	Yes	Yes
15:30	845	389	EB	Yes	Yes
14:30	826	380	EB	Yes	Yes
07:30	802	434	EB	Yes	Yes
13:30	756	323	EB	Yes	Yes
11:30	651	263	EB	Yes	Yes
12:30	610	261	EB	Yes	Yes
17:30	561	279	EB	Yes	Yes
10:30	545	270	EB	Yes	Yes
08:30	498	270	EB	Yes	Yes
09:30	476	184	EB	Yes	Yes
06:30	454	267	EB	Yes	Yes
06:15	335	206	EB	No	Yes
06:00	265	146	EB	No	Yes
05:45	169	89	EB	No	Yes
05:30	96	48	EB	No	Yes
05:15	47	14	EB	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No

War 1C-Combination of Warrants

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 360	Min 72
16:30	1,042	415	EB	Yes	Yes
15:30	845	389	EB	Yes	Yes
14:30	826	380	EB	Yes	Yes
07:30	802	434	EB	Yes	Yes
13:30	756	323	EB	Yes	Yes
11:30	651	263	EB	Yes	Yes
12:30	610	261	EB	Yes	Yes
17:30	561	279	EB	Yes	Yes
10:30	545	270	EB	Yes	Yes
08:30	498	270	EB	Yes	Yes
09:30	476	184	EB	Yes	Yes
06:30	454	267	EB	Yes	Yes
06:15	335	206	EB	No	Yes
06:00	265	146	EB	No	Yes
05:45	169	89	EB	No	Yes
05:30	96	48	EB	No	No
05:15	47	14	EB	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No

Neel-Schaffer, Inc.
Jackson, MS

Signal Warrants - Summary

Major Street Approaches

Eastbound: **ACADEMY ROAD**
Number of Lanes: **1**
Approach Speed: **45**
Total Approach Volume: **2,840**

Westbound: **ACADEMY ROAD**
Number of Lanes: **1**
Approach Speed: **45**
Total Approach Volume: **2,683**

Minor Street Approaches

Southbound: **ACADEMY SCHOOL ENTRANCE**
Number of Lanes: **2**

Total Approach Volume: **520**

Warrant Summary **(Rural values apply.)**

Warrant 1 - Eight Hour Vehicular Volumes ..... **Not Satisfied**

Warrant 1A - Minimum Vehicular Volume ..... **Not Satisfied**
Required volumes reached for 2 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic ..... **Not Satisfied**
Required volumes reached for 2 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants ..... **Not Satisfied**
Required volumes reached for 2 hours, 8 are needed

Warrant 2 - Four Hour Volumes ..... **Not Satisfied**
Number of hours (1) volumes exceed minimum < minimum required (4).

Warrant 3 - Peak Hour ..... **Not Satisfied**

Warrant 3A - Peak Hour Delay ..... **Not Satisfied**
Approach volumes on minor street don't exceed minimums for any hour. Delay data not evaluated.

Warrant 3B - Peak Hour Volumes ..... **Not Satisfied**
Volumes do not exceed minimums for any hour.

Warrant 4 - Pedestrian Volumes ..... **Not Evaluated**

Warrant 5 - School Crossing ..... **Not Evaluated**

Warrant 6 - Coordinated Signal System ..... **Not Evaluated**

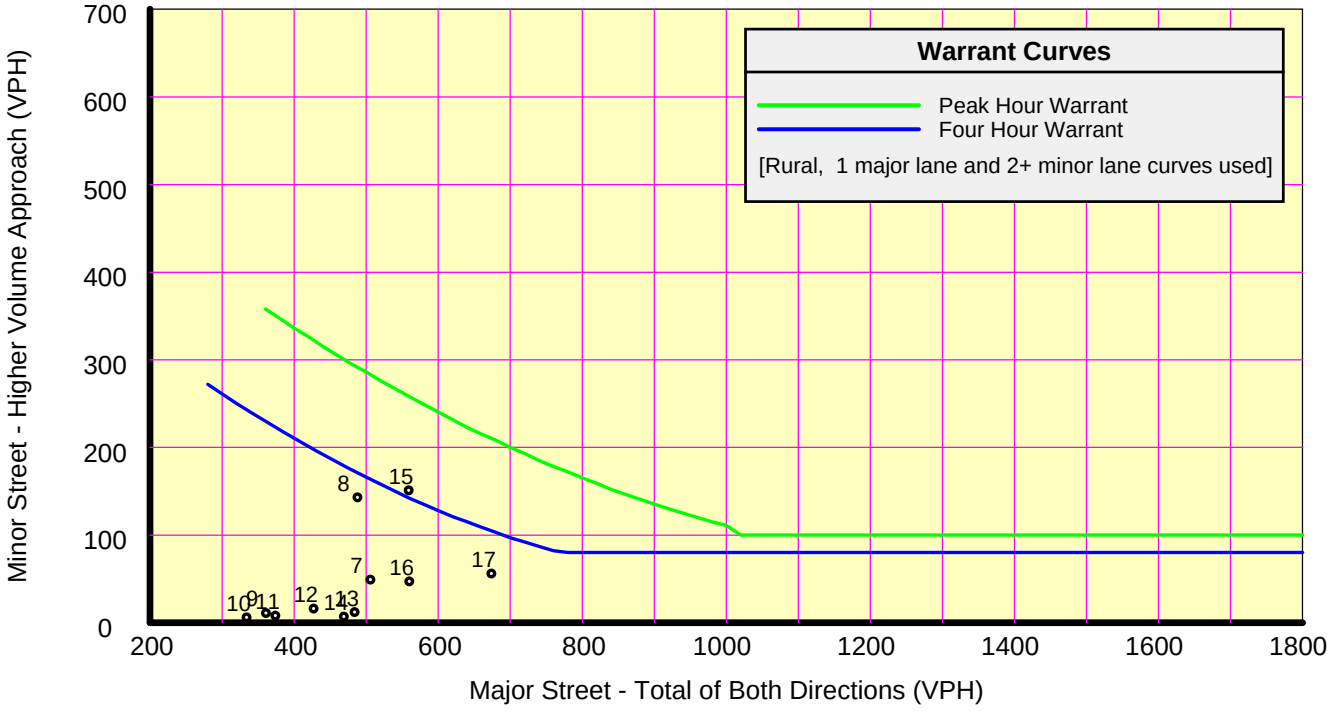
Warrant 7 - Crash Experience ..... **Not Evaluated**

Warrant 8 - Roadway Network ..... **Not Evaluated**

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

Hour	Major	Higher Minor		War-1A			War-1B			War-1A&B		
Begin	Total	Vol	Dir	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00	0	0	NB	300-No	120-No	---	450-No	60-No	---	360-No	96-No	---
01:00	0	0	NB	300-No	120-No	---	450-No	60-No	---	360-No	96-No	---
02:00	0	0	NB	300-No	120-No	---	450-No	60-No	---	360-No	96-No	---
03:00	0	0	NB	300-No	120-No	---	450-No	60-No	---	360-No	96-No	---
04:00	0	0	NB	300-No	120-No	---	450-No	60-No	---	360-No	96-No	---
05:00	0	0	NB	300-No	120-No	---	450-No	60-No	---	360-No	96-No	---
06:00	103	0	NB	300-No	120-No	---	450-No	60-No	---	360-No	96-No	---
07:00	506	49	SB	300-Yes	120-No	Major	450-Yes	60-No	Major	360-Yes	96-No	Major
08:00	488	143	SB	300-Yes	120-Yes	Both	450-Yes	60-Yes	Both	360-Yes	96-Yes	Both
09:00	361	11	SB	300-Yes	120-No	Major	450-No	60-No	---	360-Yes	96-No	Major
10:00	334	6	SB	300-Yes	120-No	Major	450-No	60-No	---	360-No	96-No	---
11:00	374	8	SB	300-Yes	120-No	Major	450-No	60-No	---	360-Yes	96-No	Major
12:00	427	16	SB	300-Yes	120-No	Major	450-No	60-No	---	360-Yes	96-No	Major
13:00	484	12	SB	300-Yes	120-No	Major	450-Yes	60-No	Major	360-Yes	96-No	Major
14:00	469	7	SB	300-Yes	120-No	Major	450-Yes	60-No	Major	360-Yes	96-No	Major
15:00	559	151	SB	300-Yes	120-Yes	Both	450-Yes	60-Yes	Both	360-Yes	96-Yes	Both
16:00	560	47	SB	300-Yes	120-No	Major	450-Yes	60-No	Major	360-Yes	96-No	Major
17:00	674	56	SB	300-Yes	120-No	Major	450-Yes	60-No	Major	360-Yes	96-No	Major
18:00	184	14	SB	300-No	120-No	---	450-No	60-No	---	360-No	96-No	---
19:00	0	0	NB	300-No	120-No	---	450-No	60-No	---	360-No	96-No	---
20:00	0	0	NB	300-No	120-No	---	450-No	60-No	---	360-No	96-No	---
21:00	0	0	NB	300-No	120-No	---	450-No	60-No	---	360-No	96-No	---
22:00	0	0	NB	300-No	120-No	---	450-No	60-No	---	360-No	96-No	---
23:00	0	0	NB	300-No	120-No	---	450-No	60-No	---	360-No	96-No	---

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary

Major Street Approaches

Eastbound: **ACADEMY ROAD**

Number of Lanes: **1**

85% Speed > 40 MPH.

Total Approach Volume: **2,178**

Westbound: **ACADEMY ROAD**

Number of Lanes: **1**

85% Speed > 40 MPH.

Total Approach Volume: **2,380**

Minor Street Approaches

Southbound: **ACADEMY SCHOOL ENTRANCE**

Number of Lanes: **1**

Total Approach Volume: **447**

Warrant Summary

(Rural values apply.)

Warrant 1 - Eight Hour Vehicular Volumes ..... **Not Satisfied**

Warrant 1A - Minimum Vehicular Volume ..... **Not Satisfied**

Required volumes reached for 3 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic ..... **Not Satisfied**

Required volumes reached for 3 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants ..... **Not Satisfied**

Required volumes reached for 3 hours, 8 are needed

Warrant 2 - Four Hour Volumes ..... **Not Satisfied**

Number of hours (2) volumes exceed minimum < minimum required (4).

Warrant 3 - Peak Hour ..... **Satisfied**

Warrant 3A - Peak Hour Delay ..... **Satisfied**

Number of hours (4) volumes exceed minimum >= required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes ..... **Not Satisfied**

Volumes do not exceed minimums for any hour.

Warrant 4 - Pedestrian Volumes ..... **Not Evaluated**

Warrant 5 - School Crossing ..... **Not Evaluated**

Warrant 6 - Coordinated Signal System ..... **Not Evaluated**

Warrant 7 - Crash Experience ..... **Not Evaluated**

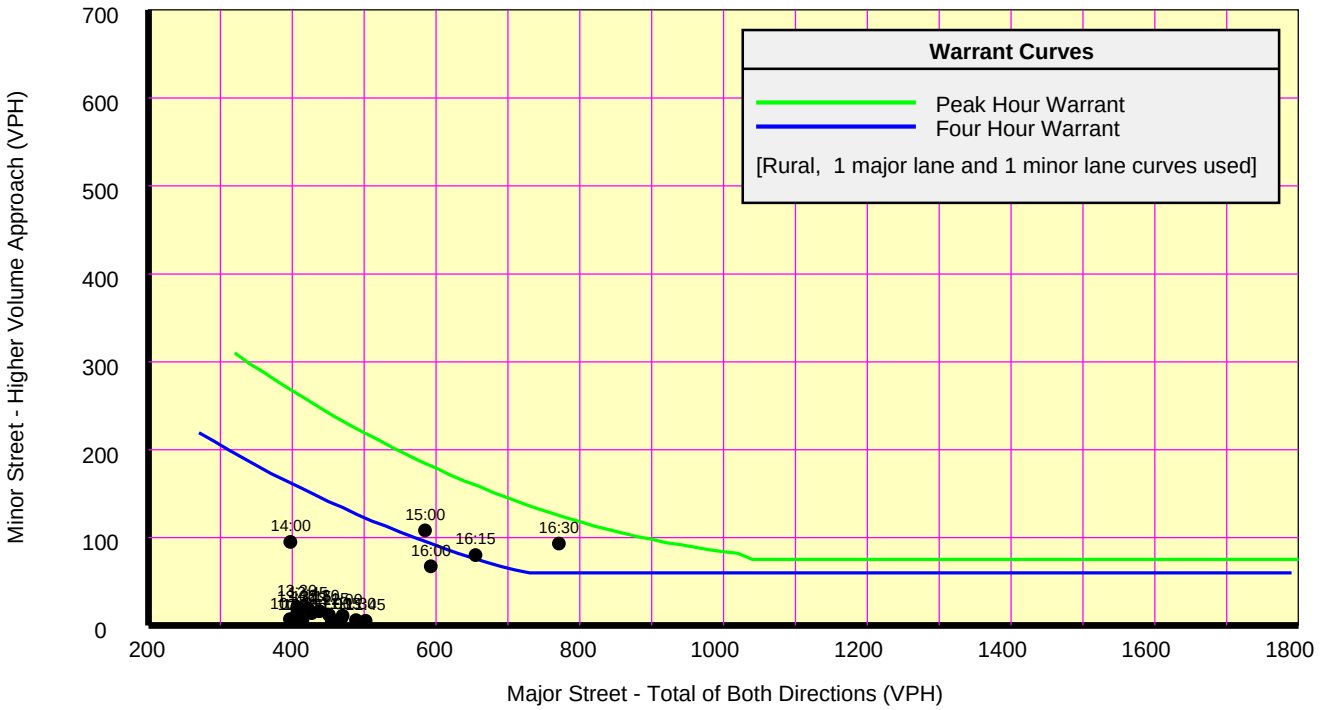
Warrant 8 - Roadway Network ..... **Not Evaluated**

Warrant 9 - Intersection Near a Grade Crossing ..... **Not Evaluated**

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

War 1A-Minimum Volume

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 300	Min 90
16:30	771	93	SB	Yes	Yes
15:00	585	108	SB	Yes	Yes
14:00	398	95	SB	Yes	Yes
16:15	655	80	SB	Yes	No
16:00	593	67	SB	Yes	No
11:45	502	5	SB	Yes	No
11:30	489	6	SB	Yes	No
12:00	470	11	SB	Yes	No
11:15	468	7	SB	Yes	No
11:00	455	6	SB	Yes	No
12:15	451	12	SB	Yes	No
12:30	438	16	SB	Yes	No
13:15	427	14	SB	Yes	No
12:45	422	19	SB	Yes	No
10:45	414	5	SB	Yes	No
10:30	408	5	SB	Yes	No
13:30	407	21	SB	Yes	No
13:00	407	14	SB	Yes	No
10:15	397	7	SB	Yes	No
13:45	393	46	SB	Yes	No
17:30	375	35	SB	Yes	No
10:00	363	8	SB	Yes	No
09:45	283	8	SB	No	No
06:30	216	28	SB	No	No

War 1B-Interruption of Traffic

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 450	Min 45
16:30	771	93	SB	Yes	Yes
15:30	567	63	SB	Yes	Yes
14:30	465	147	SB	Yes	Yes
11:45	502	5	SB	Yes	No
11:30	489	6	SB	Yes	No
12:00	470	11	SB	Yes	No
11:15	468	7	SB	Yes	No
11:00	455	6	SB	Yes	No
12:15	451	12	SB	Yes	No
12:30	438	16	SB	No	No
13:15	427	14	SB	No	No
12:45	422	19	SB	No	No
10:45	414	5	SB	No	No
14:15	413	111	SB	No	Yes
10:30	408	5	SB	No	No
13:30	407	21	SB	No	No
13:00	407	14	SB	No	No
14:00	398	95	SB	No	Yes
10:15	397	7	SB	No	No
13:45	393	46	SB	No	Yes
17:30	375	35	SB	No	No
10:00	363	8	SB	No	No
09:45	283	8	SB	No	No
06:30	216	28	SB	No	No

War 1C-Combination of Warrants

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 360	Min 72
16:15	655	80	SB	Yes	Yes
15:00	585	108	SB	Yes	Yes
14:00	398	95	SB	Yes	Yes
17:15	611	55	SB	Yes	No
16:00	593	67	SB	Yes	No
11:45	502	5	SB	Yes	No
11:30	489	6	SB	Yes	No
12:00	470	11	SB	Yes	No
11:15	468	7	SB	Yes	No
11:00	455	6	SB	Yes	No
12:15	451	12	SB	Yes	No
12:30	438	16	SB	Yes	No
13:15	427	14	SB	Yes	No
12:45	422	19	SB	Yes	No
10:45	414	5	SB	Yes	No
10:30	408	5	SB	Yes	No
13:30	407	21	SB	Yes	No
13:00	407	14	SB	Yes	No
10:15	397	7	SB	Yes	No
13:45	393	46	SB	Yes	No
17:30	375	35	SB	Yes	No
10:00	363	8	SB	Yes	No
09:45	283	8	SB	No	No
06:30	216	28	SB	No	No

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary

Major Street Approaches

Northbound: **MONTGOMERY**

Number of Lanes: **1**

85% Speed > 40 MPH.

Total Approach Volume: **3,841**

Southbound: **MONTGOMERY**

Number of Lanes: **1**

85% Speed > 40 MPH.

Total Approach Volume: **4,147**

Minor Street Approaches

Eastbound: **ACADEMY**

Number of Lanes: **2**

Total Approach Volume: **3,089**

Warrant Summary **(Rural values apply.)**

Warrant 1 - Eight Hour Vehicular Volumes ..... **Satisfied**

Warrant 1A - Minimum Vehicular Volume ..... **Satisfied**

Required volumes reached for 12 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic ..... **Satisfied**

Required volumes reached for 11 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants ..... **Satisfied**

Required volumes reached for 12 hours, 8 are needed

Warrant 2 - Four Hour Volumes ..... **Satisfied**

Number of hours (12) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour ..... **Satisfied**

Warrant 3A - Peak Hour Delay ..... **Satisfied**

Number of hours (43) volumes exceed minimum >= required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes ..... **Satisfied**

Volumes exceed minimums for at least one hour.

Warrant 4 - Pedestrian Volumes ..... **Not Evaluated**

Warrant 5 - School Crossing ..... **Not Evaluated**

Warrant 6 - Coordinated Signal System ..... **Not Evaluated**

Warrant 7 - Crash Experience ..... **Not Evaluated**

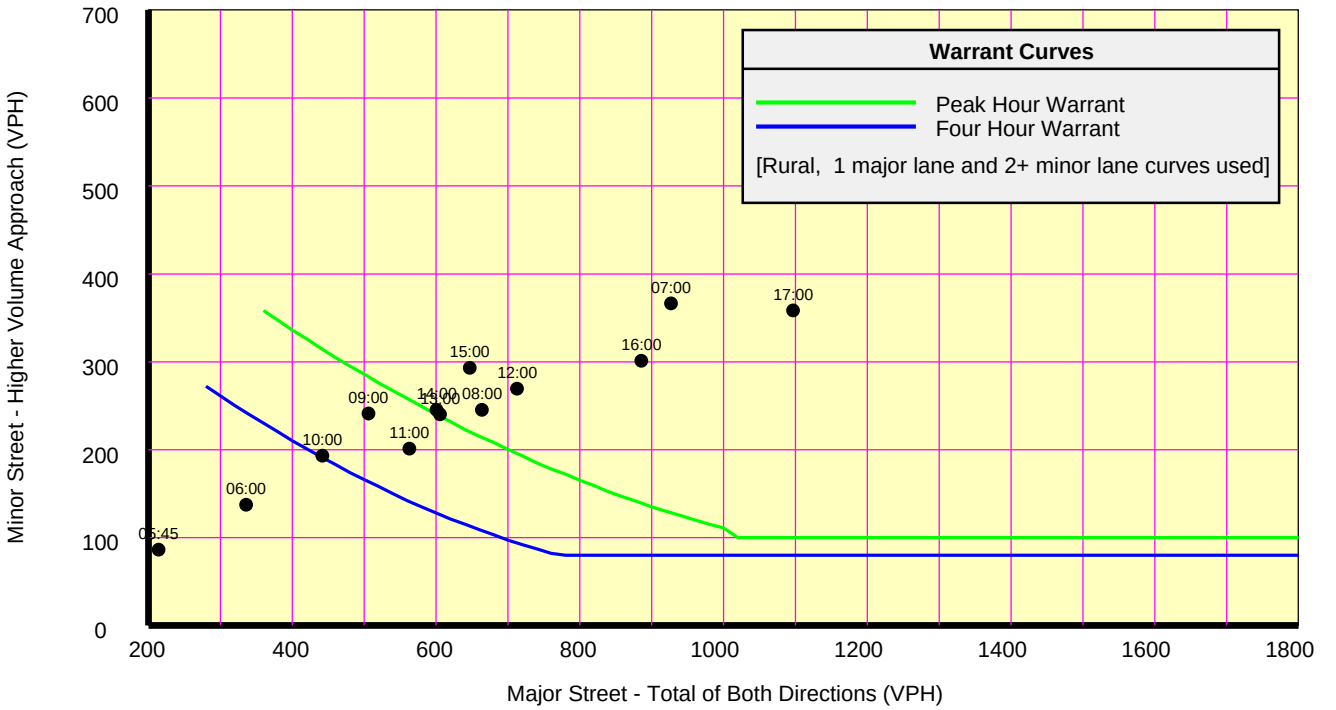
Warrant 8 - Roadway Network ..... **Not Evaluated**

Warrant 9 - Intersection Near a Grade Crossing ..... **Not Evaluated**

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

War 1A-Minimum Volume

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 300	Min 120
17:00	1,097	358	EB	Yes	Yes
07:00	927	366	EB	Yes	Yes
16:00	886	301	EB	Yes	Yes
12:00	713	269	EB	Yes	Yes
08:00	664	245	EB	Yes	Yes
15:00	647	293	EB	Yes	Yes
13:00	606	240	EB	Yes	Yes
14:00	601	245	EB	Yes	Yes
11:00	563	201	EB	Yes	Yes
09:00	506	241	EB	Yes	Yes
10:00	442	193	EB	Yes	Yes
06:00	336	137	EB	Yes	Yes
05:45	214	86	EB	No	No
05:30	113	57	EB	No	No
05:15	53	21	EB	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No
21:00	0	0	W	No	No
20:45	0	0	W	No	No

War 1B-Interruption of Traffic

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 450	Min 60
16:15	940	336	EB	Yes	Yes
07:30	865	361	EB	Yes	Yes
17:15	834	264	EB	Yes	Yes
12:15	688	274	EB	Yes	Yes
15:15	684	257	EB	Yes	Yes
11:15	643	219	EB	Yes	Yes
14:15	625	286	EB	Yes	Yes
06:30	614	205	EB	Yes	Yes
08:30	605	229	EB	Yes	Yes
13:15	577	222	EB	Yes	Yes
10:15	450	200	EB	Yes	Yes
06:15	448	177	EB	No	Yes
10:00	442	193	EB	No	Yes
09:45	438	202	EB	No	Yes
09:30	434	229	EB	No	Yes
06:00	336	137	EB	No	Yes
05:45	214	86	EB	No	Yes
05:30	113	57	EB	No	No
05:15	53	21	EB	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No

War 1C-Combination of Warrants

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 360	Min 96
07:15	948	362	EB	Yes	Yes
16:15	940	336	EB	Yes	Yes
17:15	834	264	EB	Yes	Yes
12:15	688	274	EB	Yes	Yes
15:15	684	257	EB	Yes	Yes
11:15	643	219	EB	Yes	Yes
08:15	630	243	EB	Yes	Yes
14:15	625	286	EB	Yes	Yes
13:15	577	222	EB	Yes	Yes
09:15	468	228	EB	Yes	Yes
10:15	450	200	EB	Yes	Yes
06:15	448	177	EB	Yes	Yes
06:00	336	137	EB	No	Yes
05:45	214	86	EB	No	No
05:30	113	57	EB	No	No
05:15	53	21	EB	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No
21:00	0	0	W	No	No

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary

Major Street Approaches

Northbound: **MONTGOMERY ST**

Number of Lanes: **1**

85% Speed > 40 MPH.

Total Approach Volume: **5,441**

Southbound: **MONTGOMERY ST**

Number of Lanes: **1**

85% Speed > 40 MPH.

Total Approach Volume: **6,415**

Minor Street Approaches

Eastbound: **LYNN LANE**

Number of Lanes: **1**

Total Approach Volume: **2,013**

Warrant Summary **(Rural values apply.)**

Warrant 1 - Eight Hour Vehicular Volumes ..... **Satisfied**

Warrant 1A - Minimum Vehicular Volume ..... **Satisfied**

Required volumes reached for 12 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic ..... **Satisfied**

Required volumes reached for 12 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants ..... **Satisfied**

Required volumes reached for 12 hours, 8 are needed

Warrant 2 - Four Hour Volumes ..... **Satisfied**

Number of hours (12) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour ..... **Satisfied**

Warrant 3A - Peak Hour Delay ..... **Satisfied**

Number of hours (46) volumes exceed minimum >= required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes ..... **Satisfied**

Volumes exceed minimums for at least one hour.

Warrant 4 - Pedestrian Volumes ..... **Not Evaluated**

Warrant 5 - School Crossing ..... **Not Evaluated**

Warrant 6 - Coordinated Signal System ..... **Not Evaluated**

Warrant 7 - Crash Experience ..... **Not Evaluated**

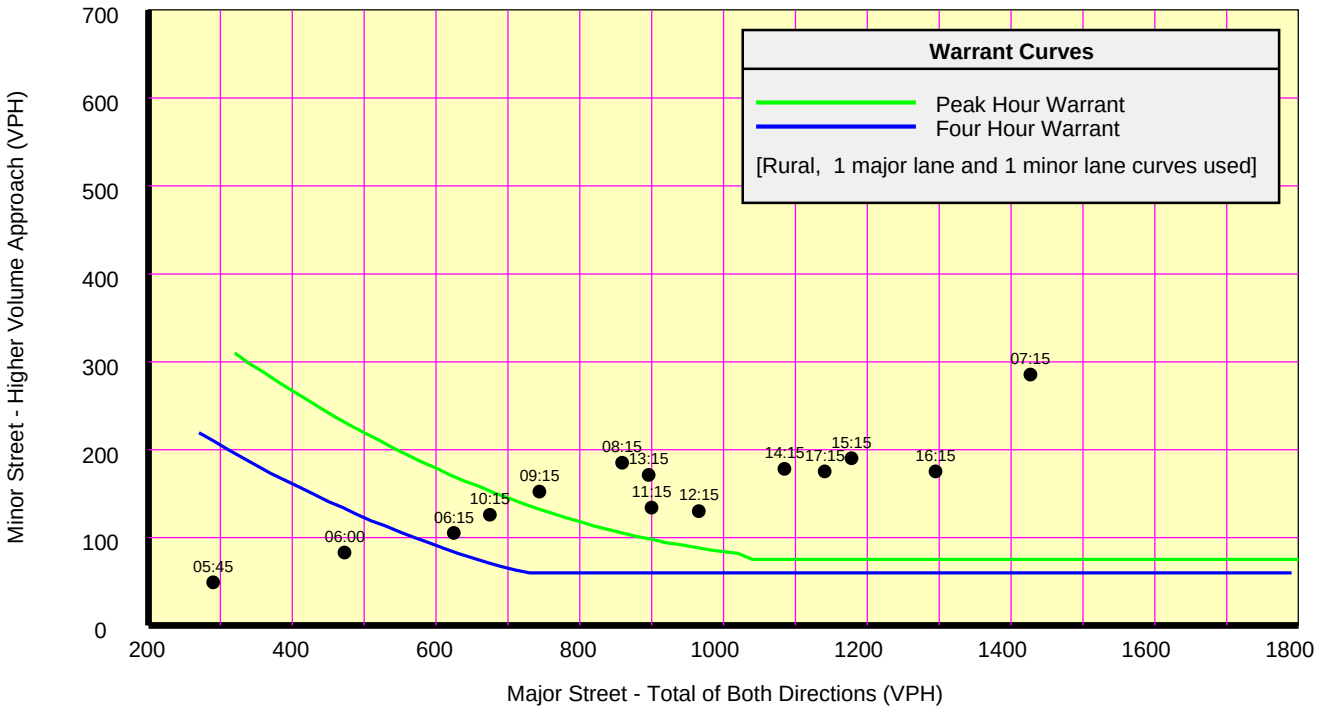
Warrant 8 - Roadway Network ..... **Not Evaluated**

Warrant 9 - Intersection Near a Grade Crossing ..... **Not Evaluated**

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

War 1A-Minimum Volume

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 300	Min 90
07:15	1,427	285	EB	Yes	Yes
16:15	1,295	175	EB	Yes	Yes
15:15	1,178	190	EB	Yes	Yes
17:15	1,141	175	EB	Yes	Yes
14:15	1,085	178	EB	Yes	Yes
12:15	966	130	EB	Yes	Yes
11:15	900	134	EB	Yes	Yes
13:15	896	171	EB	Yes	Yes
08:15	859	185	EB	Yes	Yes
09:15	744	152	EB	Yes	Yes
10:15	675	126	EB	Yes	Yes
06:15	625	105	EB	Yes	Yes
06:00	473	83	EB	Yes	No
05:45	290	49	EB	No	No
05:30	156	28	EB	No	No
05:15	65	7	EB	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No
21:00	0	0	W	No	No

War 1B-Interruption of Traffic

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 450	Min 45
17:00	1,531	216	EB	Yes	Yes
07:00	1,382	232	EB	Yes	Yes
16:00	1,198	170	EB	Yes	Yes
15:00	1,185	206	EB	Yes	Yes
14:00	1,020	161	EB	Yes	Yes
12:00	975	137	EB	Yes	Yes
08:00	932	225	EB	Yes	Yes
13:00	917	162	EB	Yes	Yes
11:00	840	130	EB	Yes	Yes
09:00	759	173	EB	Yes	Yes
10:00	644	118	EB	Yes	Yes
06:00	473	83	EB	Yes	Yes
05:45	290	49	EB	No	Yes
05:30	156	28	EB	No	No
05:15	65	7	EB	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No
21:00	0	0	W	No	No
20:45	0	0	W	No	No

War 1C-Combination of Warrants

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 360	Min 72
17:00	1,531	216	EB	Yes	Yes
07:00	1,382	232	EB	Yes	Yes
16:00	1,198	170	EB	Yes	Yes
15:00	1,185	206	EB	Yes	Yes
14:00	1,020	161	EB	Yes	Yes
12:00	975	137	EB	Yes	Yes
08:00	932	225	EB	Yes	Yes
13:00	917	162	EB	Yes	Yes
11:00	840	130	EB	Yes	Yes
09:00	759	173	EB	Yes	Yes
10:00	644	118	EB	Yes	Yes
06:00	473	83	EB	Yes	Yes
05:45	290	49	EB	No	No
05:30	156	28	EB	No	No
05:15	65	7	EB	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No
21:00	0	0	W	No	No
20:45	0	0	W	No	No

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary

Major Street Approaches

Northbound: **MONTGOMERY ST**
Number of Lanes: **2**
85% Speed > 40 MPH.
Total Approach Volume: **6,813**

Southbound: **MONTGOMERY ST**
Number of Lanes: **2**
85% Speed > 40 MPH.
Total Approach Volume: **4,246**

Minor Street Approaches

Eastbound: **LOCKSLEY WAY**
Number of Lanes: **1**
Total Approach Volume: **298**

Westbound: **LOCKSLEY WAY**
Number of Lanes: **1**
Total Approach Volume: **4,004**

Warrant Summary **(Rural values apply.)**

Warrant 1 - Eight Hour Vehicular Volumes ..... **Satisfied**

Warrant 1A - Minimum Vehicular Volume ..... **Satisfied**
Required volumes reached for 12 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic ..... **Satisfied**
Required volumes reached for 12 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants ..... **Satisfied**
Required volumes reached for 12 hours, 8 are needed

Warrant 2 - Four Hour Volumes ..... **Satisfied**
Number of hours (12) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour ..... **Satisfied**

Warrant 3A - Peak Hour Delay ..... **Satisfied**
Number of hours (45) volumes exceed minimum >= required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes ..... **Satisfied**
Volumes exceed minimums for at least one hour.

Warrant 4 - Pedestrian Volumes ..... **Not Evaluated**

Warrant 5 - School Crossing ..... **Not Evaluated**

Warrant 6 - Coordinated Signal System ..... **Not Evaluated**

Warrant 7 - Crash Experience ..... **Not Evaluated**

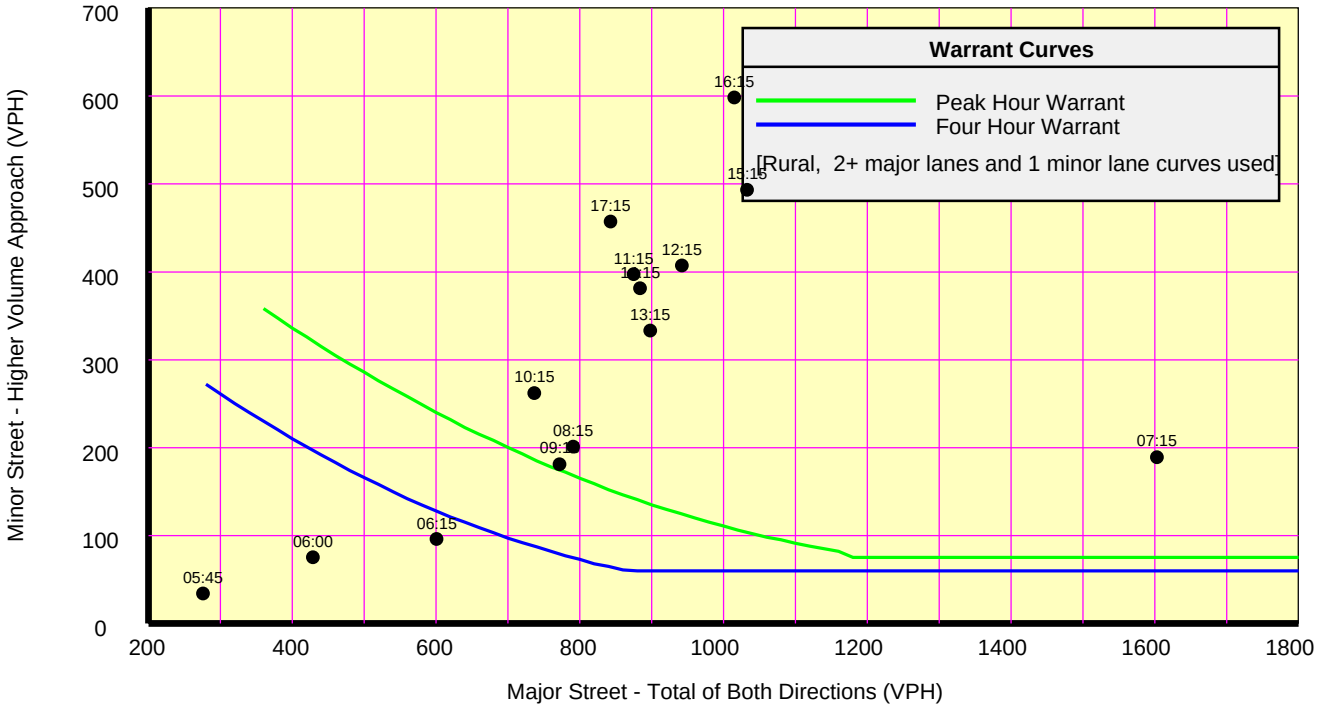
Warrant 8 - Roadway Network ..... **Not Evaluated**

Warrant 9 - Intersection Near a Grade Crossing ..... **Not Evaluated**

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

War 1A-Minimum Volume

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 360	Min 90
07:15	1,603	189	W	Yes	Yes
15:15	1,033	493	W	Yes	Yes
16:15	1,015	598	W	Yes	Yes
12:15	942	407	W	Yes	Yes
13:15	898	333	W	Yes	Yes
14:15	884	381	W	Yes	Yes
11:15	875	397	W	Yes	Yes
17:15	843	457	W	Yes	Yes
08:15	791	201	W	Yes	Yes
09:15	772	181	W	Yes	Yes
10:15	737	262	W	Yes	Yes
06:15	601	96	W	Yes	Yes
06:00	429	75	W	Yes	No
05:45	276	34	W	No	No
05:30	175	21	W	No	No
05:15	65	9	W	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No
21:00	0	0	W	No	No

War 1B-Interruption of Traffic

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 540	Min 45
07:15	1,603	189	W	Yes	Yes
15:15	1,033	493	W	Yes	Yes
16:15	1,015	598	W	Yes	Yes
12:15	942	407	W	Yes	Yes
13:15	898	333	W	Yes	Yes
14:15	884	381	W	Yes	Yes
11:15	875	397	W	Yes	Yes
17:15	843	457	W	Yes	Yes
08:15	791	201	W	Yes	Yes
09:15	772	181	W	Yes	Yes
10:15	737	262	W	Yes	Yes
06:15	601	96	W	Yes	Yes
06:00	429	75	W	No	Yes
05:45	276	34	W	No	No
05:30	175	21	W	No	No
05:15	65	9	W	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No
21:00	0	0	W	No	No

War 1C-Combination of Warrants

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 432	Min 72
07:15	1,603	189	W	Yes	Yes
15:15	1,033	493	W	Yes	Yes
16:15	1,015	598	W	Yes	Yes
12:15	942	407	W	Yes	Yes
13:15	898	333	W	Yes	Yes
14:15	884	381	W	Yes	Yes
11:15	875	397	W	Yes	Yes
17:15	843	457	W	Yes	Yes
08:15	791	201	W	Yes	Yes
09:15	772	181	W	Yes	Yes
10:15	737	262	W	Yes	Yes
06:15	601	96	W	Yes	Yes
06:00	429	75	W	No	Yes
05:45	276	34	W	No	No
05:30	175	21	W	No	No
05:15	65	9	W	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No
21:00	0	0	W	No	No

Neel-Schaffer, Inc.
Jackson, MS
(601) 948-3071

Signal Warrants - Summary

Major Street Approaches

Eastbound: **LOCKSLEY WAY**
Number of Lanes: **1**
Approach Speed: **40**
Total Approach Volume: **3,503**

Westbound: **LOCKSLEY WAY**
Number of Lanes: **1**
Approach Speed: **40**
Total Approach Volume: **2,214**

Minor Street Approaches

Northbound: **LINCOLN GREEN**
Number of Lanes: **1**

Total Approach Volume: **232**

Southbound: **LINCOLN GREEN**
Number of Lanes: **1**

Total Approach Volume: **652**

Warrant Summary **(Rural values apply.)**

Warrant 1 - Eight Hour Vehicular Volumes ..... **Not Satisfied**

Warrant 1A - Minimum Vehicular Volume ..... **Not Satisfied**
Required volumes reached for 1 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic ..... **Not Satisfied**
Required volumes reached for 5 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants ..... **Not Satisfied**
Required volumes reached for 4 hours, 8 are needed

Warrant 2 - Four Hour Volumes ..... **Not Satisfied**
Number of hours (0) volumes exceed minimum < minimum required (4).

Warrant 3 - Peak Hour ..... **Not Satisfied**

Warrant 3A - Peak Hour Delay ..... **Not Satisfied**
Approach volumes on minor street don't exceed minimums for any hour. Delay data not evaluated.

Warrant 3B - Peak Hour Volumes ..... **Not Satisfied**
Volumes do not exceed minimums for any hour.

Warrant 4 - Pedestrian Volumes ..... **Not Evaluated**

Warrant 5 - School Crossing ..... **Not Evaluated**

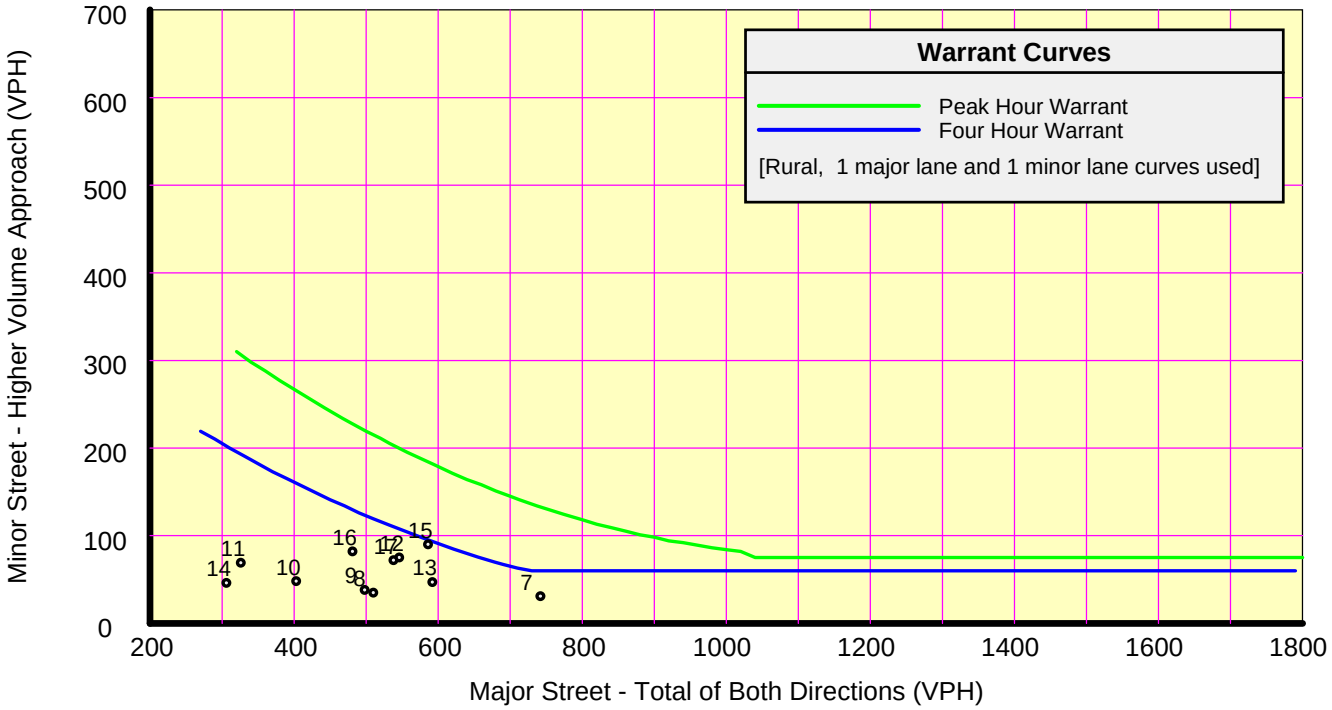
Warrant 6 - Coordinated Signal System ..... **Not Evaluated**

Warrant 7 - Crash Experience ..... **Not Evaluated**

Warrant 8 - Roadway Network ..... **Not Evaluated**

Neel-Schaffer, Inc.
Jackson, MS
(601) 948-3071

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

Hour	Major	Higher Minor		War-1A			War-1B			War-1A&B		
Begin	Total	Vol	Dir	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?	Major Crit	Minor Crit	Meets?
00:00	0	0	NB	300-No	90-No	---	450-No	45-No	---	360-No	72-No	---
01:00	0	0	NB	300-No	90-No	---	450-No	45-No	---	360-No	72-No	---
02:00	0	0	NB	300-No	90-No	---	450-No	45-No	---	360-No	72-No	---
03:00	0	0	NB	300-No	90-No	---	450-No	45-No	---	360-No	72-No	---
04:00	0	0	NB	300-No	90-No	---	450-No	45-No	---	360-No	72-No	---
05:00	0	0	NB	300-No	90-No	---	450-No	45-No	---	360-No	72-No	---
06:00	182	14	SB	300-No	90-No	---	450-No	45-No	---	360-No	72-No	---
07:00	742	31	SB	300-Yes	90-No	Major	450-Yes	45-No	Major	360-Yes	72-No	Major
08:00	510	35	SB	300-Yes	90-No	Major	450-Yes	45-No	Major	360-Yes	72-No	Major
09:00	498	38	SB	300-Yes	90-No	Major	450-Yes	45-No	Major	360-Yes	72-No	Major
10:00	403	48	SB	300-Yes	90-No	Major	450-No	45-Yes	Minor	360-Yes	72-No	Major
11:00	326	69	SB	300-Yes	90-No	Major	450-No	45-Yes	Minor	360-No	72-No	---
12:00	546	75	SB	300-Yes	90-No	Major	450-Yes	45-Yes	Both	360-Yes	72-Yes	Both
13:00	592	47	SB	300-Yes	90-No	Major	450-Yes	45-Yes	Both	360-Yes	72-No	Major
14:00	306	46	SB	300-Yes	90-No	Major	450-No	45-Yes	Minor	360-No	72-No	---
15:00	586	90	SB	300-Yes	90-Yes	Both	450-Yes	45-Yes	Both	360-Yes	72-Yes	Both
16:00	481	82	SB	300-Yes	90-No	Major	450-Yes	45-Yes	Both	360-Yes	72-Yes	Both
17:00	538	72	SB	300-Yes	90-No	Major	450-Yes	45-Yes	Both	360-Yes	72-Yes	Both
18:00	7	5	SB	300-No	90-No	---	450-No	45-No	---	360-No	72-No	---
19:00	0	0	NB	300-No	90-No	---	450-No	45-No	---	360-No	72-No	---
20:00	0	0	NB	300-No	90-No	---	450-No	45-No	---	360-No	72-No	---
21:00	0	0	NB	300-No	90-No	---	450-No	45-No	---	360-No	72-No	---
22:00	0	0	NB	300-No	90-No	---	450-No	45-No	---	360-No	72-No	---
23:00	0	0	NB	300-No	90-No	---	450-No	45-No	---	360-No	72-No	---

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary

Major Street Approaches

Northbound: **BLACKJACK RD**
Number of Lanes: **1**
85% Speed > 40 MPH.
Total Approach Volume: **7,770**

Southbound: **BLACKJACK RD**
Number of Lanes: **1**
85% Speed > 40 MPH.
Total Approach Volume: **4,857**

Minor Street Approaches

Eastbound: **LOCKSLEY WAY**
Number of Lanes: **1**

Total Approach Volume: **3,067**

Warrant Summary **(Rural values apply.)**

Warrant 1 - Eight Hour Vehicular Volumes ..... **Satisfied**

Warrant 1A - Minimum Vehicular Volume ..... **Satisfied**
Required volumes reached for 12 hours, 8 are needed

Warrant 1B - Interruption of Continuous Traffic ..... **Satisfied**
Required volumes reached for 12 hours, 8 are needed

Warrant 1 A&B - Combination of Warrants ..... **Satisfied**
Required volumes reached for 12 hours, 8 are needed

Warrant 2 - Four Hour Volumes ..... **Satisfied**
Number of hours (12) volumes exceed minimum >= minimum required (4).

Warrant 3 - Peak Hour ..... **Satisfied**

Warrant 3A - Peak Hour Delay ..... **Satisfied**
Number of hours (45) volumes exceed minimum >= required (1). Delay data not evaluated.

Warrant 3B - Peak Hour Volumes ..... **Satisfied**
Volumes exceed minimums for at least one hour.

Warrant 4 - Pedestrian Volumes ..... **Not Evaluated**

Warrant 5 - School Crossing ..... **Not Evaluated**

Warrant 6 - Coordinated Signal System ..... **Not Evaluated**

Warrant 7 - Crash Experience ..... **Not Evaluated**

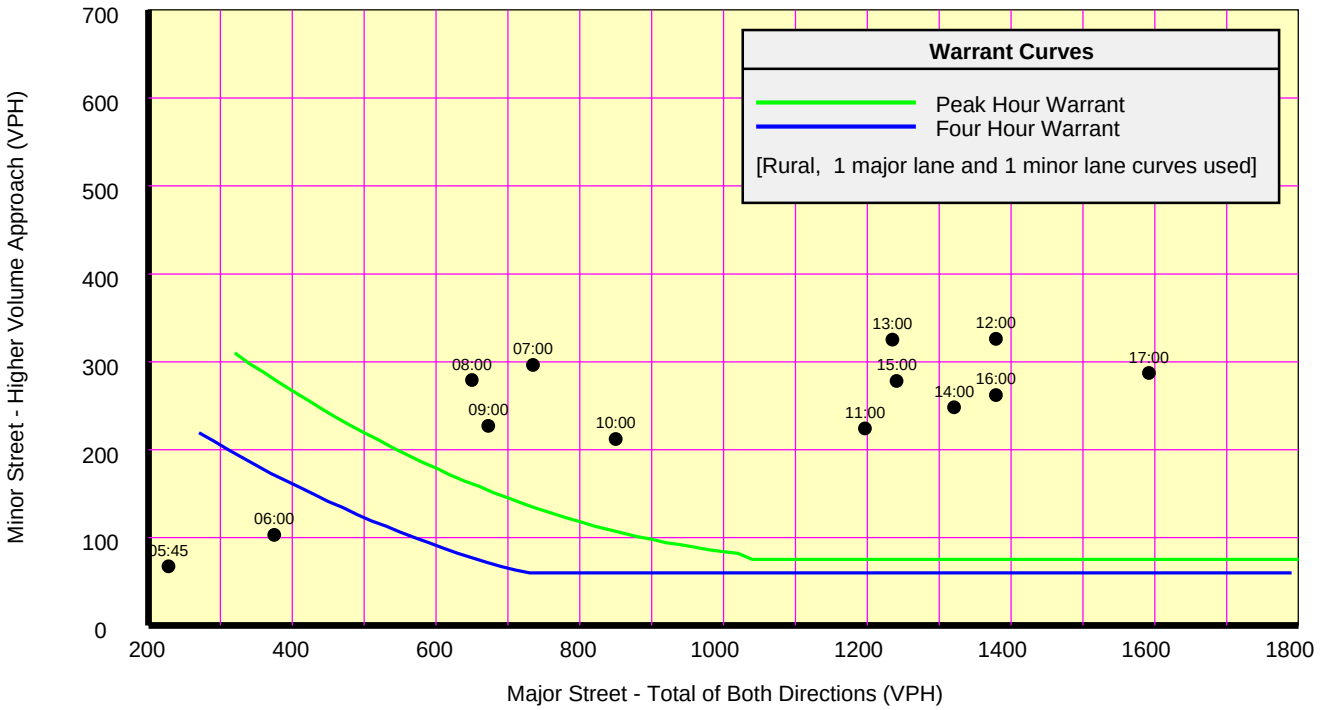
Warrant 8 - Roadway Network ..... **Not Evaluated**

Warrant 9 - Intersection Near a Grade Crossing ..... **Not Evaluated**

Neel-Schaffer, Inc.

Jackson, MS

Signal Warrants - Summary



Analysis of 8-Hour Volume Warrants:

War 1A-Minimum Volume

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 300	Min 90
17:00	1,592	287	EB	Yes	Yes
16:00	1,379	262	EB	Yes	Yes
12:00	1,379	326	EB	Yes	Yes
14:00	1,321	248	EB	Yes	Yes
15:00	1,241	278	EB	Yes	Yes
13:00	1,235	325	EB	Yes	Yes
11:00	1,197	224	EB	Yes	Yes
10:00	850	212	EB	Yes	Yes
07:00	735	296	EB	Yes	Yes
09:00	673	227	EB	Yes	Yes
08:00	650	279	EB	Yes	Yes
06:00	375	103	EB	Yes	Yes
05:45	228	67	EB	No	No
05:30	141	43	EB	No	No
05:15	51	13	EB	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No
21:00	0	0	W	No	No
20:45	0	0	W	No	No

War 1B-Interruption of Traffic

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 450	Min 45
16:15	1,488	263	EB	Yes	Yes
12:15	1,357	326	EB	Yes	Yes
14:15	1,342	256	EB	Yes	Yes
11:15	1,307	243	EB	Yes	Yes
15:15	1,256	280	EB	Yes	Yes
13:15	1,210	315	EB	Yes	Yes
17:15	1,129	215	EB	Yes	Yes
10:15	896	213	EB	Yes	Yes
07:15	765	335	EB	Yes	Yes
09:15	717	223	EB	Yes	Yes
08:15	645	249	EB	Yes	Yes
06:15	464	136	EB	Yes	Yes
06:00	375	103	EB	No	Yes
05:45	228	67	EB	No	Yes
05:30	141	43	EB	No	No
05:15	51	13	EB	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No
21:00	0	0	W	No	No

War 1C-Combination of Warrants

Hour Begin	Major Total	Minor Vol	Minor Dir	Maj 360	Min 72
17:00	1,592	287	EB	Yes	Yes
16:00	1,379	262	EB	Yes	Yes
12:00	1,379	326	EB	Yes	Yes
14:00	1,321	248	EB	Yes	Yes
15:00	1,241	278	EB	Yes	Yes
13:00	1,235	325	EB	Yes	Yes
11:00	1,197	224	EB	Yes	Yes
10:00	850	212	EB	Yes	Yes
07:00	735	296	EB	Yes	Yes
09:00	673	227	EB	Yes	Yes
08:00	650	279	EB	Yes	Yes
06:00	375	103	EB	Yes	Yes
05:45	228	67	EB	No	No
05:30	141	43	EB	No	No
05:15	51	13	EB	No	No
22:45	0	0	W	No	No
22:30	0	0	W	No	No
22:15	0	0	W	No	No
22:00	0	0	W	No	No
21:45	0	0	W	No	No
21:30	0	0	W	No	No
21:15	0	0	W	No	No
21:00	0	0	W	No	No
20:45	0	0	W	No	No

City of Starkville

Intersection: Louisville St. / Yellowjacket Dr.
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Louisville St - Yellowjacket Dr
Site Code : 00000000
Start Date : 4/29/2015
Page No : 1

Groups Printed- Unshifted

	LOUISVILLE Northbound					LOUISVILLE Southbound					YELLOWJACKET DR Eastbound					YELLOWJACKET DR Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:00 AM	0	29	2	0	31	2	8	0	0	10	0	0	1	0	1	3	1	1	0	5	47
06:15 AM	0	35	8	0	43	3	17	0	0	20	0	0	0	0	0	2	0	2	0	4	67
06:30 AM	0	37	3	0	40	4	18	0	0	22	0	0	0	0	0	4	0	1	0	5	67
06:45 AM	0	68	9	0	77	7	25	2	0	34	0	0	0	0	0	8	0	9	0	17	128
Total	0	169	22	0	191	16	68	2	0	86	0	0	1	0	1	17	1	13	0	31	309
07:00 AM	0	78	10	0	88	10	38	1	0	49	1	0	0	0	1	3	0	11	0	14	152
07:15 AM	1	70	17	0	88	30	58	2	0	90	0	1	2	0	3	11	0	14	0	25	206
07:30 AM	4	118	21	0	143	61	75	6	0	142	1	3	0	0	4	14	0	26	0	40	329
07:45 AM	1	128	26	0	155	72	68	12	0	152	1	1	2	0	4	17	4	31	0	52	363
Total	6	394	74	0	474	173	239	21	0	433	3	5	4	0	12	45	4	82	0	131	1050
08:00 AM	3	88	28	0	119	49	78	9	0	136	1	3	2	0	6	13	3	35	0	51	312
08:15 AM	0	66	5	0	71	9	49	0	0	58	1	0	1	0	2	11	2	16	0	29	160
08:30 AM	1	83	6	0	90	15	43	3	0	61	1	0	1	0	2	16	4	9	0	29	182
08:45 AM	3	57	9	0	69	9	50	11	0	70	1	1	1	0	3	15	4	7	0	26	168
Total	7	294	48	0	349	82	220	23	0	325	4	4	5	0	13	55	13	67	0	135	822
09:00 AM	4	56	6	0	66	3	41	4	0	48	2	0	4	0	6	11	5	10	0	26	146
09:15 AM	2	52	8	0	62	4	36	5	0	45	0	2	2	0	4	10	4	4	0	18	129
09:30 AM	5	60	5	0	70	10	60	5	0	75	9	3	0	0	12	10	0	9	0	19	176
09:45 AM	6	67	7	0	80	6	39	11	0	56	7	1	4	1	13	11	3	10	0	24	173
Total	17	235	26	0	278	23	176	25	0	224	18	6	10	1	35	42	12	33	0	87	624
10:00 AM	5	63	6	0	74	3	39	4	0	46	11	1	3	0	15	10	1	7	0	18	153
10:15 AM	2	60	2	0	64	0	61	6	0	67	8	0	1	0	9	13	1	6	0	20	160
10:30 AM	4	64	6	0	74	2	44	9	0	55	4	3	2	0	9	9	7	10	0	26	164
10:45 AM	9	57	4	0	70	9	64	13	0	86	13	1	1	0	15	14	0	7	0	21	192
Total	20	244	18	0	282	14	208	32	0	254	36	5	7	0	48	46	9	30	0	85	669
11:00 AM	4	68	11	0	83	8	63	12	0	83	15	2	2	0	19	11	3	10	0	24	209
11:15 AM	2	76	14	0	92	6	57	11	0	74	11	3	6	0	20	19	1	11	0	31	217
11:30 AM	5	103	8	0	116	11	72	9	0	92	7	6	4	0	17	21	5	22	0	48	273
11:45 AM	2	80	8	0	90	18	97	19	0	134	21	7	4	0	32	27	6	18	0	51	307
Total	13	327	41	0	381	43	289	51	0	383	54	18	16	0	88	78	15	61	0	154	1006
12:00 PM	6	77	15	0	98	19	77	13	0	109	16	4	6	0	26	17	4	23	2	46	279
12:15 PM	2	92	11	0	105	12	78	10	0	100	15	2	7	0	24	19	1	23	0	43	272
12:30 PM	2	74	9	0	85	10	58	8	0	76	13	6	5	0	24	21	2	14	0	37	222
12:45 PM	3	81	10	0	94	9	83	14	0	106	9	1	1	0	11	14	2	17	0	33	244
Total	13	324	45	0	382	50	296	45	0	391	53	13	19	0	85	71	9	77	2	159	1017
01:00 PM	3	71	12	0	86	12	75	10	0	97	13	2	0	0	15	21	0	10	0	31	229
01:15 PM	3	78	8	0	89	11	70	12	0	93	13	3	2	0	18	25	8	18	0	51	251
01:30 PM	3	85	11	0	99	10	69	10	0	89	8	1	5	0	14	22	4	12	0	38	240
01:45 PM	8	89	12	0	109	18	69	9	0	96	11	7	2	0	20	17	5	31	0	53	278
Total	17	323	43	0	383	51	283	41	0	375	45	13	9	0	67	85	17	71	0	173	998
02:00 PM	4	77	11	0	92	8	84	9	0	101	12	2	5	0	19	16	2	15	0	33	245
02:15 PM	1	65	17	0	83	4	82	14	0	100	10	0	3	0	13	18	2	19	0	39	235
02:30 PM	7	96	7	0	110	9	78	9	0	96	12	1	3	0	16	16	1	15	0	32	254
02:45 PM	4	86	12	0	102	11	81	8	0	100	6	1	6	0	13	16	6	12	0	34	249
Total	16	324	47	0	387	32	325	40	0	397	40	4	17	0	61	66	11	61	0	138	983
03:00 PM	2	84	14	0	100	6	120	20	0	146	11	4	3	0	18	17	0	18	0	35	299
03:15 PM	3	95	11	0	109	25	87	17	0	129	9	2	1	0	12	18	3	17	0	38	288
03:30 PM	6	118	13	0	137	40	110	15	0	165	25	8	16	0	49	11	5	52	0	68	419
03:45 PM	5	98	18	0	121	20	101	8	0	129	18	4	5	0	27	32	5	38	0	75	352
Total	16	395	56	0	467	91	418	60	0	569	63	18	25	0	106	78	13	125	0	216	1358
04:00 PM	9	100	16	0	125	27	82	12	0	121	14	1	1	0	16	26	0	27	0	53	315
04:15 PM	6	91	8	0	105	17	92	10	0	119	13	4	6	0	23	24	4	29	0	57	304

City of Starkville

Intersection: Louisville St. / Yellowjacket Dr.
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City / County: Starkville / Oktibbeha

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Site Code : 00000000
Start Date : 4/29/2015
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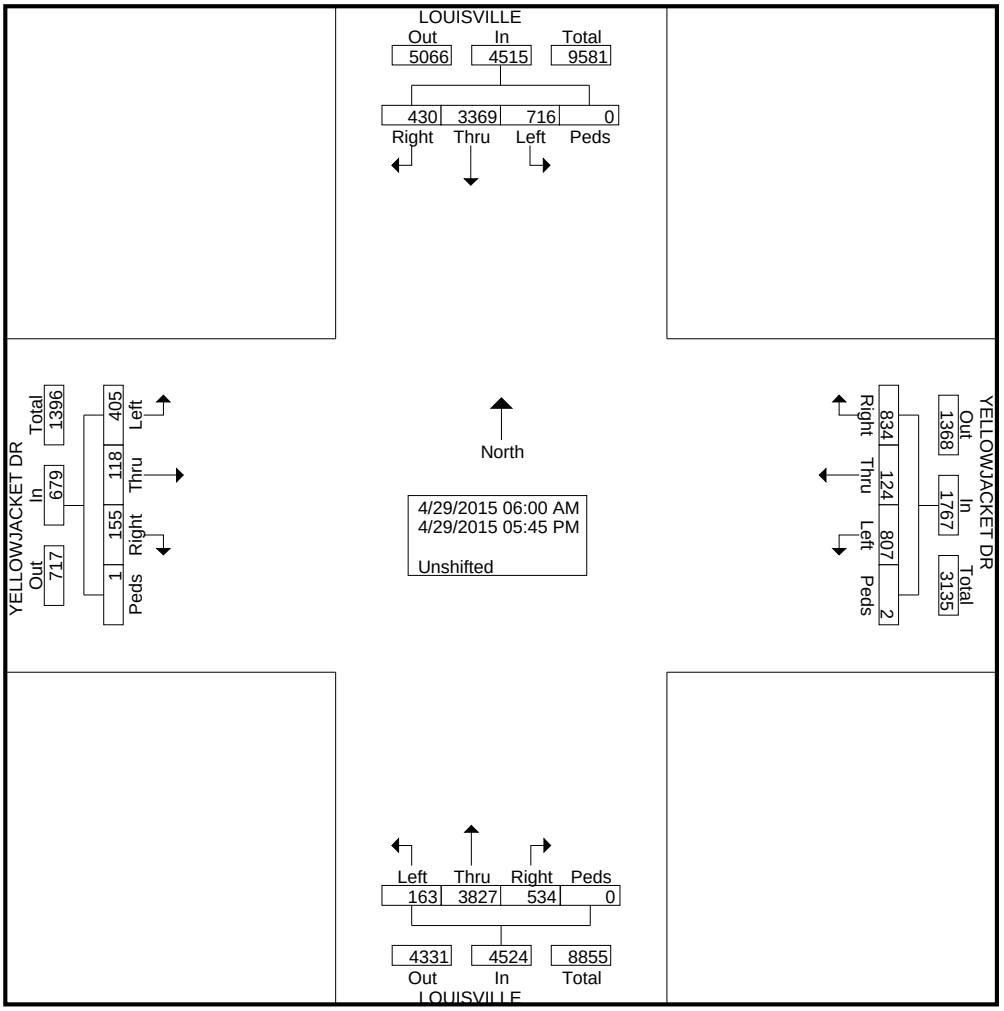
Groups Printed- Unshifted

	LOUISVILLE Northbound					LOUISVILLE Southbound					YELLOWJACKET DR Eastbound					YELLOWJACKET DR Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:30 PM	5	93	13	0	111	14	110	15	0	139	8	5	6	0	19	19	2	19	0	40	309
04:45 PM	1	109	21	0	131	20	96	14	0	130	12	3	7	0	22	27	4	33	0	64	347
Total	21	393	58	0	472	78	380	51	0	509	47	13	20	0	80	96	10	108	0	214	1275
05:00 PM	7	112	17	0	136	19	121	14	0	154	10	6	6	0	22	40	2	17	0	59	371
05:15 PM	2	97	15	0	114	14	137	12	0	163	10	2	6	0	18	44	6	36	0	86	381
05:30 PM	5	110	17	0	132	17	96	7	0	120	12	8	5	0	25	29	2	27	0	58	335
05:45 PM	3	86	7	0	96	13	113	6	0	132	10	3	5	0	18	15	0	26	0	41	287
Total	17	405	56	0	478	63	467	39	0	569	42	19	22	0	83	128	10	106	0	244	1374
Grand Total	163	3827	534	0	4524	716	3369	430	0	4515	405	118	155	1	679	807	124	834	2	1767	11485
Apprch %	3.6	84.6	11.8	0		15.9	74.6	9.5	0		59.6	17.4	22.8	0.1		45.7	7	47.2	0.1		
Total %	1.4	33.3	4.6	0	39.4	6.2	29.3	3.7	0	39.3	3.5	1	1.3	0	5.9	7	1.1	7.3	0	15.4	



City of Starkville

Intersection: Louisville St. / Yellowjacket Dr.
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Site Code : 00000000
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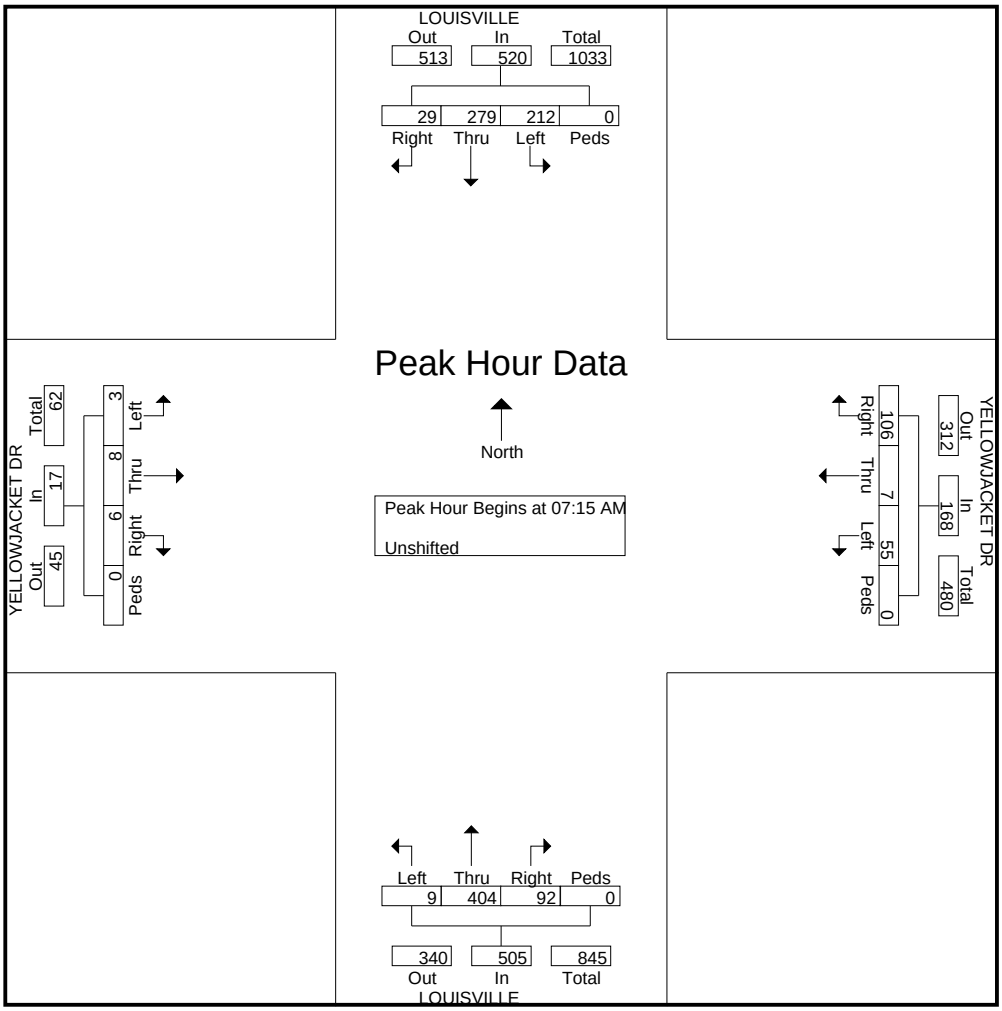
	LOUISVILLE Northbound					LOUISVILLE Southbound					YELLOWJACKET DR Eastbound					YELLOWJACKET DR Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	1	70	17	0	88	30	58	2	0	90	0	1	**2**	0	3	11	0	14	0	25	206
07:30 AM	**4**	118	21	0	143	61	75	6	0	142	**1**	**3**	0	0	4	14	0	26	0	40	329
07:45 AM	1	**128**	26	0	**155**	**72**	68	**12**	0	**152**	1	1	2	0	4	**17**	**4**	31	0	**52**	**363**
08:00 AM	3	88	**28**	0	119	49	**78**	9	0	136	1	3	2	0	**6**	13	3	**35**	0	51	312
Total Volume	9	404	92	0	505	212	279	29	0	520	3	8	6	0	17	55	7	106	0	168	1210
% App. Total	1.8	80	18.2	0		40.8	53.7	5.6	0		17.6	47.1	35.3	0		32.7	4.2	63.1	0		
PHF	.563	.789	.821	.000	.815	.736	.894	.604	.000	.855	.750	.667	.750	.000	.708	.809	.438	.757	.000	.808	.833

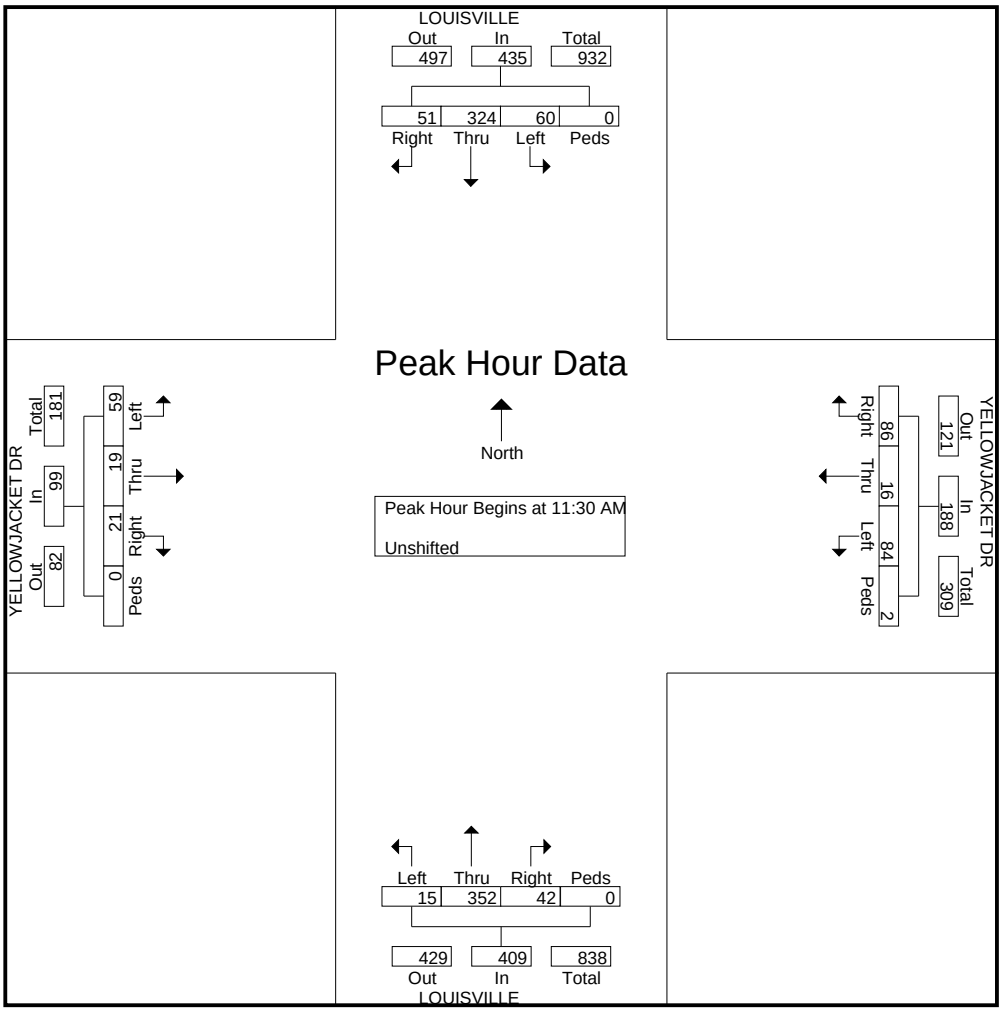


City of Starkville

Intersection: Louisville St. / Yellowjacket Dr.
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Louisville St - Yellowjacket Dr
Site Code : 00000000
Start Date : 4/29/2015
Page No : 4

	LOUISVILLE Northbound					LOUISVILLE Southbound					YELLOWJACKET DR Eastbound					YELLOWJACKET DR Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:30 AM																					
11:30 AM	5	**103**	8	0	**116**	11	72	9	0	92	7	6	4	0	17	21	5	22	0	48	273
11:45 AM	2	80	8	0	90	18	**97**	**19**	0	**134**	**21**	**7**	4	0	**32**	**27**	**6**	18	0	**51**	**307**
12:00 PM	**6**	77	**15**	0	98	**19**	77	13	0	109	16	4	6	0	26	17	4	**23**	**2**	46	279
12:15 PM	2	92	11	0	105	12	78	10	0	100	15	2	**7**	0	24	19	1	23	0	43	272
Total Volume	15	352	42	0	409	60	324	51	0	435	59	19	21	0	99	84	16	86	2	188	1131
% App. Total	3.7	86.1	10.3	0		13.8	74.5	11.7	0		59.6	19.2	21.2	0		44.7	8.5	45.7	1.1		
PHF	.625	.854	.700	.000	.881	.789	.835	.671	.000	.812	.702	.679	.750	.000	.773	.778	.667	.935	.250	.922	.921

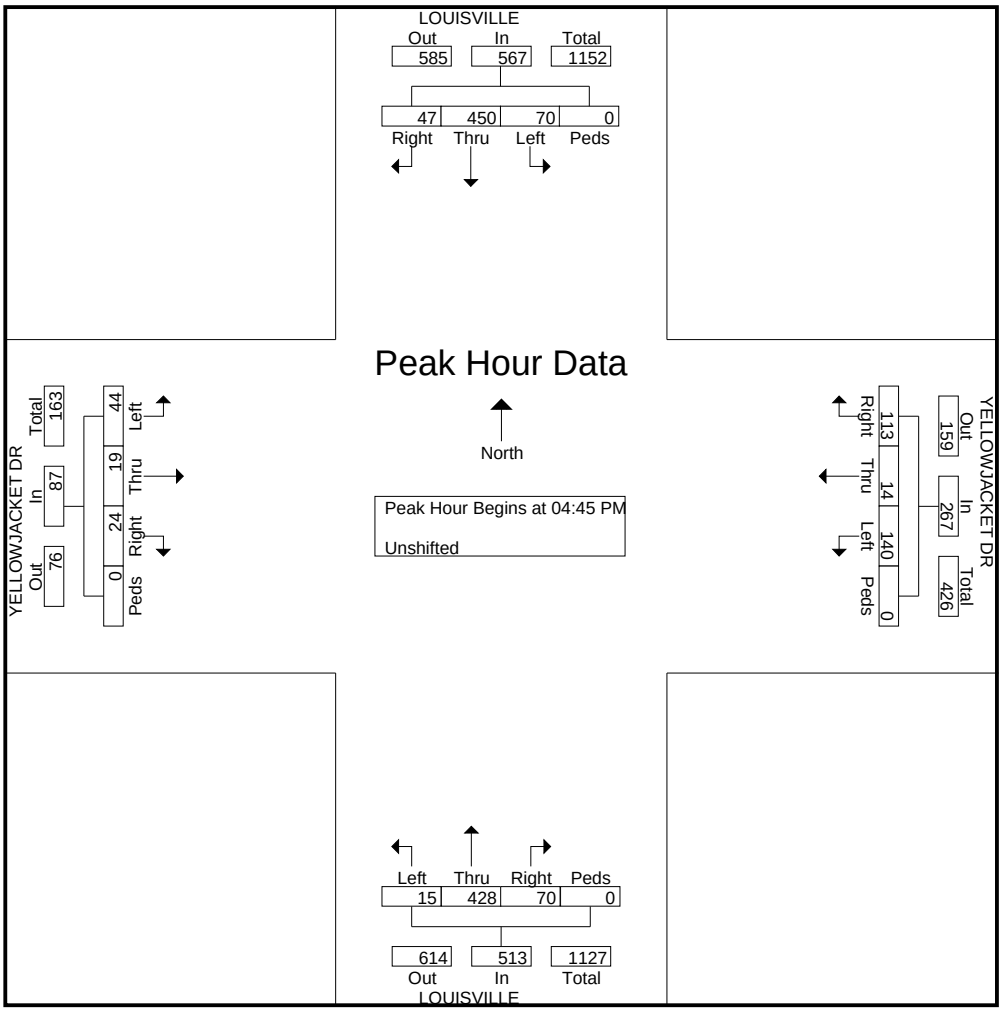


City of Starkville

Intersection: Louisville St. / Yellowjacket Dr.
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Louisville St - Yellowjacket Dr
Site Code : 00000000
Start Date : 4/29/2015
Page No : 5

	LOUISVILLE Northbound					LOUISVILLE Southbound					YELLOWJACKET DR Eastbound					YELLOWJACKET DR Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	1	109	**21**	0	131	**20**	96	**14**	0	130	**12**	3	**7**	0	22	27	4	33	0	64	347
05:00 PM	**7**	**112**	17	0	**136**	19	121	14	0	154	10	6	6	0	22	40	2	17	0	59	371
05:15 PM	2	97	15	0	114	14	**137**	12	0	**163**	10	2	6	0	18	**44**	**6**	**36**	0	**86**	**381**
05:30 PM	5	110	17	0	132	17	96	7	0	120	12	**8**	5	0	**25**	29	2	27	0	58	335
Total Volume	15	428	70	0	513	70	450	47	0	567	44	19	24	0	87	140	14	113	0	267	1434
% App. Total	2.9	83.4	13.6	0		12.3	79.4	8.3	0		50.6	21.8	27.6	0		52.4	5.2	42.3	0		
PHF	.536	.955	.833	.000	.943	.875	.821	.839	.000	.870	.917	.594	.857	.000	.870	.795	.583	.785	.000	.776	.941



City of Starkville

Intersection: Louisville St. / Millsaps Career & Tech Center
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Louisville St - Millsap
Site Code : 00000000
Start Date : 4/29/2015
Page No : 1

Groups Printed- Unshifted

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					MILLSAP Eastbound					MILLSAPS CAREER & TECH Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:15 AM	0	34	0	0	34	0	9	0	0	9	0	0	1	0	1	0	0	0	0	0	44
06:30 AM	1	46	1	0	48	0	25	0	0	25	0	0	2	0	2	1	0	0	0	1	76
06:45 AM	2	52	1	0	55	1	23	1	0	25	4	0	1	0	5	0	0	1	0	1	86
Total	3	132	2	0	137	1	57	1	0	59	4	0	4	0	8	1	0	1	0	2	206
07:00 AM	1	82	4	0	87	1	34	1	0	36	3	0	0	0	3	0	0	1	0	1	127
07:15 AM	4	69	5	0	78	2	49	0	0	51	3	0	2	0	5	0	0	2	0	2	136
07:30 AM	3	117	15	0	135	13	58	2	0	73	0	0	0	0	0	0	0	0	0	0	208
07:45 AM	0	124	8	0	132	17	79	0	0	96	0	0	0	0	0	4	0	15	0	19	247
Total	8	392	32	0	432	33	220	3	0	256	6	0	2	0	8	4	0	18	0	22	718
08:00 AM	2	110	6	0	118	20	71	5	0	96	0	1	3	0	4	2	0	9	0	11	229
08:15 AM	0	67	1	0	68	6	61	0	0	67	0	0	1	0	1	1	0	5	0	6	142
08:30 AM	0	68	1	0	69	1	51	0	0	52	1	0	1	0	2	0	0	2	0	2	125
08:45 AM	0	56	1	0	57	3	48	0	0	51	0	0	0	0	0	0	0	1	0	1	109
Total	2	301	9	0	312	30	231	5	0	266	1	1	5	0	7	3	0	17	0	20	605
09:00 AM	0	52	0	0	52	2	38	0	0	40	1	0	0	0	1	2	0	1	0	3	96
09:15 AM	0	52	0	0	52	1	45	0	0	46	0	0	0	0	0	0	0	2	0	2	100
09:30 AM	0	52	2	0	54	6	42	0	0	48	0	0	0	0	0	0	0	4	0	4	106
09:45 AM	0	67	7	0	74	14	53	5	0	72	0	0	0	0	0	0	0	0	0	0	146
Total	0	223	9	0	232	23	178	5	0	206	1	0	0	0	1	2	0	7	0	9	448
10:00 AM	2	65	0	0	67	4	50	0	0	54	4	1	2	0	7	1	0	4	0	5	133
10:15 AM	0	63	10	0	73	0	66	0	0	66	0	0	3	0	3	1	0	6	0	7	149
10:30 AM	4	62	1	0	67	6	68	0	0	74	0	0	1	0	1	1	0	0	0	1	143
10:45 AM	0	67	1	0	68	4	57	0	0	61	2	0	1	0	3	0	0	3	0	3	135
Total	6	257	12	0	275	14	241	0	0	255	6	1	7	0	14	3	0	13	0	16	560
11:00 AM	1	81	0	0	82	6	71	1	0	78	1	0	2	0	3	1	0	5	0	6	169
11:15 AM	5	71	6	0	82	6	74	0	0	80	0	0	1	0	1	1	0	2	0	3	166
11:30 AM	2	99	0	0	101	5	83	3	0	91	0	0	1	0	1	4	0	9	1	14	207
11:45 AM	1	94	1	0	96	5	115	1	0	121	1	0	6	0	7	1	0	13	0	14	238
Total	9	345	7	0	361	22	343	5	0	370	2	0	10	0	12	7	0	29	1	37	780
12:00 PM	3	82	1	0	86	2	114	0	0	116	1	0	3	0	4	1	0	3	0	4	210
12:15 PM	1	106	0	0	107	7	93	0	0	100	2	0	3	0	5	0	0	5	0	5	217
12:30 PM	2	83	1	0	86	3	81	6	0	90	4	0	5	0	9	1	1	0	0	2	187
12:45 PM	2	100	0	0	102	5	85	0	0	90	3	0	7	0	10	0	1	7	0	8	210
Total	8	371	2	0	381	17	373	6	0	396	10	0	18	0	28	2	2	15	0	19	824
01:00 PM	4	78	1	0	83	2	87	0	0	89	3	0	7	0	10	1	0	3	0	4	186
01:15 PM	7	82	0	0	89	10	96	0	0	106	3	0	3	0	6	1	0	2	0	3	204
01:30 PM	7	91	0	0	98	6	91	0	0	97	1	0	3	0	4	0	1	5	0	6	205
01:45 PM	2	104	5	0	111	2	88	3	0	93	1	0	3	0	4	3	0	5	0	8	216
Total	20	355	6	0	381	20	362	3	0	385	8	0	16	0	24	5	1	15	0	21	811
02:00 PM	1	85	1	0	87	3	95	3	0	101	1	0	2	0	3	3	0	12	0	15	206
02:15 PM	3	81	1	0	85	2	90	0	0	92	2	0	1	0	3	2	0	1	0	3	183
02:30 PM	3	87	7	0	97	0	93	0	0	93	3	0	3	0	6	3	0	1	0	4	200
02:45 PM	2	118	2	0	122	0	100	3	0	103	1	0	3	0	4	0	0	5	0	5	234
Total	9	371	11	0	391	5	378	6	0	389	7	0	9	0	16	8	0	19	0	27	823
03:00 PM	1	86	1	0	88	3	106	1	0	110	3	0	3	0	6	3	0	2	0	5	209
03:15 PM	3	93	2	0	98	0	113	2	0	115	2	0	5	0	7	1	0	3	0	4	224
03:30 PM	4	132	3	0	139	4	106	0	0	110	2	0	7	0	9	5	0	18	0	23	281
03:45 PM	1	94	3	0	98	5	147	3	0	155	1	0	1	0	2	15	0	18	0	33	288
Total	9	405	9	0	423	12	472	6	0	490	8	0	16	0	24	24	0	41	0	65	1002
04:00 PM	2	112	14	0	128	0	143	0	0	143	0	0	4	0	4	7	0	5	0	12	287
04:15 PM	6	107	1	0	114	4	111	2	0	117	3	0	3	0	6	3	0	9	0	12	249
04:30 PM	1	107	3	0	111	1	116	2	0	119	0	0	1	0	1	4	0	9	0	13	244

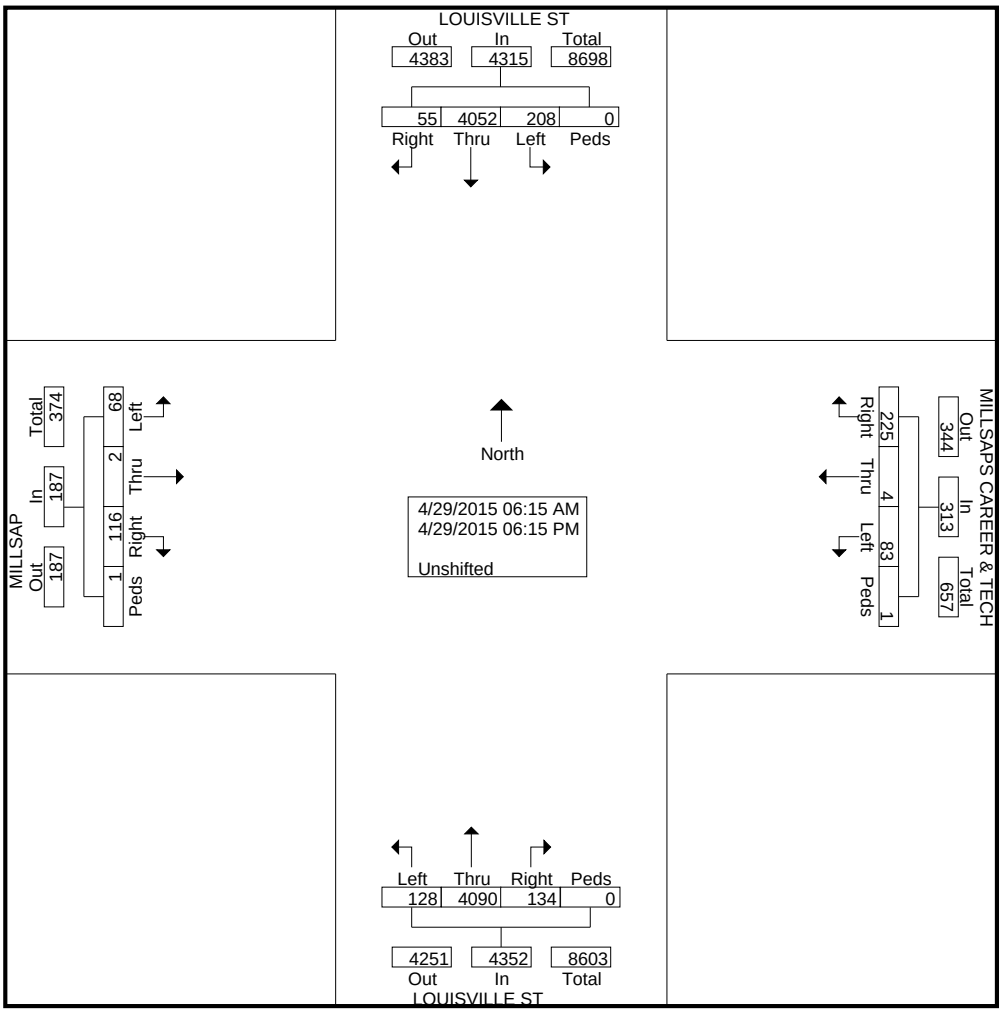
City of Starkville

Intersection: Louisville St. / Millsaps Career & Tech Center
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Louisville St - Millsap
Site Code : 00000000
Start Date : 4/29/2015
Page No : 2

Groups Printed- Unshifted

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					MILLSAP Eastbound					MILLSAPS CAREER & TECH Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:45 PM	2	96	0	0	98	2	128	0	0	130	1	0	1	0	2	3	1	6	0	10	240
Total	11	422	18	0	451	7	498	4	0	509	4	0	9	0	13	17	1	29	0	47	1020
05:00 PM	5	108	2	0	115	1	138	1	0	140	3	0	4	0	7	2	0	10	0	12	274
05:15 PM	4	105	2	0	111	3	165	0	0	168	2	0	2	1	5	1	0	7	0	8	292
05:30 PM	7	114	0	0	121	5	152	1	0	158	3	0	4	0	7	1	0	1	0	2	288
05:45 PM	7	103	7	0	117	2	127	6	0	135	2	0	3	0	5	2	0	1	0	3	260
Total	23	430	11	0	464	11	582	8	0	601	10	0	13	1	24	6	0	19	0	25	1114
06:00 PM	20	76	5	0	101	9	113	3	0	125	1	0	7	0	8	1	0	2	0	3	237
06:15 PM	0	10	1	0	11	4	4	0	0	8	0	0	0	0	0	0	0	0	0	0	19
Grand Total	128	4090	134	0	4352	208	4052	55	0	4315	68	2	116	1	187	83	4	225	1	313	9167
Apprch %	2.9	94	3.1	0		4.8	93.9	1.3	0		36.4	1.1	62	0.5		26.5	1.3	71.9	0.3		
Total %	1.4	44.6	1.5	0	47.5	2.3	44.2	0.6	0	47.1	0.7	0	1.3	0	2	0.9	0	2.5	0	3.4	

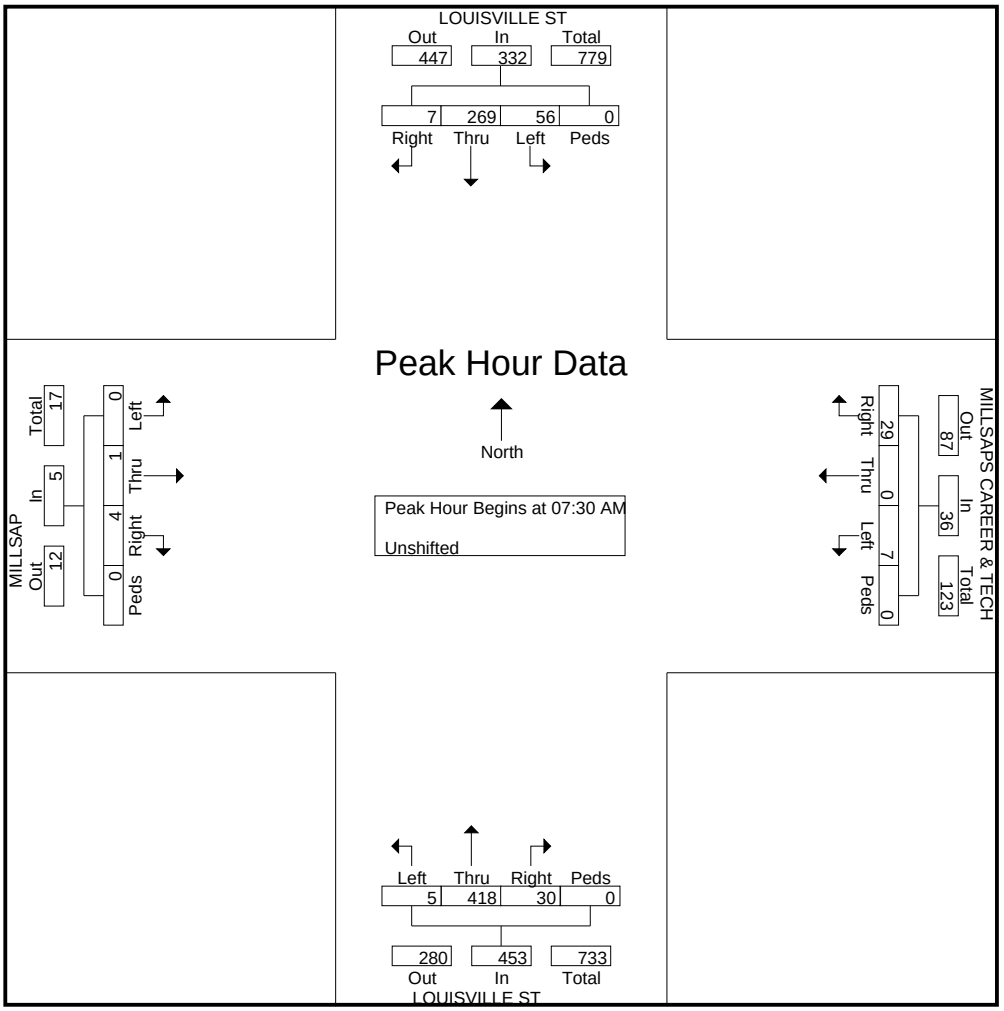


City of Starkville

Intersection: Louisville St. / Millsaps Career & Tech Center
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Louisville St - Millsap
Site Code : 00000000
Start Date : 4/29/2015
Page No : 3

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					MILLSAP Eastbound					MILLSAPS CAREER & TECH Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:15 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	**3**	117	**15**	0	**135**	13	58	2	0	73	0	0	0	0	0	0	0	0	0	0	208
07:45 AM	0	**124**	8	0	132	17	**79**	0	0	**96**	0	0	0	0	0	**4**	0	**15**	0	**19**	**247**
08:00 AM	2	110	6	0	118	**20**	71	**5**	0	96	0	**1**	**3**	0	**4**	2	0	9	0	11	229
08:15 AM	0	67	1	0	68	6	61	0	0	67	0	0	1	0	1	1	0	5	0	6	142
Total Volume	5	418	30	0	453	56	269	7	0	332	0	1	4	0	5	7	0	29	0	36	826
% App. Total	1.1	92.3	6.6	0		16.9	81	2.1	0		0	20	80	0		19.4	0	80.6	0		
PHF	.417	.843	.500	.000	.839	.700	.851	.350	.000	.865	.000	.250	.333	.000	.313	.438	.000	.483	.000	.474	.836

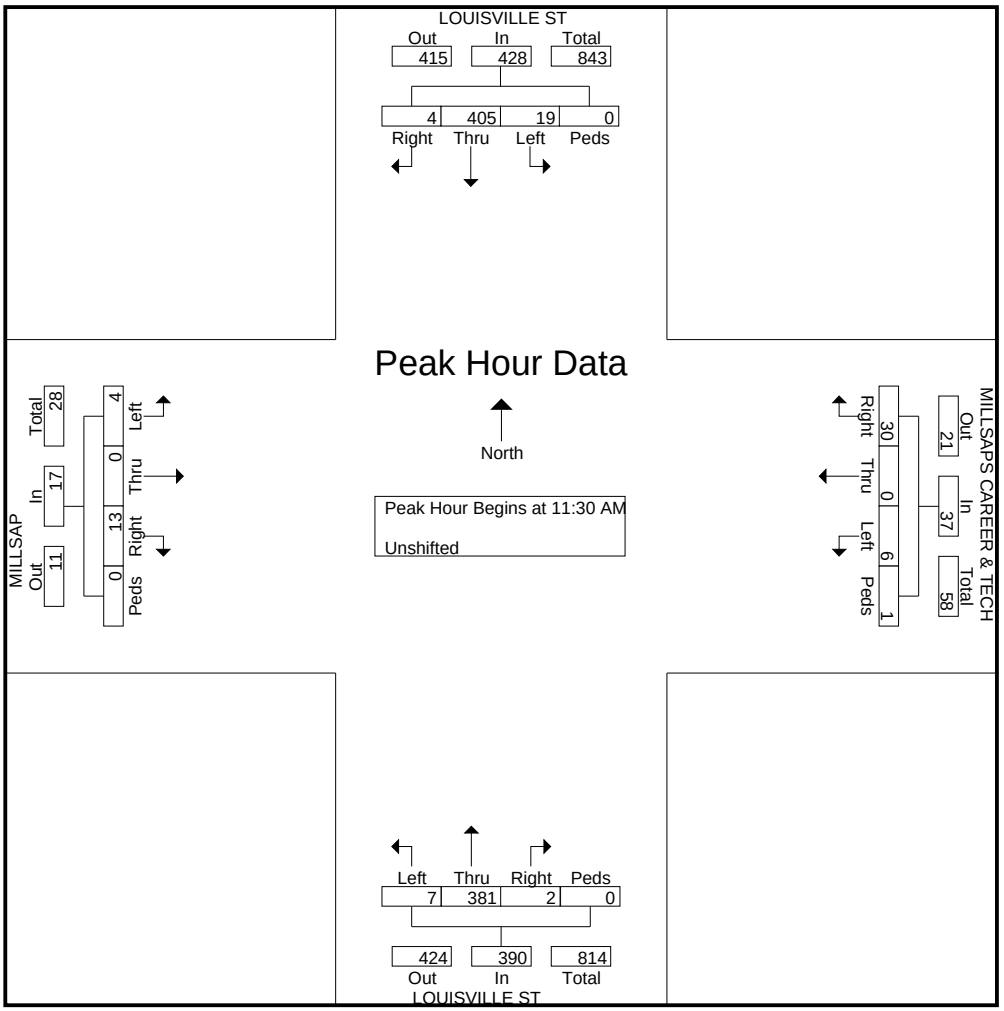


City of Starkville

Intersection: Louisville St. / Millsaps Career & Tech Center
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Louisville St - Millsap
Site Code : 00000000
Start Date : 4/29/2015
Page No : 4

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					MILLSAP Eastbound					MILLSAPS CAREER & TECH Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:30 AM																					
11:30 AM	2	99	0	0	101	5	83	**3**	0	91	0	0	1	0	1	**4**	0	9	**1**	**14**	207
11:45 AM	1	94	**1**	0	96	5	**115**	1	0	**121**	1	0	**6**	0	**7**	1	0	**13**	0	14	**238**
12:00 PM	**3**	82	1	0	86	2	114	0	0	116	1	0	3	0	4	1	0	3	0	4	210
12:15 PM	1	**106**	0	0	**107**	**7**	93	0	0	100	**2**	0	3	0	5	0	0	5	0	5	217
Total Volume	7	381	2	0	390	19	405	4	0	428	4	0	13	0	17	6	0	30	1	37	872
% App. Total	1.8	97.7	0.5	0		4.4	94.6	0.9	0		23.5	0	76.5	0		16.2	0	81.1	2.7		
PHF	.583	.899	.500	.000	.911	.679	.880	.333	.000	.884	.500	.000	.542	.000	.607	.375	.000	.577	.250	.661	.916

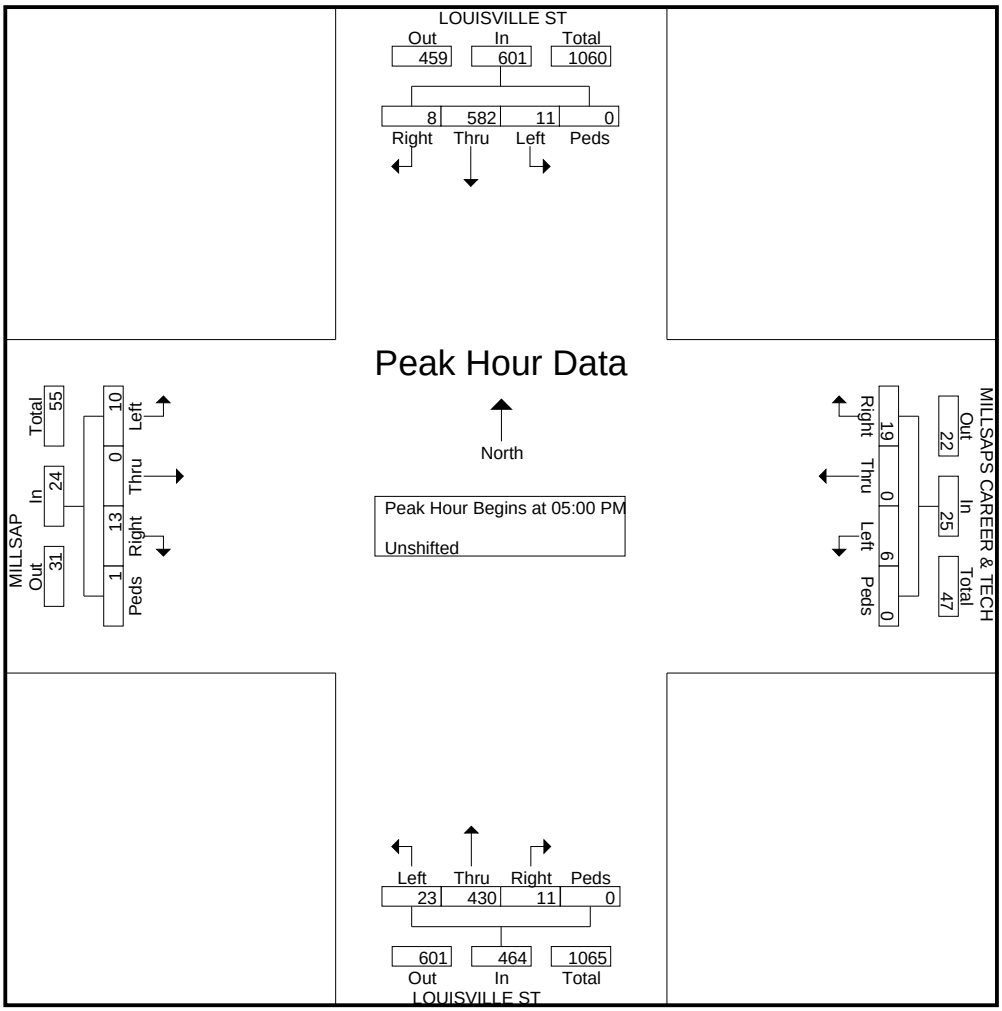


City of Starkville

Intersection: Louisville St. / Millsaps Career & Tech Center
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Louisville St - Millsap
Site Code : 00000000
Start Date : 4/29/2015
Page No : 5

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					MILLSAP Eastbound					MILLSAPS CAREER & TECH Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 06:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	5	108	2	0	115	1	138	1	0	140	**3**	0	**4**	0	**7**	**2**	0	**10**	0	**12**	274
05:15 PM	4	105	2	0	111	3	**165**	0	0	**168**	2	0	2	**1**	5	1	0	7	0	8	**292**
05:30 PM	**7**	**114**	0	0	**121**	**5**	152	1	0	158	3	0	4	0	7	1	0	1	0	2	288
05:45 PM	7	103	**7**	0	117	2	127	**6**	0	135	2	0	3	0	5	2	0	1	0	3	260
Total Volume	23	430	11	0	464	11	582	8	0	601	10	0	13	1	24	6	0	19	0	25	1114
% App. Total	5	92.7	2.4	0		1.8	96.8	1.3	0		41.7	0	54.2	4.2		24	0	76	0		
PHF	.821	.943	.393	.000	.959	.550	.882	.333	.000	.894	.833	.000	.813	.250	.857	.750	.000	.475	.000	.521	.954



City of Starkville

Intersection: Louisville St. / Lynn Lane
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Louisville St - Lynn Lane
Site Code : 00000000
Start Date : 4/21/2015
Page No : 1

Groups Printed- Unshifted

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					LYNN LANE Eastbound					LYNN LANE Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:00 AM	16	13	3	0	32	1	7	7	0	15	3	5	6	0	14	1	4	1	0	6	67
06:15 AM	11	17	4	0	32	4	9	4	0	17	12	15	7	0	34	0	4	1	0	5	88
06:30 AM	22	23	3	0	48	2	14	9	0	25	17	14	10	0	41	0	3	1	0	4	118
06:45 AM	17	38	4	0	59	4	21	12	0	37	23	19	15	0	57	2	11	1	0	14	167
Total	66	91	14	0	171	11	51	32	0	94	55	53	38	0	146	3	22	4	0	29	440
07:00 AM	19	54	8	0	81	7	22	7	0	36	32	27	15	0	74	3	12	3	0	18	209
07:15 AM	21	67	12	0	100	13	34	21	0	68	22	51	22	0	95	5	18	2	0	25	288
07:30 AM	26	82	25	0	133	22	32	24	0	78	48	90	25	0	163	5	15	1	0	21	395
07:45 AM	44	113	26	1	184	20	56	29	0	105	37	66	23	0	126	8	28	1	0	37	452
Total	110	316	71	1	498	62	144	81	0	287	139	234	85	0	458	21	73	7	0	101	1344
08:00 AM	18	58	8	0	84	7	53	24	1	85	32	36	25	0	93	4	18	4	0	26	288
08:15 AM	25	44	12	0	81	3	35	16	0	54	18	17	17	0	52	2	7	4	0	13	200
08:30 AM	25	47	4	0	76	3	34	11	0	48	22	30	16	0	68	1	14	4	0	19	211
08:45 AM	14	59	7	0	80	7	29	17	0	53	14	31	15	0	60	2	16	5	0	23	216
Total	82	208	31	0	321	20	151	68	1	240	86	114	73	0	273	9	55	17	0	81	915
09:00 AM	23	39	4	0	66	5	36	12	0	53	30	31	25	0	86	2	11	3	0	16	221
09:15 AM	17	45	4	0	66	1	43	12	0	56	12	21	23	0	56	1	11	6	0	18	196
09:30 AM	17	41	1	0	59	3	32	16	0	51	15	21	8	0	44	6	17	6	0	29	183
09:45 AM	11	35	4	0	50	1	24	13	0	38	11	10	11	0	32	5	16	1	0	22	142
Total	68	160	13	0	241	10	135	53	0	198	68	83	67	0	218	14	55	16	0	85	742
10:00 AM	15	52	7	0	74	5	37	20	0	62	14	19	22	0	55	3	14	4	0	21	212
10:15 AM	28	49	4	0	81	3	33	25	0	61	22	17	14	0	53	5	13	11	0	29	224
10:30 AM	23	49	3	0	75	8	41	13	0	62	12	24	23	0	59	5	14	4	0	23	219
10:45 AM	26	52	6	0	84	8	41	18	0	67	21	23	24	0	68	5	18	2	0	25	244
Total	92	202	20	0	314	24	152	76	0	252	69	83	83	0	235	18	59	21	0	98	899
11:00 AM	21	41	1	0	63	5	30	23	0	58	25	23	30	0	78	2	20	11	0	33	232
11:15 AM	20	42	4	0	66	4	44	22	0	70	20	19	26	0	65	4	19	4	0	27	228
11:30 AM	28	43	6	0	77	4	51	27	0	82	13	26	21	0	60	4	20	8	0	32	251
11:45 AM	23	48	6	0	77	3	53	21	0	77	25	13	27	0	65	4	21	8	0	33	252
Total	92	174	17	0	283	16	178	93	0	287	83	81	104	0	268	14	80	31	0	125	963
12:00 PM	36	45	3	0	84	6	47	26	0	79	17	26	25	0	68	9	25	7	0	41	272
12:15 PM	32	50	10	0	92	3	53	27	0	83	20	26	24	0	70	3	29	5	0	37	282
12:30 PM	23	65	5	0	93	4	65	24	0	93	17	17	29	0	63	4	32	6	0	42	291
12:45 PM	22	26	1	0	49	2	24	12	0	38	12	20	19	0	51	1	18	5	0	24	162
Total	113	186	19	0	318	15	189	89	0	293	66	89	97	0	252	17	104	23	0	144	1007
01:00 PM	27	49	8	0	84	4	57	24	0	85	24	25	28	0	77	3	37	7	0	47	293
01:15 PM	26	39	8	0	73	7	51	37	0	95	19	31	20	0	70	3	25	4	0	32	270
01:30 PM	29	60	8	0	97	6	60	22	0	88	19	35	31	0	85	5	21	12	0	38	308
01:45 PM	25	59	5	0	89	4	62	32	0	98	30	26	26	0	82	7	29	7	0	43	312
Total	107	207	29	0	343	21	230	115	0	366	92	117	105	0	314	18	112	30	0	160	1183
02:00 PM	30	52	10	0	92	4	63	27	0	94	23	24	26	0	73	2	51	5	0	58	317
02:15 PM	37	64	8	0	109	8	54	27	0	89	27	30	26	0	83	8	35	6	0	49	330
02:30 PM	29	46	11	0	86	5	68	21	0	94	31	27	23	0	81	5	28	7	0	40	301
02:45 PM	29	71	5	0	105	7	46	22	0	75	39	43	34	0	116	11	31	10	0	52	348
Total	125	233	34	0	392	24	231	97	0	352	120	124	109	0	353	26	145	28	0	199	1296
03:00 PM	31	63	10	0	104	10	78	38	0	126	20	33	33	0	86	8	33	5	0	46	362
03:15 PM	53	70	8	0	131	9	51	45	0	105	23	33	41	0	97	8	33	18	0	59	392
03:30 PM	32	54	3	0	89	4	64	48	0	116	46	34	29	0	109	5	58	13	0	76	390
03:45 PM	28	47	10	0	85	7	77	39	0	123	29	29	19	0	77	11	47	5	0	63	348
Total	144	234	31	0	409	30	270	170	0	470	118	129	122	0	369	32	171	41	0	244	1492
04:00 PM	32	57	3	0	92	6	74	41	0	121	39	36	42	0	117	8	43	15	0	66	396
04:15 PM	38	59	7	0	104	7	68	40	0	115	31	29	26	0	86	10	40	4	0	54	359

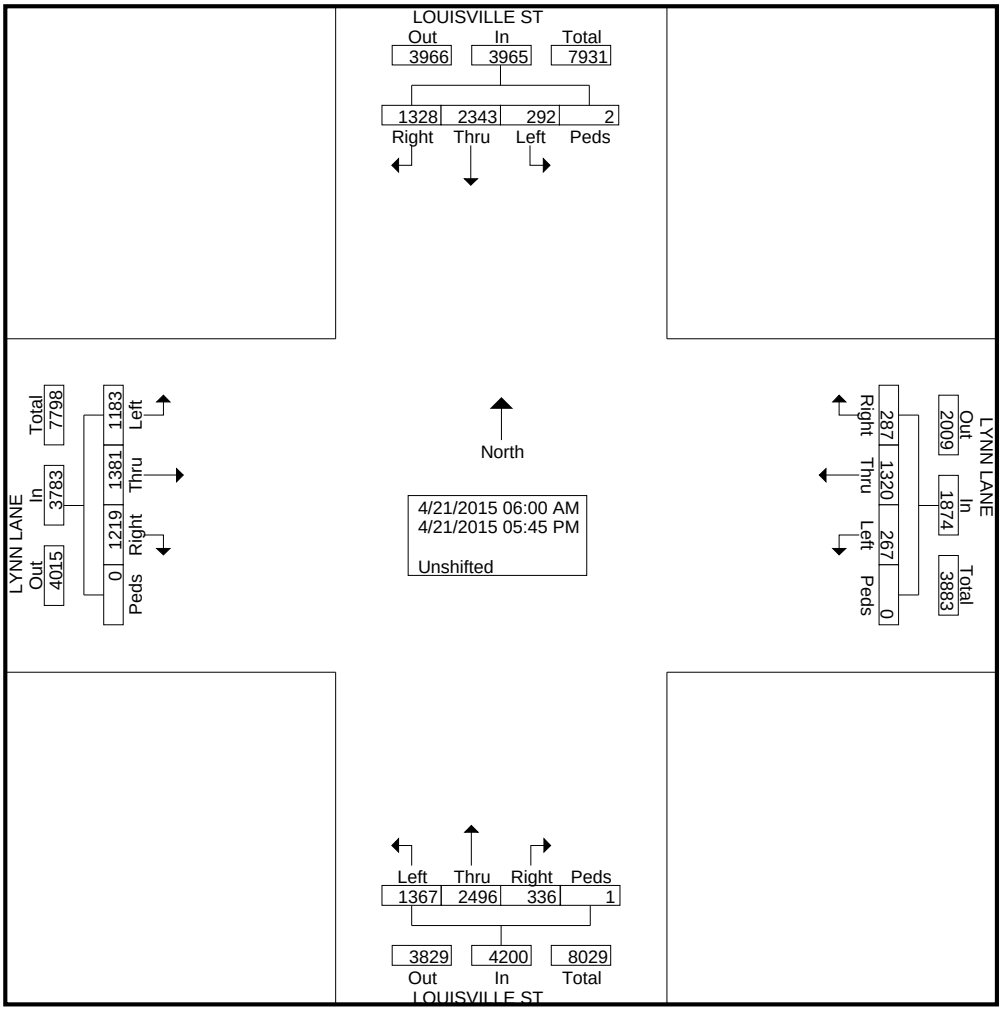
City of Starkville

Intersection: Louisville St. / Lynn Lane
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Louisville St - Lynn Lane
Site Code : 00000000
Start Date : 4/21/2015
Page No : 2

Groups Printed- Unshifted

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					LYNN LANE Eastbound					LYNN LANE Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:30 PM	34	50	7	0	91	8	74	40	0	122	23	30	42	0	95	10	42	7	0	59	367
04:45 PM	35	70	8	0	113	11	94	45	0	150	29	29	39	0	97	9	42	10	0	61	421
Total	139	236	25	0	400	32	310	166	0	508	122	124	149	0	395	37	167	36	0	240	1543
05:00 PM	50	62	9	0	121	9	77	63	0	149	30	34	43	0	107	20	57	8	0	85	462
05:15 PM	61	64	11	0	136	4	77	79	0	160	38	35	43	0	116	13	66	7	0	86	498
05:30 PM	58	61	3	0	122	12	72	79	1	164	54	42	57	0	153	11	80	12	0	103	542
05:45 PM	60	62	9	0	131	2	76	67	0	145	43	39	44	0	126	14	74	6	0	94	496
Total	229	249	32	0	510	27	302	288	1	618	165	150	187	0	502	58	277	33	0	368	1998
Grand Total	1367	2496	336	1	4200	292	2343	1328	2	3965	1183	1381	1219	0	3783	267	1320	287	0	1874	13822
Apprch %	32.5	59.4	8	0		7.4	59.1	33.5	0.1		31.3	36.5	32.2	0		14.2	70.4	15.3	0		
Total %	9.9	18.1	2.4	0	30.4	2.1	17	9.6	0	28.7	8.6	10	8.8	0	27.4	1.9	9.5	2.1	0	13.6	

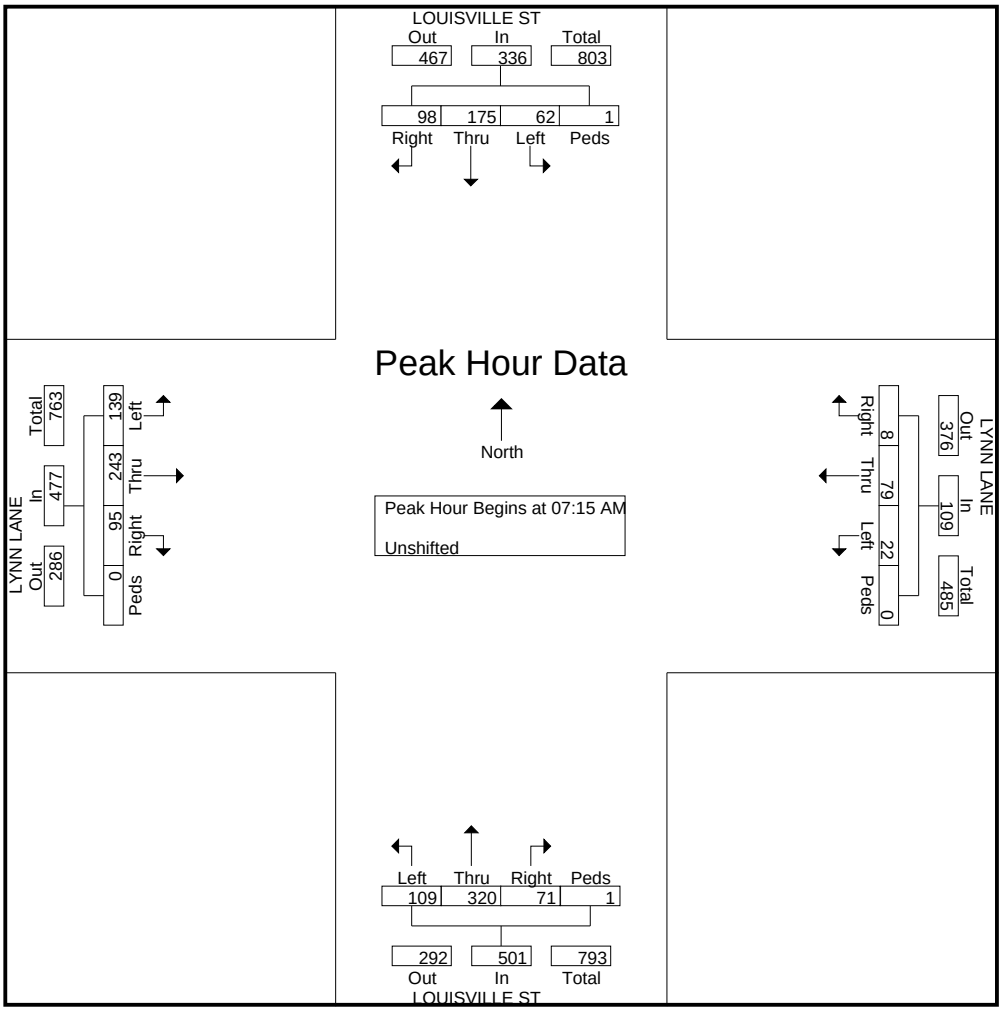


City of Starkville

Intersection: Louisville St. / Lynn Lane
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Louisville St - Lynn Lane
Site Code : 00000000
Start Date : 4/21/2015
Page No : 3

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					LYNN LANE Eastbound					LYNN LANE Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	21	67	12	0	100	13	34	21	0	68	22	51	22	0	95	5	18	2	0	25	288
07:30 AM	26	82	25	0	133	**22**	32	24	0	78	**48**	**90**	**25**	0	**163**	5	15	1	0	21	395
07:45 AM	**44**	**113**	**26**	**1**	**184**	20	**56**	**29**	0	**105**	37	66	23	0	126	**8**	**28**	1	0	**37**	**452**
08:00 AM	18	58	8	0	84	7	53	24	**1**	85	32	36	25	0	93	4	18	**4**	0	26	288
Total Volume	109	320	71	1	501	62	175	98	1	336	139	243	95	0	477	22	79	8	0	109	1423
% App. Total	21.8	63.9	14.2	0.2		18.5	52.1	29.2	0.3		29.1	50.9	19.9	0		20.2	72.5	7.3	0		
PHF	.619	.708	.683	.250	.681	.705	.781	.845	.250	.800	.724	.675	.950	.000	.732	.688	.705	.500	.000	.736	.787

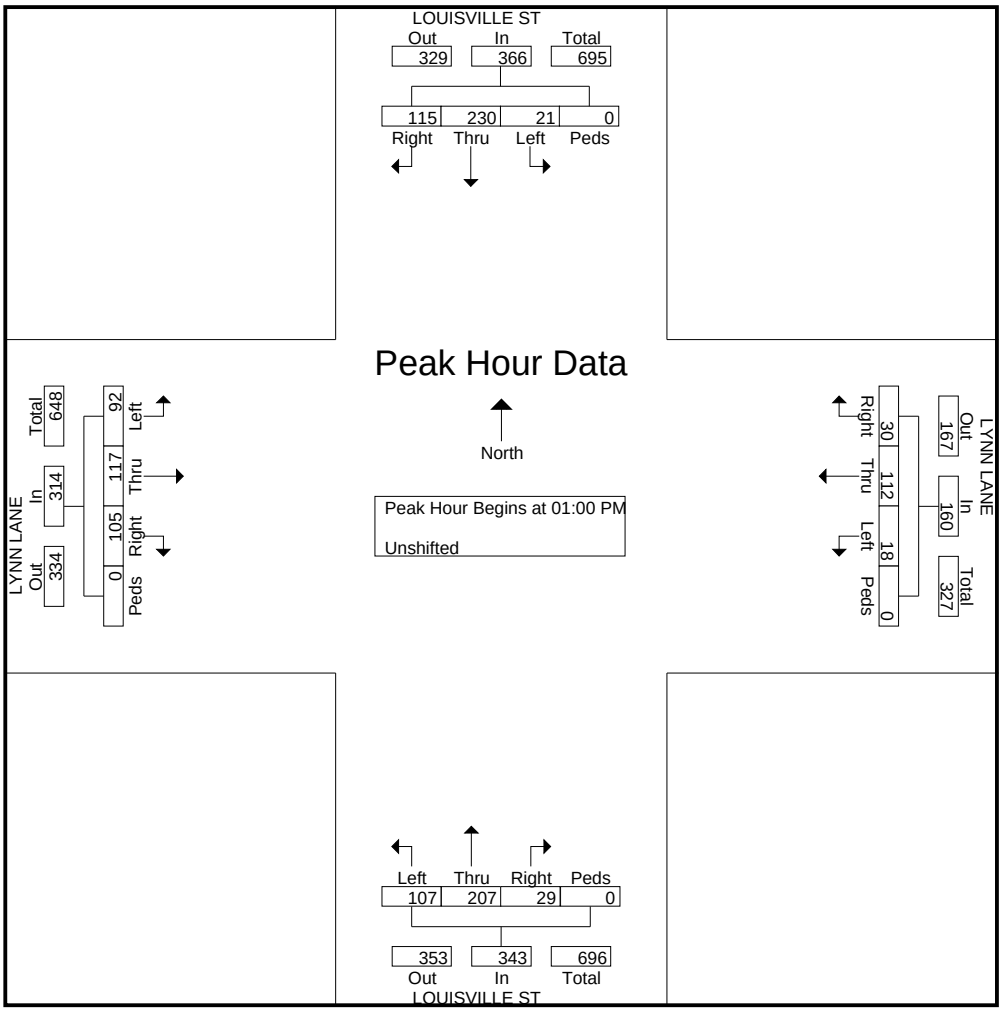


City of Starkville

Intersection: Louisville St. / Lynn Lane
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Louisville St - Lynn Lane
Site Code : 00000000
Start Date : 4/21/2015
Page No : 4

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					LYNN LANE Eastbound					LYNN LANE Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 01:00 PM																					
01:00 PM	27	49	**8**	0	84	4	57	24	0	85	24	25	28	0	77	3	**37**	7	0	**47**	293
01:15 PM	26	39	8	0	73	**7**	51	**37**	0	95	19	31	20	0	70	3	25	4	0	32	270
01:30 PM	**29**	**60**	8	0	**97**	6	60	22	0	88	19	**35**	**31**	0	**85**	5	21	**12**	0	38	308
01:45 PM	25	59	5	0	89	4	**62**	32	0	**98**	**30**	26	26	0	82	**7**	29	7	0	43	**312**
Total Volume	107	207	29	0	343	21	230	115	0	366	92	117	105	0	314	18	112	30	0	160	1183
% App. Total	31.2	60.3	8.5	0		5.7	62.8	31.4	0		29.3	37.3	33.4	0		11.2	70	18.8	0		
PHF	.922	.863	.906	.000	.884	.750	.927	.777	.000	.934	.767	.836	.847	.000	.924	.643	.757	.625	.000	.851	.948

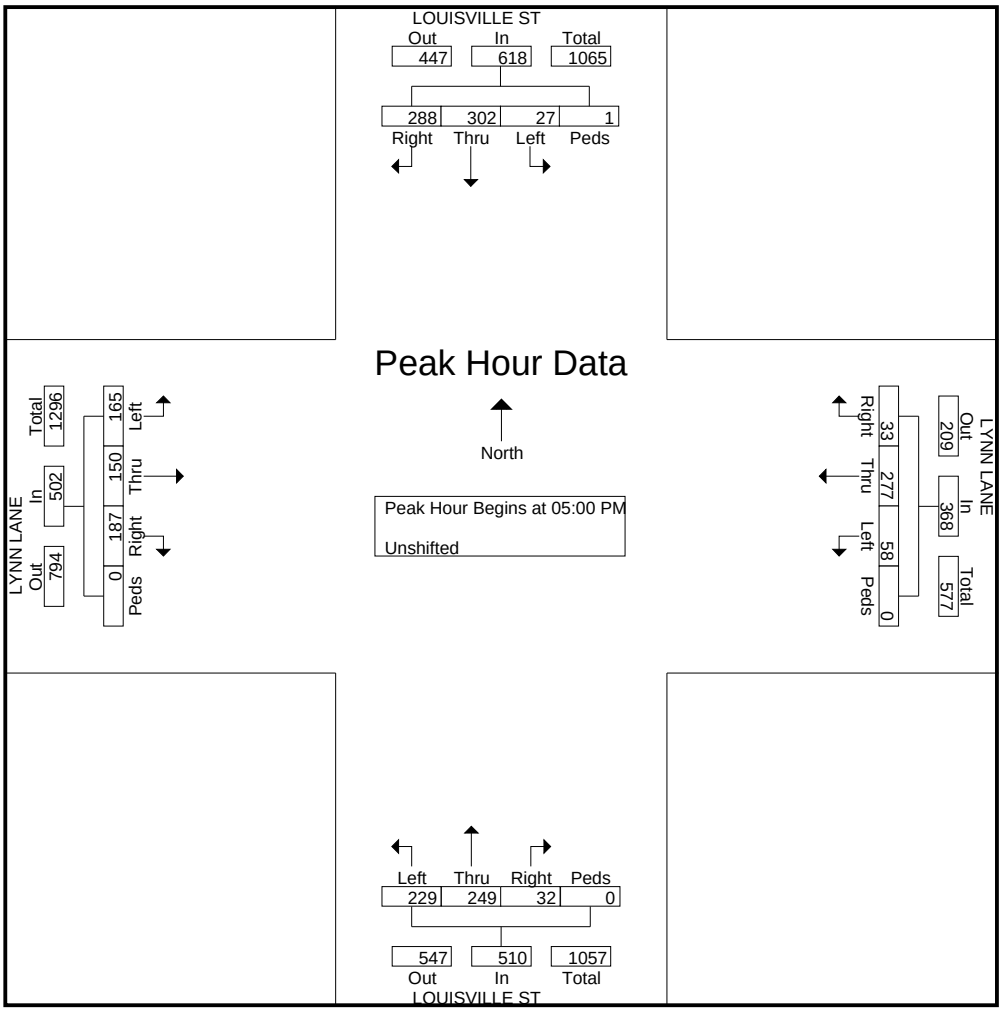


City of Starkville

Intersection: Louisville St. / Lynn Lane
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Louisville St - Lynn Lane
Site Code : 00000000
Start Date : 4/21/2015
Page No : 5

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					LYNN LANE Eastbound					LYNN LANE Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	50	62	9	0	121	9	**77**	63	0	149	30	34	43	0	107	**20**	57	8	0	85	462
05:15 PM	**61**	**64**	**11**	0	**136**	4	77	**79**	0	160	38	35	43	0	116	13	66	7	0	86	498
05:30 PM	58	61	3	0	122	**12**	72	79	**1**	**164**	**54**	**42**	**57**	0	**153**	11	**80**	**12**	0	**103**	**542**
05:45 PM	60	62	9	0	131	2	76	67	0	145	43	39	44	0	126	14	74	6	0	94	496
Total Volume	229	249	32	0	510	27	302	288	1	618	165	150	187	0	502	58	277	33	0	368	1998
% App. Total	44.9	48.8	6.3	0		4.4	48.9	46.6	0.2		32.9	29.9	37.3	0		15.8	75.3	9	0		
PHF	.939	.973	.727	.000	.938	.563	.981	.911	.250	.942	.764	.893	.820	.000	.820	.725	.866	.688	.000	.893	.922



City of Starkville

Intersection: Louisville St / Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Okibbeha

File Name : Louisville St - Academy Rd
Site Code : 00000000
Start Date : 4/28/2015
Page No : 1

Groups Printed- Unshifted

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					ACADEMY RD Eastbound					ACADEMY RD Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:00 AM	0	14	11	0	25	4	6	0	0	10	0	1	0	0	1	5	0	11	0	16	52
06:15 AM	0	17	13	0	30	8	8	0	0	16	0	0	0	0	0	3	0	10	0	13	59
06:30 AM	0	36	10	0	46	9	17	0	0	26	0	0	0	0	0	7	0	11	0	18	90
06:45 AM	0	56	20	0	76	17	19	0	0	36	0	0	0	0	0	8	0	14	0	22	134
Total	0	123	54	0	177	38	50	0	0	88	0	1	0	0	1	23	0	46	0	69	335
07:00 AM	0	53	13	0	66	21	18	0	0	39	0	0	0	0	0	12	0	21	0	33	138
07:15 AM	0	48	33	0	81	16	32	0	0	48	0	0	0	0	0	17	0	34	0	51	180
07:30 AM	0	89	28	0	117	30	26	0	0	56	0	0	0	0	0	13	0	65	0	78	251
07:45 AM	0	84	22	0	106	23	55	0	0	78	0	0	0	0	0	18	0	70	0	88	272
Total	0	274	96	0	370	90	131	0	0	221	0	0	0	0	0	60	0	190	0	250	841
08:00 AM	0	55	29	0	84	37	34	0	0	71	0	0	0	0	0	17	0	41	0	58	213
08:15 AM	0	52	12	0	64	21	34	0	0	55	0	0	0	0	0	18	0	25	0	43	162
08:30 AM	0	58	21	0	79	34	36	0	0	70	0	0	0	0	0	16	0	25	0	41	190
08:45 AM	0	66	17	0	83	23	42	0	0	65	0	0	0	0	0	18	0	9	0	27	175
Total	0	231	79	0	310	115	146	0	0	261	0	0	0	0	0	69	0	100	0	169	740
09:00 AM	0	44	24	0	68	23	19	0	0	42	0	0	0	0	0	8	0	13	0	21	131
09:15 AM	0	41	17	0	58	22	33	0	0	55	0	0	0	0	0	13	0	28	0	41	154
09:30 AM	0	29	18	0	47	17	22	0	0	39	0	0	0	0	0	12	0	18	0	30	116
09:45 AM	0	40	8	0	48	33	34	0	0	67	0	0	0	0	0	10	0	30	0	40	155
Total	0	154	67	0	221	95	108	0	0	203	0	0	0	0	0	43	0	89	0	132	556
10:00 AM	0	27	14	0	41	15	24	0	0	39	0	0	0	0	0	14	0	17	0	31	111
10:15 AM	0	34	7	0	41	27	27	0	0	54	0	0	0	0	0	16	0	25	0	41	136
10:30 AM	0	38	20	0	58	29	27	0	0	56	0	0	0	0	0	9	0	23	0	32	146
10:45 AM	0	27	9	0	36	31	27	0	0	58	0	0	0	0	0	14	0	26	0	40	134
Total	0	126	50	0	176	102	105	0	0	207	0	0	0	0	0	53	0	91	0	144	527
11:00 AM	0	32	7	0	39	21	27	0	0	48	0	0	0	0	0	20	0	12	0	32	119
11:15 AM	0	50	12	0	62	24	31	0	0	55	0	0	0	0	0	23	0	27	0	50	167
11:30 AM	0	37	15	0	52	47	32	0	0	79	0	0	0	0	0	18	0	27	0	45	176
11:45 AM	0	52	8	0	60	54	37	0	0	91	0	0	0	0	0	8	0	23	0	31	182
Total	0	171	42	0	213	146	127	0	0	273	0	0	0	0	0	69	0	89	0	158	644
12:00 PM	1	71	19	0	91	37	59	0	0	96	0	1	0	0	1	18	2	41	0	61	249
12:15 PM	0	54	14	0	68	40	39	0	0	79	0	2	1	0	3	17	3	32	0	52	202
12:30 PM	0	32	12	0	44	35	49	0	0	84	0	0	0	0	0	19	0	38	0	57	185
12:45 PM	2	51	13	0	66	31	38	0	0	69	0	0	0	0	0	13	0	33	0	46	181
Total	3	208	58	0	269	143	185	0	0	328	0	3	1	0	4	67	5	144	0	216	817
01:00 PM	0	52	14	0	66	27	41	0	0	68	0	0	0	0	0	15	0	38	0	53	187
01:15 PM	0	28	12	0	40	41	50	0	0	91	0	0	0	0	0	14	0	21	0	35	166
01:30 PM	0	63	9	0	72	34	38	0	0	72	0	0	0	0	0	23	0	29	0	52	196
01:45 PM	0	55	9	0	64	27	43	0	0	70	0	0	0	0	0	19	0	27	0	46	180
Total	0	198	44	0	242	129	172	0	0	301	0	0	0	0	0	71	0	115	0	186	729
02:00 PM	0	53	8	0	61	40	45	0	0	85	0	0	0	0	0	29	0	33	0	62	208
02:15 PM	0	67	9	0	76	40	65	0	0	105	0	0	0	0	0	19	0	41	0	60	241
02:30 PM	0	65	16	0	81	46	59	0	0	105	0	0	0	0	0	16	0	30	0	46	232
02:45 PM	0	46	15	0	61	36	48	0	0	84	0	0	0	0	0	18	0	50	0	68	213
Total	0	231	48	0	279	162	217	0	0	379	0	0	0	0	0	82	0	154	0	236	894
03:00 PM	0	53	20	0	73	43	55	0	0	98	0	0	0	0	0	26	0	29	0	55	226
03:15 PM	0	59	17	0	76	38	53	0	0	91	0	0	0	0	0	38	0	50	0	88	255
03:30 PM	0	53	11	0	64	63	62	0	0	125	0	0	0	0	0	28	0	37	0	65	254
03:45 PM	0	54	22	0	76	62	59	0	0	121	0	0	0	0	0	30	0	44	0	74	271
Total	0	219	70	0	289	206	229	0	0	435	0	0	0	0	0	122	0	160	0	282	1006
04:00 PM	0	51	21	0	72	46	68	0	0	114	0	0	0	0	0	24	0	32	0	56	242
04:15 PM	0	62	14	0	76	42	52	0	0	94	0	0	0	0	0	23	0	44	0	67	237

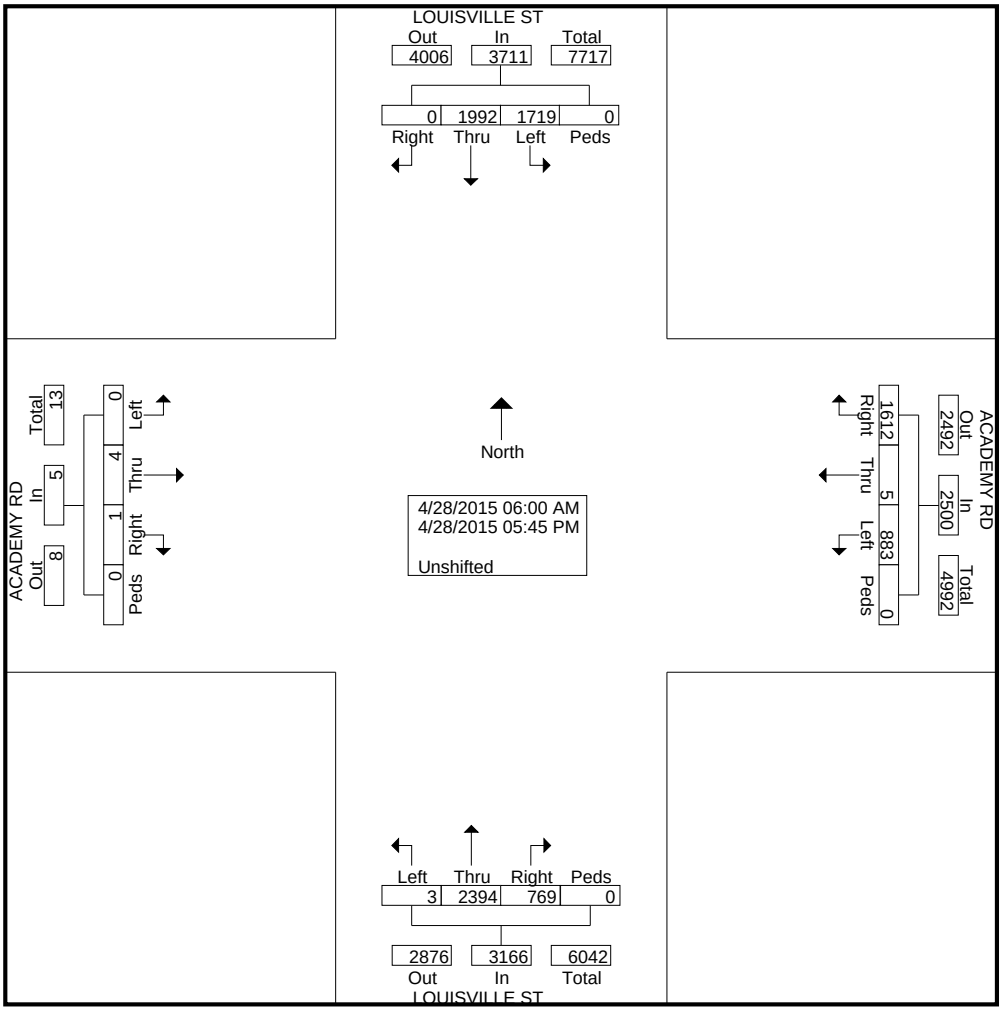
City of Starkville

Intersection: Louisville St / Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Okibbeha

File Name : Louisville St - Academy Rd
Site Code : 00000000
Start Date : 4/28/2015
Page No : 2

Groups Printed- Unshifted

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					ACADEMY RD Eastbound					ACADEMY RD Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:30 PM	0	54	19	0	73	75	70	0	0	145	0	0	0	0	0	27	0	36	0	63	281
04:45 PM	0	52	16	0	68	68	61	0	0	129	0	0	0	0	0	23	0	54	0	77	274
Total	0	219	70	0	289	231	251	0	0	482	0	0	0	0	0	97	0	166	0	263	1034
05:00 PM	0	65	16	0	81	64	66	0	0	130	0	0	0	0	0	32	0	82	0	114	325
05:15 PM	0	69	23	0	92	67	80	0	0	147	0	0	0	0	0	27	0	79	0	106	345
05:30 PM	0	56	43	0	99	58	70	0	0	128	0	0	0	0	0	41	0	79	0	120	347
05:45 PM	0	50	9	0	59	73	55	0	0	128	0	0	0	0	0	27	0	28	0	55	242
Total	0	240	91	0	331	262	271	0	0	533	0	0	0	0	0	127	0	268	0	395	1259
Grand Total	3	2394	769	0	3166	1719	1992	0	0	3711	0	4	1	0	5	883	5	1612	0	2500	9382
Apprch %	0.1	75.6	24.3	0		46.3	53.7	0	0		0	80	20	0		35.3	0.2	64.5	0		
Total %	0	25.5	8.2	0	33.7	18.3	21.2	0	0	39.6	0	0	0	0	0.1	9.4	0.1	17.2	0	26.6	

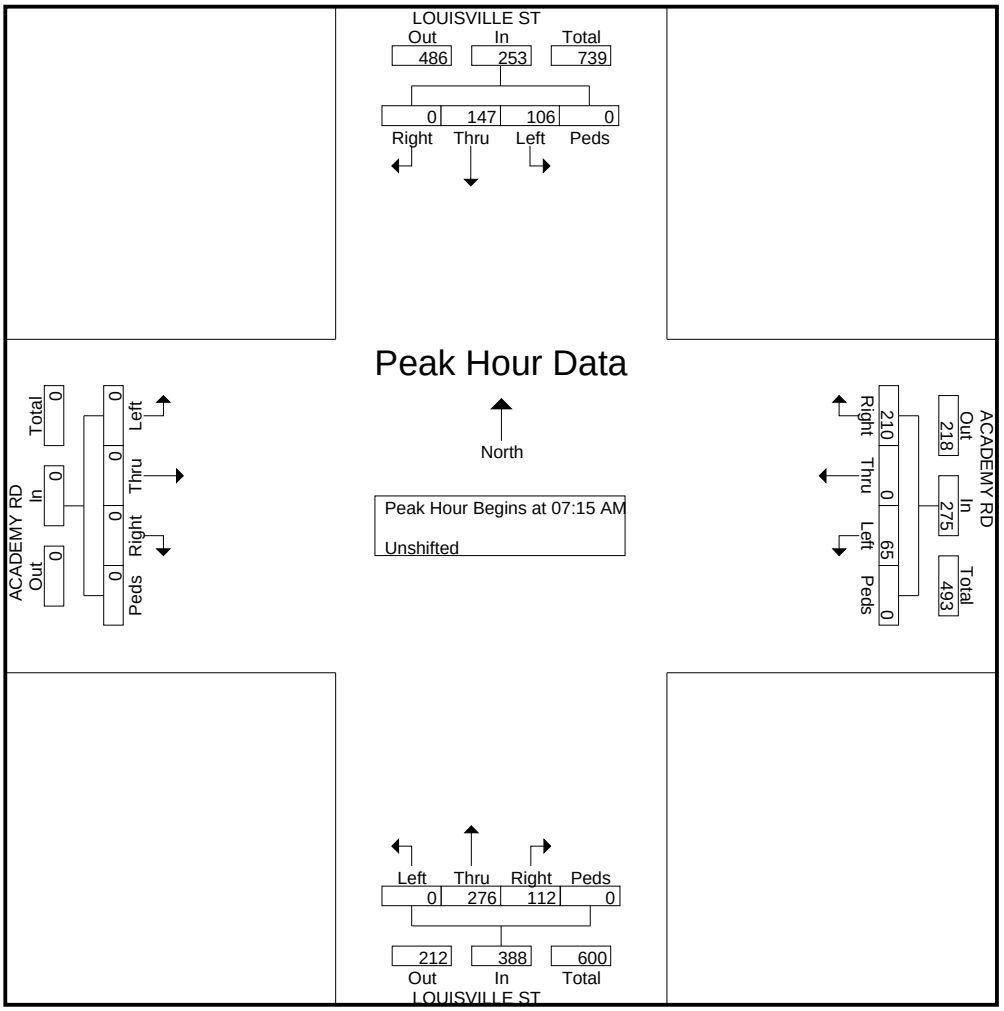


City of Starkville

Intersection: Louisville St / Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Okibbeha

File Name : Louisville St - Academy Rd
Site Code : 00000000
Start Date : 4/28/2015
Page No : 3

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					ACADEMY RD Eastbound					ACADEMY RD Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	48	**33**	0	81	16	32	0	0	48	0	0	0	0	0	17	0	34	0	51	180
07:30 AM	0	**89**	28	0	**117**	30	26	0	0	56	0	0	0	0	0	13	0	65	0	78	251
07:45 AM	0	84	22	0	106	23	**55**	0	0	**78**	0	0	0	0	0	**18**	0	**70**	0	**88**	**272**
08:00 AM	0	55	29	0	84	**37**	34	0	0	71	0	0	0	0	0	17	0	41	0	58	213
Total Volume	0	276	112	0	388	106	147	0	0	253	0	0	0	0	0	65	0	210	0	275	916
% App. Total	0	71.1	28.9	0		41.9	58.1	0	0		0	0	0	0		23.6	0	76.4	0		
PHF	.000	.775	.848	.000	.829	.716	.668	.000	.000	.811	.000	.000	.000	.000	.000	.903	.000	.750	.000	.781	.842

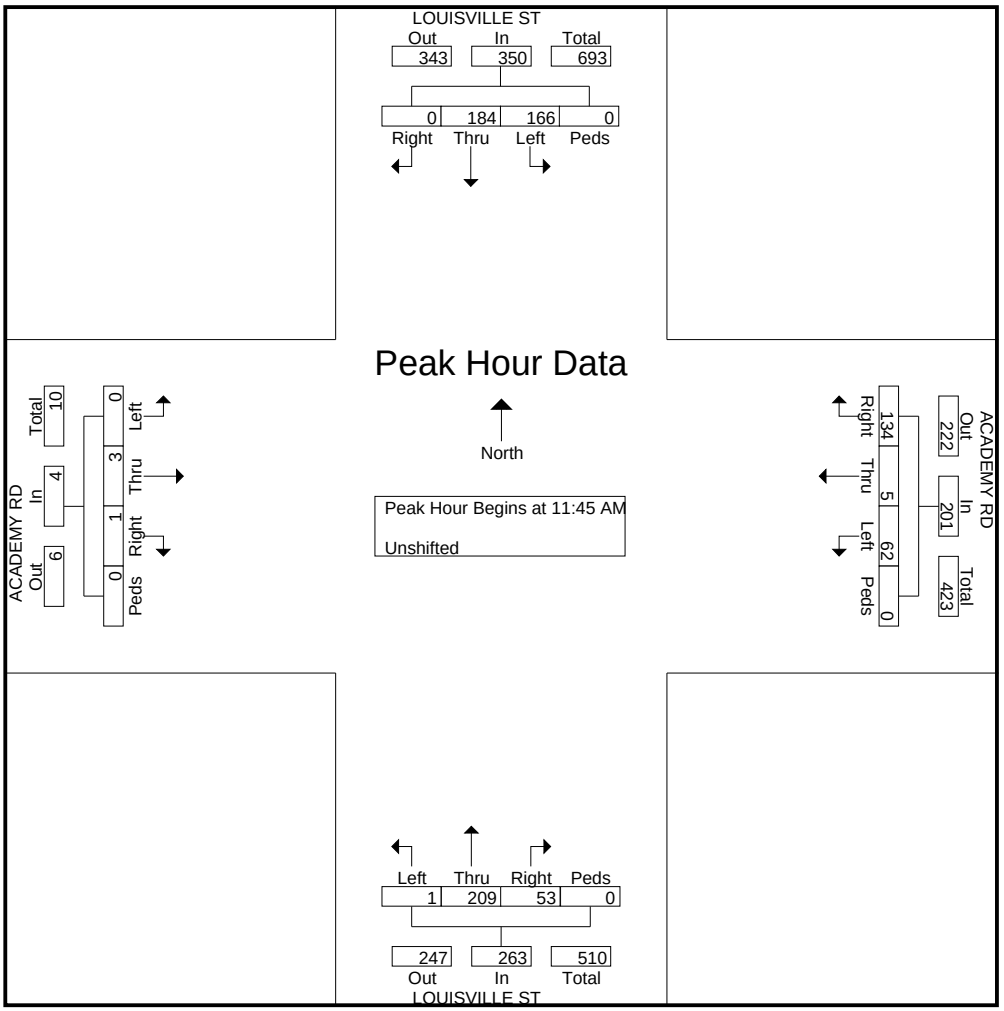


City of Starkville

Intersection: Louisville St / Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Okibbeha

File Name : Louisville St - Academy Rd
Site Code : 00000000
Start Date : 4/28/2015
Page No : 4

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					ACADEMY RD Eastbound					ACADEMY RD Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	0	52	8	0	60	**54**	37	0	0	91	0	0	0	0	0	8	0	23	0	31	182
12:00 PM	**1**	**71**	**19**	0	**91**	37	**59**	0	0	**96**	0	1	0	0	1	18	2	**41**	0	**61**	**249**
12:15 PM	0	54	14	0	68	40	39	0	0	79	0	**2**	**1**	0	**3**	17	**3**	32	0	52	202
12:30 PM	0	32	12	0	44	35	49	0	0	84	0	0	0	0	0	**19**	0	38	0	57	185
Total Volume	1	209	53	0	263	166	184	0	0	350	0	3	1	0	4	62	5	134	0	201	818
% App. Total	0.4	79.5	20.2	0		47.4	52.6	0	0		0	75	25	0		30.8	2.5	66.7	0		
PHF	.250	.736	.697	.000	.723	.769	.780	.000	.000	.911	.000	.375	.250	.000	.333	.816	.417	.817	.000	.824	.821

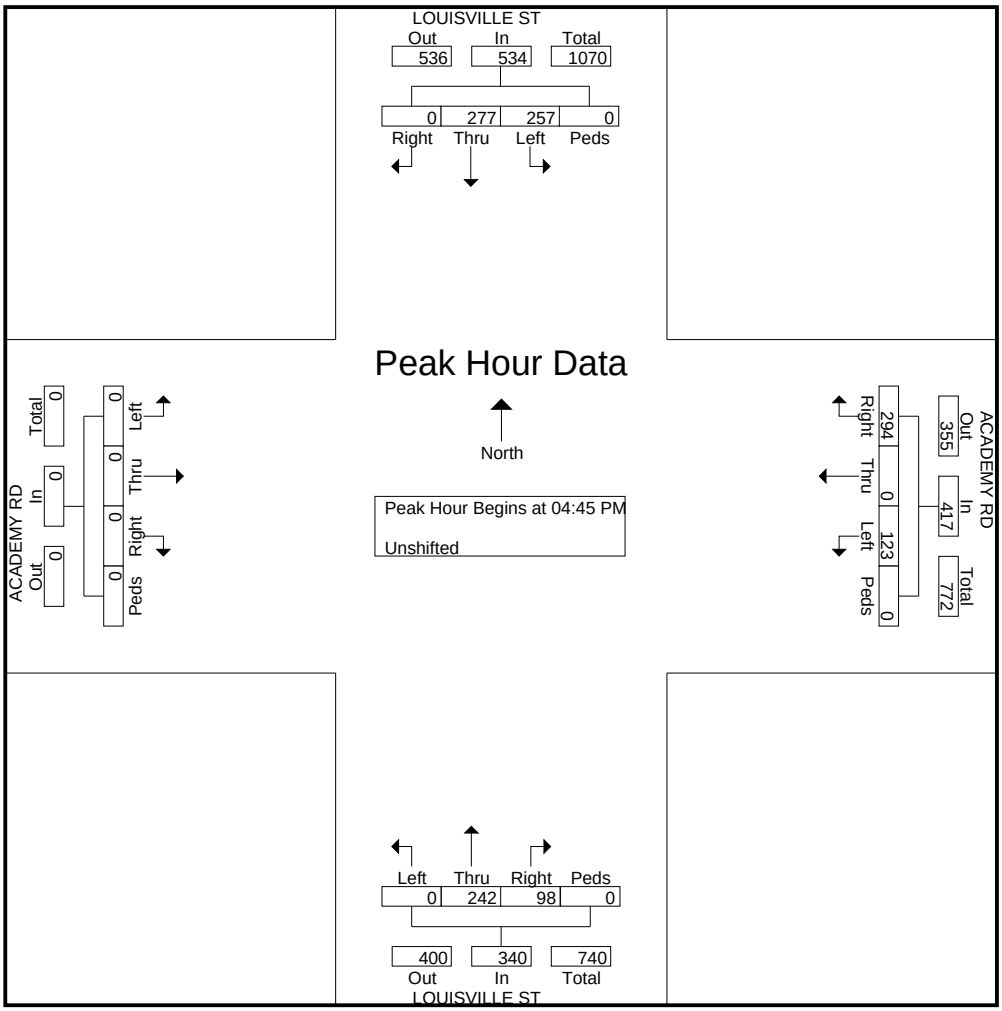


City of Starkville

Intersection: Louisville St / Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Okibbeha

File Name : Louisville St - Academy Rd
Site Code : 00000000
Start Date : 4/28/2015
Page No : 5

	LOUISVILLE ST Northbound					LOUISVILLE ST Southbound					ACADEMY RD Eastbound					ACADEMY RD Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	52	16	0	68	**68**	61	0	0	129	0	0	0	0	0	23	0	54	0	77	274
05:00 PM	0	65	16	0	81	64	66	0	0	130	0	0	0	0	0	32	0	**82**	0	114	325
05:15 PM	0	**69**	23	0	92	67	**80**	0	0	**147**	0	0	0	0	0	27	0	79	0	106	345
05:30 PM	0	56	**43**	0	**99**	58	70	0	0	128	0	0	0	0	0	**41**	0	79	0	**120**	**347**
Total Volume	0	242	98	0	340	257	277	0	0	534	0	0	0	0	0	123	0	294	0	417	1291
% App. Total	0	71.2	28.8	0		48.1	51.9	0	0		0	0	0	0		29.5	0	70.5	0		
PHF	.000	.877	.570	.000	.859	.945	.866	.000	.000	.908	.000	.000	.000	.000	.000	.750	.000	.896	.000	.869	.930



City of Starkville

Intersection: Academy School Entr./Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Academy_AcademyEnt
Site Code : 00000000
Start Date : 9/29/2015
Page No : 1

Groups Printed- Unshifted - Bank 1

	STARKVILLE ACADEMY Southbound					ACADEMY ROAD Westbound					STARKVILLE ACADEMY Northbound					ACADEMY ROAD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:30 AM	0	0	0	0	0	1	24	1	0	26	0	0	0	0	0	0	29	0	0	29	55
06:45 AM	0	0	0	0	0	0	19	0	0	19	0	0	0	0	0	0	30	0	0	30	49
Total	0	0	0	0	0	1	43	1	0	45	0	0	0	0	0	0	59	0	0	59	104
07:00 AM	0	0	1	0	1	0	28	0	0	28	0	0	0	0	0	3	34	0	0	37	66
07:15 AM	1	0	1	0	2	0	36	2	0	38	0	0	0	0	0	5	52	0	0	57	97
07:30 AM	1	0	4	0	5	0	41	21	0	62	0	0	0	0	0	14	75	1	0	90	157
07:45 AM	26	0	38	0	64	0	41	72	0	113	0	0	0	0	0	21	109	1	0	131	308
Total	28	0	44	0	72	0	146	95	0	241	0	0	0	0	0	43	270	2	0	315	628
08:00 AM	58	0	56	0	114	0	42	74	0	116	0	0	0	0	0	25	64	0	0	89	319
08:15 AM	40	1	29	1	71	2	43	12	0	57	0	0	0	0	0	5	64	1	0	70	198
08:30 AM	1	0	1	0	2	1	49	1	0	51	0	0	0	0	0	2	52	0	0	54	107
08:45 AM	0	0	2	0	2	0	38	2	0	40	0	0	0	0	0	0	57	0	0	57	99
Total	99	1	88	1	189	3	172	89	0	264	0	0	0	0	0	32	237	1	0	270	723
09:00 AM	2	0	3	0	5	1	35	1	0	37	0	0	0	0	0	2	53	0	0	55	97
09:15 AM	2	0	6	0	8	0	32	4	0	36	0	0	0	0	0	1	59	0	0	60	104
09:30 AM	0	0	0	0	0	0	40	1	0	41	0	0	0	0	0	1	60	0	0	61	102
09:45 AM	2	0	1	0	3	1	38	0	0	39	0	0	0	0	0	0	36	0	0	36	78
Total	6	0	10	0	16	2	145	6	0	153	0	0	0	0	0	4	208	0	0	212	381
10:00 AM	3	0	1	0	4	1	50	1	0	52	0	0	0	0	0	3	53	0	0	56	112
10:15 AM	0	0	0	0	0	1	47	1	0	49	0	0	0	0	0	1	41	0	0	42	91
10:30 AM	0	0	1	0	1	0	19	0	0	19	0	0	0	0	0	0	37	0	0	37	57
10:45 AM	1	0	3	0	4	0	37	2	0	39	0	0	0	0	0	1	42	0	0	43	86
Total	4	0	5	0	9	2	153	4	0	159	0	0	0	0	0	5	173	0	0	178	346
11:00 AM	0	0	2	0	2	0	40	0	0	40	0	0	0	0	0	2	47	1	0	50	92
11:15 AM	0	0	2	0	2	0	56	2	0	58	0	0	0	0	0	3	44	0	0	47	107
11:30 AM	1	0	4	0	5	0	43	1	0	44	0	0	0	0	0	0	42	0	0	42	91
11:45 AM	1	0	3	0	4	0	54	2	0	56	0	0	0	0	0	1	40	0	0	41	101
Total	2	0	11	0	13	0	193	5	0	198	0	0	0	0	0	6	173	1	0	180	391
12:00 PM	1	0	2	0	3	0	47	0	0	47	0	0	0	0	0	1	45	0	0	46	96
12:15 PM	2	0	1	0	3	0	41	2	0	43	0	0	0	0	0	2	61	0	0	63	109
12:30 PM	4	1	3	0	8	1	57	0	0	58	0	0	0	0	0	1	65	0	0	66	132
12:45 PM	3	0	3	0	6	0	51	2	0	53	0	0	0	0	0	0	53	0	0	53	112
Total	10	1	9	0	20	1	196	4	0	201	0	0	0	0	0	4	224	0	0	228	449
01:00 PM	4	0	1	0	5	1	64	2	0	67	0	0	1	0	1	2	67	0	0	69	142
01:15 PM	1	0	0	0	1	0	59	0	0	59	0	0	0	0	0	4	52	0	0	56	116
01:30 PM	0	0	2	0	2	0	54	1	0	55	0	0	0	0	0	3	64	0	0	67	124
01:45 PM	2	0	8	0	10	0	44	3	0	47	0	0	0	0	0	2	65	0	0	67	124
Total	7	0	11	0	18	1	221	6	0	228	0	0	1	0	1	11	248	0	0	259	506
02:00 PM	1	0	5	0	6	0	60	1	0	61	0	0	0	0	0	4	66	0	0	70	137
02:15 PM	2	0	1	0	3	0	69	3	0	72	0	0	0	0	0	0	49	0	0	49	124
02:30 PM	1	0	1	0	2	0	52	7	0	59	0	0	0	0	0	4	46	0	0	50	111
02:45 PM	1	0	1	0	2	0	60	14	0	74	0	0	0	0	0	8	38	0	0	46	122
Total	5	0	8	0	13	0	241	25	0	266	0	0	0	0	0	16	199	0	0	215	494
03:00 PM	34	0	23	0	57	1	54	18	0	73	0	0	0	0	0	6	54	0	0	60	190
03:15 PM	28	0	35	0	63	0	59	21	0	80	0	0	1	0	1	4	65	0	0	69	213
03:30 PM	14	0	19	0	33	0	68	23	0	91	0	0	0	0	0	9	51	0	0	60	184
03:45 PM	27	0	16	0	43	1	93	3	0	97	0	0	0	0	0	0	61	0	0	61	201
Total	103	0	93	0	196	2	274	65	0	341	0	0	1	0	1	19	231	0	0	250	788
04:00 PM	3	0	2	0	5	1	64	1	0	66	0	0	1	0	1	3	71	0	0	74	146
04:15 PM	6	0	10	0	16	1	90	2	0	93	0	0	2	0	2	2	62	1	0	65	176
04:30 PM	9	0	8	0	17	1	68	5	0	74	0	0	1	0	1	5	75	0	0	80	172
04:45 PM	13	0	12	0	25	1	54	3	0	58	0	0	0	0	0	2	55	0	0	57	140
Total	31	0	32	0	63	4	276	11	0	291	0	0	4	0	4	12	263	1	0	276	634

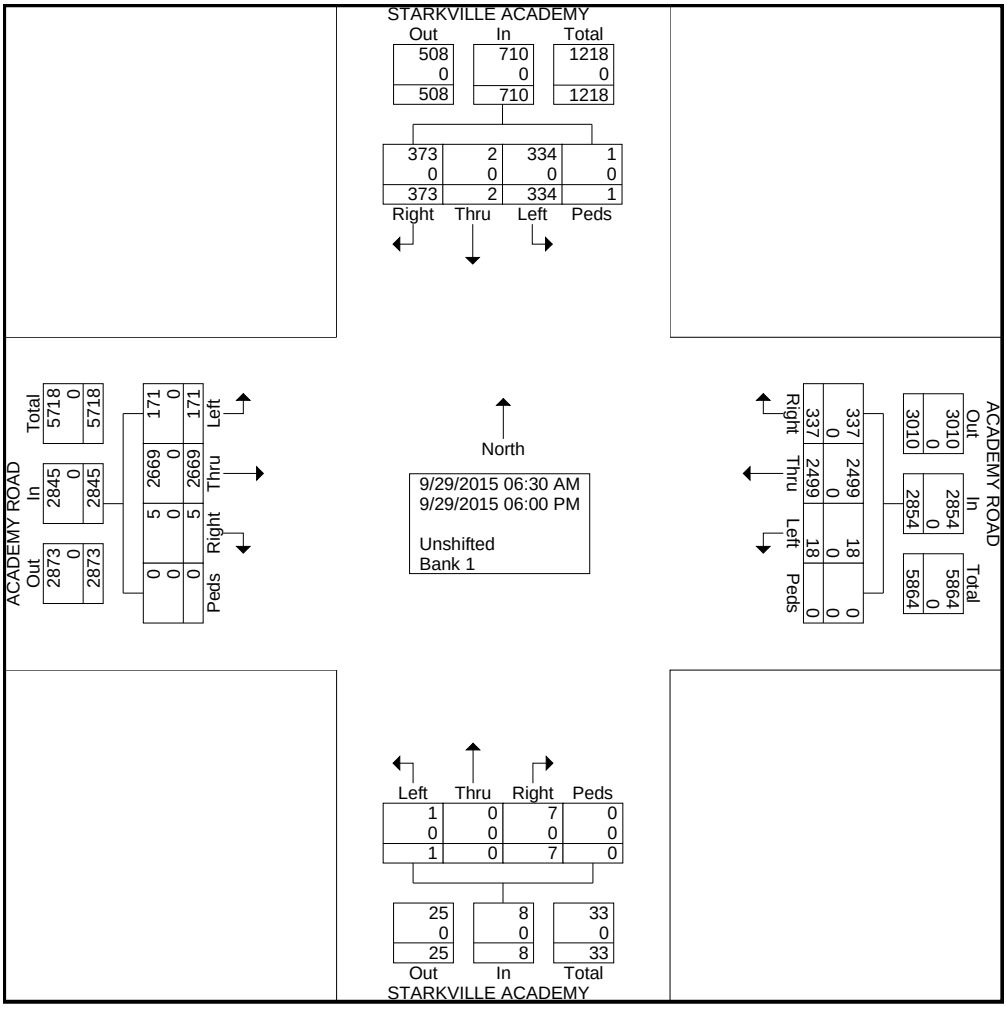
City of Starkville

Intersection: Academy School Entr./Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Academy_AcademyEnt
Site Code : 00000000
Start Date : 9/29/2015
Page No : 2

Groups Printed- Unshifted - Bank 1

	STARKVILLE ACADEMY Southbound					ACADEMY ROAD Westbound					STARKVILLE ACADEMY Northbound					ACADEMY ROAD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
05:00 PM	6	0	8	0	14	0	61	3	0	64	0	0	0	0	0	2	75	0	0	77	155
05:15 PM	5	0	9	0	14	0	83	3	0	86	0	0	1	0	1	3	84	0	0	87	188
05:30 PM	3	0	16	0	19	0	84	8	0	92	1	0	0	0	1	7	70	0	0	77	189
05:45 PM	16	0	19	0	35	0	112	8	0	120	0	0	0	0	0	5	76	0	0	81	236
Total	30	0	52	0	82	0	340	22	0	362	1	0	1	0	2	17	305	0	0	322	768
06:00 PM	9	0	10	0	19	2	99	4	0	105	0	0	0	0	0	2	79	0	0	81	205
Grand Total	334	2	373	1	710	18	2499	337	0	2854	1	0	7	0	8	171	2669	5	0	2845	6417
Apprch %	47	0.3	52.5	0.1		0.6	87.6	11.8	0		12.5	0	87.5	0		6	93.8	0.2	0		
Total %	5.2	0	5.8	0	11.1	0.3	38.9	5.3	0	44.5	0	0	0.1	0	0.1	2.7	41.6	0.1	0	44.3	
Unshifted	334	2	373	1	710	18	2499	337	0	2854	1	0	7	0	8	171	2669	5	0	2845	6417
% Unshifted	100	100	100	100	100	100	100	100	0	100	100	0	100	0	100	100	100	100	0	100	100
Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bank 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

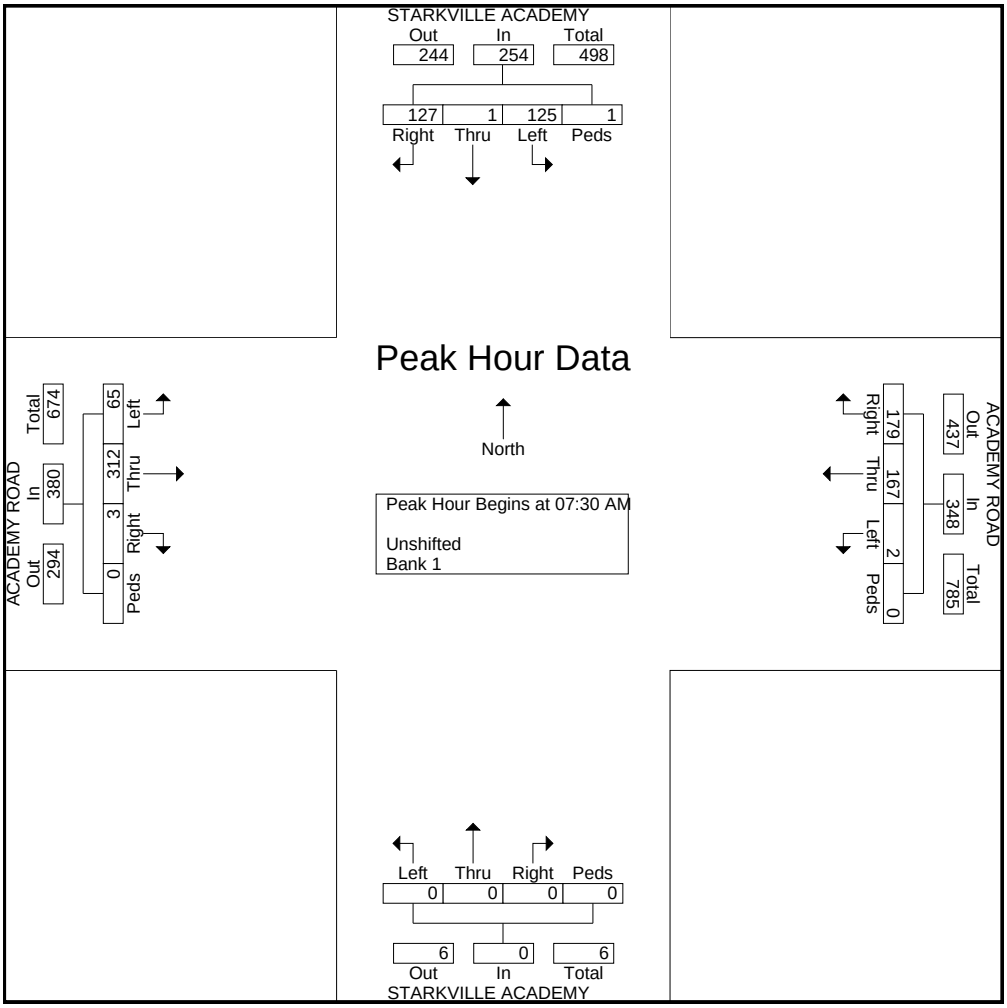


City of Starkville

Intersection: Academy School Entr./Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Academy_AcademyEnt
Site Code : 00000000
Start Date : 9/29/2015
Page No : 3

	STARKVILLE ACADEMY Southbound					ACADEMY ROAD Westbound					STARKVILLE ACADEMY Northbound					ACADEMY ROAD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	1	0	4	0	5	0	41	21	0	62	0	0	0	0	0	14	75	**1**			
07:45 AM	**26**	**0**	**38**	**0**	**64**	**0**	**41**	**72**	**0**	**113**	**0**	**0**	**0**	**0**	**0**	**21**	**109**	1	0	**131**	308
08:00 AM	**58**		**56**		**114**	0	42	**74**		**116**	0	0	0	0	0	**25**					**319**
08:15 AM	40	**1**	29	**1**		**2**	**43**														
Total Volume	125	1	127	1	254	2	167	179	0	348	0	0	0	0	0	65	312	3	0	380	982
% App. Total	49.2	0.4	50	0.4		0.6	48	51.4	0		0	0	0	0		17.1	82.1	0.8	0		
PHF	.539	.250	.567	.250	.557	.250	.971	.605	.000	.750	.000	.000	.000	.000	.000	.650	.716	.750	.000	.725	.770

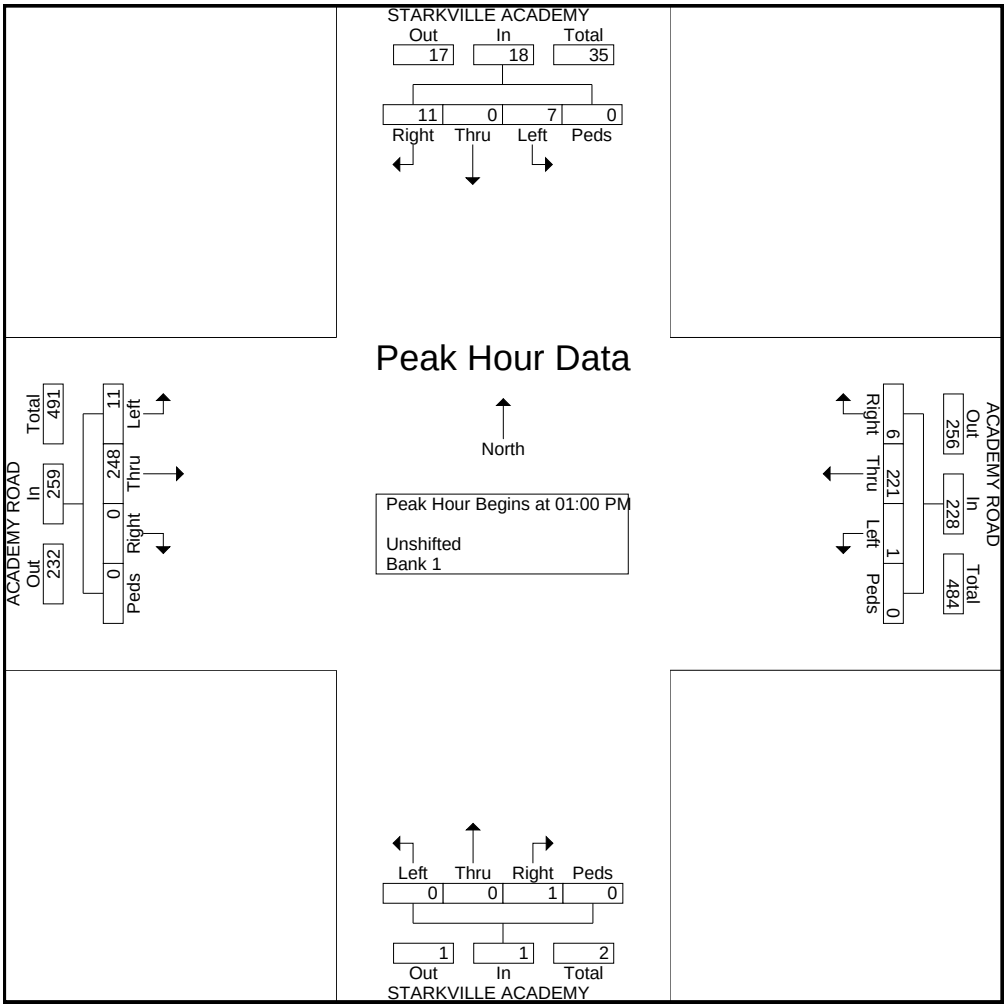


City of Starkville

Intersection: Academy School Entr./Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Academy_AcademyEnt
Site Code : 00000000
Start Date : 9/29/2015
Page No : 4

	STARKVILLE ACADEMY Southbound					ACADEMY ROAD Westbound					STARKVILLE ACADEMY Northbound					ACADEMY ROAD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 01:00 PM																					
01:00 PM	**4**					**1**	**64**			**67**	0	0	**1**	0	**1**	2	**67**	0	0	**69**	**142**
01:15 PM	1	0	0	0	1	0	59	0	0	59	0	0	0	0	0	**4**					
01:30 PM	**0**	**0**	**2**	**0**	**2**	**0**	**54**	**1**	**0**	**55**	**0**	**0**	**0**	**0**	**0**	**3**	**64**	**0**	**0**	**67**	**124**
01:45 PM	**2**	**0**	**8**	**0**	**10**	0	44	**3**	**0**	**47**	**0**	**0**	**0**	**0**	**0**	**2**	**65**	**0**	**0**	**67**	**124**
Total Volume	7	0	11	0	18	1	221	6	0	228	0	0	1	0	1	11	248	0	0	259	506
% App. Total	38.9	0	61.1	0		0.4	96.9	2.6	0		0	0	100	0		4.2	95.8	0	0		
PHF	.438	.000	.344	.000	.450	.250	.863	.500	.000	.851	.000	.000	.250	.000	.250	.688	.925	.000	.000	.938	.891

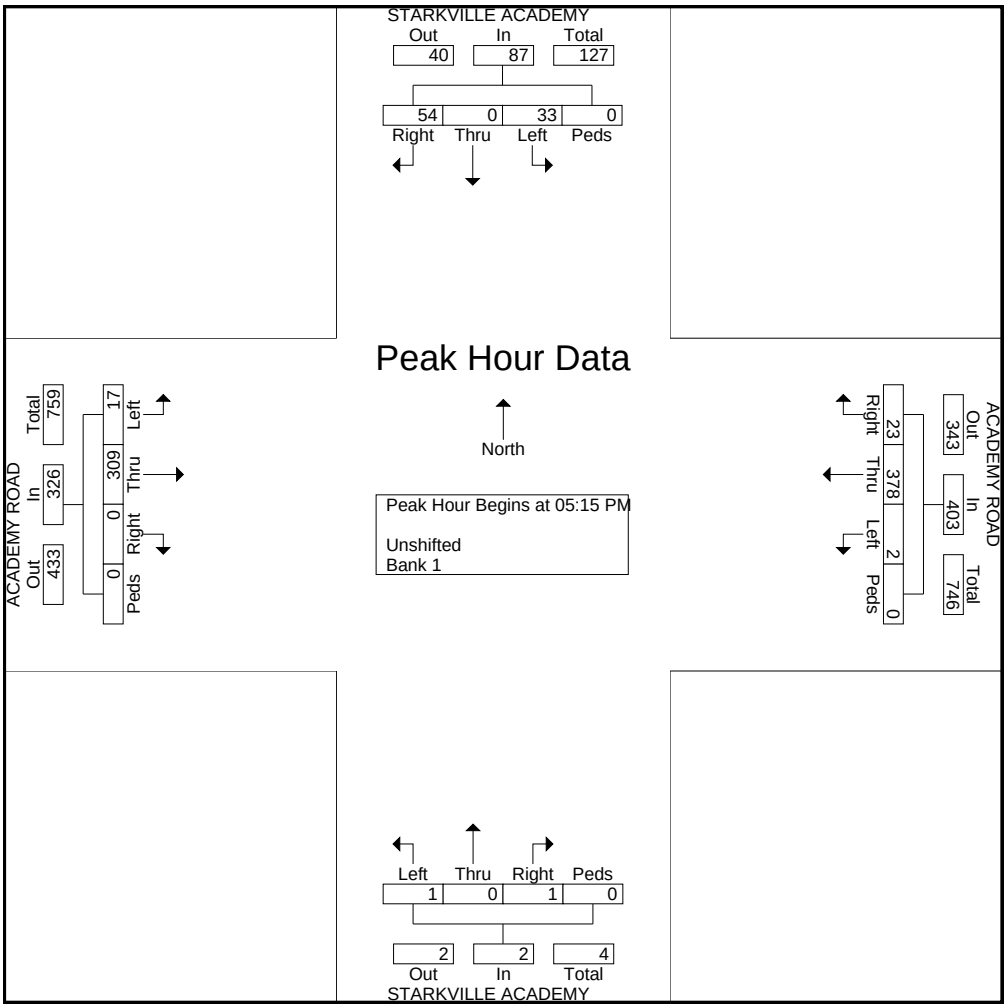


City of Starkville

Intersection: Academy School Entr./Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Academy_AcademyEnt
Site Code : 00000000
Start Date : 9/29/2015
Page No : 5

	STARKVILLE ACADEMY Southbound					ACADEMY ROAD Westbound					STARKVILLE ACADEMY Northbound					ACADEMY ROAD Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:15 PM																					
05:15 PM	5	0	9	0	14	0	83	3	0	86	0	0	**1**	0	**1**	3	**84**	0	0	**87**	188
05:30 PM	3	0	16	0	19	0	84	**8**			**1**					**7**					
05:45 PM	**16**	**0**	**19**	**0**	**35**	0	**112**	**8**	**0**	**120**	0	0	0	0	0	5	76	0	0	81	**236**
06:00 PM	9	0	10	0	19	**2**	99	4	0	105	0	0	0	0	0	2	79	0	0	81	205
Total Volume	33	0	54	0	87	2	378	23	0	403	1	0	1	0	2	17	309	0	0	326	818
% App. Total	37.9	0	62.1	0		0.5	93.8	5.7	0		50	0	50	0		5.2	94.8	0	0		
PHF	.516	.000	.711	.000	.621	.250	.844	.719	.000	.840	.250	.000	.250	.000	.500	.607	.920	.000	.000	.937	.867



City of Starkville

Intersection: Montgomery St. / Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Academy
Site Code : 00000000
Start Date : 4/22/2015
Page No : 1

Groups Printed- Unshifted

	MONTGOMERY Northbound					MONTGOMERY Southbound					ACADEMY Eastbound					ACADEMY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:00 AM	7	23	0	0	30	0	11	12	0	23	20	0	1	0	21	0	0	0	0	0	74
06:15 AM	8	33	0	0	41	0	10	9	0	19	27	0	9	0	36	0	0	0	0	0	96
06:30 AM	9	60	0	0	69	0	12	20	0	32	22	0	7	0	29	0	0	0	0	0	130
06:45 AM	10	78	0	0	88	0	14	20	0	34	40	0	11	0	51	0	0	0	0	0	173
Total	34	194	0	0	228	0	47	61	0	108	109	0	28	0	137	0	0	0	0	0	473
07:00 AM	18	106	1	0	125	0	15	25	0	40	49	0	12	0	61	0	0	0	0	0	226
07:15 AM	48	120	1	0	169	0	26	31	0	57	60	0	4	0	64	0	0	0	0	0	290
07:30 AM	95	123	0	0	218	0	32	24	0	56	104	0	16	0	120	0	0	0	0	0	394
07:45 AM	64	141	0	0	205	0	31	26	0	57	108	0	13	0	121	0	0	0	0	0	383
Total	225	490	2	0	717	0	104	106	0	210	321	0	45	0	366	0	0	0	0	0	1293
08:00 AM	32	104	0	0	136	0	22	28	0	50	42	0	15	0	57	0	0	0	0	0	243
08:15 AM	21	78	0	0	99	0	25	19	0	44	49	0	14	0	63	0	0	0	0	0	206
08:30 AM	21	95	0	0	116	0	32	21	0	53	60	0	14	0	74	0	0	0	0	0	243
08:45 AM	27	74	0	0	101	0	28	37	0	65	39	0	12	0	51	0	0	0	0	0	217
Total	101	351	0	0	452	0	107	105	0	212	190	0	55	0	245	0	0	0	0	0	909
09:00 AM	28	51	0	0	79	0	42	31	0	73	44	0	11	0	55	0	0	0	0	0	207
09:15 AM	19	45	0	0	64	1	26	27	0	54	38	0	11	0	49	0	0	0	0	0	167
09:30 AM	21	49	0	0	70	0	23	29	0	52	66	0	14	0	80	0	0	0	0	0	202
09:45 AM	19	42	0	0	61	1	30	22	0	53	39	0	18	0	57	0	0	0	0	0	171
Total	87	187	0	0	274	2	121	109	0	232	187	0	54	0	241	0	0	0	0	0	747
10:00 AM	17	40	0	0	57	0	28	29	0	57	26	0	16	0	42	0	0	0	0	0	156
10:15 AM	15	33	0	0	48	0	19	17	0	36	36	0	14	0	50	0	0	0	0	0	134
10:30 AM	24	40	0	0	64	0	37	25	0	62	34	0	19	0	53	0	0	0	0	0	179
10:45 AM	22	46	0	0	68	0	23	27	0	50	33	0	15	0	48	0	0	0	0	0	166
Total	78	159	0	0	237	0	107	98	0	205	129	0	64	0	193	0	0	0	0	0	635
11:00 AM	16	32	0	0	48	0	31	43	0	74	34	0	15	0	49	0	0	0	0	0	171
11:15 AM	25	56	0	0	81	0	37	28	0	65	34	0	13	0	47	0	0	0	0	0	193
11:30 AM	10	29	0	0	39	0	63	37	0	100	35	0	20	0	55	0	0	0	0	0	194
11:45 AM	18	46	0	0	64	0	50	42	0	92	37	0	13	0	50	0	0	0	0	0	206
Total	69	163	0	0	232	0	181	150	0	331	140	0	61	0	201	0	0	0	0	0	764
12:00 PM	24	49	0	0	73	0	65	64	0	129	40	0	27	0	67	0	0	0	0	0	269
12:15 PM	16	47	0	0	63	0	60	53	0	113	50	0	21	0	71	0	0	0	0	0	247
12:30 PM	17	31	3	0	51	0	46	36	0	82	41	0	24	0	65	0	0	0	0	0	198
12:45 PM	26	71	0	0	97	0	64	41	0	105	44	0	22	0	66	0	0	0	0	0	268
Total	83	198	3	0	284	0	235	194	0	429	175	0	94	0	269	0	0	0	0	0	982
01:00 PM	19	51	0	0	70	0	54	53	0	107	39	0	33	0	72	0	0	0	0	0	249
01:15 PM	20	46	0	0	66	0	48	40	0	88	56	0	17	0	73	0	0	0	0	0	227
01:30 PM	13	59	0	0	72	0	34	48	0	82	30	0	20	0	50	0	0	0	0	0	204
01:45 PM	21	30	0	0	51	0	31	39	0	70	35	0	10	0	45	0	0	0	0	0	166
Total	73	186	0	0	259	0	167	180	0	347	160	0	80	0	240	0	0	0	0	0	846
02:00 PM	18	39	0	0	57	0	43	48	0	91	41	0	13	0	54	0	0	0	0	0	202
02:15 PM	24	37	0	0	61	0	45	44	0	89	38	0	9	0	47	0	0	0	0	0	197
02:30 PM	21	50	0	0	71	0	48	46	0	94	42	0	10	0	52	0	0	0	0	0	217
02:45 PM	10	49	0	0	59	0	33	46	0	79	60	0	32	0	92	0	0	0	0	0	230
Total	73	175	0	0	248	0	169	184	0	353	181	0	64	0	245	0	0	0	0	0	846
03:00 PM	37	39	0	0	76	0	42	54	0	96	60	0	35	0	95	0	0	0	0	0	267
03:15 PM	26	33	0	0	59	0	61	62	0	123	40	0	22	0	62	0	0	0	0	0	244
03:30 PM	9	34	0	0	43	0	73	39	0	112	34	0	33	0	67	0	0	0	0	0	222
03:45 PM	23	22	0	0	45	0	62	31	0	93	42	0	27	0	69	0	0	0	0	0	207
Total	95	128	0	0	223	0	238	186	0	424	176	0	117	0	293	0	0	0	0	0	940
04:00 PM	26	49	0	0	75	0	75	59	0	134	26	0	33	0	59	0	0	0	0	0	268
04:15 PM	22	33	0	0	55	0	83	65	0	148	36	0	40	0	76	0	0	0	0	0	279

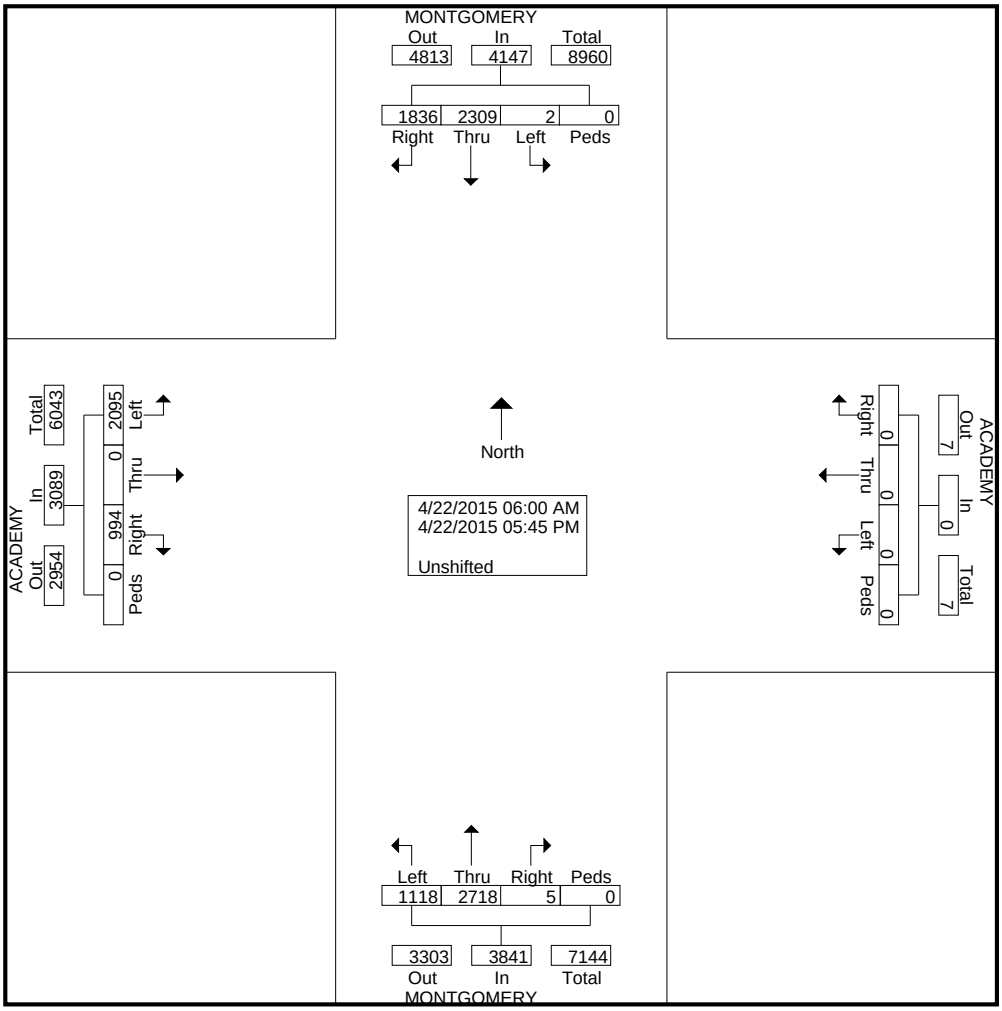
City of Starkville

Intersection: Montgomery St. / Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Academy
Site Code : 00000000
Start Date : 4/22/2015
Page No : 2

Groups Printed- Unshifted

	MONTGOMERY Northbound					MONTGOMERY Southbound					ACADEMY Eastbound					ACADEMY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:30 PM	15	64	0	0	79	0	94	49	0	143	34	0	45	0	79	0	0	0	0	0	301
04:45 PM	19	63	0	0	82	0	106	64	0	170	47	0	40	0	87	0	0	0	0	0	339
Total	82	209	0	0	291	0	358	237	0	595	143	0	158	0	301	0	0	0	0	0	1187
05:00 PM	32	50	0	0	82	0	117	64	0	181	50	0	44	0	94	0	0	0	0	0	357
05:15 PM	35	70	0	0	105	0	118	63	0	181	38	0	51	0	89	0	0	0	0	0	375
05:30 PM	30	83	0	0	113	0	134	52	0	186	50	0	42	0	92	0	0	0	0	0	391
05:45 PM	21	75	0	0	96	0	106	47	0	153	46	0	37	0	83	0	0	0	0	0	332
Total	118	278	0	0	396	0	475	226	0	701	184	0	174	0	358	0	0	0	0	0	1455
Grand Total	1118	2718	5	0	3841	2	2309	1836	0	4147	2095	0	994	0	3089	0	0	0	0	0	11077
Apprch %	29.1	70.8	0.1	0		0	55.7	44.3	0		67.8	0	32.2	0		0	0	0	0		
Total %	10.1	24.5	0	0	34.7	0	20.8	16.6	0	37.4	18.9	0	9	0	27.9	0	0	0	0	0	

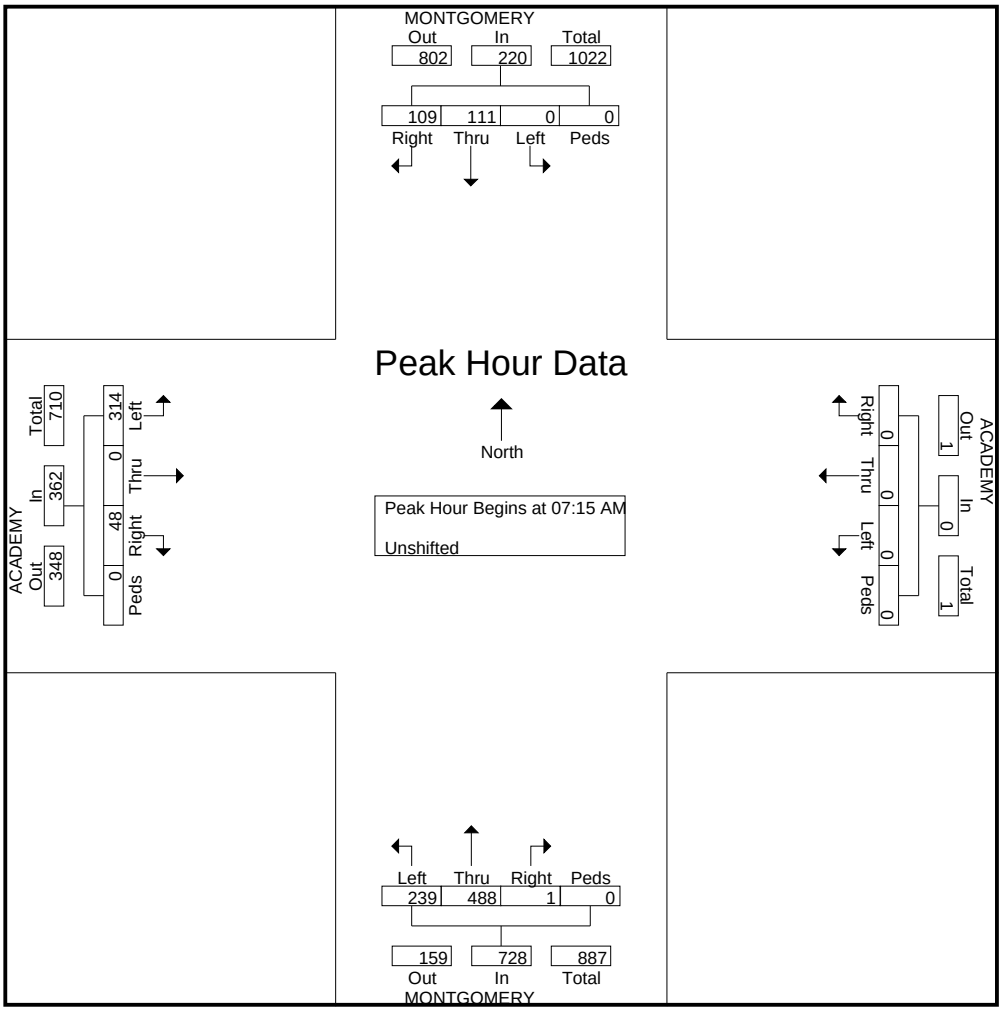


City of Starkville

Intersection: Montgomery St. / Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Academy
Site Code : 00000000
Start Date : 4/22/2015
Page No : 3

	MONTGOMERY Northbound					MONTGOMERY Southbound					ACADEMY Eastbound					ACADEMY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	48	120	**1**	0	169	0	26	**31**	0	**57**	60	0	4	0	64	0	0	0	0	0	290
07:30 AM	**95**	123	0	0	**218**	0	**32**	24	0	56	104	0	**16**	0	120	0	0	0	0	0	**394**
07:45 AM	64	**141**	0	0	205	0	31	26	0	57	**108**	0	13	0	**121**	0	0	0	0	0	383
08:00 AM	32	104	0	0	136	0	22	28	0	50	42	0	15	0	57	0	0	0	0	0	243
Total Volume	239	488	1	0	728	0	111	109	0	220	314	0	48	0	362	0	0	0	0	0	1310
% App. Total	32.8	67	0.1	0		0	50.5	49.5	0		86.7	0	13.3	0		0	0	0	0		
PHF	.629	.865	.250	.000	.835	.000	.867	.879	.000	.965	.727	.000	.750	.000	.748	.000	.000	.000	.000	.000	.831

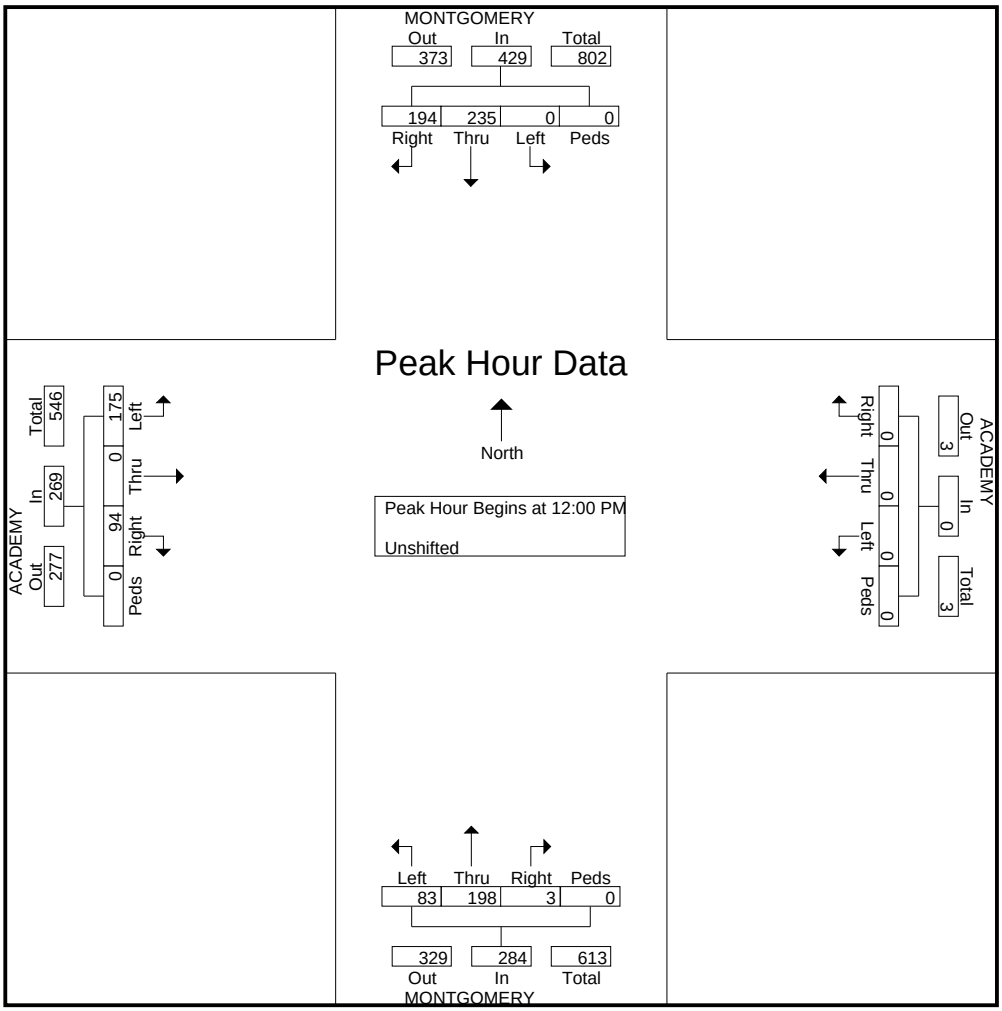


City of Starkville

Intersection: Montgomery St. / Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Academy
Site Code : 00000000
Start Date : 4/22/2015
Page No : 4

	MONTGOMERY Northbound					MONTGOMERY Southbound					ACADEMY Eastbound					ACADEMY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	24	49	0	0	73	0	**65**	**64**	0	**129**	40	0	**27**	0	67	0	0	0	0	0	**269**
12:15 PM	16	47	0	0	63	0	60	53	0	113	**50**	0	21	0	**71**	0	0	0	0	0	247
12:30 PM	17	31	**3**	0	51	0	46	36	0	82	41	0	24	0	65	0	0	0	0	0	198
12:45 PM	**26**	**71**	0	0	**97**	0	64	41	0	105	44	0	22	0	66	0	0	0	0	0	268
Total Volume	83	198	3	0	284	0	235	194	0	429	175	0	94	0	269	0	0	0	0	0	982
% App. Total	29.2	69.7	1.1	0		0	54.8	45.2	0		65.1	0	34.9	0		0	0	0	0		
PHF	.798	.697	.250	.000	.732	.000	.904	.758	.000	.831	.875	.000	.870	.000	.947	.000	.000	.000	.000	.000	.913

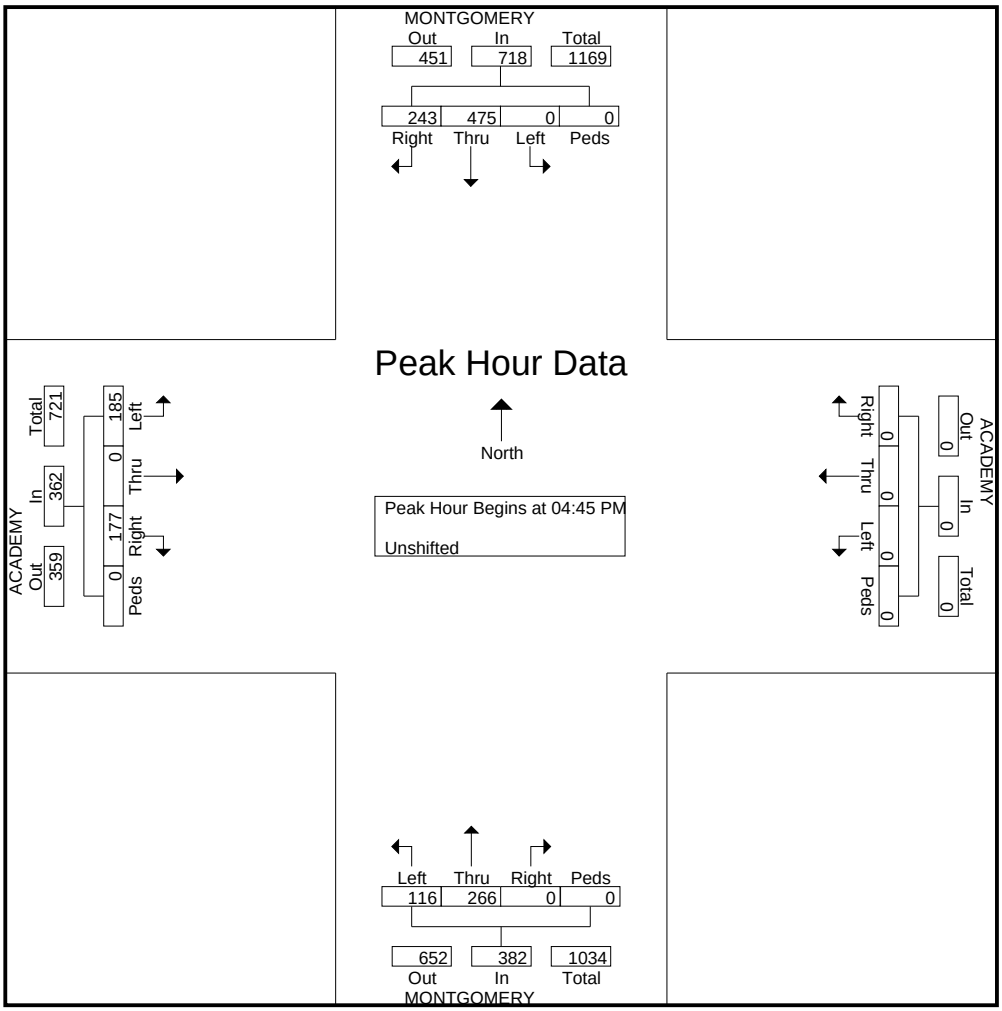


City of Starkville

Intersection: Montgomery St. / Academy Rd.
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Academy
Site Code : 00000000
Start Date : 4/22/2015
Page No : 5

	MONTGOMERY Northbound					MONTGOMERY Southbound					ACADEMY Eastbound					ACADEMY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	19	63	0	0	82	0	106	**64**	0	170	47	0	40	0	87	0	0	0	0	0	339
05:00 PM	32	50	0	0	82	0	117	64	0	181	**50**	0	44	0	**94**	0	0	0	0	0	357
05:15 PM	**35**	70	0	0	105	0	118	63	0	181	38	0	**51**	0	89	0	0	0	0	0	375
05:30 PM	30	**83**	0	0	**113**	0	**134**	52	0	**186**	50	0	42	0	92	0	0	0	0	0	**391**
Total Volume	116	266	0	0	382	0	475	243	0	718	185	0	177	0	362	0	0	0	0	0	1462
% App. Total	30.4	69.6	0	0		0	66.2	33.8	0		51.1	0	48.9	0		0	0	0	0		
PHF	.829	.801	.000	.000	.845	.000	.886	.949	.000	.965	.925	.000	.868	.000	.963	.000	.000	.000	.000	.000	.935



City of Starkville

Intersection: Montgomery St. / Lynn Lane
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Lynn Lane
Site Code : 00000000
Start Date : 4/22/2015
Page No : 1

Groups Printed- Unshifted

	MONTGOMERY ST Northbound					MONTGOMERY ST Southbound					LYNN LANE Eastbound					LYNN LANE Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:00 AM	0	40	0	0	40	0	18	7	0	25	7	0	0	0	7	0	0	0	0	0	72
06:15 AM	0	63	0	0	63	0	22	6	0	28	20	0	1	0	21	0	0	0	0	0	112
06:30 AM	0	85	0	0	85	0	36	13	0	49	20	0	1	0	21	0	0	0	0	0	155
06:45 AM	6	121	0	0	127	0	38	18	0	56	31	0	3	0	34	0	0	0	0	0	217
Total	6	309	0	0	315	0	114	44	0	158	78	0	5	0	83	0	0	0	0	0	556
07:00 AM	2	163	0	0	165	0	39	13	0	52	29	0	0	0	29	0	0	0	0	0	246
07:15 AM	7	216	0	0	223	0	66	45	0	111	39	0	1	0	40	0	0	0	0	0	374
07:30 AM	18	241	0	0	259	0	59	87	0	146	77	0	0	0	77	0	0	0	0	0	482
07:45 AM	19	268	0	0	287	0	66	73	0	139	80	0	6	0	86	0	0	0	0	0	512
Total	46	888	0	0	934	0	230	218	0	448	225	0	7	0	232	0	0	0	0	0	1614
08:00 AM	25	155	0	0	180	0	61	21	0	82	72	9	1	0	82	0	0	0	0	0	344
08:15 AM	3	138	0	0	141	0	44	19	0	63	36	0	2	0	38	0	0	0	0	0	242
08:30 AM	5	167	0	0	172	0	59	9	0	68	58	0	3	0	61	0	0	0	0	0	301
08:45 AM	2	140	0	0	142	0	71	13	0	84	38	0	6	0	44	0	0	0	0	0	270
Total	35	600	0	0	635	0	235	62	0	297	204	9	12	0	225	0	0	0	0	0	1157
09:00 AM	3	100	0	0	103	0	68	18	0	86	36	0	6	0	42	0	0	0	0	0	231
09:15 AM	6	94	0	0	100	0	60	23	0	83	33	0	6	0	39	0	0	0	0	0	222
09:30 AM	7	129	0	0	136	0	58	9	0	67	36	0	7	0	43	0	0	0	0	0	246
09:45 AM	4	94	0	0	98	0	61	25	0	86	43	0	6	0	49	0	0	0	0	0	233
Total	20	417	0	0	437	0	247	75	0	322	148	0	25	0	173	0	0	0	0	0	932
10:00 AM	7	66	0	0	73	0	70	31	0	101	19	0	2	0	21	0	0	0	0	0	195
10:15 AM	2	72	0	0	74	0	51	17	0	68	30	1	2	0	33	0	0	0	0	0	175
10:30 AM	2	82	0	0	84	0	65	16	0	81	29	0	7	0	36	0	0	0	0	0	201
10:45 AM	1	84	0	0	85	0	62	16	0	78	23	0	5	0	28	0	0	0	0	0	191
Total	12	304	0	0	316	0	248	80	0	328	101	1	16	0	118	0	0	0	0	0	762
11:00 AM	1	76	0	0	77	0	92	36	0	128	23	0	6	0	29	0	0	0	0	0	234
11:15 AM	3	104	0	0	107	0	72	23	0	95	24	0	7	0	31	0	0	0	0	0	233
11:30 AM	0	80	0	0	80	0	105	12	0	117	31	0	4	0	35	0	0	0	0	0	232
11:45 AM	2	87	0	0	89	0	118	29	0	147	32	0	3	0	35	0	0	0	0	0	271
Total	6	347	0	0	353	0	387	100	0	487	110	0	20	0	130	0	0	0	0	0	970
12:00 PM	7	89	0	0	96	0	140	29	0	169	25	2	6	0	33	0	0	0	0	0	298
12:15 PM	2	91	0	0	93	0	116	41	0	157	32	0	2	0	34	0	2	0	0	2	286
12:30 PM	3	82	0	0	85	0	99	23	0	122	29	0	1	0	30	0	0	0	0	0	237
12:45 PM	1	113	0	0	114	0	103	36	0	139	38	0	2	0	40	0	0	0	0	0	293
Total	13	375	0	0	388	0	458	129	0	587	124	2	11	0	137	0	2	0	0	2	1114
01:00 PM	4	100	7	0	111	0	109	36	0	145	25	0	1	0	26	0	0	0	0	0	282
01:15 PM	5	98	0	0	103	0	98	28	0	126	33	0	6	0	39	0	0	0	0	0	268
01:30 PM	4	99	1	0	104	0	87	30	0	117	49	0	10	0	59	0	0	0	0	0	280
01:45 PM	4	90	0	0	94	0	93	24	0	117	34	0	4	0	38	0	0	0	0	0	249
Total	17	387	8	0	412	0	387	118	0	505	141	0	21	0	162	0	0	0	0	0	1079
02:00 PM	2	82	0	0	84	0	108	43	0	151	27	0	8	0	35	0	0	0	0	0	270
02:15 PM	4	86	0	0	90	0	99	51	0	150	34	0	6	0	40	0	0	0	0	0	280
02:30 PM	8	96	0	0	104	0	104	50	0	154	39	0	3	0	42	0	0	0	0	0	300
02:45 PM	5	111	0	0	116	0	111	60	0	171	41	0	3	0	44	0	0	0	0	0	331
Total	19	375	0	0	394	0	422	204	0	626	141	0	20	0	161	0	0	0	0	0	1181
03:00 PM	6	115	0	0	121	0	117	62	0	179	42	0	10	0	52	0	0	0	0	0	352
03:15 PM	3	96	0	0	99	0	155	73	0	228	47	0	11	0	58	0	0	0	0	0	385
03:30 PM	5	96	0	0	101	0	138	60	0	198	38	0	13	0	51	0	0	0	0	0	350
03:45 PM	2	83	0	0	85	0	121	53	0	174	39	0	6	0	45	0	0	0	0	0	304
Total	16	390	0	0	406	0	531	248	0	779	166	0	40	0	206	0	0	0	0	0	1391
04:00 PM	2	83	0	0	85	0	162	46	0	208	32	0	4	0	36	0	0	0	0	0	329
04:15 PM	2	78	0	0	80	0	154	40	0	194	24	0	8	0	32	0	0	0	0	0	306

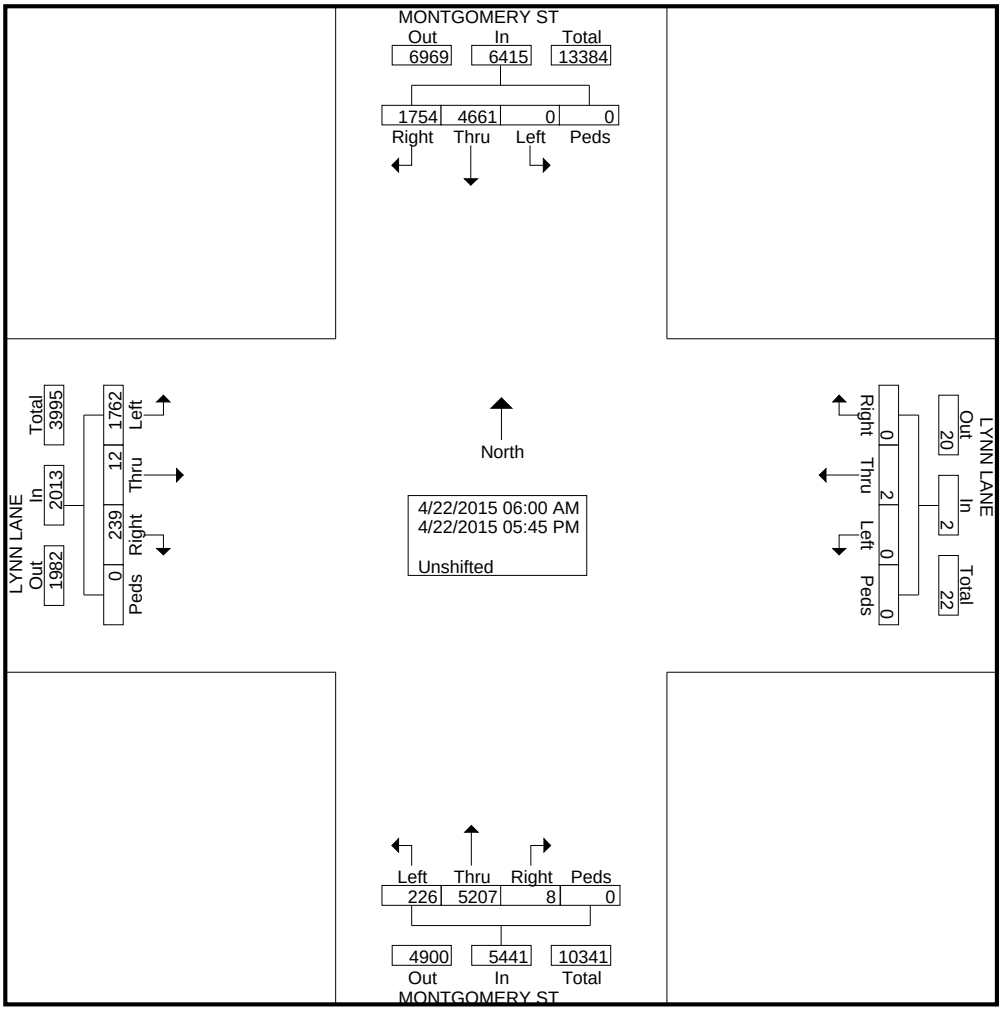
City of Starkville

Intersection: Montgomery St. / Lynn Lane
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Lynn Lane
Site Code : 00000000
Start Date : 4/22/2015
Page No : 2

Groups Printed- Unshifted

	MONTGOMERY ST Northbound					MONTGOMERY ST Southbound					LYNN LANE Eastbound					LYNN LANE Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:30 PM	6	96	0	0	102	0	127	41	0	168	46	0	6	0	52	0	0	0	0	0	322
04:45 PM	5	105	0	0	110	0	184	67	0	251	41	0	9	0	50	0	0	0	0	0	411
Total	15	362	0	0	377	0	627	194	0	821	143	0	27	0	170	0	0	0	0	0	1368
05:00 PM	6	97	0	0	103	0	207	80	0	287	35	0	6	0	41	0	0	0	0	0	431
05:15 PM	2	106	0	0	108	0	194	73	0	267	50	0	11	0	61	0	0	0	0	0	436
05:30 PM	7	138	0	0	145	0	211	78	0	289	61	0	11	0	72	0	0	0	0	0	506
05:45 PM	6	112	0	0	118	0	163	51	0	214	35	0	7	0	42	0	0	0	0	0	374
Total	21	453	0	0	474	0	775	282	0	1057	181	0	35	0	216	0	0	0	0	0	1747
Grand Total	226	5207	8	0	5441	0	4661	1754	0	6415	1762	12	239	0	2013	0	2	0	0	2	13871
Apprch %	4.2	95.7	0.1	0		0	72.7	27.3	0		87.5	0.6	11.9	0		0	100	0	0		
Total %	1.6	37.5	0.1	0	39.2	0	33.6	12.6	0	46.2	12.7	0.1	1.7	0	14.5	0	0	0	0	0	

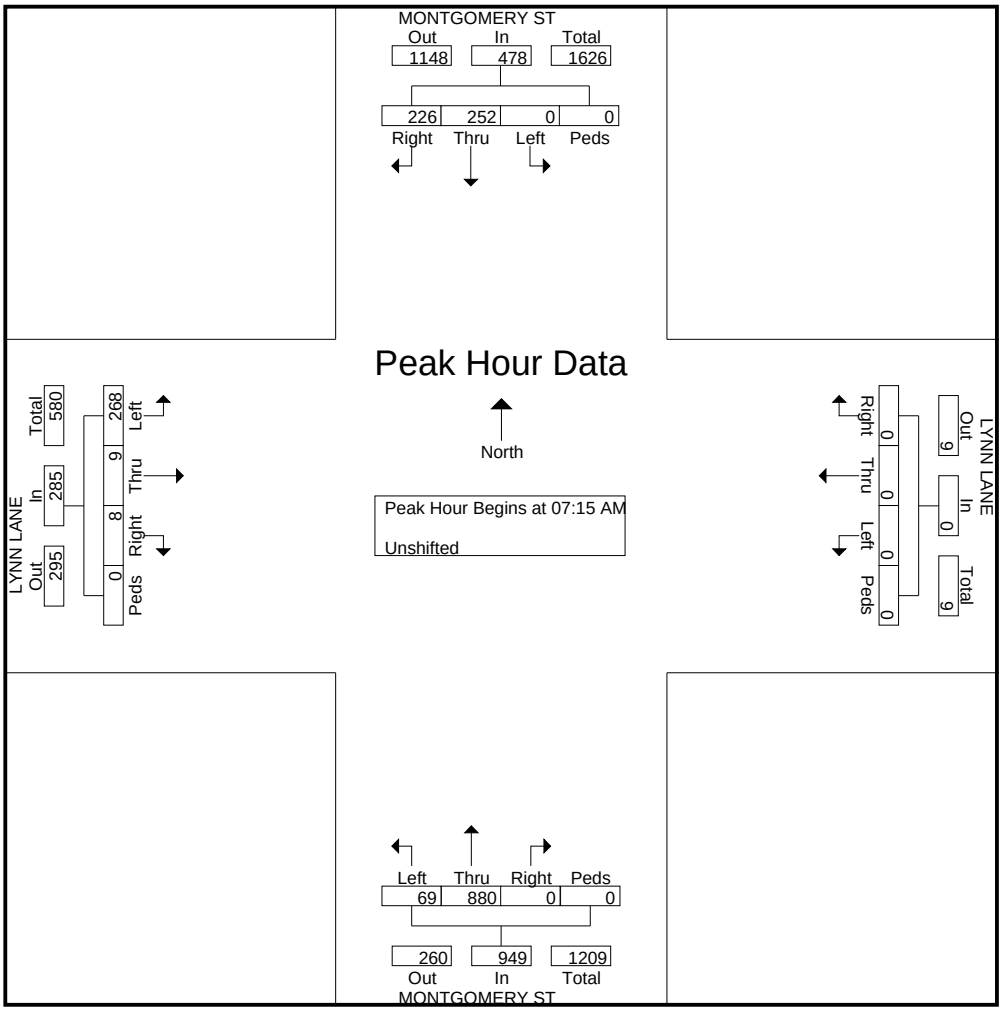


City of Starkville

Intersection: Montgomery St. / Lynn Lane
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Lynn Lane
Site Code : 00000000
Start Date : 4/22/2015
Page No : 3

	MONTGOMERY ST Northbound					MONTGOMERY ST Southbound					LYNN LANE Eastbound					LYNN LANE Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	7	216	0	0	223	0	**66**	45	0	111	39	0	1	0	40	0	0	0	0	0	374
07:30 AM	18	241	0	0	259	0	59	**87**	0	**146**	77	0	0	0	77	0	0	0	0	0	482
07:45 AM	19	**268**	0	0	**287**	0	66	73	0	139	**80**	0	**6**	0	**86**	0	0	0	0	0	**512**
08:00 AM	**25**	155	0	0	180	0	61	21	0	82	72	**9**	1	0	82	0	0	0	0	0	344
Total Volume	69	880	0	0	949	0	252	226	0	478	268	9	8	0	285	0	0	0	0	0	1712
% App. Total	7.3	92.7	0	0		0	52.7	47.3	0		94	3.2	2.8	0		0	0	0	0		
PHF	.690	.821	.000	.000	.827	.000	.955	.649	.000	.818	.838	.250	.333	.000	.828	.000	.000	.000	.000	.000	.836

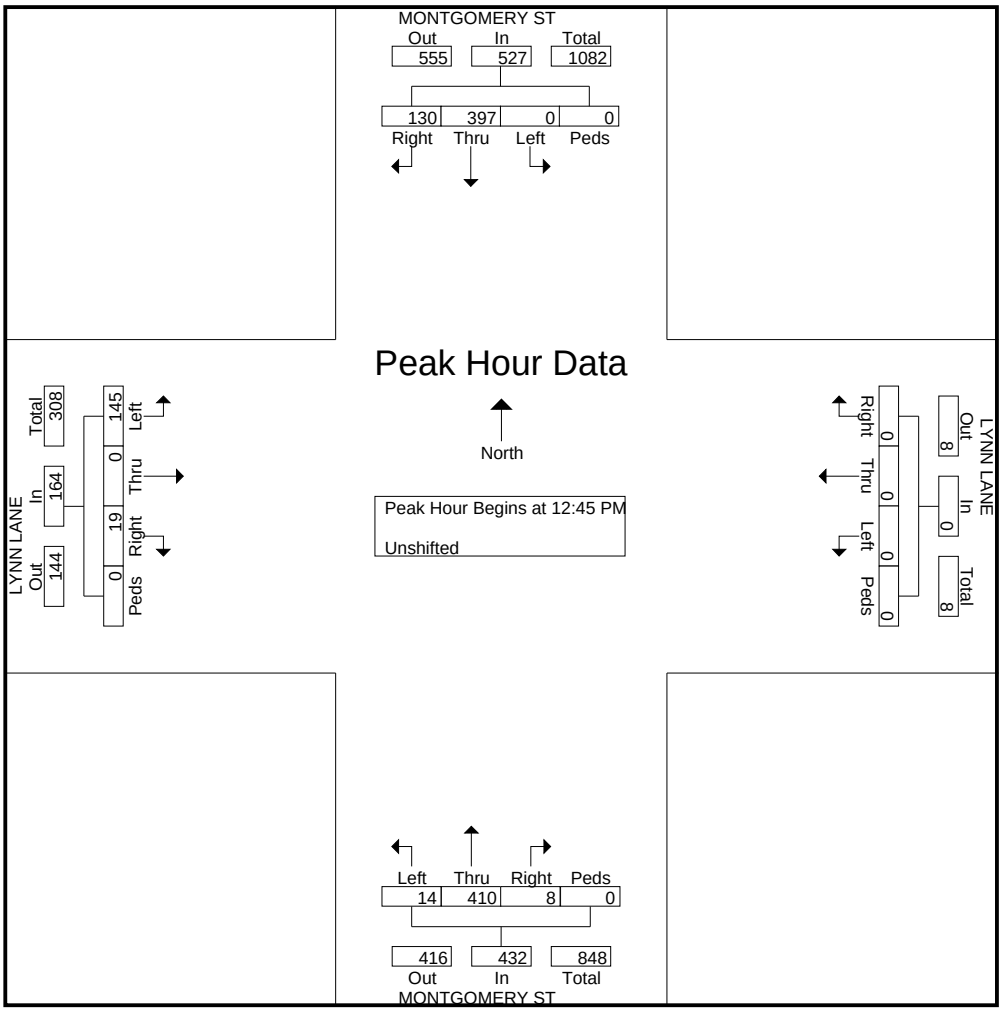


City of Starkville

Intersection: Montgomery St. / Lynn Lane
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Lynn Lane
Site Code : 00000000
Start Date : 4/22/2015
Page No : 4

	MONTGOMERY ST Northbound					MONTGOMERY ST Southbound					LYNN LANE Eastbound					LYNN LANE Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:45 PM																					
12:45 PM	1	**113**	0	0	**114**	0	103	**36**	0	139	38	0	2	0	40	0	0	0	0	0	**293**
01:00 PM	4	100	**7**	0	111	0	**109**	36	0	**145**	25	0	1	0	26	0	0	0	0	0	282
01:15 PM	**5**	98	0	0	103	0	98	28	0	126	33	0	6	0	39	0	0	0	0	0	268
01:30 PM	4	99	1	0	104	0	87	30	0	117	**49**	0	**10**	0	**59**	0	0	0	0	0	280
Total Volume	14	410	8	0	432	0	397	130	0	527	145	0	19	0	164	0	0	0	0	0	1123
% App. Total	3.2	94.9	1.9	0		0	75.3	24.7	0		88.4	0	11.6	0		0	0	0	0		
PHF	.700	.907	.286	.000	.947	.000	.911	.903	.000	.909	.740	.000	.475	.000	.695	.000	.000	.000	.000	.000	.958

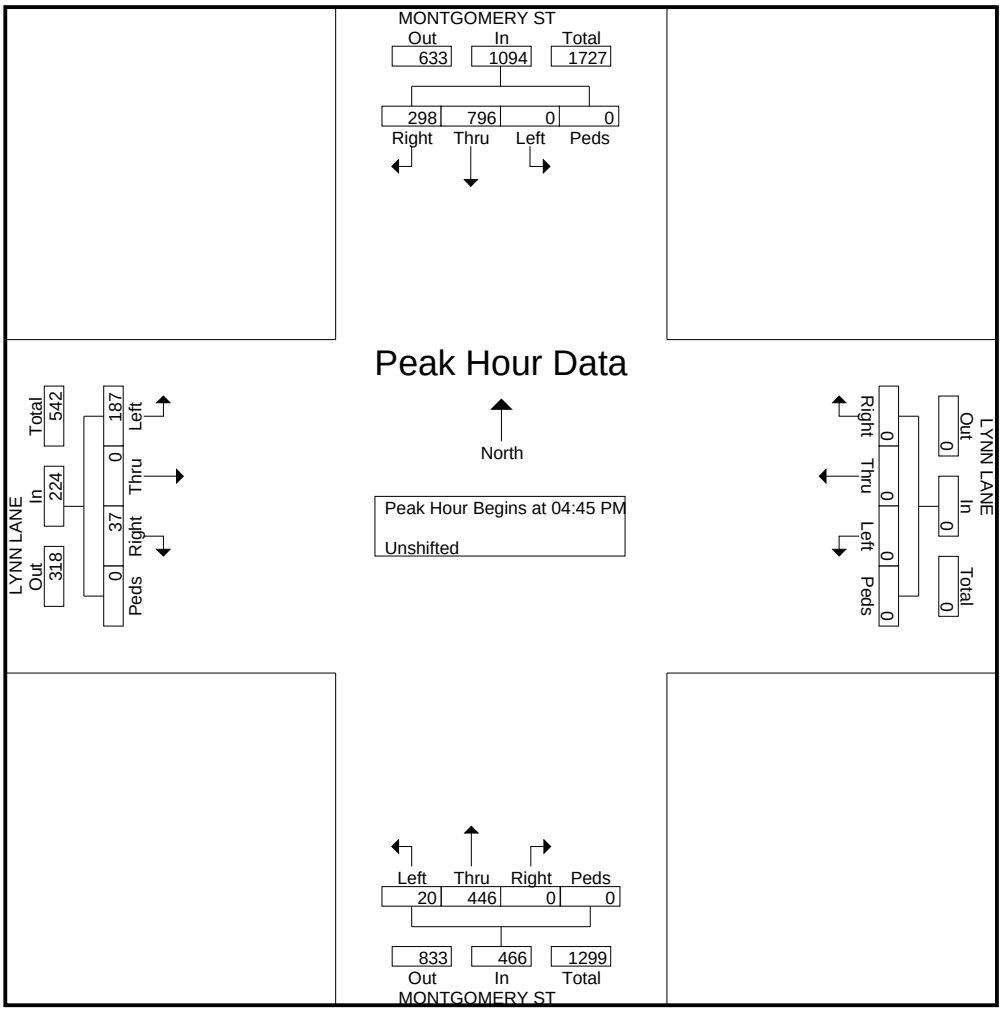


City of Starkville

Intersection: Montgomery St. / Lynn Lane
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Lynn Lane
Site Code : 00000000
Start Date : 4/22/2015
Page No : 5

	MONTGOMERY ST Northbound					MONTGOMERY ST Southbound					LYNN LANE Eastbound					LYNN LANE Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	5	105	0	0	110	0	184	67	0	251	41	0	9	0	50	0	0	0	0	0	411
05:00 PM	6	97	0	0	103	0	207	**80**	0	287	35	0	6	0	41	0	0	0	0	0	431
05:15 PM	2	106	0	0	108	0	194	73	0	267	50	0	**11**	0	61	0	0	0	0	0	436
05:30 PM	**7**	**138**	0	0	**145**	0	**211**	78	0	**289**	**61**	0	11	0	**72**	0	0	0	0	0	**506**
Total Volume	20	446	0	0	466	0	796	298	0	1094	187	0	37	0	224	0	0	0	0	0	1784
% App. Total	4.3	95.7	0	0		0	72.8	27.2	0		83.5	0	16.5	0		0	0	0	0		
PHF	.714	.808	.000	.000	.803	.000	.943	.931	.000	.946	.766	.000	.841	.000	.778	.000	.000	.000	.000	.000	.881



City of Starkville

Intersection: Montgomery St. / Locksley Way
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Locksley Way
Site Code : 00000000
Start Date : 4/23/2015
Page No : 1

Groups Printed- Unshifted

	MONTGOMERY ST Northbound					MONTGOMERY ST Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:00 AM	0	30	21	0	51	1	13	0	0	14	1	0	2	0	3	8	0	1	0	9	77
06:15 AM	0	46	44	0	90	4	16	0	0	20	0	1	0	0	1	7	0	5	0	12	123
06:30 AM	0	44	30	0	74	6	21	0	0	27	1	1	1	0	3	9	0	4	0	13	117
06:45 AM	0	62	42	0	104	5	43	1	0	49	1	1	0	0	2	23	2	16	0	41	196
Total	0	182	137	0	319	16	93	1	0	110	3	3	3	0	9	47	2	26	0	75	513
07:00 AM	0	100	85	0	185	12	39	1	0	52	1	0	0	0	1	19	0	11	0	30	268
07:15 AM	0	175	114	0	289	15	65	0	0	80	0	1	3	0	4	27	3	8	0	38	411
07:30 AM	0	148	175	4	327	26	91	1	0	118	2	2	4	0	8	31	0	17	0	48	501
07:45 AM	0	171	162	1	334	26	77	0	0	103	4	1	1	0	6	41	1	16	0	58	501
Total	0	594	536	5	1135	79	272	2	0	353	7	4	8	0	19	118	4	52	0	174	1681
08:00 AM	0	127	131	0	258	24	75	0	0	99	2	3	1	0	6	31	0	14	0	45	408
08:15 AM	0	89	81	1	171	13	39	0	0	52	0	1	1	0	2	27	1	6	0	34	259
08:30 AM	16	36	39	0	91	4	12	0	0	16	0	51	33	0	84	23	28	5	0	56	247
08:45 AM	5	80	74	0	159	10	39	2	0	51	0	16	15	0	31	35	11	11	0	57	298
Total	21	332	325	1	679	51	165	2	0	218	2	71	50	0	123	116	40	36	0	192	1212
09:00 AM	1	97	96	0	194	18	40	0	0	58	0	3	2	0	5	43	0	11	0	54	311
09:15 AM	0	80	79	0	159	16	49	0	0	65	3	2	1	0	6	37	0	10	0	47	277
09:30 AM	0	86	57	0	143	19	66	3	0	88	1	4	0	0	5	50	0	13	0	63	299
09:45 AM	1	60	32	0	93	16	55	0	0	71	5	1	0	0	6	25	0	16	0	41	211
Total	2	323	264	0	589	69	210	3	0	282	9	10	3	0	22	155	0	50	0	205	1098
10:00 AM	0	51	43	0	94	5	51	3	0	59	0	1	2	0	3	29	0	1	0	30	186
10:15 AM	0	64	49	0	113	10	49	0	0	59	1	1	0	0	2	39	0	11	0	50	224
10:30 AM	0	66	82	0	148	15	48	0	0	63	0	0	1	0	1	39	1	17	0	57	269
10:45 AM	0	58	58	0	116	17	40	0	0	57	0	1	2	0	3	53	0	15	0	68	244
Total	0	239	232	0	471	47	188	3	0	238	1	3	5	0	9	160	1	44	0	205	923
11:00 AM	0	73	30	0	103	21	57	0	0	78	0	1	3	0	4	69	2	16	0	87	272
11:15 AM	0	78	36	0	114	20	62	0	0	82	1	0	2	0	3	56	1	27	0	84	283
11:30 AM	0	68	36	0	104	26	68	0	0	94	1	1	1	0	3	65	0	21	0	86	287
11:45 AM	0	72	45	0	117	28	78	1	0	107	0	0	1	0	1	83	1	17	0	101	326
Total	0	291	147	0	438	95	265	1	0	361	2	2	7	0	11	273	4	81	0	358	1168
12:00 PM	1	79	63	0	143	29	85	0	0	114	0	1	2	0	3	88	3	35	0	126	386
12:15 PM	0	68	59	0	127	31	77	1	0	109	3	2	1	0	6	74	4	25	0	103	345
12:30 PM	0	65	56	0	121	23	73	2	0	98	0	2	2	0	4	68	3	33	0	104	327
12:45 PM	0	86	63	0	149	26	82	4	0	112	2	2	0	0	4	81	1	26	0	108	373
Total	1	298	241	0	540	109	317	7	0	433	5	7	5	0	17	311	11	119	0	441	1431
01:00 PM	0	76	66	0	142	20	63	1	0	84	2	3	0	0	5	67	1	24	1	93	324
01:15 PM	0	89	68	0	157	23	58	5	0	86	0	0	2	0	2	59	1	24	0	84	329
01:30 PM	0	80	59	0	139	26	55	2	0	83	2	6	1	0	9	60	0	18	0	78	309
01:45 PM	2	81	66	0	149	20	68	2	0	90	0	3	3	0	6	54	1	19	1	75	320
Total	2	326	259	0	587	89	244	10	0	343	4	12	6	0	22	240	3	85	2	330	1282
02:00 PM	0	58	50	0	108	16	69	1	0	86	1	0	4	0	5	81	1	15	0	97	296
02:15 PM	0	68	41	0	109	19	72	0	0	91	1	1	0	0	2	74	0	15	0	89	291
02:30 PM	0	73	30	0	103	12	68	1	0	81	1	3	5	0	9	63	1	22	0	86	279
02:45 PM	0	86	50	0	136	17	78	1	0	96	2	1	4	0	7	74	2	26	0	102	341
Total	0	285	171	0	456	64	287	3	0	354	5	5	13	0	23	292	4	78	0	374	1207
03:00 PM	0	85	81	0	166	18	83	1	0	102	0	0	1	0	1	77	3	24	0	104	373
03:15 PM	0	95	68	0	163	21	100	2	0	123	2	1	1	0	4	96	3	27	0	126	416
03:30 PM	1	79	50	0	130	21	86	0	0	107	2	2	0	0	4	86	7	27	0	120	361
03:45 PM	0	94	62	0	156	29	101	0	0	130	0	3	5	0	8	83	2	23	0	108	402
Total	1	353	261	0	615	89	370	3	0	462	4	6	7	0	17	342	15	101	0	458	1552
04:00 PM	0	57	45	0	102	26	91	5	0	122	1	1	1	0	3	104	2	33	3	142	369
04:15 PM	1	69	43	0	113	23	105	2	0	130	0	1	2	0	3	108	2	28	0	138	384

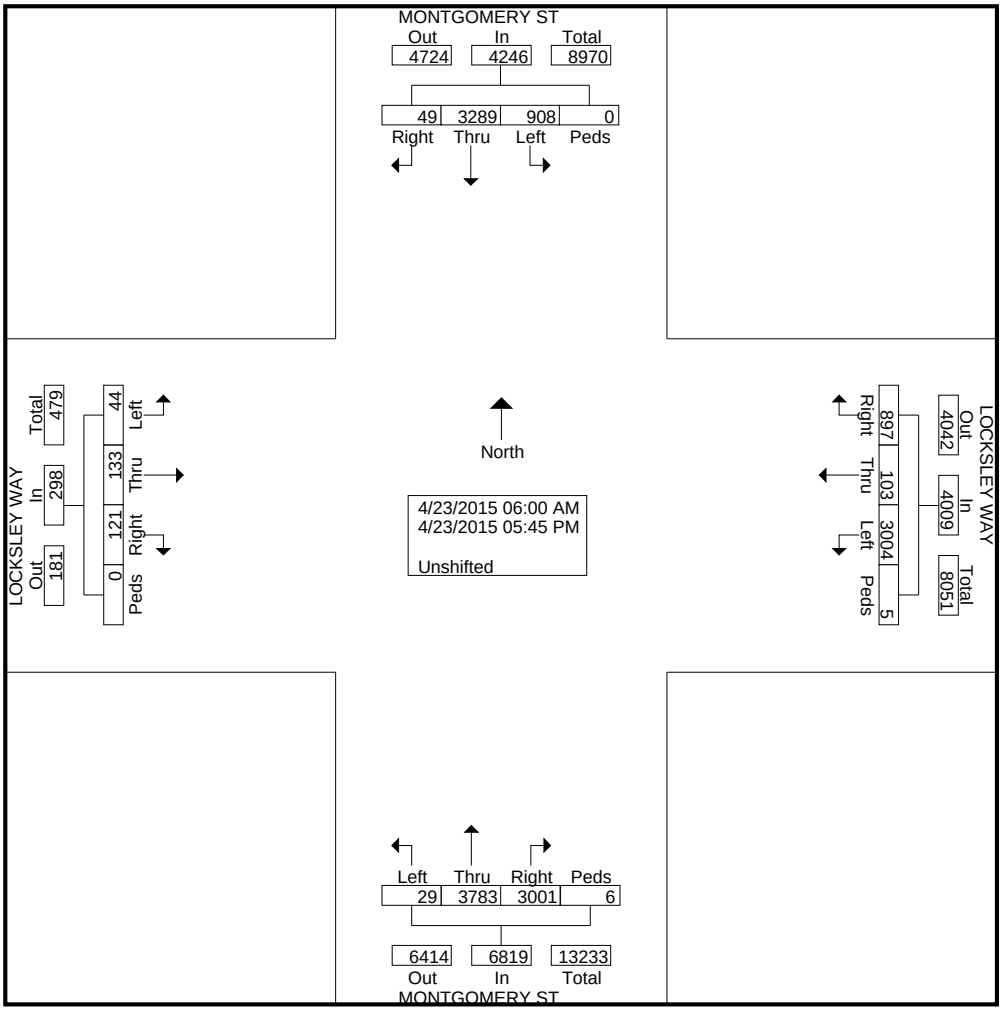
City of Starkville

Intersection: Montgomery St. / Locksley Way
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Locksley Way
Site Code : 00000000
Start Date : 4/23/2015
Page No : 2

Groups Printed- Unshifted

	MONTGOMERY ST Northbound					MONTGOMERY ST Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:30 PM	0	63	56	0	119	19	97	0	0	116	0	2	1	0	3	87	1	22	0	110	348
04:45 PM	0	55	61	0	116	34	104	1	0	139	0	1	2	0	3	125	0	25	0	150	408
Total	1	244	205	0	450	102	397	8	0	507	1	5	6	0	12	424	5	108	3	540	1509
05:00 PM	0	79	63	0	142	28	112	0	0	140	0	1	4	0	5	154	6	40	0	200	487
05:15 PM	0	79	47	0	126	17	149	2	0	168	0	3	3	0	6	163	6	30	0	199	499
05:30 PM	1	65	56	0	122	23	120	3	0	146	0	0	1	0	1	116	2	24	0	142	411
05:45 PM	0	93	57	0	150	30	100	1	0	131	1	1	0	0	2	93	0	23	0	116	399
Total	1	316	223	0	540	98	481	6	0	585	1	5	8	0	14	526	14	117	0	657	1796
Grand Total	29	3783	3001	6	6819	908	3289	49	0	4246	44	133	121	0	298	3004	103	897	5	4009	15372
Apprch %	0.4	55.5	44	0.1		21.4	77.5	1.2	0		14.8	44.6	40.6	0		74.9	2.6	22.4	0.1		
Total %	0.2	24.6	19.5	0	44.4	5.9	21.4	0.3	0	27.6	0.3	0.9	0.8	0	1.9	19.5	0.7	5.8	0	26.1	



City of Starkville

Intersection: Montgomery St. / Locksley Way
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Locksley Way
Site Code : 00000000
Start Date : 4/23/2015
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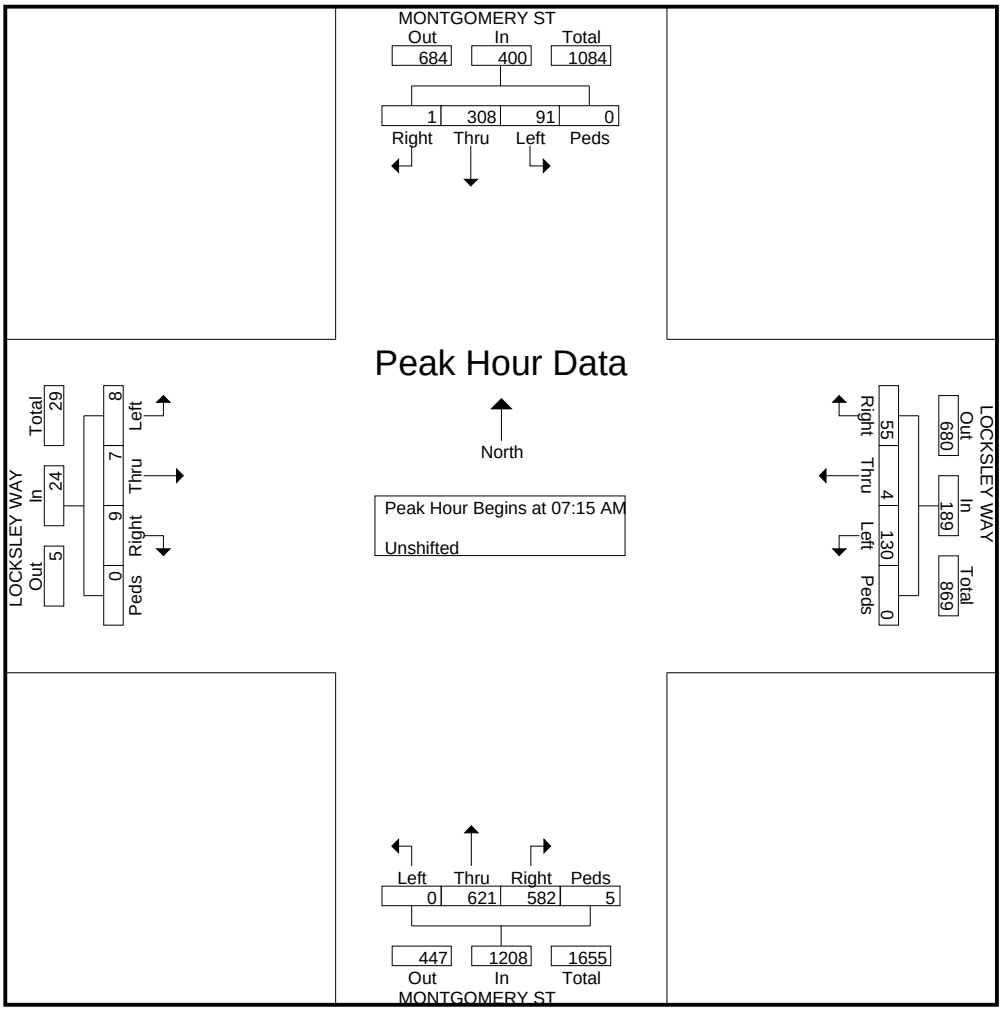
	MONTGOMERY ST Northbound					MONTGOMERY ST Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	**175**	114	0	289	15	65	0	0	80	0	1	3	0	4	27	**3**	8	0	38	411
07:30 AM	0	148	**175**	**4**	327	**26**	**91**	**1**	0	**118**	2	2	**4**	0	**8**	31	0	**17**	0	48	**501**
07:45 AM	0	171	162	1	**334**	26	77	0	0	103	**4**	1	1	0	6	**41**	1	16	0	**58**	501
08:00 AM	0	127	131	0	258	24	75	0	0	99	2	**3**	1	0	6	31	0	14	0	45	408
Total Volume	0	621	582	5	1208	91	308	1	0	400	8	7	9	0	24	130	4	55	0	189	1821
% App. Total	0	51.4	48.2	0.4		22.8	77	0.2	0		33.3	29.2	37.5	0		68.8	2.1	29.1	0		
PHF	.000	.887	.831	.313	.904	.875	.846	.250	.000	.847	.500	.583	.563	.000	.750	.793	.333	.809	.000	.815	.909

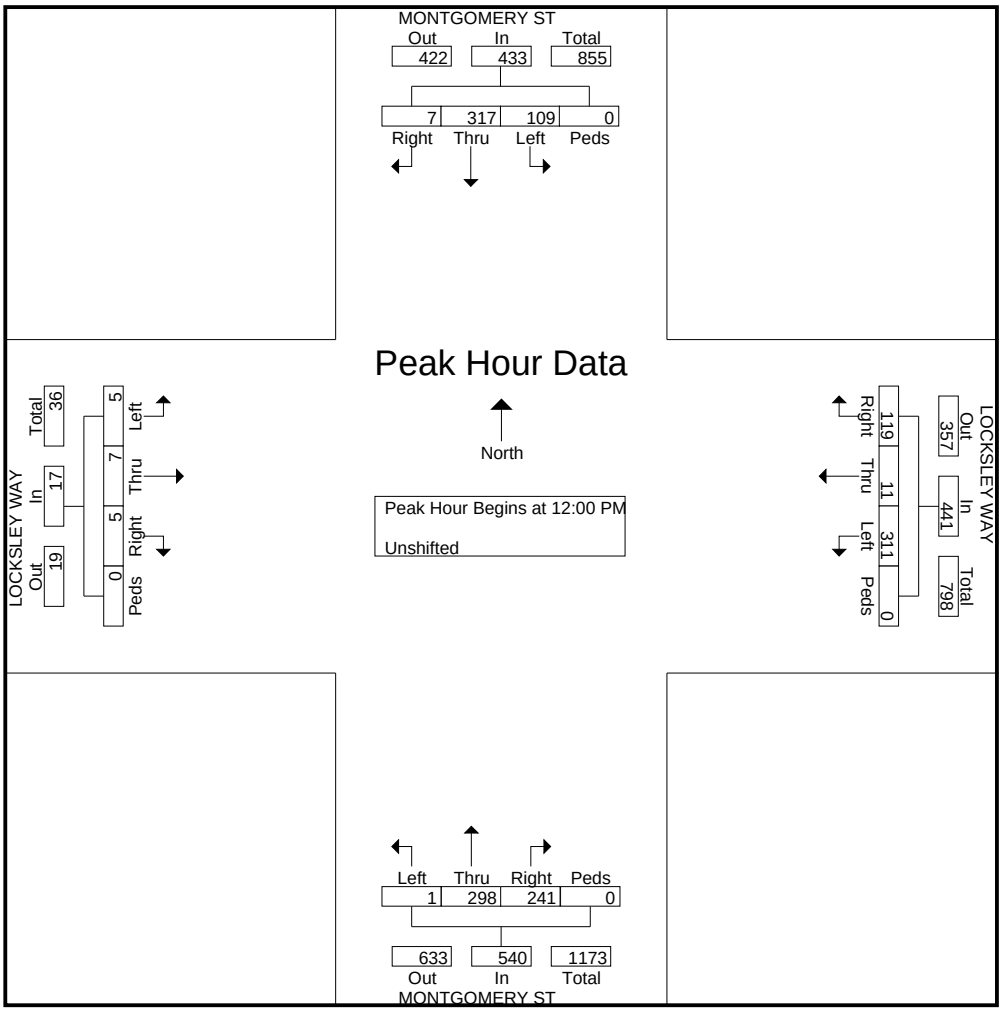


City of Starkville

Intersection: Montgomery St. / Locksley Way
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Locksley Way
Site Code : 00000000
Start Date : 4/23/2015
Page No : 4

	MONTGOMERY ST Northbound					MONTGOMERY ST Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	**1**	79	**63**	0	143	29	**85**	0	0	**114**	0	1	**2**	0	3	**88**	3	**35**	0	**126**	**386**
12:15 PM	0	68	59	0	127	**31**	77	1	0	109	**3**	**2**	1	0	**6**	74	**4**	25	0	103	345
12:30 PM	0	65	56	0	121	23	73	2	0	98	0	2	2	0	4	68	3	33	0	104	327
12:45 PM	0	**86**	63	0	**149**	26	82	**4**	0	112	2	2	0	0	4	81	1	26	0	108	373
Total Volume	1	298	241	0	540	109	317	7	0	433	5	7	5	0	17	311	11	119	0	441	1431
% App. Total	0.2	55.2	44.6	0		25.2	73.2	1.6	0		29.4	41.2	29.4	0		70.5	2.5	27	0		
PHF	.250	.866	.956	.000	.906	.879	.932	.438	.000	.950	.417	.875	.625	.000	.708	.884	.688	.850	.000	.875	.927

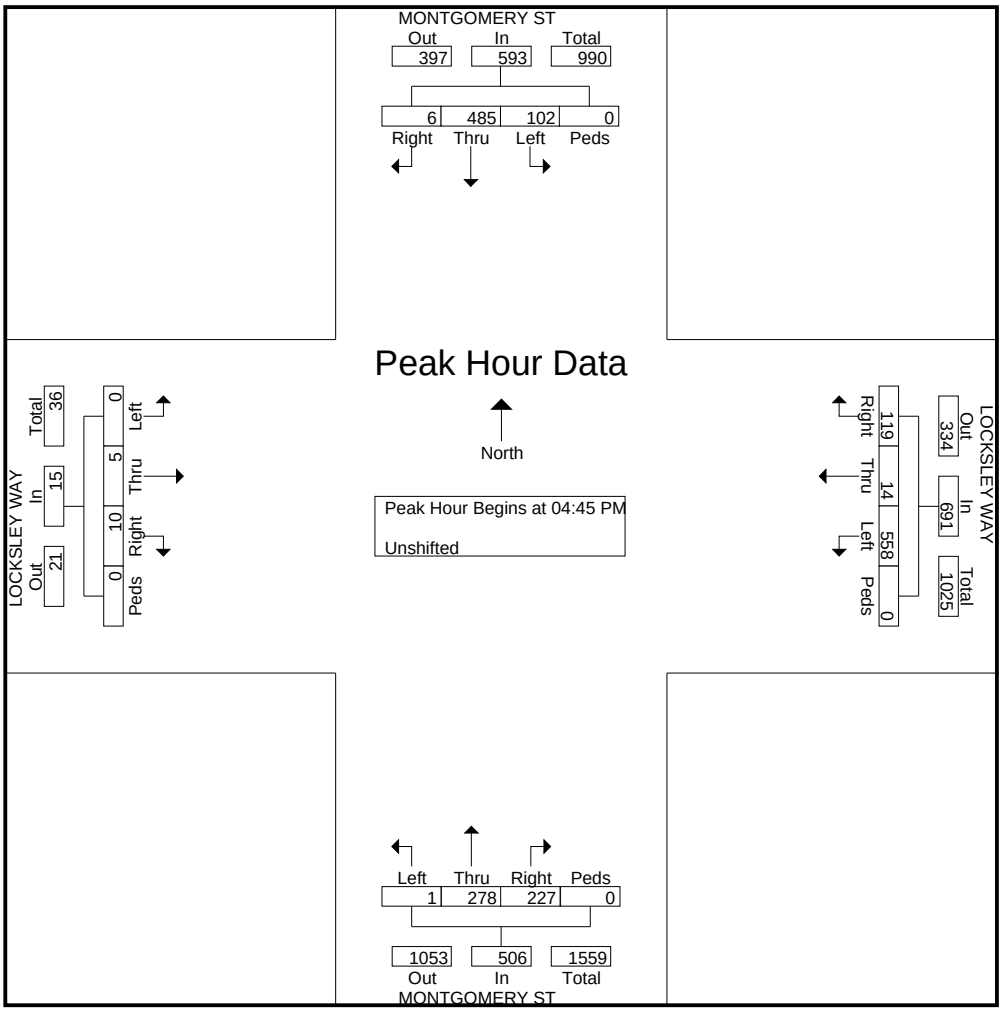


City of Starkville

Intersection: Montgomery St. / Locksley Way
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Montgomery - Locksley Way
Site Code : 00000000
Start Date : 4/23/2015
Page No : 5

	MONTGOMERY ST Northbound					MONTGOMERY ST Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	55	61	0	116	**34**	104	1	0	139	0	1	2	0	3	125	0	25	0	150	408
05:00 PM	0	**79**	**63**	0	**142**	28	112	0	0	140	0	1	**4**	0	5	154	**6**	**40**	0	**200**	487
05:15 PM	0	79	47	0	126	17	**149**	2	0	**168**	0	**3**	3	0	**6**	**163**	6	30	0	199	**499**
05:30 PM	**1**	65	56	0	122	23	120	**3**	0	146	0	0	1	0	1	116	2	24	0	142	411
Total Volume	1	278	227	0	506	102	485	6	0	593	0	5	10	0	15	558	14	119	0	691	1805
% App. Total	0.2	54.9	44.9	0		17.2	81.8	1	0		0	33.3	66.7	0		80.8	2	17.2	0		
PHF	.250	.880	.901	.000	.891	.750	.814	.500	.000	.882	.000	.417	.625	.000	.625	.856	.583	.744	.000	.864	.904



City of Starkville

Intersection: Lincoln Green / Locksley Way
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Lincoln Green - Locksley Way
Site Code : 00000000
Start Date : 4/23/2015
Page No : 1

Groups Printed- Unshifted

	LINCOLN GREEN Northbound					LINCOLN GREEN Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:00 AM	1	1	0	0	2	0	0	4	0	4	11	9	0	0	20	0	6	0	0	6	32
06:15 AM	0	2	0	0	2	0	0	8	0	8	10	23	0	0	33	0	6	0	0	6	49
06:30 AM	1	0	0	0	1	0	0	6	0	6	15	22	1	0	38	0	9	0	0	9	54
06:45 AM	2	2	0	0	4	0	3	4	0	7	15	36	1	0	52	0	18	0	0	18	81
Total	4	5	0	0	9	0	3	22	0	25	51	90	2	0	143	0	39	0	0	39	216
07:00 AM	1	0	1	0	2	0	0	10	0	10	29	70	1	0	100	0	16	0	0	16	128
07:15 AM	1	0	3	0	4	1	0	12	0	13	31	93	2	0	126	0	23	0	0	23	166
07:30 AM	0	2	4	0	6	3	0	8	0	11	43	177	2	0	222	1	38	1	0	40	279
07:45 AM	3	2	2	0	7	2	2	16	0	20	40	142	1	0	183	0	31	1	0	32	242
Total	5	4	10	0	19	6	2	46	0	54	143	482	6	0	631	1	108	2	0	111	815
08:00 AM	0	2	0	0	2	1	1	13	0	15	42	106	2	0	150	0	25	1	0	26	193
08:15 AM	2	3	1	0	6	1	1	14	0	16	17	64	4	0	85	0	16	0	0	16	123
08:30 AM	5	1	0	0	6	0	1	12	0	13	14	63	1	0	78	0	21	1	0	22	119
08:45 AM	3	0	0	0	3	0	1	19	0	20	30	76	1	0	107	1	25	0	0	26	156
Total	10	6	1	0	17	2	4	58	0	64	103	309	8	0	420	1	87	2	0	90	591
09:00 AM	1	1	4	0	6	0	2	13	0	15	26	98	2	0	126	2	34	0	0	36	183
09:15 AM	3	3	4	0	10	1	1	14	0	16	18	86	1	0	105	1	33	3	0	37	168
09:30 AM	1	1	0	0	2	1	2	15	0	18	18	47	2	0	67	0	43	1	0	44	131
09:45 AM	8	5	0	0	13	1	1	17	0	19	16	44	2	0	62	0	21	0	0	21	115
Total	13	10	8	0	31	3	6	59	0	68	78	275	7	0	360	3	131	4	0	138	597
10:00 AM	0	2	0	0	2	0	2	14	0	16	10	39	2	0	51	0	18	0	0	18	87
10:15 AM	1	1	0	0	2	4	0	14	0	18	16	39	2	0	57	0	30	2	0	32	109
10:30 AM	1	0	1	0	2	2	2	20	0	24	16	72	0	0	88	2	32	2	0	36	150
10:45 AM	1	0	0	0	1	3	1	19	0	23	15	54	3	0	72	1	47	1	0	49	145
Total	3	3	1	0	7	9	5	67	0	81	57	204	7	0	268	3	127	5	0	135	491
11:00 AM	1	0	0	0	1	1	1	13	0	15	10	13	4	0	27	1	27	1	0	29	72
11:15 AM	2	0	1	0	3	0	13	29	0	42	25	22	6	0	53	3	24	0	0	27	125
11:30 AM	8	1	3	0	12	0	5	20	0	25	7	35	14	0	56	6	54	0	0	60	153
11:45 AM	3	1	2	0	6	2	2	30	0	34	3	21	6	0	30	5	39	0	0	44	114
Total	14	2	6	0	22	3	21	92	0	116	45	91	30	0	166	15	144	1	0	160	464
12:00 PM	3	2	0	0	5	2	4	36	0	42	3	33	2	0	38	2	25	0	0	27	112
12:15 PM	0	5	0	0	5	0	7	32	0	39	6	82	5	0	93	2	71	2	0	75	212
12:30 PM	2	4	0	0	6	0	6	17	0	23	12	55	2	0	69	2	73	5	0	80	178
12:45 PM	0	5	0	0	5	2	3	18	0	23	12	80	0	0	92	1	70	1	0	72	192
Total	5	16	0	0	21	4	20	103	0	127	33	250	9	0	292	7	239	8	0	254	694
01:00 PM	0	6	1	0	7	0	0	22	0	22	6	90	3	0	99	2	66	0	0	68	196
01:15 PM	6	10	5	0	21	1	1	17	0	19	6	82	2	0	90	3	46	0	0	49	179
01:30 PM	1	2	1	0	4	2	1	20	0	23	14	74	2	0	90	1	55	2	0	58	175
01:45 PM	1	5	4	0	10	1	3	18	0	22	17	65	2	0	84	1	53	0	0	54	170
Total	8	23	11	0	42	4	5	77	0	86	43	311	9	0	363	7	220	2	0	229	720
02:00 PM	4	3	5	0	12	0	2	17	0	19	14	37	1	0	52	0	47	3	0	50	133
02:15 PM	0	0	0	0	0	0	1	24	0	25	9	28	0	0	37	0	34	2	0	36	98
02:30 PM	1	1	0	0	2	1	1	2	0	4	0	10	0	0	10	0	18	1	0	19	35
02:45 PM	0	1	2	0	3	1	1	36	0	38	12	41	1	0	54	0	47	1	0	48	143
Total	5	5	7	0	17	2	5	79	0	86	35	116	2	0	153	0	146	7	0	153	409
03:00 PM	2	2	0	0	4	0	3	29	0	32	10	72	5	0	87	1	65	3	0	69	192
03:15 PM	2	0	1	0	3	4	2	36	0	42	19	60	2	0	81	0	84	0	0	84	210
03:30 PM	2	0	3	0	5	1	2	34	0	37	17	34	2	0	53	2	61	6	0	69	164
03:45 PM	0	2	3	0	5	2	3	49	0	54	12	58	3	0	73	1	68	1	0	70	202
Total	6	4	7	0	17	7	10	148	0	165	58	224	12	0	294	4	278	10	0	292	768
04:00 PM	2	1	0	0	3	1	1	29	0	31	10	35	1	0	46	1	73	1	0	75	155
04:15 PM	3	0	0	0	3	0	0	28	0	28	10	29	4	0	43	2	69	3	0	74	148

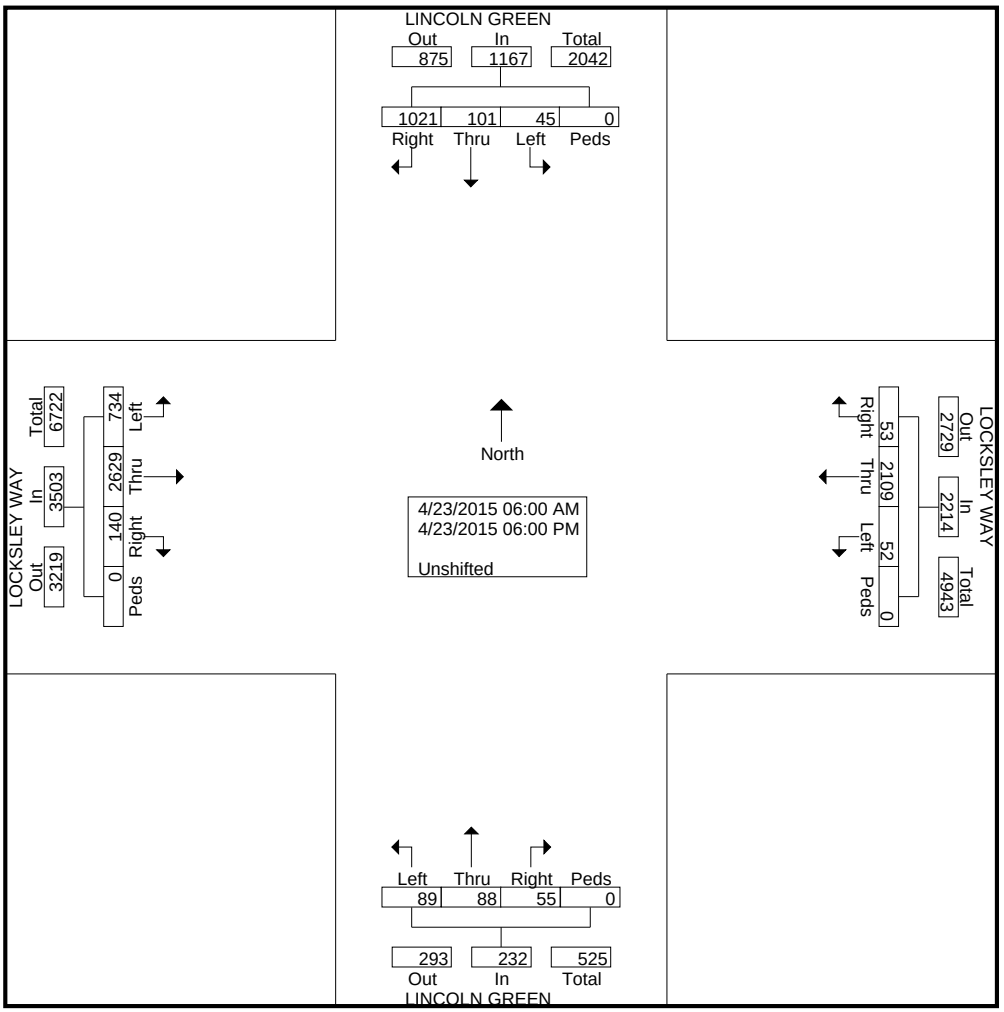
City of Starkville

Intersection: Lincoln Green / Locksley Way
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Lincoln Green - Locksley Way
Site Code : 00000000
Start Date : 4/23/2015
Page No : 2

Groups Printed- Unshifted

	LINCOLN GREEN Northbound					LINCOLN GREEN Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:30 PM	1	3	0	0	4	2	0	44	0	46	14	34	5	0	53	2	36	1	0	39	142
04:45 PM	1	4	1	0	6	2	5	42	0	49	16	39	9	0	64	2	82	3	0	87	206
Total	7	8	1	0	16	5	6	143	0	154	50	137	19	0	206	7	260	8	0	275	651
05:00 PM	0	0	0	0	0	0	2	37	0	39	13	49	17	0	79	1	147	0	0	148	266
05:15 PM	1	1	0	0	2	0	3	38	0	41	9	17	4	0	30	0	67	1	0	68	141
05:30 PM	7	1	3	0	11	0	4	28	0	32	6	52	2	0	60	2	80	1	0	83	186
05:45 PM	1	0	0	0	1	0	2	21	0	23	9	22	6	0	37	1	30	2	0	33	94
Total	9	2	3	0	14	0	11	124	0	135	37	140	29	0	206	4	324	4	0	332	687
06:00 PM	0	0	0	0	0	0	3	3	0	6	1	0	0	0	1	0	6	0	0	6	13
Grand Total	89	88	55	0	232	45	101	1021	0	1167	734	2629	140	0	3503	52	2109	53	0	2214	7116
Apprch %	38.4	37.9	23.7	0		3.9	8.7	87.5	0		21	75	4	0		2.3	95.3	2.4	0		
Total %	1.3	1.2	0.8	0	3.3	0.6	1.4	14.3	0	16.4	10.3	36.9	2	0	49.2	0.7	29.6	0.7	0	31.1	

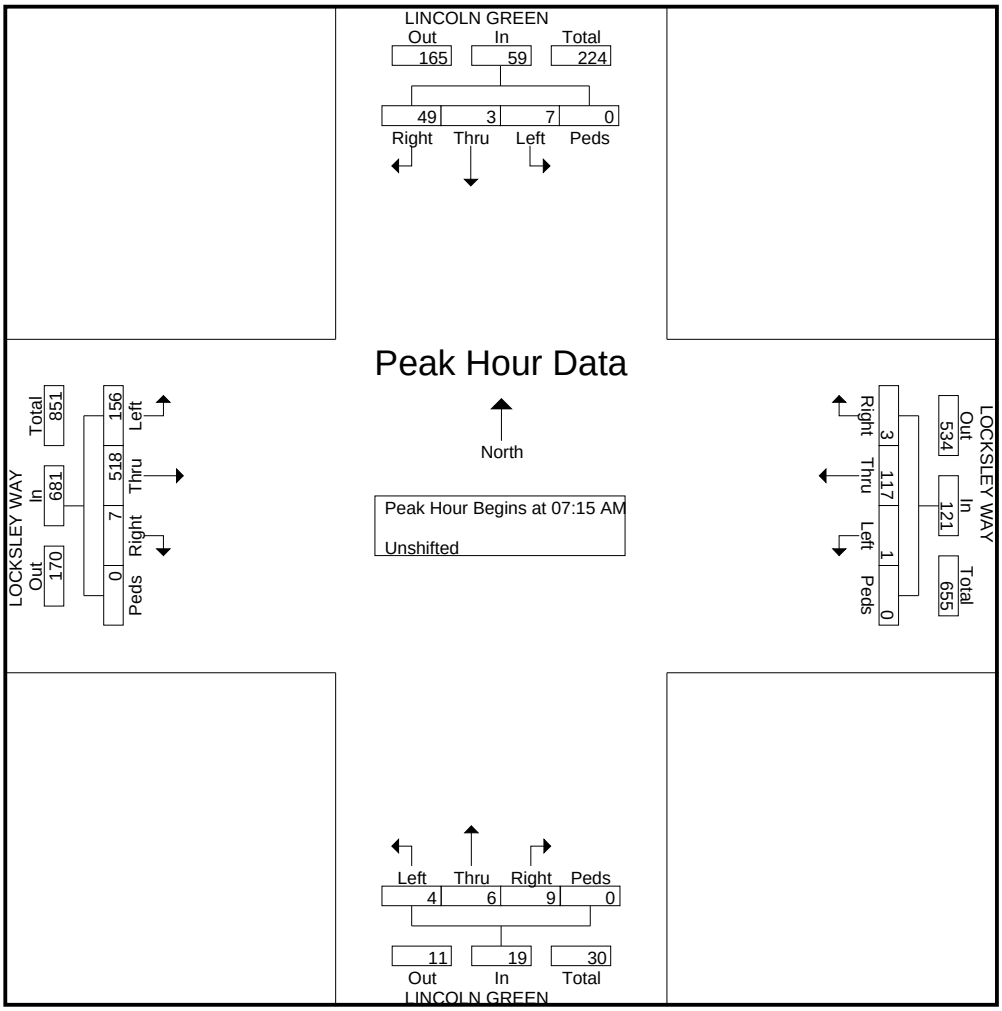


City of Starkville

Intersection: Lincoln Green / Locksley Way
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Lincoln Green - Locksley Way
Site Code : 00000000
Start Date : 4/23/2015
Page No : 3

	LINCOLN GREEN Northbound					LINCOLN GREEN Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	1	0	3	0	4	1	0	12	0	13	31	93	**2**	0	126	0	23	0	0	23	166
07:30 AM	0	**2**	**4**	0	6	**3**	0	8	0	11	**43**	**177**	2	0	**222**	**1**	**38**	**1**	0	**40**	**279**
07:45 AM	**3**	2	2	0	**7**	2	**2**	**16**	0	**20**	40	142	1	0	183	0	31	1	0	32	242
08:00 AM	0	2	0	0	2	1	1	13	0	15	42	106	2	0	150	0	25	1	0	26	193
Total Volume	4	6	9	0	19	7	3	49	0	59	156	518	7	0	681	1	117	3	0	121	880
% App. Total	21.1	31.6	47.4	0		11.9	5.1	83.1	0		22.9	76.1	1	0		0.8	96.7	2.5	0		
PHF	.333	.750	.563	.000	.679	.583	.375	.766	.000	.738	.907	.732	.875	.000	.767	.250	.770	.750	.000	.756	.789

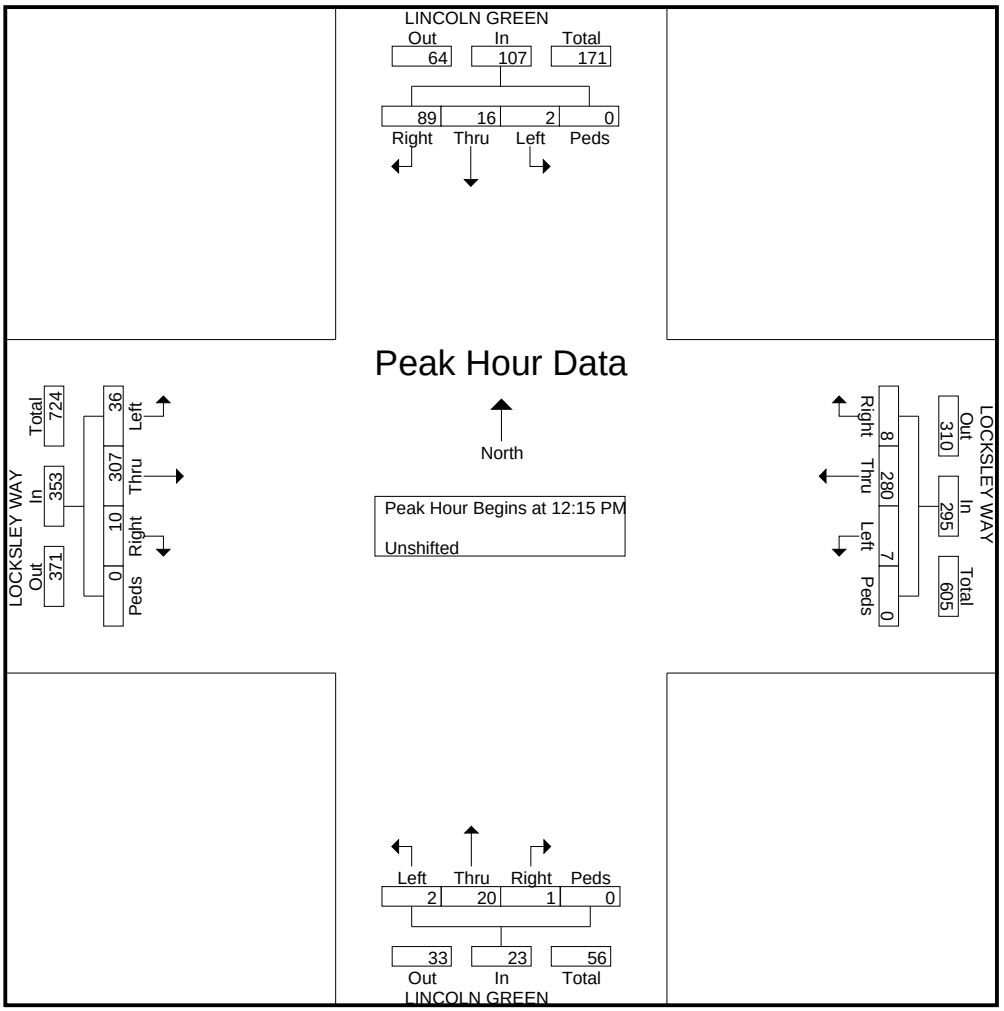


City of Starkville

Intersection: Lincoln Green / Locksley Way
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Lincoln Green - Locksley Way
Site Code : 00000000
Start Date : 4/23/2015
Page No : 4

	LINCOLN GREEN Northbound					LINCOLN GREEN Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:15 PM																					
12:15 PM	0	5	0	0	5	0	**7**	**32**	0	**39**	6	82	**5**	0	93	**2**	71	2	0	75	**212**
12:30 PM	**2**	4	0	0	6	0	6	17	0	23	**12**	55	2	0	69	2	**73**	**5**	0	**80**	178
12:45 PM	0	5	0	0	5	**2**	3	18	0	23	12	80	0	0	92	1	70	1	0	72	192
01:00 PM	0	**6**	**1**	0	**7**	0	0	22	0	22	6	**90**	3	0	**99**	2	66	0	0	68	196
Total Volume	2	20	1	0	23	2	16	89	0	107	36	307	10	0	353	7	280	8	0	295	778
% App. Total	8.7	87	4.3	0		1.9	15	83.2	0		10.2	87	2.8	0		2.4	94.9	2.7	0		
PHF	.250	.833	.250	.000	.821	.250	.571	.695	.000	.686	.750	.853	.500	.000	.891	.875	.959	.400	.000	.922	.917

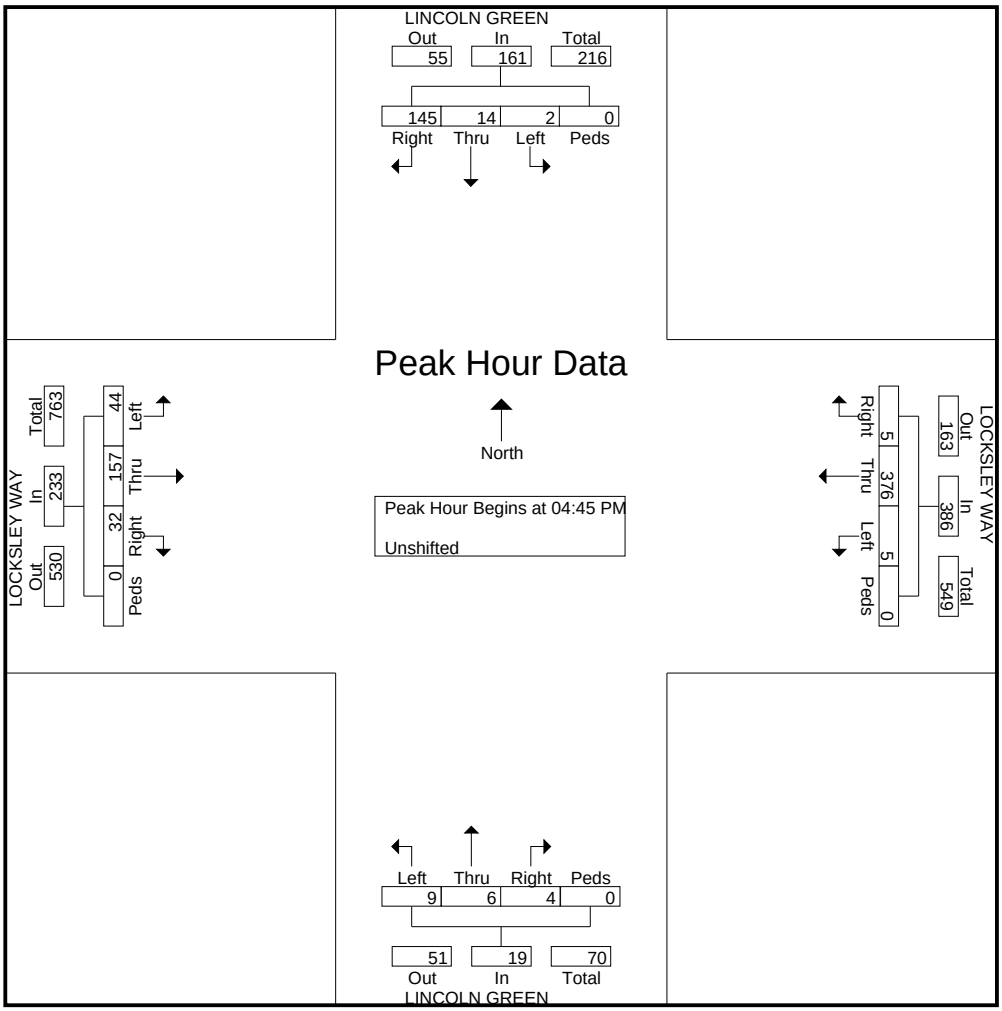


City of Starkville

Intersection: Lincoln Green / Locksley Way
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Lincoln Green - Locksley Way
Site Code : 00000000
Start Date : 4/23/2015
Page No : 5

	LINCOLN GREEN Northbound					LINCOLN GREEN Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 06:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	1	**4**	1	0	6	**2**	**5**	**42**	0	**49**	**16**	39	9	0	64	**2**	82	**3**	0	87	206
05:00 PM	0	0	0	0	0	0	2	37	0	39	13	49	**17**	0	**79**	1	**147**	0	0	**148**	**266**
05:15 PM	1	1	0	0	2	0	3	38	0	41	9	17	4	0	30	0	67	1	0	68	141
05:30 PM	**7**	1	**3**	0	**11**	0	4	28	0	32	6	**52**	2	0	60	2	80	1	0	83	186
Total Volume	9	6	4	0	19	2	14	145	0	161	44	157	32	0	233	5	376	5	0	386	799
% App. Total	47.4	31.6	21.1	0		1.2	8.7	90.1	0		18.9	67.4	13.7	0		1.3	97.4	1.3	0		
PHF	.321	.375	.333	.000	.432	.250	.700	.863	.000	.821	.688	.755	.471	.000	.737	.625	.639	.417	.000	.652	.751



City of Starkville

Intersection: Blackjack Rd. / Locksley Way
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Blackjack - Locksley
Site Code : 00000000
Start Date : 4/30/2015
Page No : 1

Groups Printed- Unshifted

	BLACKJACK RD Northbound					BLACKJACK RD Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:00 AM	5	24	0	0	29	0	22	0	0	22	0	0	13	0	13	0	0	0	0	0	64
06:15 AM	6	41	0	0	47	0	43	0	0	43	1	0	29	0	30	0	0	0	0	0	120
06:30 AM	8	37	0	0	45	0	42	0	0	42	0	0	24	0	24	0	0	0	0	0	111
06:45 AM	23	61	0	0	84	0	63	0	0	63	1	0	35	0	36	0	0	0	0	0	183
Total	42	163	0	0	205	0	170	0	0	170	2	0	101	0	103	0	0	0	0	0	478
07:00 AM	19	57	0	0	76	0	64	0	0	64	0	0	46	0	46	0	0	0	0	0	186
07:15 AM	21	68	0	0	89	0	87	2	0	89	2	0	53	0	55	0	0	0	0	0	233
07:30 AM	47	67	0	0	114	0	78	2	0	80	2	0	78	0	80	0	0	0	0	0	274
07:45 AM	30	69	0	0	99	0	121	3	0	124	1	0	114	0	115	0	0	0	0	0	338
Total	117	261	0	0	378	0	350	7	0	357	5	0	291	0	296	0	0	0	0	0	1031
08:00 AM	28	40	0	0	68	0	101	1	0	102	1	0	84	0	85	0	0	0	0	0	255
08:15 AM	12	76	0	0	88	0	50	2	0	52	0	0	68	0	68	0	0	0	0	0	208
08:30 AM	23	79	0	0	102	0	66	1	0	67	1	0	58	0	59	0	0	0	0	0	228
08:45 AM	18	75	0	0	93	0	76	2	0	78	4	0	63	0	67	0	0	0	0	0	238
Total	81	270	0	0	351	0	293	6	0	299	6	0	273	0	279	0	0	0	0	0	929
09:00 AM	26	68	0	0	94	0	67	4	0	71	2	0	53	0	55	0	0	0	0	0	220
09:15 AM	25	72	0	0	97	0	46	2	0	48	4	0	55	0	59	0	0	0	0	0	204
09:30 AM	32	68	0	0	100	0	54	2	0	56	2	0	43	0	45	0	0	0	0	0	201
09:45 AM	30	97	1	0	128	0	76	3	0	79	2	0	66	0	68	0	0	0	0	0	275
Total	113	305	1	0	419	0	243	11	0	254	10	0	217	0	227	0	0	0	0	0	900
10:00 AM	33	101	0	0	134	0	73	2	0	75	5	0	46	0	51	0	0	0	0	0	260
10:15 AM	32	71	0	0	103	0	79	2	0	81	1	0	49	0	50	0	0	0	0	0	234
10:30 AM	42	92	0	0	134	0	62	1	0	63	2	0	55	0	57	0	0	0	0	0	254
10:45 AM	46	112	0	0	158	0	99	3	0	102	1	0	53	0	54	0	0	0	0	0	314
Total	153	376	0	0	529	0	313	8	0	321	9	0	203	0	212	0	0	0	0	0	1062
11:00 AM	60	116	0	0	176	0	75	4	0	79	5	0	47	0	52	0	0	0	0	0	307
11:15 AM	55	122	0	0	177	0	94	3	0	97	0	0	41	0	41	0	0	0	0	0	315
11:30 AM	76	115	0	0	191	0	121	3	0	124	1	0	58	0	59	0	0	0	0	0	374
11:45 AM	95	149	0	0	244	0	102	7	0	109	7	0	65	0	72	0	0	0	0	0	425
Total	286	502	0	0	788	0	392	17	0	409	13	0	211	0	224	0	0	0	0	0	1421
12:00 PM	95	155	0	0	250	0	107	8	0	115	4	0	67	0	71	0	0	0	0	0	436
12:15 PM	66	143	1	0	210	0	129	2	0	131	3	0	83	1	87	0	0	0	0	0	428
12:30 PM	64	112	0	0	176	0	148	3	0	151	4	0	68	0	72	0	0	0	0	0	399
12:45 PM	63	147	0	0	210	0	129	7	0	136	7	0	90	0	97	0	0	0	0	0	443
Total	288	557	1	0	846	0	513	20	0	533	18	0	308	1	327	0	0	0	0	0	1706
01:00 PM	61	145	0	0	206	0	132	5	0	137	1	0	70	0	71	0	0	0	0	0	414
01:15 PM	43	94	0	0	137	0	114	1	0	115	4	0	78	1	83	0	0	0	0	0	335
01:30 PM	55	141	1	0	197	0	116	1	0	117	4	0	74	0	78	0	0	0	0	0	392
01:45 PM	66	133	0	0	199	0	123	4	0	127	6	0	88	2	96	0	0	0	0	0	422
Total	225	513	1	0	739	0	485	11	0	496	15	0	310	3	328	0	0	0	0	0	1563
02:00 PM	69	128	0	0	197	0	120	1	0	121	3	0	58	0	61	0	0	0	0	0	379
02:15 PM	84	117	0	0	201	0	150	1	0	151	0	0	64	0	64	0	0	0	0	0	416
02:30 PM	76	124	0	0	200	0	126	1	0	127	4	0	52	0	56	0	0	0	0	0	383
02:45 PM	66	126	0	0	192	0	131	1	0	132	2	0	65	0	67	0	0	0	0	0	391
Total	295	495	0	0	790	0	527	4	0	531	9	0	239	0	248	0	0	0	0	0	1569
03:00 PM	72	128	0	0	200	4	132	3	0	139	2	0	67	0	69	0	0	0	0	0	408
03:15 PM	57	134	0	0	191	0	124	1	0	125	1	0	56	0	57	0	0	0	0	0	373
03:30 PM	60	125	0	0	185	0	96	0	0	96	6	0	67	0	73	0	0	0	0	0	354
03:45 PM	64	120	0	0	184	0	118	3	0	121	5	0	74	0	79	0	0	0	0	0	384
Total	253	507	0	0	760	4	470	7	0	481	14	0	264	0	278	0	0	0	0	0	1519
04:00 PM	91	138	0	0	229	0	124	1	0	125	3	0	68	0	71	0	0	0	0	0	425
04:15 PM	80	124	0	0	204	0	114	2	0	116	5	0	67	0	72	0	0	0	0	0	392

City of Starkville

Intersection: Blackjack Rd. / Locksley Way
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Blackjack - Locksley
Site Code : 00000000
Start Date : 4/30/2015
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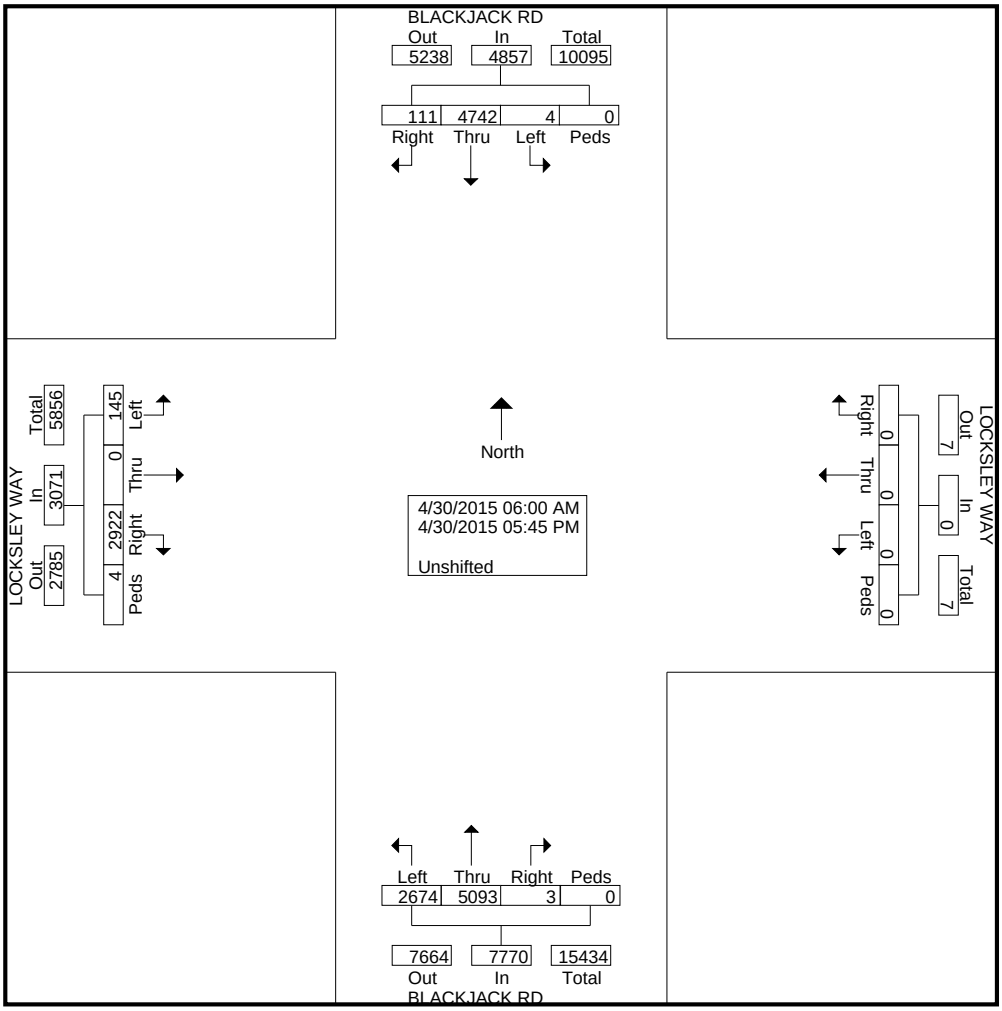
Groups Printed- Unshifted

	BLACKJACK RD Northbound					BLACKJACK RD Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:30 PM	83	121	0	0	204	0	110	1	0	111	3	0	52	0	55	0	0	0	0	0	370
04:45 PM	114	153	0	0	267	0	119	4	0	123	6	0	58	0	64	0	0	0	0	0	454
Total	368	536	0	0	904	0	467	8	0	475	17	0	245	0	262	0	0	0	0	0	1641
05:00 PM	131	203	0	0	334	0	128	1	0	129	5	0	67	0	72	0	0	0	0	0	535
05:15 PM	125	145	0	0	270	0	123	6	0	129	7	0	68	0	75	0	0	0	0	0	474
05:30 PM	99	125	0	0	224	0	138	2	0	140	8	0	60	0	68	0	0	0	0	0	432
05:45 PM	98	135	0	0	233	0	130	3	0	133	7	0	65	0	72	0	0	0	0	0	438
Total	453	608	0	0	1061	0	519	12	0	531	27	0	260	0	287	0	0	0	0	0	1879
Grand Total	2674	5093	3	0	7770	4	4742	111	0	4857	145	0	2922	4	3071	0	0	0	0	0	15698
Apprch %	34.4	65.5	0	0		0.1	97.6	2.3	0		4.7	0	95.1	0.1		0	0	0	0		
Total %	17	32.4	0	0	49.5	0	30.2	0.7	0	30.9	0.9	0	18.6	0	19.6	0	0	0	0	0	



City of Starkville

Intersection: Blackjack Rd. / Locksley Way
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Blackjack - Locksley
Site Code : 00000000
Start Date : 4/30/2015
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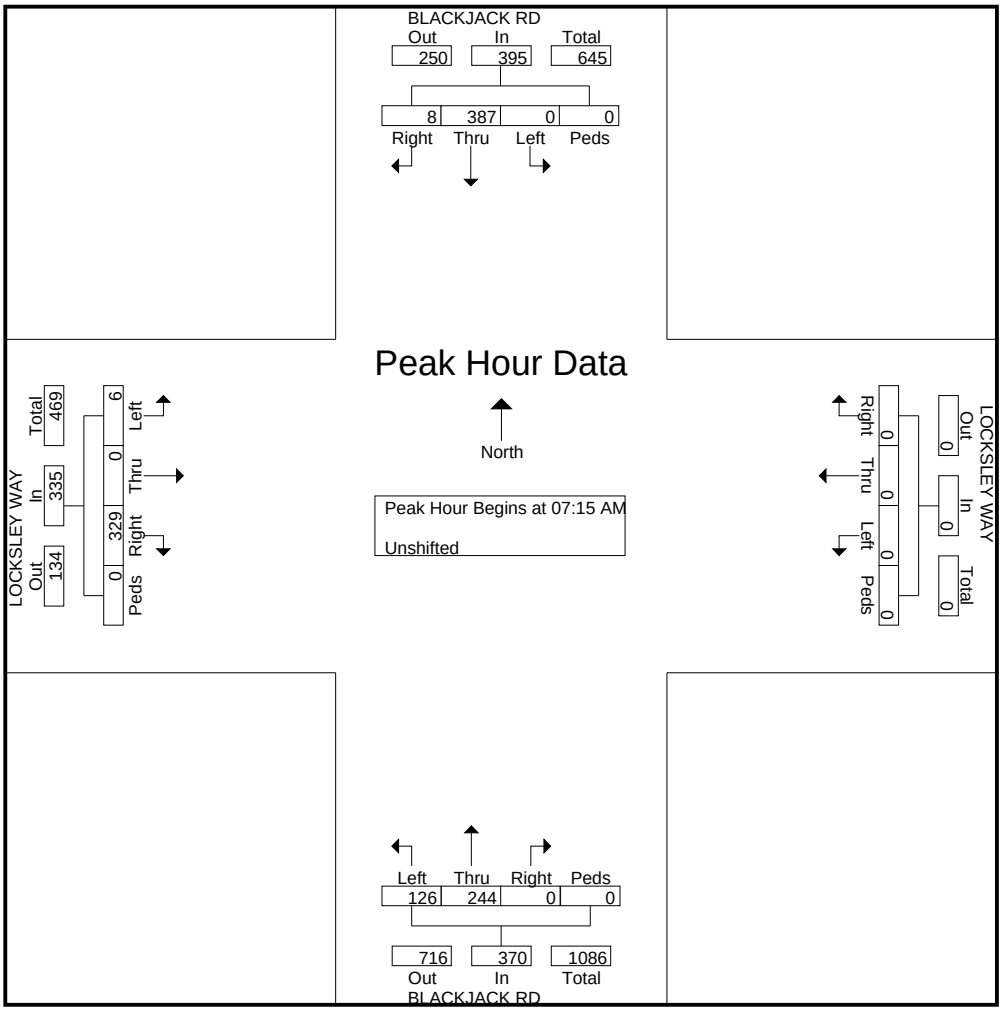
	BLACKJACK RD Northbound					BLACKJACK RD Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	21	68	0	0	89	0	87	2	0	89	**2**	0	53	0	55	0	0	0	0	0	233
07:30 AM	**47**	67	0	0	**114**	0	78	2	0	80	2	0	78	0	80	0	0	0	0	0	274
07:45 AM	30	**69**	0	0	99	0	**121**	**3**	0	**124**	1	0	**114**	0	**115**	0	0	0	0	0	**338**
08:00 AM	28	40	0	0	68	0	101	1	0	102	1	0	84	0	85	0	0	0	0	0	255
Total Volume	126	244	0	0	370	0	387	8	0	395	6	0	329	0	335	0	0	0	0	0	1100
% App. Total	34.1	65.9	0	0		0	98	2	0		1.8	0	98.2	0		0	0	0	0		
PHF	.670	.884	.000	.000	.811	.000	.800	.667	.000	.796	.750	.000	.721	.000	.728	.000	.000	.000	.000	.000	.814



City of Starkville

Intersection: Blackjack Rd. / Locksley Way
Counted by: City of Starkville
City / County: Starkville / Oktibbeha

File Name : Blackjack - Locksley
Site Code : 00000000
Start Date : 4/30/2015
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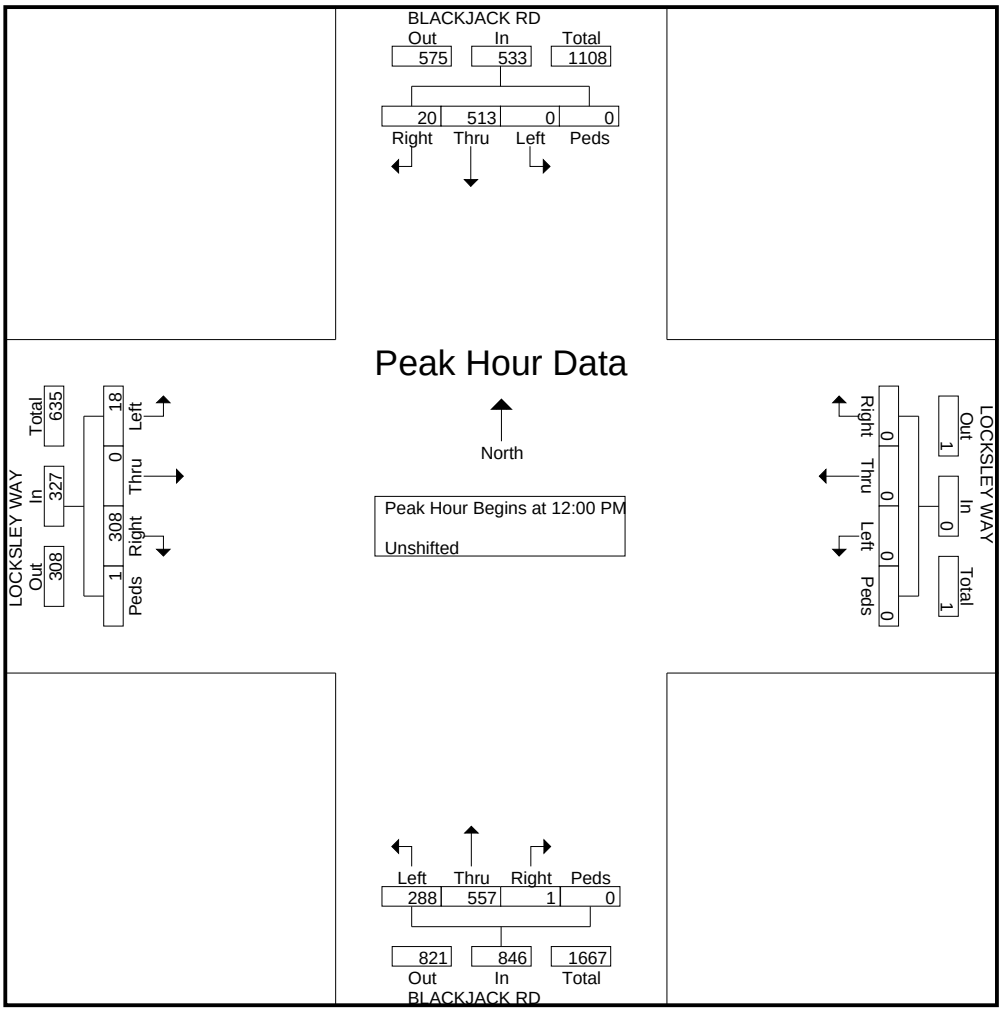
	BLACKJACK RD Northbound					BLACKJACK RD Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	**95**	**155**	0	0	**250**	0	107	**8**	0	115	4	0	67	0	71	0	0	0	0	0	436
12:15 PM	66	143	**1**	0	210	0	129	2	0	131	3	0	83	**1**	87	0	0	0	0	0	428
12:30 PM	64	112	0	0	176	0	**148**	3	0	**151**	4	0	68	0	72	0	0	0	0	0	399
12:45 PM	63	147	0	0	210	0	129	7	0	136	**7**	0	**90**	0	**97**	0	0	0	0	0	**443**
Total Volume	288	557	1	0	846	0	513	20	0	533	18	0	308	1	327	0	0	0	0	0	1706
% App. Total	34	65.8	0.1	0		0	96.2	3.8	0		5.5	0	94.2	0.3		0	0	0	0		
PHF	.758	.898	.250	.000	.846	.000	.867	.625	.000	.882	.643	.000	.856	.250	.843	.000	.000	.000	.000	.000	.963



City of Starkville

Intersection: Blackjack Rd. / Locksley Way
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File Name : Blackjack - Locksley
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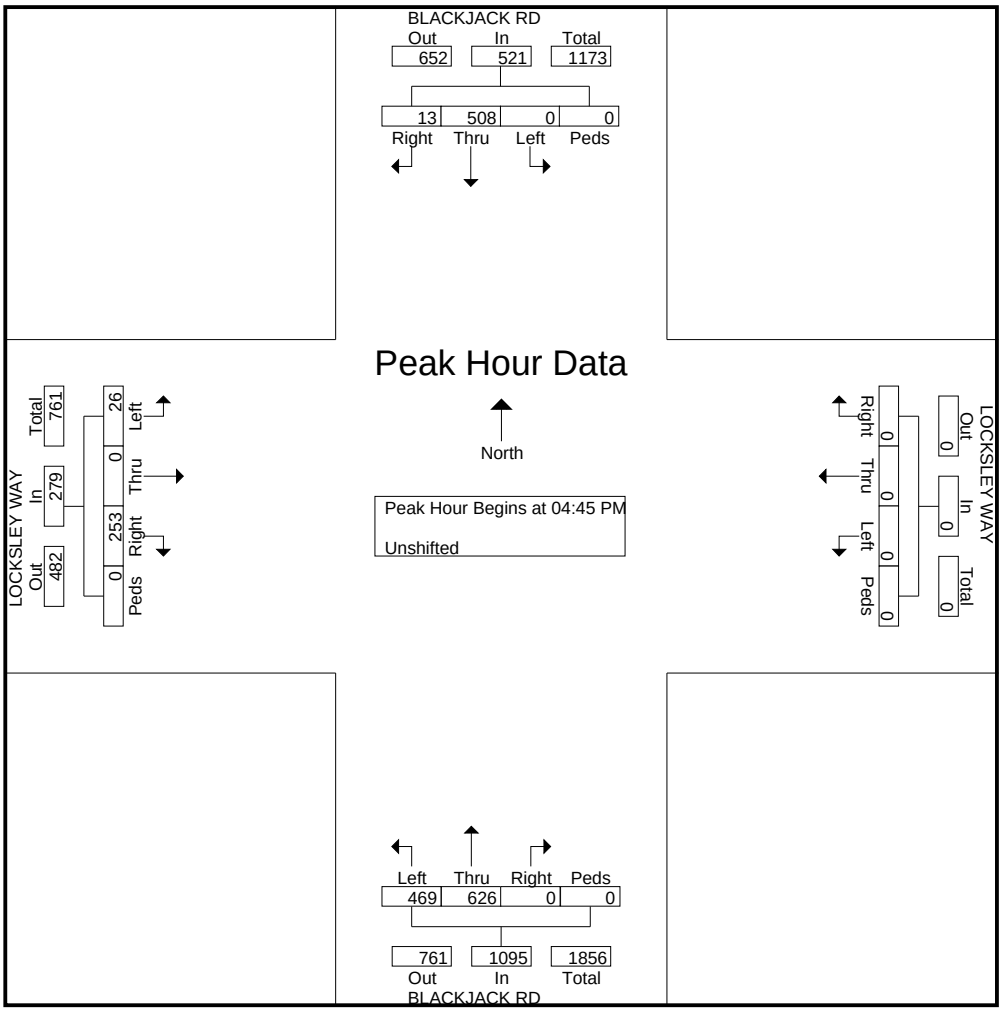
	BLACKJACK RD Northbound					BLACKJACK RD Southbound					LOCKSLEY WAY Eastbound					LOCKSLEY WAY Westbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	114	153	0	0	267	0	119	4	0	123	6	0	58	0	64	0	0	0	0	0	454
05:00 PM	**131**	**203**	0	0	**334**	0	128	1	0	129	5	0	67	0	72	0	0	0	0	0	**535**
05:15 PM	125	145	0	0	270	0	123	**6**	0	129	7	0	**68**	0	**75**	0	0	0	0	0	474
05:30 PM	99	125	0	0	224	0	**138**	2	0	**140**	**8**	0	60	0	68	0	0	0	0	0	432
Total Volume	469	626	0	0	1095	0	508	13	0	521	26	0	253	0	279	0	0	0	0	0	1895
% App. Total	42.8	57.2	0	0		0	97.5	2.5	0		9.3	0	90.7	0		0	0	0	0		
PHF	.895	.771	.000	.000	.820	.000	.920	.542	.000	.930	.813	.000	.930	.000	.930	.000	.000	.000	.000	.000	.886