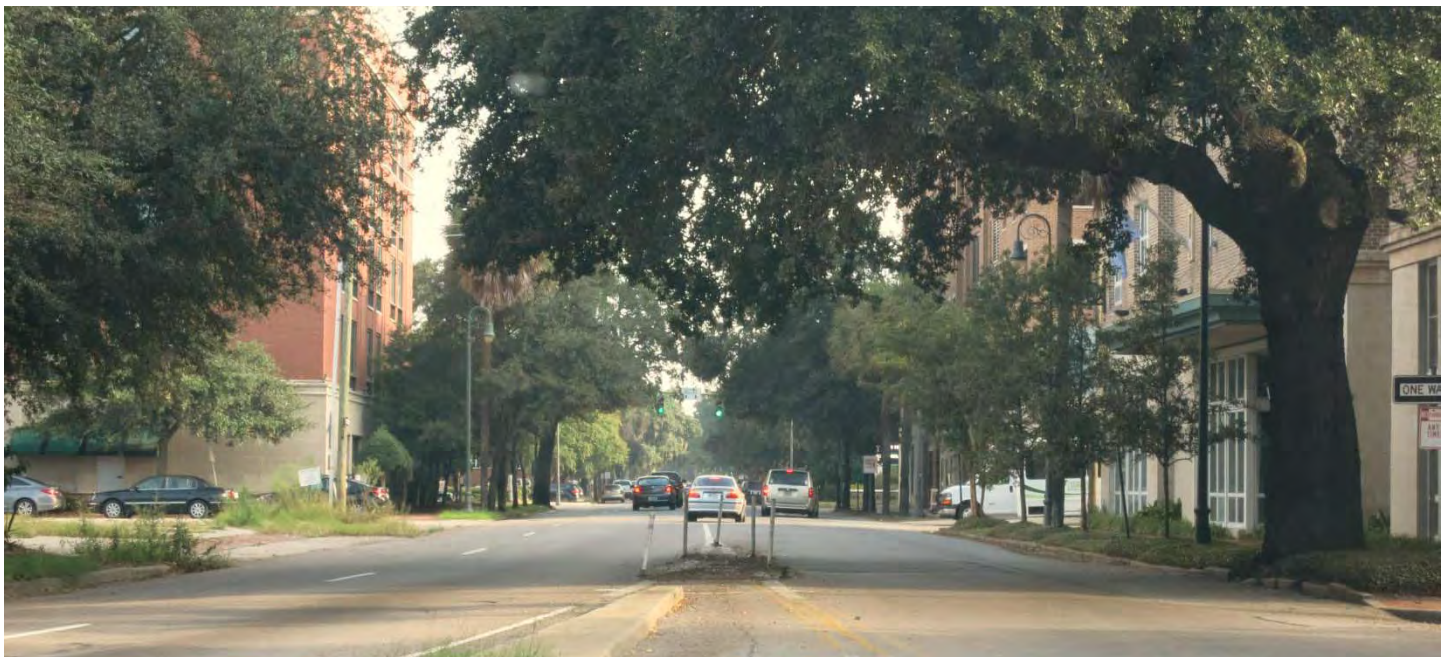
Montgomery Street Two-way Traffic Study

Coastal Region MPO

Montgomery Street Two-Way with Cultural Arts Center Study

April 26, 2016

RFP NO. 14001 On-Call Transportation Planning Services Task Order 1



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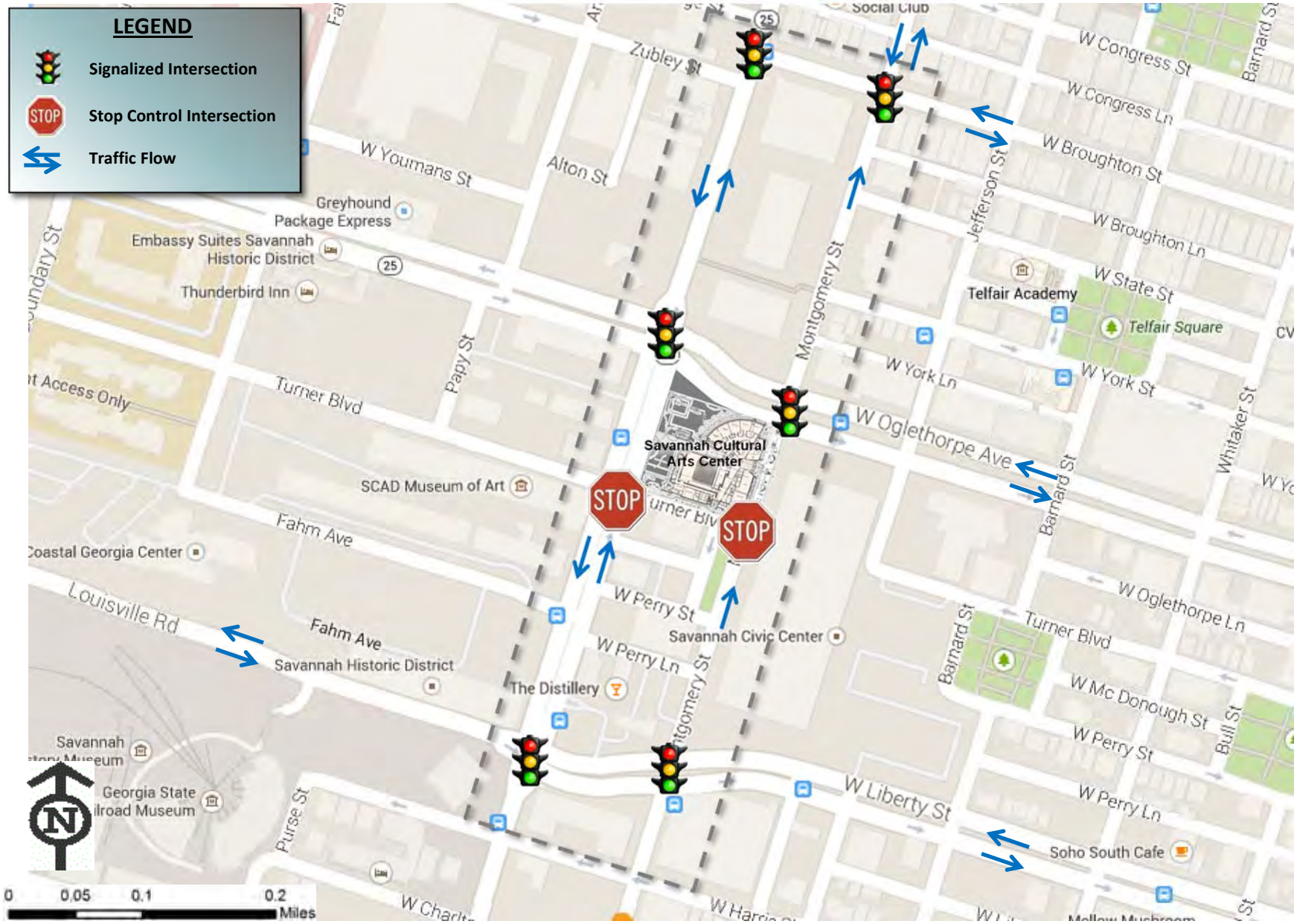
1. Introduction

The Savannah Cultural Arts Center is proposed to be constructed on the southwest corner of Montgomery Street and W. Oglethorpe Avenue. The Savannah Cultural Arts Center will house approximately 480 seats in the Main Hall and up to 60 seats for a wide variety of events in a combination classroom/studio theater. The two-way traffic flow conversion of Montgomery Street between W. Broughton Street and W. Liberty Street has been proposed to improve the circulation in the area adjacent to the Savannah Cultural Arts Center along Montgomery Street. Additionally, there are two alternatives for the two-way conversion; Alternative 1 would provide one southbound and two northbound lanes, Alternative 2 would provide one southbound and one northbound lane. The purpose of this traffic study is to evaluate the impact the change in traffic circulation from one-way to two-way would have on the local intersection traffic operations along Montgomery Street and MLK Jr Boulevard between W. Broughton Street and W. Liberty Street.

This study addresses the existing (2014) and two future (2017 and 2037) years traffic conditions in the area surrounding Montgomery Street. Background traffic growth and site driven traffic generation were considered in the development of study area traffic projections.

The study area, as shown in Figure 1, focuses on Montgomery Street and Martin Luther King Jr (MLK) Boulevard bound by W. Broughton Street to the north, to just south of W. Liberty Street to the south. The following paragraphs summarize the results of the analysis.



JACOBS™	Montgomery Street Two-Way Conversion Study	**Figure 1** **Study Area**

2. Existing Conditions

The roadway network was examined to evaluate the existing roadway conditions adjacent to the proposed Savannah Cultural Arts Center site. An inventory of both north-south corridors was performed to note the existing geometry, signage, parking, bus stops, and traffic control elements. Additionally, Jacobs observed morning and afternoon peak traffic and pedestrian conditions and noted typical queue lengths under existing traffic conditions. Signalized intersections are located at W. Liberty Drive, W. Oglethorpe Avenue and W. Broughton Street along Montgomery Street and MLK Jr Boulevard. The physical and traffic control elements of each of the roadways and other important elements for the study roadways are as follows:

2.1 Existing Roadway Conditions

The roadway network was examined to evaluate the existing roadway conditions adjacent to the proposed site. The existing intersection geometry is shown in Figure 2.

2.1.1 Montgomery Street

Montgomery Street is currently a one-way northbound arterial that provides access from I-16 to the historic downtown Savannah area. The I-16 eastbound off-ramp merges with Montgomery Street just south of the study area. South of the merger, Montgomery Street is one lane northbound which then adds two additional northbound lanes from the ramp. At the W. Liberty Drive, Montgomery Street intersection the northbound approach is composed of a dedicated left-turn lane, two-through lanes and a right-turn lane. No on-street parking exists south of the intersection. Traveling north of W. Liberty Street, Montgomery Street is reduced to two-lanes with on-street parking on both sides of the roadway extending to W. Broughton Street.

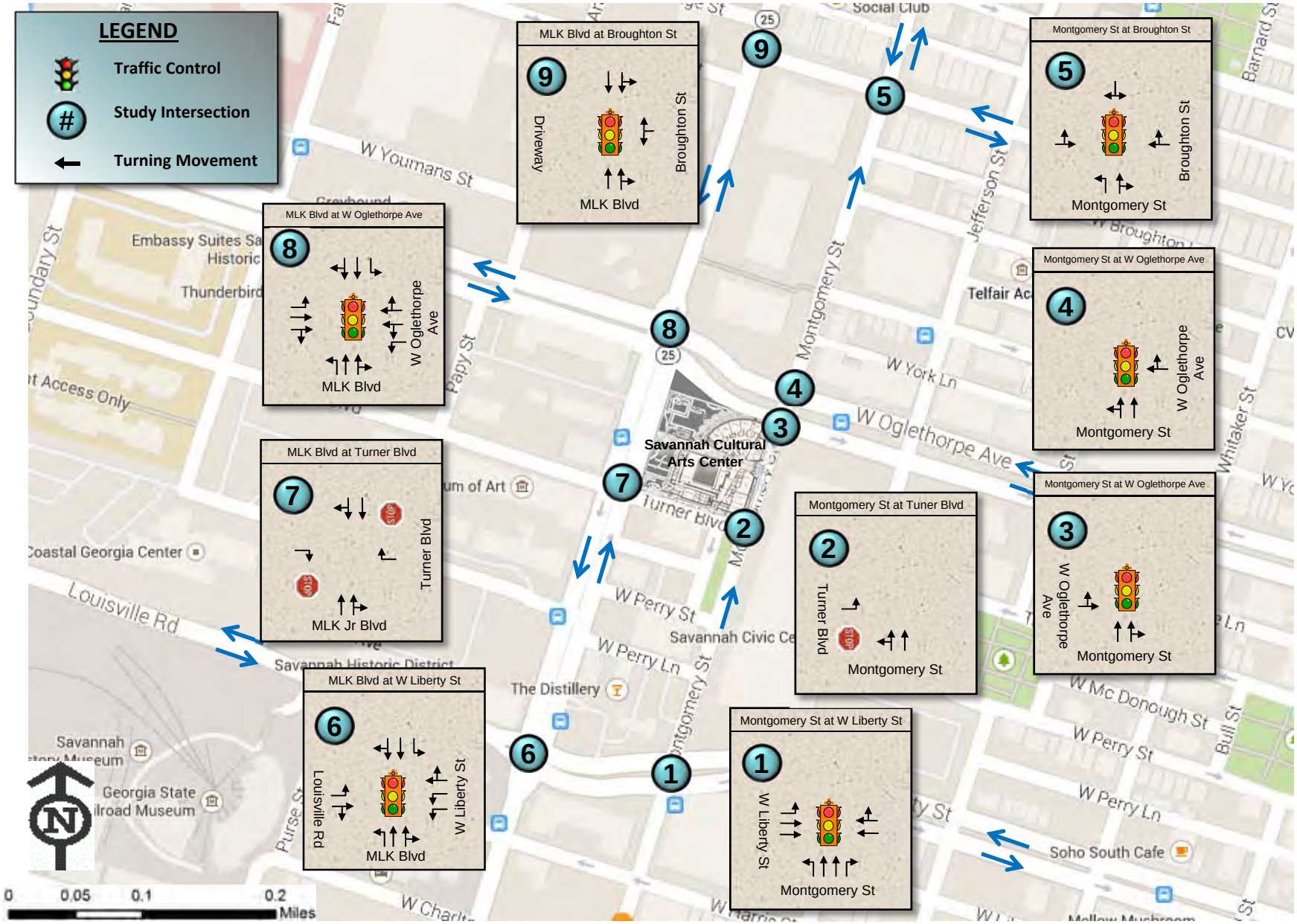
Turner Boulevard is unsignalized with a single left turn approach lane under stop control. Turner Boulevard provides connection between Montgomery Street and MLK Jr Boulevard.

W. Oglethorpe Avenue has a single lane on both the eastbound and westbound approaches with a wide median on W. Oglethorpe Avenue at the intersection with Montgomery Street. Montgomery Street is composed of shared left-through and through-right lanes. There is no southbound approach on Montgomery Street.

W. Broughton Street has single shared lanes on both the eastbound and westbound approaches with no median. Montgomery Street approach has dedicated left turn lane and a through-right lane for the northbound approach and a shared left-right turn lane for the southbound approach.

2.1.2 MLK Jr Boulevard

MLK Jr Boulevard travels parallel with Montgomery Street one block to the west with two-way traffic circulation. Traveling from W. Broughton Street south, MLK Jr Boulevard is four lanes (2 southbound and 2 northbound) with turn lanes at the signalized intersections and on-street parking between W. Broughton Street and W. Oglethorpe Avenue. South of W. Oglethorpe Avenue, MLK Jr Boulevard is a divided four lane arterial with no on-street parking extending to W. Liberty Drive. South of W. Liberty Drive, MLK Jr Boulevard returns to being an undivided four lane roadway with parking.



JACOBS™	Montgomery Street Two-Way Conversion Study	**Figure 2** **Existing Lane Configuration and Circulation**

W. Broughton Street has a single shared lane on the westbound approach and a driveway for the eastbound approach with MLK Jr Boulevard. MLK Jr Boulevard southbound approach is composed of shared left-through and through lanes with a through and through-right lane for the northbound.

The W. Oglethorpe Avenue has a large raised median at the intersection with MLK Jr Boulevard. The westbound approach is composed of a left, left-through, and through-right lane. The eastbound approach is a left, through, and right turn lane. The southbound and northbound approaches of MLK Jr Boulevard are composed of a left, through, and right turn lanes with a median located on the south leg. On-street parking exists on the north leg.

The westbound approach of W. Liberty Street is composed of dual left-turn lanes with a shared through right lane and a raised median. The eastbound approach has a left lane and a through-right lane. The northbound and southbound approaches of MLK Jr Boulevard are composed of left, through, and through-right lanes.

2.2 Existing Traffic Volumes

The roadway network was evaluated in order to evaluate the impacts of the proposed Savannah Cultural Arts Center and the Montgomery Street two-way traffic conversion. Traffic counts were provided and used to evaluate existing and future traffic conditions within the study area. Relative traffic volumes from these counts were also used to determine the trip distribution for the proposed developments. Existing traffic volumes are shown in Figure 3. Peak hour turning movement counts were collected during the AM (7:00-9:00 AM) and PM (4:00-6:00 PM) peak hours for a typical weekday as part of the recent I-16 flyover Interchange Modification Report (IMR) study at the following locations:

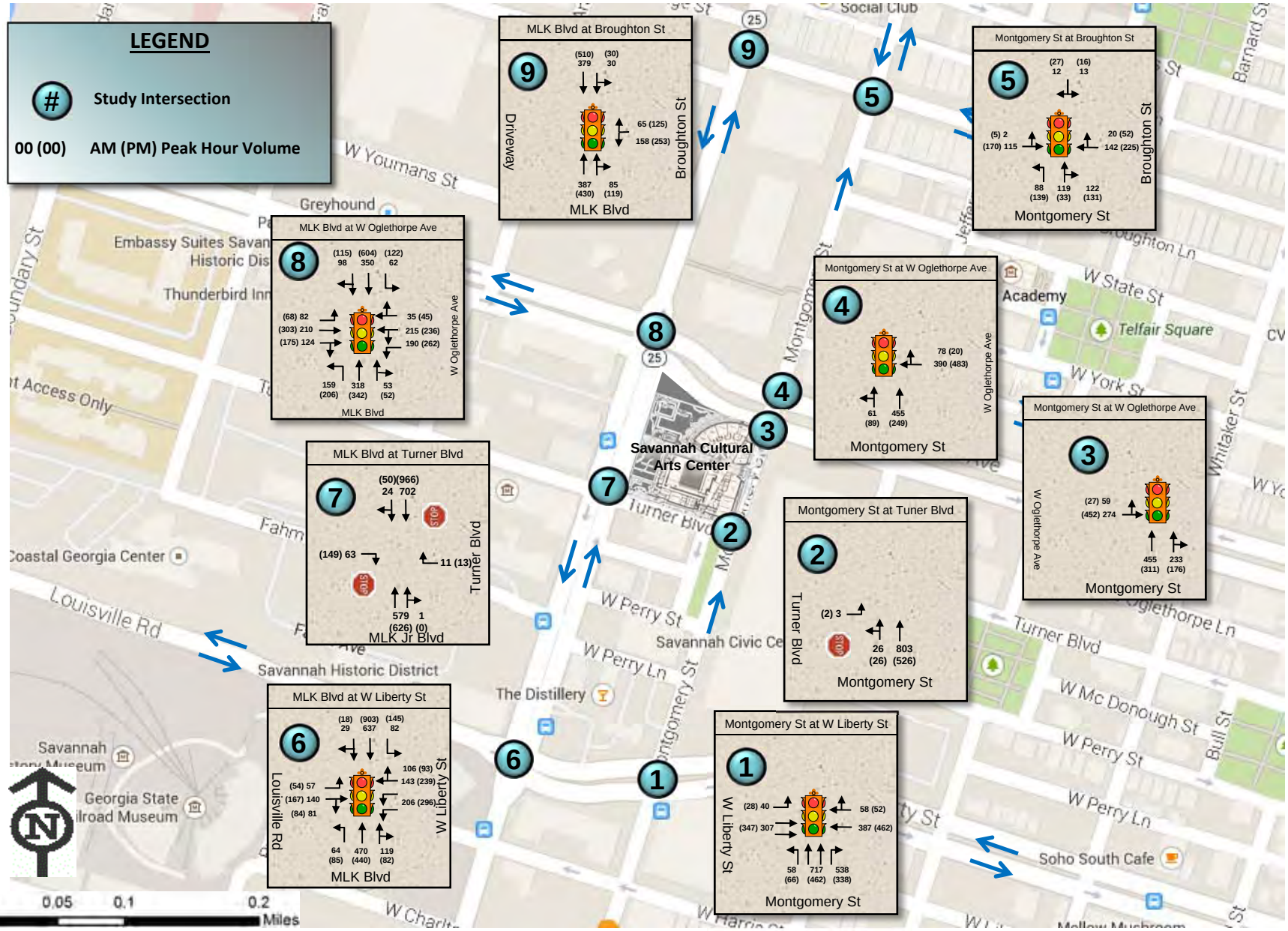
- Montgomery Street at Liberty Street
- Montgomery Street at Oglethorpe Avenue
- Montgomery Street at W. Broughton Street
- MLK Jr Boulevard at W. Liberty Street
- MLK Jr Boulevard at Oglethorpe Avenue
- MLK Jr Boulevard at W. Broughton Street

South of the proposed Savannah Cultural Arts Center several unsignalized intersections are expected to be impacted and AM and PM peak hour turning movement counts were collected. These intersections are as follows:

- Montgomery Street at Turner Boulevard
- MLK Jr Boulevard at Turner Boulevard

2.3 Collision History

Corridor collision history analysis was conducted for the most current three years of available data (Years 2012, 2013, and 2014). The data was used to identify any high-accident intersections. Table 1 shows the historical number of reported crashes at the intersections along Montgomery Street and MLK Jr Boulevard with in the study area.



JACOBS™	Montgomery Street Two-Way Conversion Study	**Figure 3** **Existing Traffic Volumes**

Table 1 Historical Collision Data

Segment	Number of Crashes		
	2012	2013	2014
Montgomery Street at W. Liberty Street	11	14	15
Montgomery Street at W. Oglethorpe Avenue (N)	13	16	17
Montgomery Street at W. Oglethorpe Avenue (S)	13	16	17
Montgomery Street at W. Broughton Street	10	9	7
MLK Jr Boulevard at W. Liberty Street	15	24	23
MLK Jr Boulevard at W. Oglethorpe Avenue	35	21	39
MLK Jr Boulevard at W. Broughton Street	23	21	17

As Table 1 indicates, the intersections with the highest collision rates between 2012 and 2014 occurred at MLK Jr Boulevard and W. Oglethorpe Avenue in two of the three years. The other location with a high collision rate during 2013 was MLK Jr Boulevard at W. Liberty Street. The higher number of crashes may be attributed to the higher traffic volumes on MLK Jr Boulevard. The introduction of southbound traffic flow and an increase in traffic volume may increase the number of collisions along Montgomery Street. Left turn movements along the Montgomery Street corridor at W. Oglethorpe Avenue and W. Liberty Street are recommended to be prohibited under two-way traffic flow conditions to help reduce the number of conflict points at these intersections.

2.4 Existing Traffic Analysis

Traffic conditions on the existing street network were analyzed for current operations using Synchro 8.0 traffic simulation software. Synchro analyzes the traffic operations in regards to level of service (LOS), vehicle delay and queuing at the signalized and unsignalized intersections included in the study area. An analysis of existing peak hour traffic conditions was performed to determine the LOS at the study intersections. LOS for an intersection is based on vehicular delay at the intersection and is a typical measure of effectiveness used to evaluate intersection operations. The Highway Capacity manual (HCM) provides ranges of delay for each LOS definition, spanning from very minimal delays (LOS A) to high delays (LOS F). Level of Service E and above is considered acceptable in an urban area, like Savanah. Level of Service F is considered unacceptable for most drivers.

Existing traffic signal timings were used in modeling the existing traffic operations to determine existing delays and LOS. For signalized intersections, Synchro software was used to determine LOS, based on the following input data:

- Intersection geometry
- Lane configuration
- Turning movement volumes
- Existing signal phasing
- Existing signal timing

For unsignalized intersections where side streets or minor streets are controlled by a stop sign, the criterion for evaluating traffic operations is the LOS for the controlled turning movements at the

intersection. Synchro methodology to determine the delay and LOS for these controlled movements is based on the following input data:

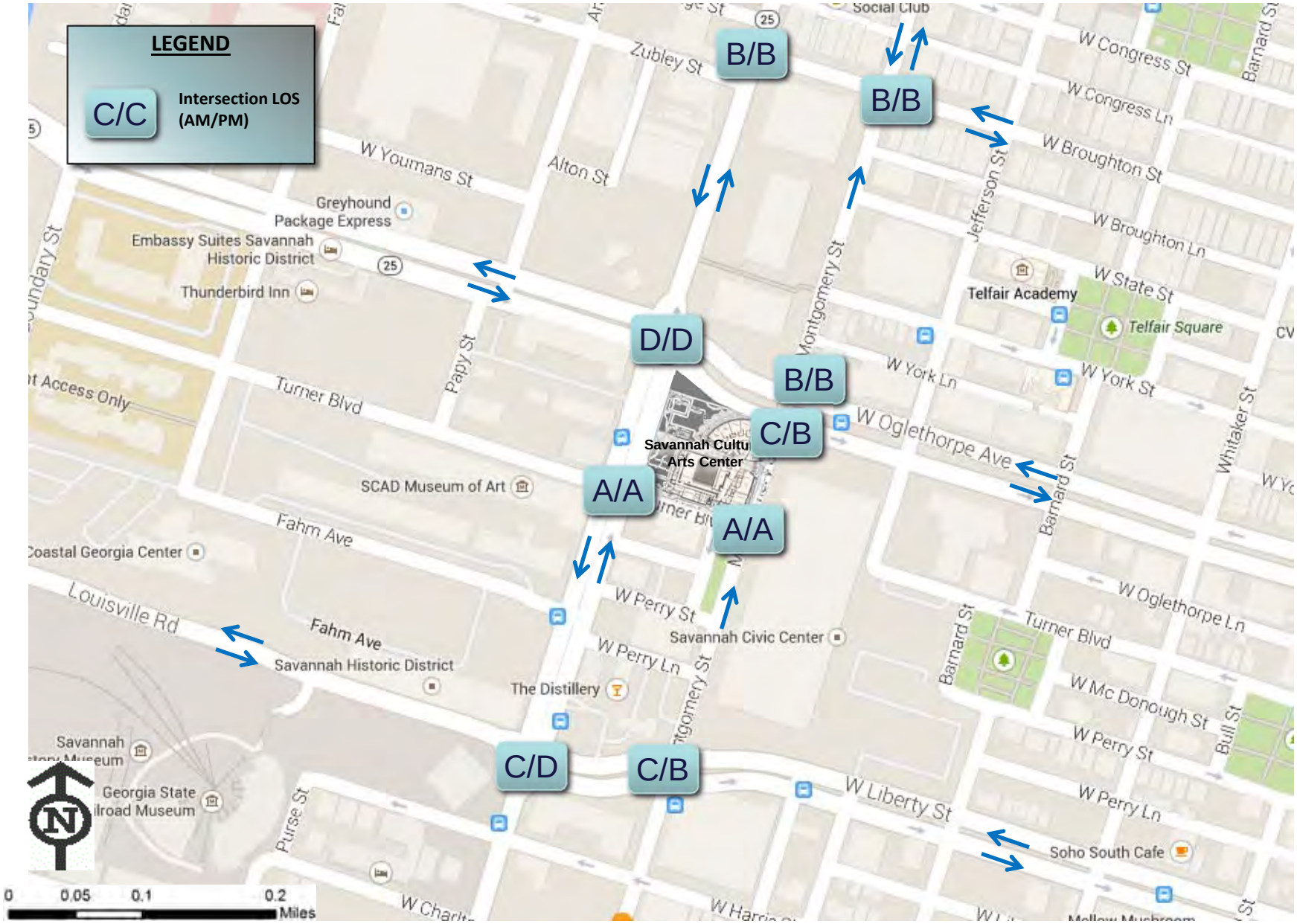
- Intersection geometry
- Lane configuration
- Turning movement volumes

Using the existing traffic volumes for both AM peak and PM peak conditions, along with the noted lane assignments and traffic control elements, a Synchro traffic model for existing conditions was developed. The LOS, delays and vehicle queue lengths were compared with field observations to ensure the model is functioning properly. The seasonal adjustment factor was applied to traffic volumes to obtain an average traffic volume for the balanced existing counts from the I-16 study.

Synchro was used to estimate LOS under existing and future conditions. The results for existing LOS conditions can be seen in Table 2. Figure 4 shows the LOS for all of the study area signalized and unsignalized intersections. As shown in the figure and table, all of the study intersections operate at acceptable LOS during the existing conditions weekday AM and PM peak periods. MLK Jr Boulevard at W. Oglethorpe Avenue experiences the poorest LOS with D during both the AM and PM peaks. As shown in Figure 4 all unsignalized study intersections operate at LOS A.

Table 2 Existing Signalized Intersection Capacity Analysis Results

Montgomery Street One Way	Existing Conditions LOS	
Intersection	**AM**	**PM**
Montgomery Street at West Liberty Street	C	B
Montgomery Street at West Oglethorpe Avenue (N)	C	B
Montgomery Street at West Oglethorpe Avenue (S)	B	B
Montgomery Street at West Broughton Street	B	B
MLK Jr Boulevard at West Liberty Street	C	D
MLK Jr Boulevard at West Oglethorpe Avenue	D	D
MLK Jr Boulevard at West Broughton Street	B	B



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3. Future Conditions

The Savannah Cultural Arts Center is proposed to be constructed on the southwest corner of Montgomery Street and W. Oglethorpe Avenue. Parking will not be provided at the site and it is anticipated that the existing parking decks in the area will be utilized for the additional parking demand. It is anticipated that the heaviest traffic impacts at the site will be during the weekday summer camps, with several hundred children arriving at approximately 8:00 AM and picked up at 5:00 PM. During the peak hours, passenger drop-off areas will be provided along Turner Boulevard and Montgomery Street. While there will be school days where large numbers of students arrive in school buses, it is anticipated those will typically occur late morning or early afternoon and will not impact peak AM and PM traffic conditions. Refer to Figure 5 for Savannah Cultural Arts Center site plan.

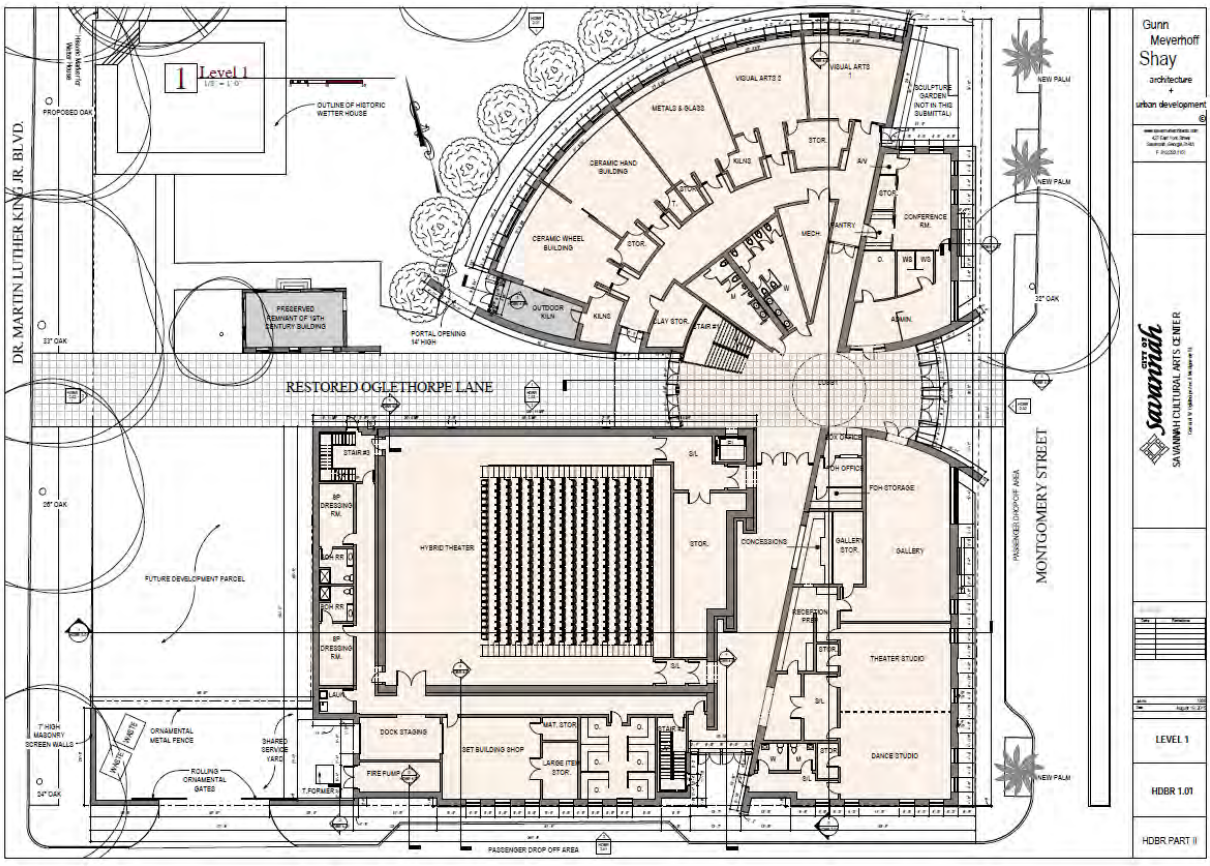

Figure 5 Savannah Cultural Arts Center Site Plan

The two-way conversion of Montgomery Street between W. Broughton Street and W. Liberty Street has been proposed to enhance the circulation in the area of the Savannah Cultural Arts Center at Montgomery Street and Oglethorpe Avenue. The two-way traffic operations would begin at W. Liberty Street and continue to W. Broughton Street where two-way traffic operation currently exists on the north leg. Two alternatives have been proposed to accommodate the two-way Montgomery Street operation:

- Alternative 1 would provide one southbound and two northbound lanes with on-street parking remaining on the east side of Montgomery Street
- Alternative 2 would provide one southbound and one northbound lane and on-street parking maintained on both sides of the roadway.

3.1 Historical Growth Rate

To estimate future traffic volumes, existing traffic volumes were increased to account for background traffic growth not related directly to the proposed Savannah Cultural Arts Center. Jacobs used a 1% annual traffic growth rate for the I-16 flyover IMR study in order to remain consistent with other studies in the area. The existing traffic volumes, the Savannah Cultural Arts Center traffic and the annual growth rates were used to generate future traffic volumes for the anticipated opening year of the Cultural Arts Center, as well as a twenty-year projection horizon. The following three alternatives for the two future years were analyzed:

- Montgomery Street remains one-way
- Montgomery Street converts to two-way operations (Alternative 1)
- Montgomery Street converts to two-way operations (Alternative 2)

3.2 Trip Generation

Trip generation for the Savannah Cultural Arts Center was based on AM and PM peak hour demand for the summer camps. It is projected that the highest typical peak hour demand will occur during day camps where approximately 200 children will visit the Center. Those 200 trips trip were reduced by 10% for sibling/carpool rideshares and 5% for transit and pedestrian modes. Additionally, six shuttle trips were added to the trip generation during the peak hours to account for Liberty Park Shuttle Drop-off. The results of the trip generation are presented in Table 3.

Table 3 Trip Generation: Savannah Cultural Arts Center

	Units	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Summer Camp	200 students	200	200	400	200	200	400
Summer Camp Reduction for Sibling/Carpool Rideshare	-10% (summer camp only)	-20	-20	-40	-20	-20	-40
Reduced for Transit and Pedestrian Modes	-5% (both)	-10	-10	-20	-10	-10	-20
Liberty Park Shuttle Drop-off	10 minute Headway	6	6	12	6	6	12
Total New Trips		176	176	352	176	176	352

3.3 Trip Distribution and Assignment

Trip distribution is the percentage of site traffic that travels on each of the various roadways to and from a site. Trips were distributed throughout the roadway network based on the existing volume distribution on the major arterials. The trip distribution was applied to the AM and PM peak hour site generated trips in order to assign specific AM and PM peak hour site generated volumes at the study intersections for year 2017 and year 2037. Figure 6 shows the assumed trip distribution for the Savannah Cultural Arts Center.

Shifted traffic volumes were also estimated as a result of circulation changes with Montgomery Street being converted to two-way operations to be used in the two-way traffic flow alternatives. The modification of the roadway circulation would allow traffic volumes that currently use MLK Jr Boulevard to use Montgomery Street. This traffic re-routing procedure was conducted for both the anticipated opening year 2017 of Savannah Cultural Arts Center and the future design year 2037 volumes.

As the Savannah Cultural Arts Center site plan shows, there will be a passenger drop-off area on the north side of Turner Boulevard and west side of Montgomery Street. It is recommended that the preferred drop-off area be located on the north side of Turner Boulevard which would allow parents to drop-off summer campers on the passenger side of the vehicle traveling west. As a result, trips generated by the summer camp program during the AM and PM peak hours were allocated traveling westbound on Turner Boulevard and exiting northbound on MLK Jr Boulevard. Drop-offs should not be encouraged in the eastbound direction that would require children to cross vehicle traffic along Turner Boulevard.

3.4 Future Traffic Analysis

Intersection capacity analyses were performed for Year 2017 and Year 2037 conditions, with the Savannah Cultural Arts Center development, using Synchro 8.0 traffic simulation software. The intersection traffic analysis focused on the impact from future traffic generation and potential changes to traffic circulation from one-way to two-way operations on Montgomery Street.

To analyze the future traffic delay and levels of service, Jacobs revised the Synchro traffic model to reflect two-way operations and the revised traffic volumes. The model was run for both future projection years.

3.4.1 One-way Montgomery Street Capacity Analysis

The study area intersections were analyzed during the 2017 and 2037 traffic conditions with Montgomery Street maintaining one-way operations. Current lane configuration and signal phasing were maintained for the different analysis scenarios. Signal timings were, however, adjusted to accommodate future traffic demand. Turning movement traffic volume data used in the 2017 and 2037 one-way analysis are shown in Figures 7 and 8. The results of the AM and PM analysis are shown below in Table 4.

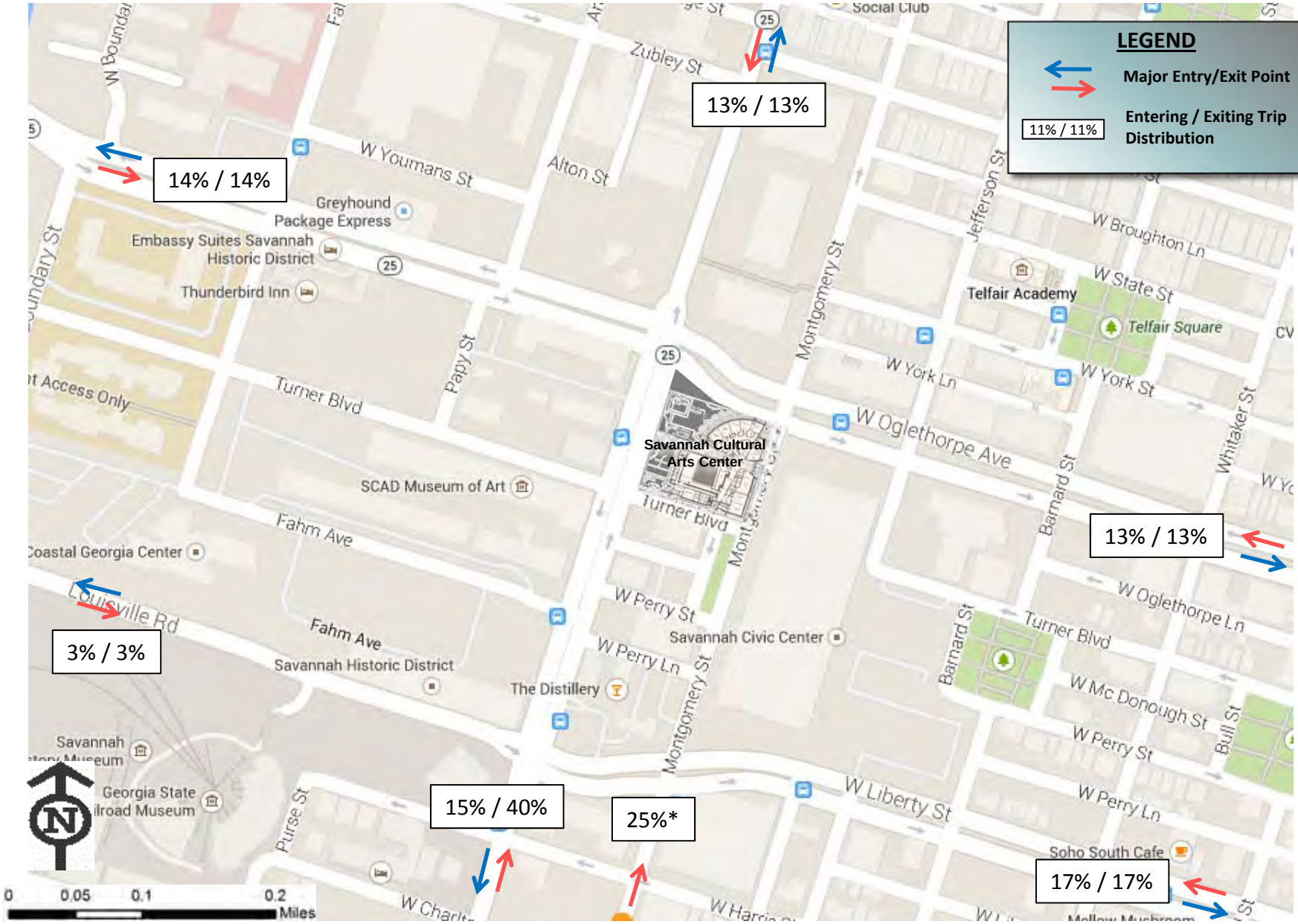

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Figure 6
Trip Distribution

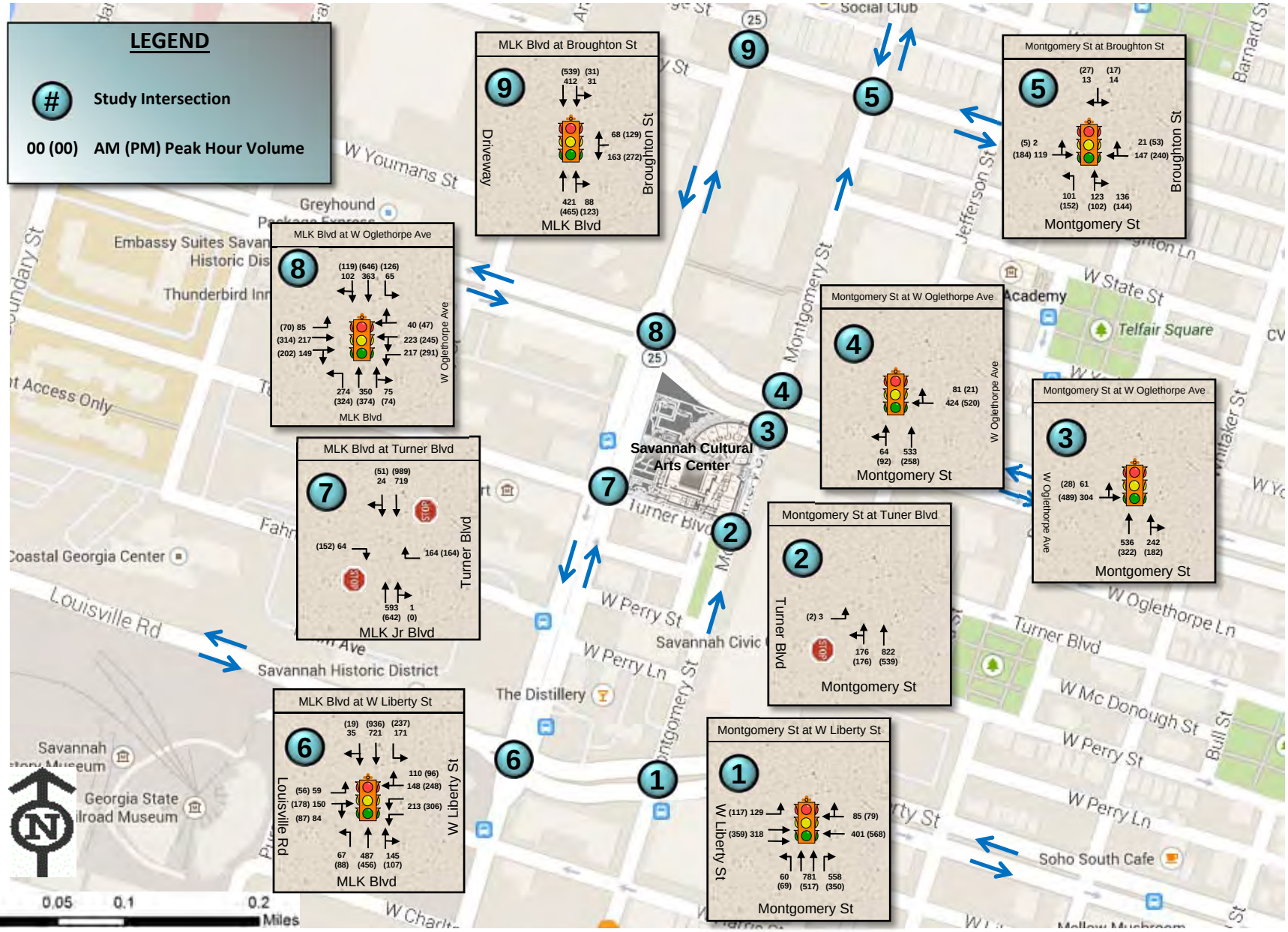

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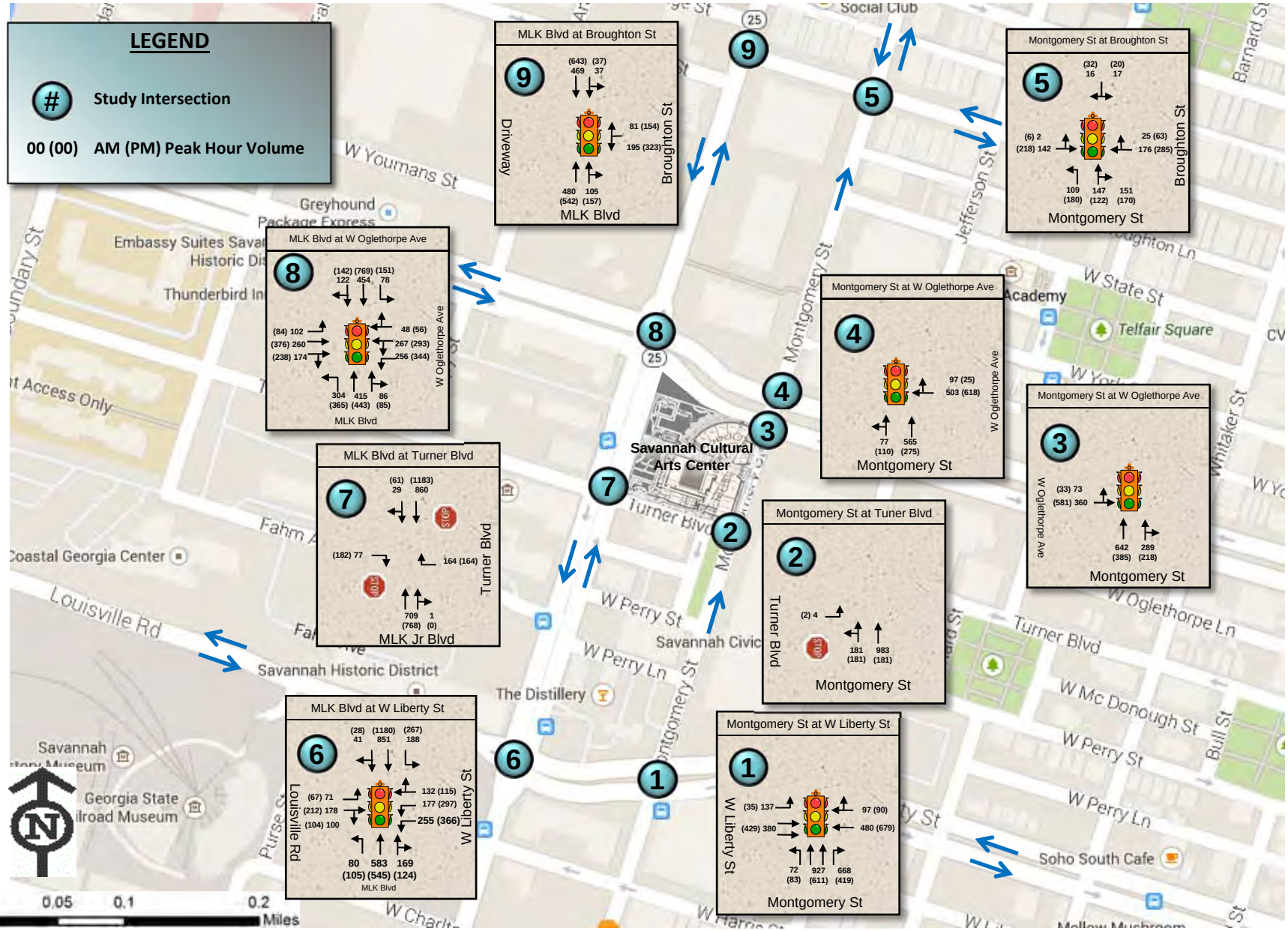
Figure 7
One-Way Montgomery
2017 Traffic Volumes



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Montgomery Street Two-Way Conversion Study

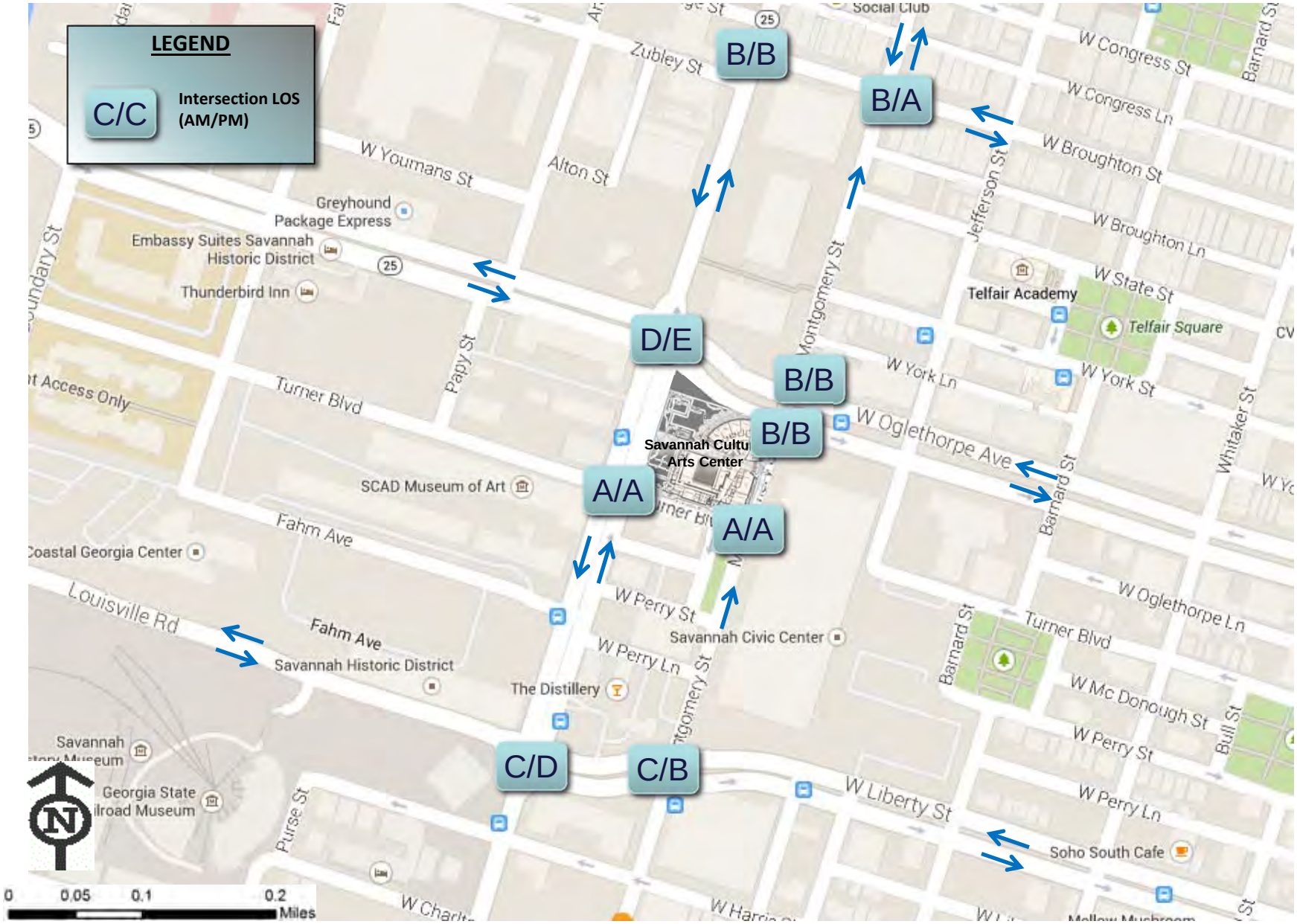
Figure 8
One-Way Montgomery
2037 Traffic Volumes

Table 4 Montgomery Street One-Way Future Capacity Analysis Results

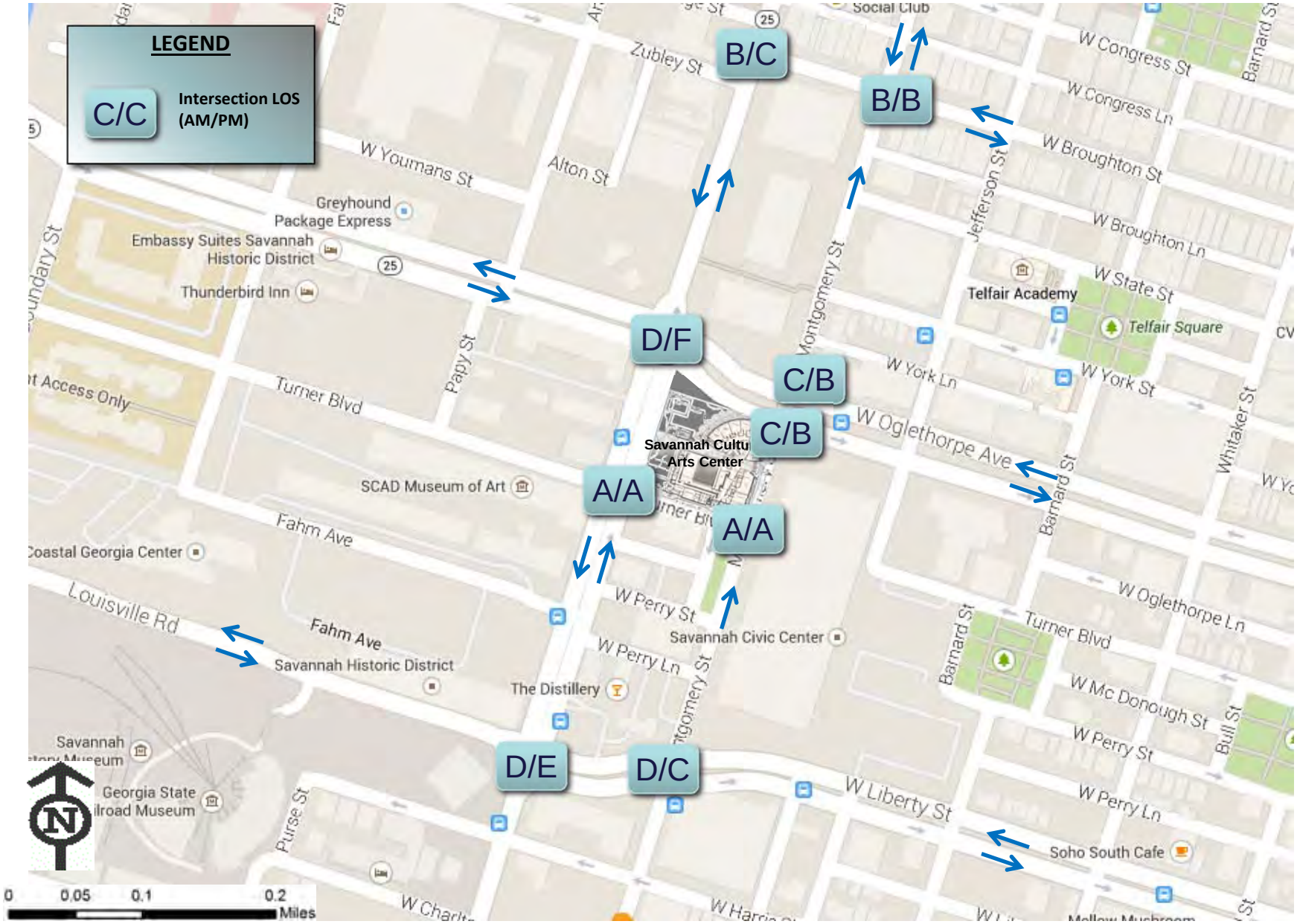
Montgomery Street One Way	2017		2037	
Intersection	**AM**	**PM**	**AM**	**PM**
Montgomery Street at West Liberty Street	C	B	D	C
Montgomery Street at West Oglethorpe Avenue (N)	B	B	C	B
Montgomery Street at West Oglethorpe Avenue (S)	B	B	C	B
Montgomery Street at West Broughton Street	B	A	B	B
MLK Jr Boulevard at West Liberty Street	C	D	D	E
MLK Jr Boulevard at West Oglethorpe Avenue	D	E	D	F
MLK Jr Boulevard at West Broughton Street	B	B	B	C

As shown in Table 4, the study intersections in the Year 2017 are anticipated to operate with acceptable LOS (E or better) during the AM and PM peak hours. The maximum cycle lengths were maintained at either 120 seconds or 140 seconds, with half cycling done at some locations to maintain signal progression. The Year 2037 capacity analysis resulted in a LOS F at the intersection of MLK Jr Boulevard at W. Oglethorpe Avenue during the PM peak hour. As previously discussed, the split phased operation at this intersection greatly increases the overall delay. Figure 9 and 10 show the AM and PM peak hour LOS for all of the signalized and unsignalized study intersections during the 2017 and 2037 analysis years, respectively.

To maintain intersection operations, signal timings were optimized while still maintaining coordination within the system. Signal timing modifications were tested at MLK Jr Boulevard at W. Oglethorpe Avenue but none would provide improved LOS. Geometric changes to the intersections outside of the existing curb line are considered prohibitive to implement because of the historic nature of the area. A southbound right turn bay at MLK Jr Boulevard at W. Oglethorpe Avenue was tested and shown to slightly improve operations but because the improvement would impact the existing curb line the improvement is not recommended at this time.



JACOBS™	Montgomery Street Two-Way Conversion Study	**Figure 9** **One-way Montgomery Street** **2017 Level of Service**



JACOBS™	Montgomery Street Two-Way Conversion Study	**Figure 10** **One-way Montgomery Street** **2037 Level of Service**

3.4.2 Two-way Montgomery Street Capacity Analysis

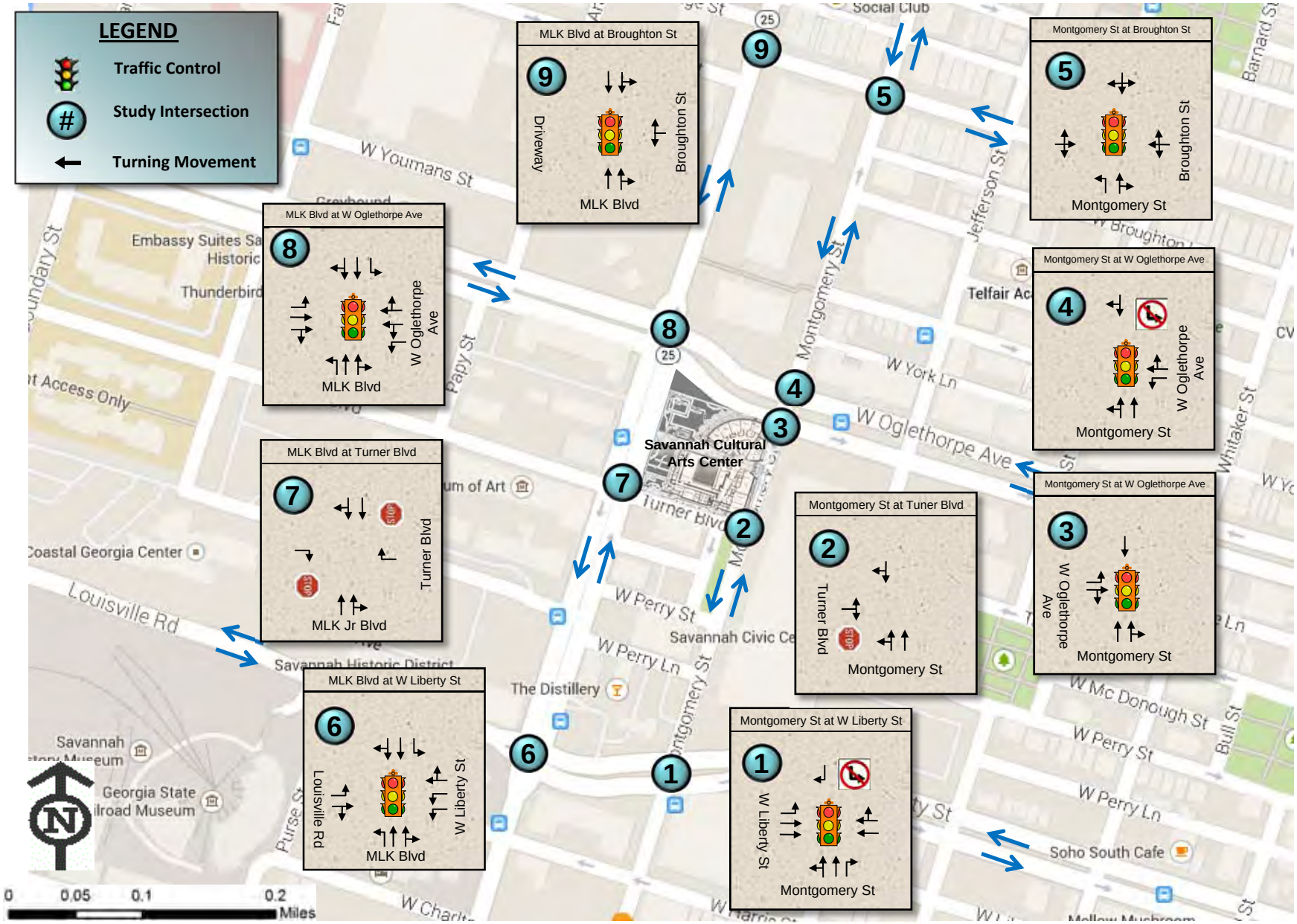
The study area intersections were also analyzed during the 2017 and 2037 traffic conditions with Montgomery Street modified to two-way operations. Signal timings for the future conditions were adjusted to accommodate future traffic demand and two-way operations. The maximum cycle lengths were maintained at either 120 seconds or 140 seconds, with half cycling provided where possible to maintain signal progression. Both Alternative 1 and Alternative 2 capacity analysis results for Years 2017 and 2037 during the AM and PM peak hours are presented below.

3.4.2.1 Alternative 1 (1-SB lane and 2-NB lanes)

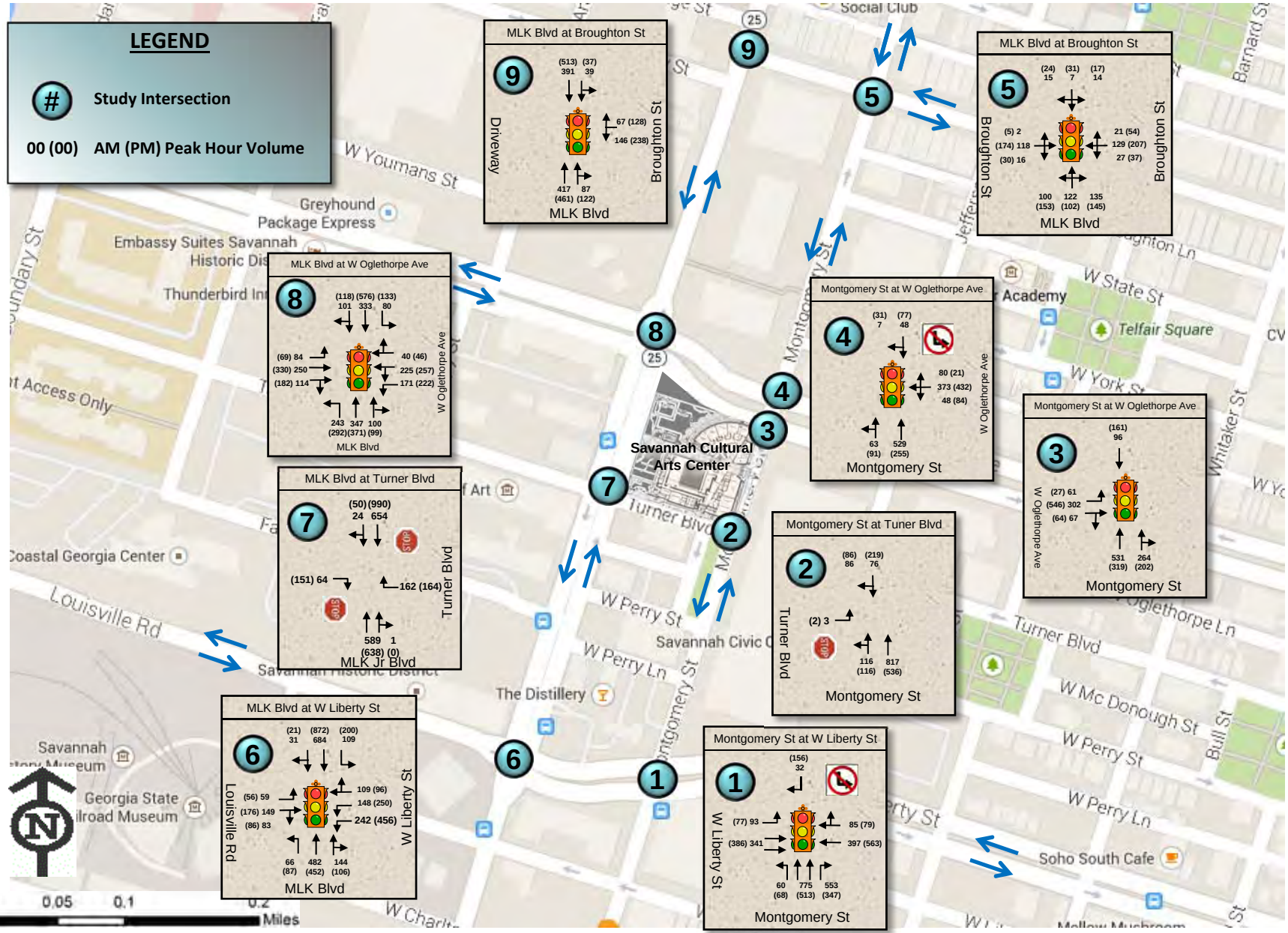
Intersection capacity analysis was performed to evaluate the conversion of Montgomery Street from one-way northbound traffic flow to two-way traffic flow with one southbound and two northbound travel lanes (Alternative 1). The increase in overall travel lanes from two to three lanes along the corridor will require the on-street parking to be removed from the west side of Montgomery Street. By removing the parking on the west side of Montgomery Street, the current number of northbound travel lanes is maintained. Additionally, parking in the immediate vicinity of the Montgomery Street at W. Oglethorpe Street intersection is recommended to be prohibited to allow for improved intersection operations. Larger vehicles and busses traveling eastbound along W. Oglethorpe Street will have difficulty maintaining their lane while turning right from the curb side lane onto a single southbound Montgomery Street receiving lane because of the corner turning radius. As a result, the eastern Montgomery Street parking was removed and the northbound lanes were shifted east to provide for a wider southbound receiving lane at the intersection. AutoTURN turning template software was used to evaluate the required turn radius utilizing a city bus vehicle for the simulation. The result indicates the existing southwest corner turn radius will not accommodate a city bus without the vehicle encroaching into the northbound lane even with the lane shift. To accommodate the maneuver the southwest corner turn radius will need to be reconstructed to accommodate a larger curb radius for turning vehicles and busses. Also, the addition of southbound traffic flow will introduce additional traffic movements that will need to be accommodated and will require additional green time which will result in increased delay at the intersections.

The Montgomery Street roadway facility will need to be modified to accommodate the southbound traffic flow. Roadway striping will need to be eradicated and replaced to allow the modified traffic circulation. Traffic signs will need to be installed and the existing traffic signals will need to be modified in the southbound direction. Signal operation modifications will require upgrades to the two signalized intersections along Montgomery Street at W. Oglethorpe Street and W. Liberty Street. The signals at those intersections were constructed many years ago and will require a complete equipment upgrade to bring them up to current standards.

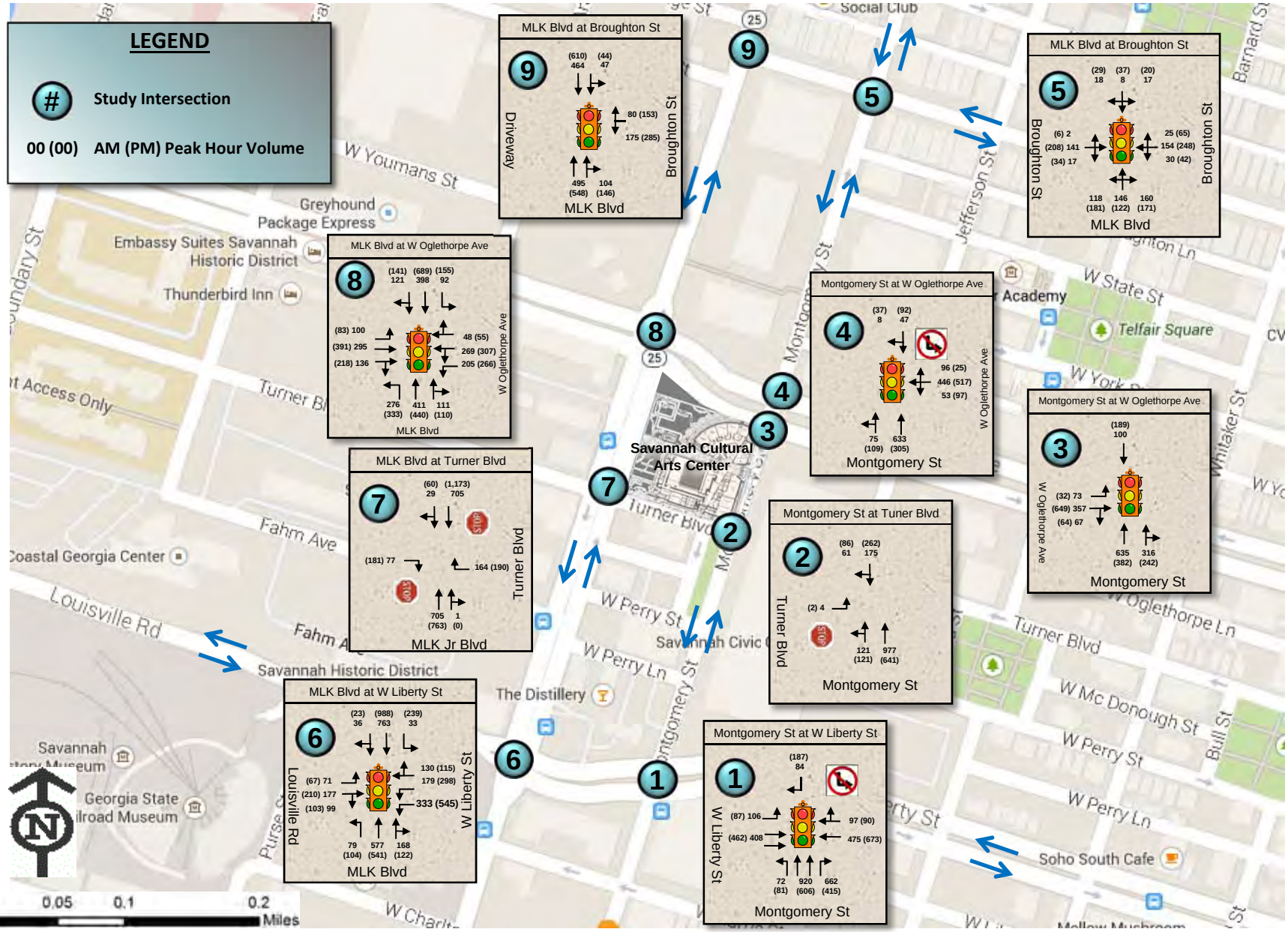
The following is a description of the intersection geometry required to facilitate the Alternative 1 two-way conversion. The proposed intersection lane configuration and circulation used in the capacity analysis is shown in Figure 11. Turning movement traffic volume data used in the 2017 and 2037 two-way conversion analysis are shown in Figures 12 and 13.



JACOBS™	Montgomery Street Two-Way Conversion Study	**Figure 11** **Two-way Montgomery Street (Alternative 1)** **Lane Configuration and Circulation**



JACOBS™	Montgomery Street Two-Way Conversion Study	**Figure 12** **Two-way Montgomery Street (Alternative 1 & 2)** **2017 Traffic Volumes**



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Montgomery Street Two-Way Conversion Study

Figure 13
Two-way Montgomery Street (Alternative 1 & 2)
2037 Traffic Volumes

3.4.2.1.1 Montgomery Street at W. Liberty Street

The northbound Montgomery Street approach at the intersection with W. Liberty Street is currently four lanes with a left turn lane, two through lanes, and a right turn lane. With the introduction of a southbound travel lane at the intersection, the left lane and one of the through lanes will need to be combined into a shared left-through lane. Additionally, to avoid the possible need for split-phased signal operation and improve intersection operation and safety, the southbound left turn movement has been prohibited. The W. Liberty Street approach lane configurations will remain as they currently exist. Additionally, a complete traffic signal upgrade will need to be performed to accommodate southbound traffic and bring the signal equipment up to current standards.

3.4.2.1.2 Montgomery Street at W. Oglethorpe Street

The northbound Montgomery Street approach at the intersection with W. Oglethorpe Street is currently two lanes with a shared left-through lane and a shared through-right lane. The northbound approach was modified to provide a through lane and a shared through-right lane. On-street parking is present along both sides of the northbound approach. To facilitate the southbound lane through the intersection, the western on-street parking was removed to accommodate the receiving lane. To improve the southwest corner turning radius at the intersection, it is recommended that the eastern Montgomery Street on-street parking be removed adjacent to the intersection and northbound lanes shifted to the east to provide a large southbound receiving lane. Additionally, the southwest corner turning radius will require reconstruction to be increased to accommodate larger curb radius for turning vehicles and busses. Also, the westbound W. Oglethorpe Street approach is currently a shared through-right lane with on-street parking. The approach should be modified to provide a dedicated 100-foot left turn bay and a shared through-right lane by removing the adjacent on-street parking and restriping. Finally, a complete traffic signal upgrade will need to be performed to accommodate southbound traffic and bring the signal equipment up to current standards.

3.4.2.1.3 Montgomery Street at W. Broughton Street

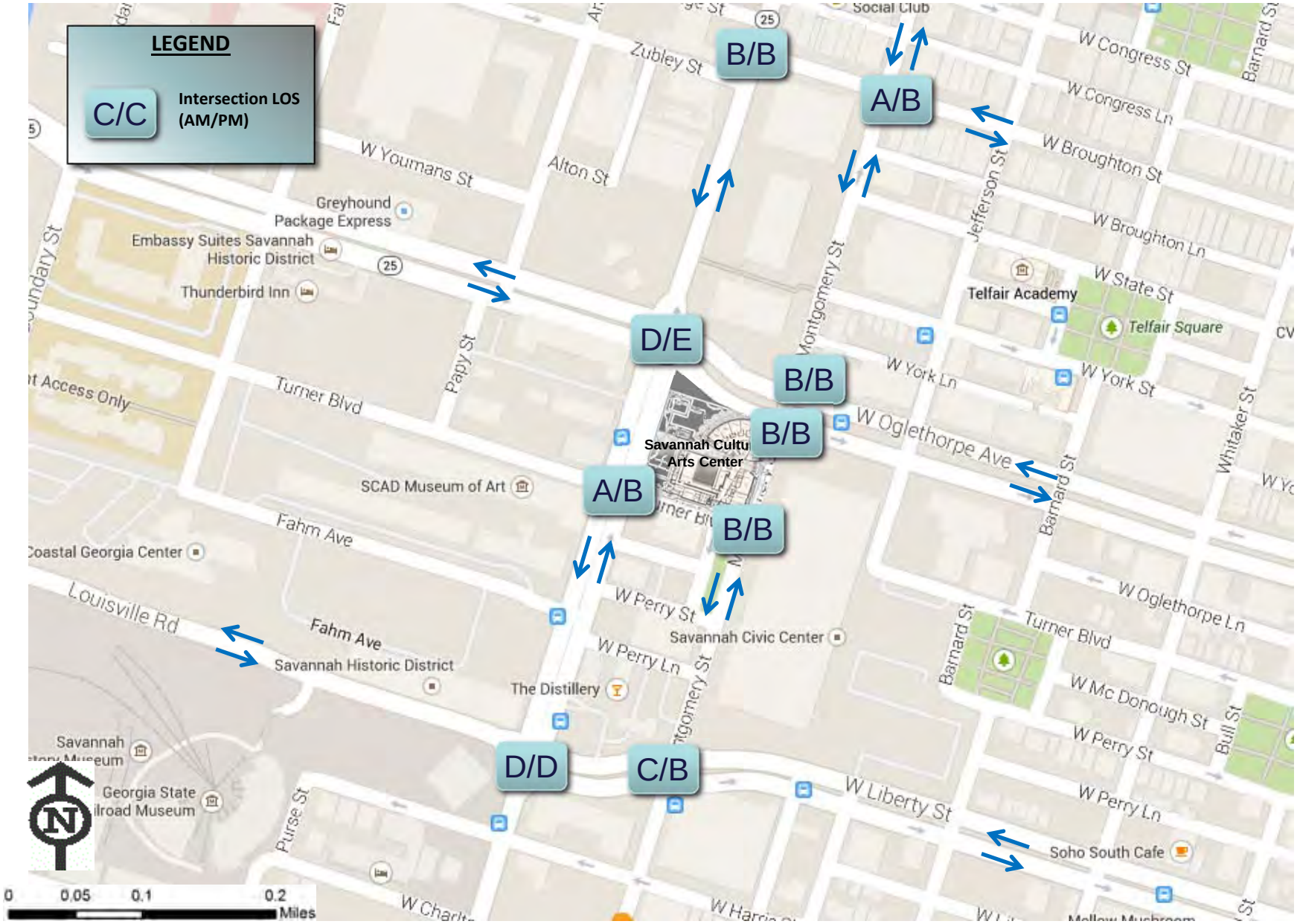
Currently the northbound Montgomery Street approach at the intersection with W. Broughton Street consists of a left turn lane and a shared through-right lane. This could be maintained while accommodating the southbound travel lane. On-street parking along the north and south Montgomery Street approaches of the intersection should be prohibited within 100-feet to improve operations and accommodate turning maneuvers. Current signal operation will continue and no signal modification is anticipated with the possible exception of vehicle detection modification on the northbound approach.

The results of the AM and PM peak hour analyses are shown below in Table 5.

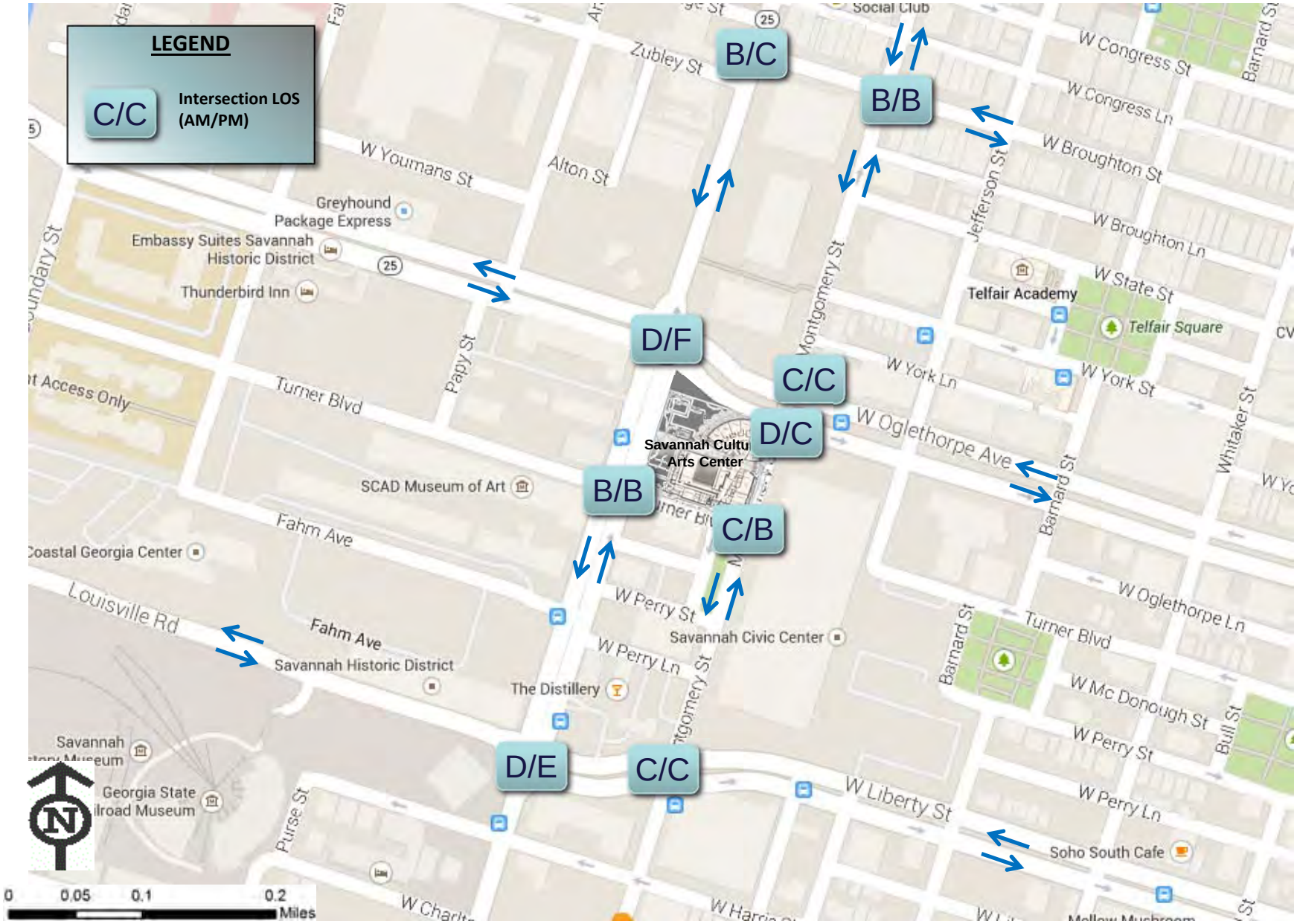
Table 5 Future Montgomery Street Two-Way (Alternative 1) Capacity Analysis Results

Montgomery Street Two-Way Alternative 1 (1SB-2NB)	2017		2037	
Intersection	**AM**	**PM**	**AM**	**PM**
Montgomery Street at West Liberty Street	C	B	C	C
Montgomery Street at West Oglethorpe Avenue (N)	B	B	D	C
Montgomery Street at West Oglethorpe Avenue (S)	B	B	C	C
Montgomery Street at West Broughton Street	A	B	B	B
MLK Jr Boulevard at West Liberty Street	D	D	D	E
MLK Jr Boulevard at West Oglethorpe Avenue	D	E	D	F
MLK Jr Boulevard at West Broughton Street	B	B	B	C

As shown in Table 5, the study intersections in the Year 2017 are anticipated to operate with acceptable LOS (E or better) during the AM and PM peak hours. The maximum cycle lengths were maintained at either 120 seconds or 140 seconds, with half cycling done at some locations to maintain signal progression. The Year 2037 capacity analysis resulted in a LOS F at the intersection of MLK Jr Boulevard at W. Oglethorpe Avenue during the 2037 PM peak hour. As previously discussed, the split-phased operation at this intersection greatly increases the overall delay. Geometric modifications that would provide capacity improvements were analyzed but are not considered feasible because of the historic nature of the area. Figures 14 and 15 provide the AM and PM peak hour LOS for all of the signalized and unsignalized study intersections during the 2017 and 2037 analysis years, respectively.



JACOBS™	Montgomery Street Two-Way Conversion Study	**Figure 14** **Two-way Montgomery Street (Alternative 1)** **2017 Level of Service**



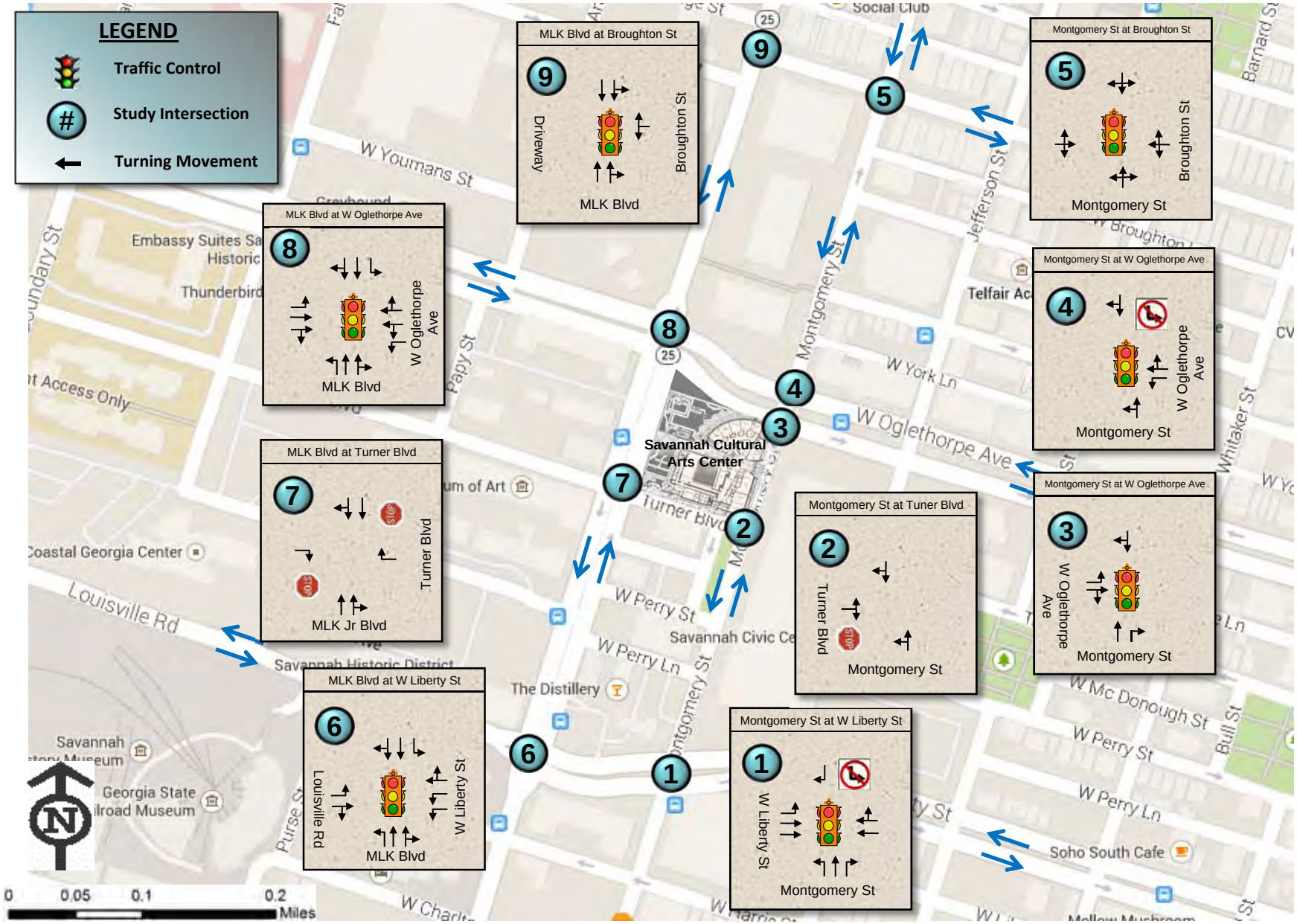
JACOBS™	Montgomery Street Two-Way Conversion Study	**Figure 15** **Two-way Montgomery Street (Alternative 1)** **2037 Level of Service**

3.4.2.2 Alternative 2 (1-SB lane and 1-NB lanes)

Intersection capacity analysis was performed for the conversion of Montgomery Street from one-way northbound to two-way operations with one southbound and one northbound travel lane. This alternative would not require the on-street parking to be removed from the majority of Montgomery Street because the overall number of travel lanes would not be increased. However, some parking will need to be prohibited near signalized intersections along Montgomery Street to allow for turn lane additions or improved turning radii. Larger vehicles and busses traveling eastbound along W. Oglethorpe Street will have difficulty maintaining their lane while turning right from the curb side lane onto a single southbound receiving lane on Montgomery Street because of the corner turning radius. As a result, AutoTURN turning template software was used to evaluate the required turn radius utilizing a city bus vehicle for the simulation. The result indicates the existing southwest corner turn radius will not accommodate a city bus without encroaching into the northbound lane. The southwest corner turn radius will need to be reconstructed and corner radius increased to accommodate large turning vehicles and busses. Additionally, parking along southbound Montgomery Street at the intersection should be removed and a wide southbound receiving lane provided.

The Montgomery Street roadway facility will also need to be modified to accommodate the southbound traffic flow. Roadway striping will need to be eradicated and replaced. Traffic signs will need to installed and the existing traffic signals will need to be modified for the southbound direction. Signal operation modifications will require upgrades to the two signalized intersections along Montgomery Street at W. Oglethorpe Street and W. Liberty Street. The signals at those intersections were constructed many years ago and will require a complete equipment upgrade to bring them up to current standards.

The following is a description of the intersection geometry required to facilitate the Alternative 2 two-way conversion. Proposed intersection lane configuration and circulation is shown in Figure 16. Turning movement traffic volume data used in the 2017 and 2037 two-way conversion analysis are the same for both Alternative 1 and Alternative 2 and were previously shown in Figures 12 and 13.



JACOBS™

Montgomery Street Two-Way Conversion Study

Figure 16
Two-way Montgomery Street (Alternative 2)
Lane Configuration and Circulation

3.4.2.2.1 Montgomery Street at W. Liberty Street

The northbound Montgomery Street approach at the intersection with W. Liberty Street is currently four lanes with a left turn lane, two through lanes, and a right turn lane. With the introduction of a southbound travel lane, one through lane was removed from the approach at the intersection. Additionally, to avoid the possible need for split-phased signal operation and improve intersection operation and safety, the southbound left turn movement has been prohibited. The W. Liberty Street approach lane configurations will remain as they currently exist. Additionally, a complete traffic signal upgrade will need to be performed to accommodate southbound traffic and bring the signal equipment up to current standards.

3.4.2.2.2 Montgomery Street at W. Oglethorpe Street

The northbound Montgomery Street approach at the intersection with W. Oglethorpe Street is currently two lanes with a shared left-through lane and a shared through-right lane at the intersection. The northbound approach was modified to provide a through lane and a right turn lane. The width of the roadway at the median area will be wide enough to include a short left turn bay, a northbound and southbound through lane. This will allow northbound left turning vehicles to pull out of the travel way while waiting for a southbound gap in traffic and allow the through movement to continue to flow. The right turn lane would be provided by removing parking and restriping. On-street parking will be maintained for the majority of Montgomery Street under Alternative 2; however, parking should be removed within 100-feet of the signalized intersections. The parking prohibition adjacent to the intersection will improve effective turn radii by providing larger curb side lanes to better accommodate turning busses and larger vehicles, improve sight lines and reduce vehicle conflicts. Currently, on-street parking is present along both sides of the Montgomery Street approaches at the intersection, with the exception of the northeast side of the intersection. To improve the southwest corner turning radius, it is recommended that a wider southbound receiving lane be provided. Additionally, the southwest corner will need to be reconstructed to accommodate an increase in the turning radius required to accommodate larger vehicles and busses making turning maneuvers. Also, the westbound W. Oglethorpe Street approach is currently a shared through-right lane with on-street parking. The approach should be modified to provide a dedicated 100-foot left turn bay and a shared through-right lane by removing the adjacent on-street parking and restriping. Finally, a complete traffic signal upgrade will need to be performed to accommodate southbound traffic and bring the signal equipment up to current standards.

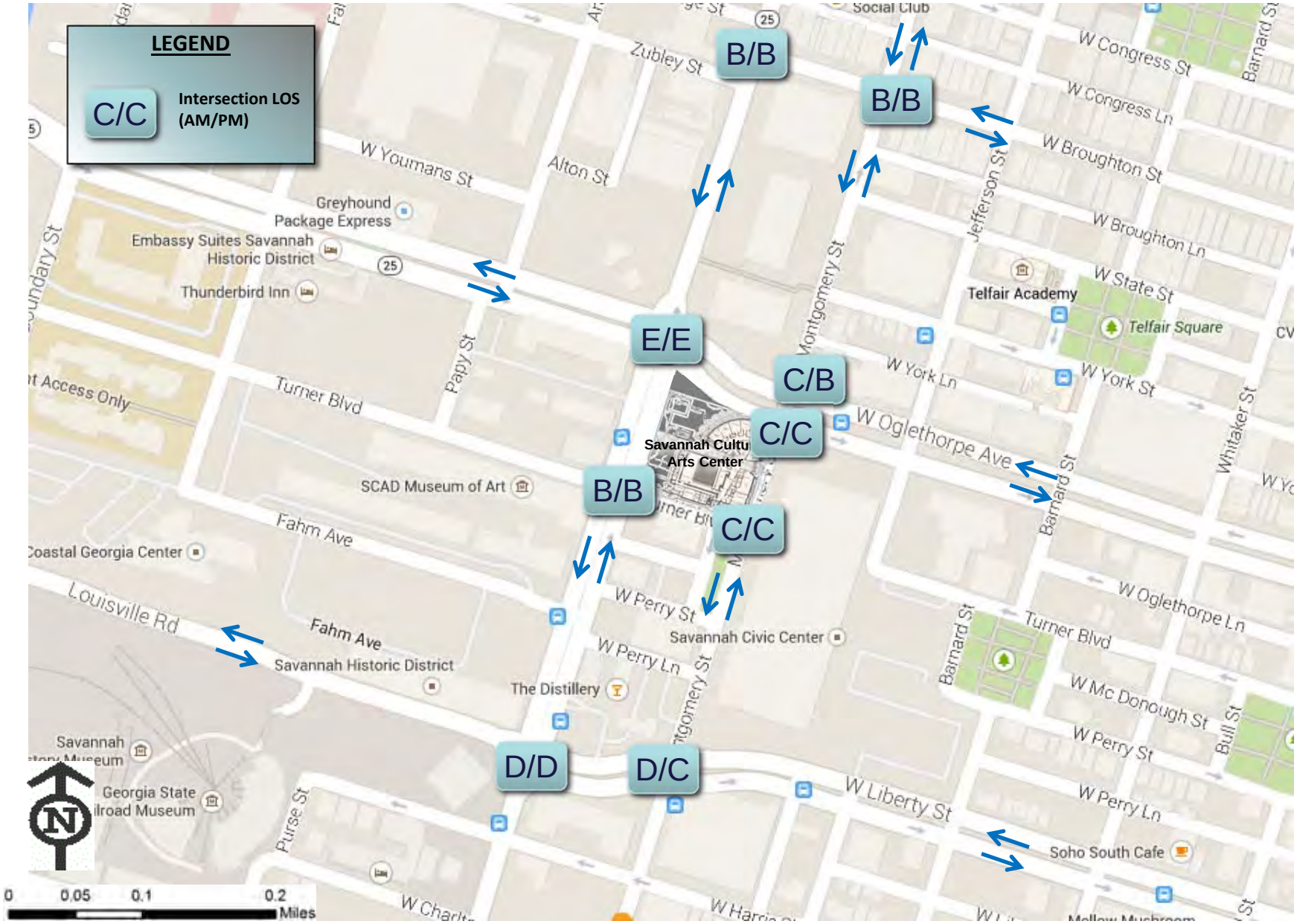
3.4.2.2.3 Montgomery Street at W. Broughton Street

Currently the northbound Montgomery Street approach at the intersection with W. Broughton Street consists of a left turn lane and a shared through-right lane. The lane configuration should be modified to provide a shared left-through-right lane in both the northbound and southbound directions. On-street parking along the north and south Montgomery Street approaches of the intersection should be prohibited within 100 feet to improve operations and turning maneuvers. Current signal operation will continue and no signal modification is anticipated with the possible exception of vehicle detection modification on the northbound approach.

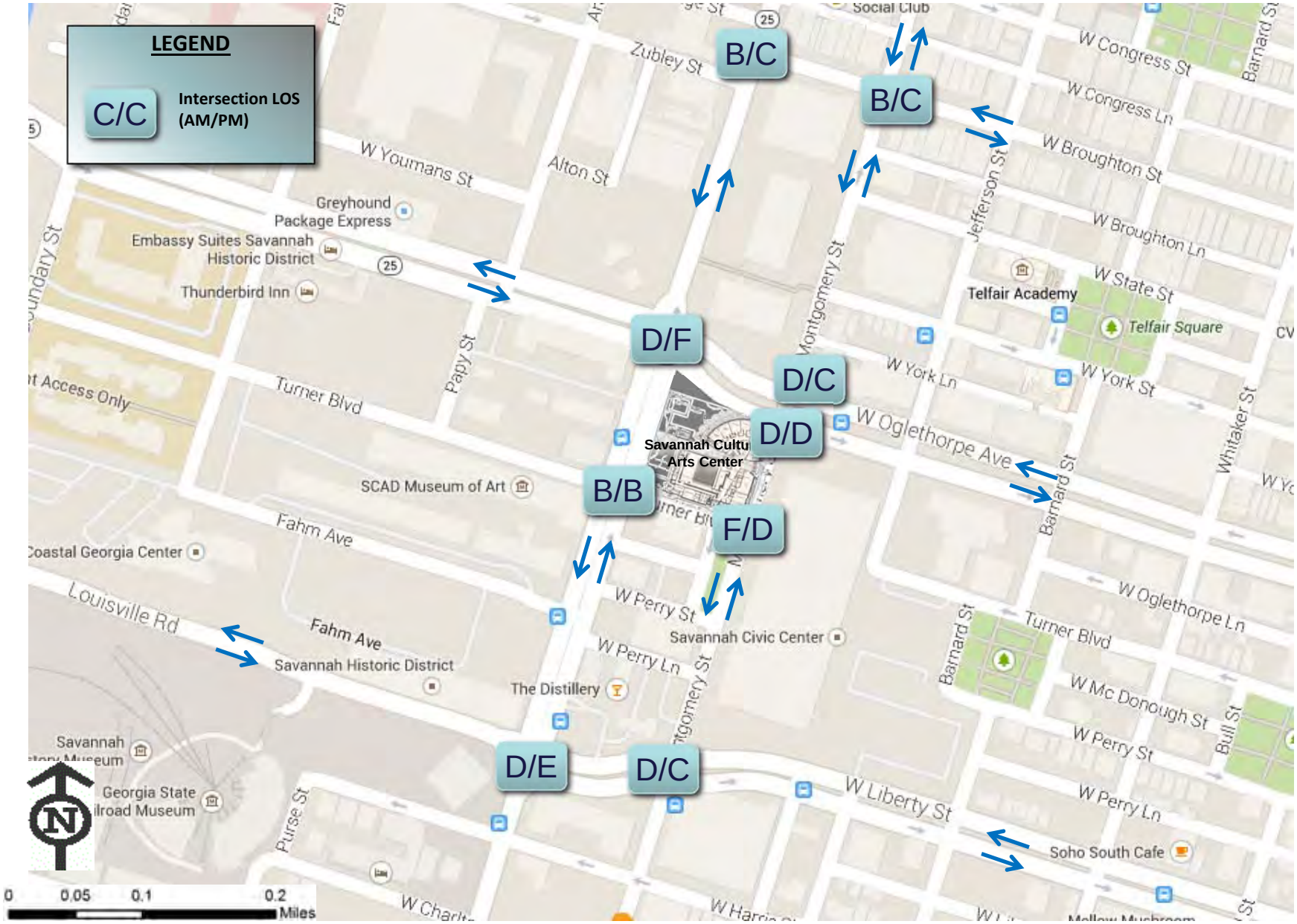
Table 6 Montgomery Street Two-Way (Alternative 2) Future Capacity Analysis Results

Montgomery Street Two-Way Alternative 2 (1SB-1NB)	2017		2037	
Intersection	**AM**	**PM**	**AM**	**PM**
Montgomery Street at West Liberty Street	D	C	D	C
Montgomery Street at West Oglethorpe Avenue (N)	C	C	D	C
Montgomery Street at West Oglethorpe Avenue (S)	C	B	D	D
Montgomery Street at West Broughton Street	B	B	B	C
MLK Jr Boulevard at West Liberty Street	D	D	D	E
MLK Jr Boulevard at West Oglethorpe Avenue	E	E	D	F
MLK Jr Boulevard at West Broughton Street	B	B	B	C

Although the study intersections in the Year 2017 are anticipated to operate at acceptable LOS (E or better) during the AM and PM peak hours, shown in Table 6, many Montgomery Street intersections are operating below levels when compared to the one-way and Alternative 1 scenarios. This is due to the decreased traffic capacity resulting from the reduction from two northbound lanes to one lane on Montgomery Street. The maximum cycle lengths were maintained at either 120 seconds or 140 seconds, with half cycling done at some locations to maintain signal progression. The Year 2037 capacity analysis resulted in a LOS F at the intersection of MLK Jr Boulevard at W. Oglethorpe Avenue during the 2037 PM peak hour. As previously discussed the split phased operation at the intersection greatly increases the overall delay at the intersection. Geometric modifications that would provide capacity improvements were analyzed but are not considered feasible because of the historic nature of the area. Figure 17 and 18 shows the AM and PM peak hour LOS for all of the signalized and unsignalized study intersections during the 2017 and 2037 analysis years, respectively.



JACOBS™	Montgomery Street Two-Way Conversion Study	**Figure 17** **Two-way Montgomery Street (Alternative 2)** **2017 Level of Service**



JACOBS™	Montgomery Street Two-Way Conversion Study	**Figure 18** **Two-way Montgomery Street (Alternative 2)** **2037 Level of Service**

4. Conclusions

The Savannah Cultural Arts Center is proposed to be constructed on the southwest corner of Montgomery Street and W. Oglethorpe Avenue. The existing roadway network was evaluated to determine the impact to the study intersection operations. Additionally, two alternatives were evaluated for modifying Montgomery Street to two-way traffic flow. The alternatives evaluated included: Alternative 1, one southbound and two northbound lanes, and Alternative 2, one southbound and one northbound lane.

Capacity analysis was performed on the three circulation alternatives. Capacity analysis performed on the one-way Montgomery Street scenario used existing intersection lane configurations and signal phasing. Signal timings were adjusted to accommodate the changes in traffic circulation and volume. Capacity analysis for Alternatives 1 and 2 used modified intersection geometries to include southbound traffic flow within the existing curb line. Additionally, the southbound left turns were prohibited at the signalized intersections along Montgomery Street at W. Oglethorpe Avenue and W. Liberty Street.

The result of the Savannah Cultural Arts Center capacity analysis for 2017 and 2037 with the continued one-way operation and the two two-way alternatives indicated the poorest LOS occurred for the Alternative 2 scenario. The reduction of the northbound approaches along Montgomery Street from two lanes to one lane diminishes capacity and LOS during several analysis periods. MLK Jr Boulevard at W. Oglethorpe Avenue during the 2037 PM peak hour continues to experience failing LOS during all of the analysis scenarios.

In addition to capacity impacts to the two-way conversion of Montgomery Street, there are also parking supply and cost implications as well. The following is a description of a few of the advantages and disadvantages for each traffic circulation scenario. Planning level cost estimates are included below which assume milling of Montgomery Street to eradicate existing pavement markings, new asphalt, striping, signage, and signal modifications.

<u>One-way Montgomery Street (Existing Conditions) ***Planning Level Cost: ($0.00)***</u>

Capacity analysis results were acceptable (LOS E or better) for all but the 2037 PM peak at MLK Jr Boulevard at W. Oglethorpe Avenue, where results were LOS F. (See Tables 4-6)

Advantage

- Traffic signals along Montgomery Street would not require modification or upgrade.
- Traffic and informational signs would not need modification.
- Roadway striping would not require modification.
- No parking would be required to be removed.
- Conflict points at the intersections would not be increased.

Disadvantage

- The Savannah Cultural Arts Center access would be limited to northbound Montgomery Street and MLK Jr boulevard traffic flow.

Two-way Montgomery Street (Alternative 1) ***Planning Level Cost: ($641,400.00)***

Capacity analysis results were acceptable (LOS E or better) for all but the 2037 PM peak at MLK Jr Boulevard at W. Oglethorpe Avenue, where results were LOS F.

Advantage

- The Savannah Cultural Arts Center would have improved access on Montgomery Street when compared to the one-way Montgomery Street scenario.

Disadvantage

- Increased cost compared to one-way Montgomery Street scenario.
- Traffic signals at two locations along Montgomery Street would require complete equipment upgrade to bring intersection operation and equipment up to current standards.
- Traffic and informational signs would need modification to accommodate two-way traffic flow.
- Roadway striping would require modification.
- Require southbound left-turns to be prohibited along Montgomery Street at W. Oglethorpe Avenue and W. Liberty Street to improve traffic operations and improve safety.
- Introduce an increase in conflict points at the intersections along Montgomery Street.
- Will result in turning busses and large vehicles encroaching into opposing northbound travel lane while performing turning maneuver without reconstruction to the southwest corner radius.
- Overall capacity analysis results were similar between Alternative 1 and the one-way Montgomery Street scenarios with the exception of the 2037 PM peak hour capacity analysis Montgomery Street at W. Oglethorpe Avenue. The results of which were reduced by one level as a result of the additional delay incurred by the introduction of the southbound movement for Alternative 1. (See Tables 4 and 5)
- Alternative 1 would require the most parking be removed (approximately 49 parking spaces) along Montgomery Street and side streets near the signalized intersections to provide better turn radii and turn lanes. Please review Appendix A-Concept Layout for parking locations.

Two-way Montgomery Street (Alternative 2) ***Planning Level Cost: ($640,200.00)***

Advantage

- The Savannah Cultural Arts Center would have improved access on Montgomery Street when compared to the one-way Montgomery Street scenario.

Disadvantage

- Capacity analysis results for Alternative 2 were lower for many analysis periods when compared to the one-way Montgomery Street and Alternative 2 analysis scenarios. (See Tables 4-6)
- Increased cost when compared to one-way Montgomery Street scenario.
- Traffic signals at two locations along Montgomery Street would require complete equipment upgrade to bring intersection operation and equipment up to current standards.
- Traffic and informational signs would need modification to accommodate two-way traffic flow.
- Roadway striping would require modification.
- Introduce an increase in conflict points at the intersections along Montgomery Street.
- Will result in turning busses and large vehicles encroaching into opposing northbound travel lane while performing turning maneuver without reconstruction to the southwest corner radius.
- Require southbound left-turn prohibitions at Montgomery Street intersections with W. Oglethorpe Avenue and W. Liberty Street to improve safety and traffic operations.
- Alternative would require approximately 31 parking spaces be removed along Montgomery Street and side streets near the signalized intersections to provide better turn radii and turn lanes. Please review Appendix A-Concept Layout for parking locations.

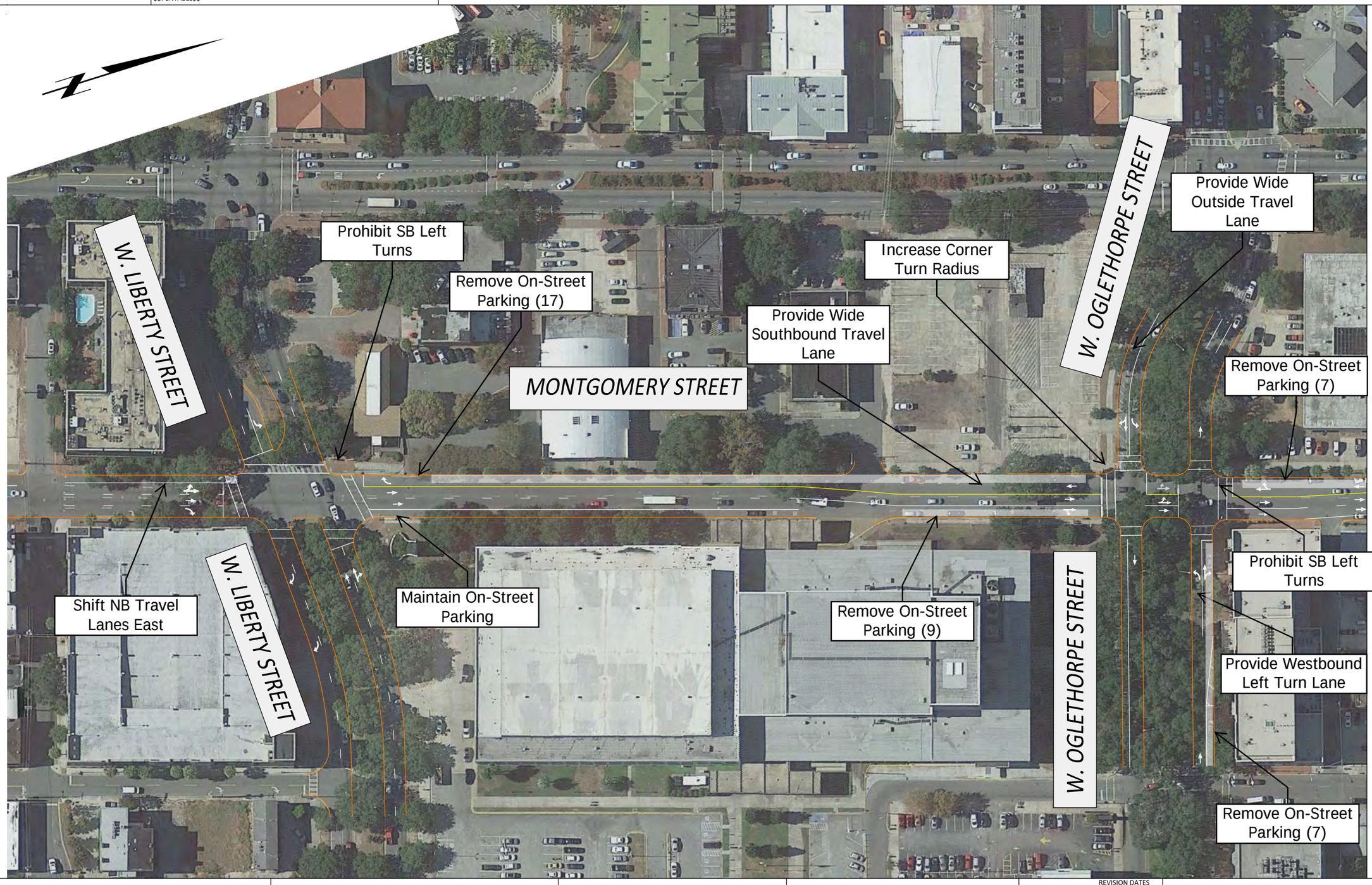
5. Recommendations

The information in the above section should provide assistance to decision markers concerning the impact the Savannah Cultural Arts Center access would have on Montgomery Street and MLK Jr Boulevard traffic. Maintaining one-way traffic flow along Montgomery Street will provide the least impact to the existing infrastructure and traffic capacity. However, traffic circulation around the Savannah Cultural Arts Center will be more limited when compared to two-way traffic flow scenarios. Capacity analysis indicates that operational impacts can be minimized with the two-way traffic flow by prohibiting southbound left turns at signalized intersections and removing on-street parking adjacent to signalized intersections and along Montgomery Street. The parking impacts are reduced with the implementation of Alternative 2 (one lane northbound and one-lane southbound), but requires the reduction of the northbound traffic capacity to one lane. Planning level cost estimates for Alternative 1 and 2 are similar, with no cost associated with the Montgomery Street one-way scenario.

The Savannah Cultural Arts Center site plan includes the construction of a two-lane eastbound approach at Montgomery Street and W. Oglethorpe Avenue. Consideration should be given to increasing the turning radius at the corner to accommodate large vehicles and busses, with the two-way Montgomery Street conversion alternatives. Additionally, the Savannah Cultural Arts Center site plan has a proposed median located on Montgomery Street just south of W. Oglethorpe Avenue. The construction would require additional on-street parking be removed along Montgomery Street, impact eastbound turning vehicles and require the removal of the northbound right turn lane on Montgomery Street at W. Oglethorpe Avenue. Finally, the site plan includes the restoration of Elbert Square to the south of Turner Avenue. The square would extend into the southbound travel lane and force traffic to go around the square. This may negatively impact traffic operations and turning radii which should be further reviewed by the City of Savannah.

Appendix A. Concept Layout- Montgomery Street

DATE$$$ TIME$$$ DGN
$USER$ $$PENTABLE$$



MATCH LINE SEE SHEET 2 OF 2

LEGEND

- Proposed No Parking
- Edge of Curb

JACOBS™

NOT FOR CONSTRUCTION

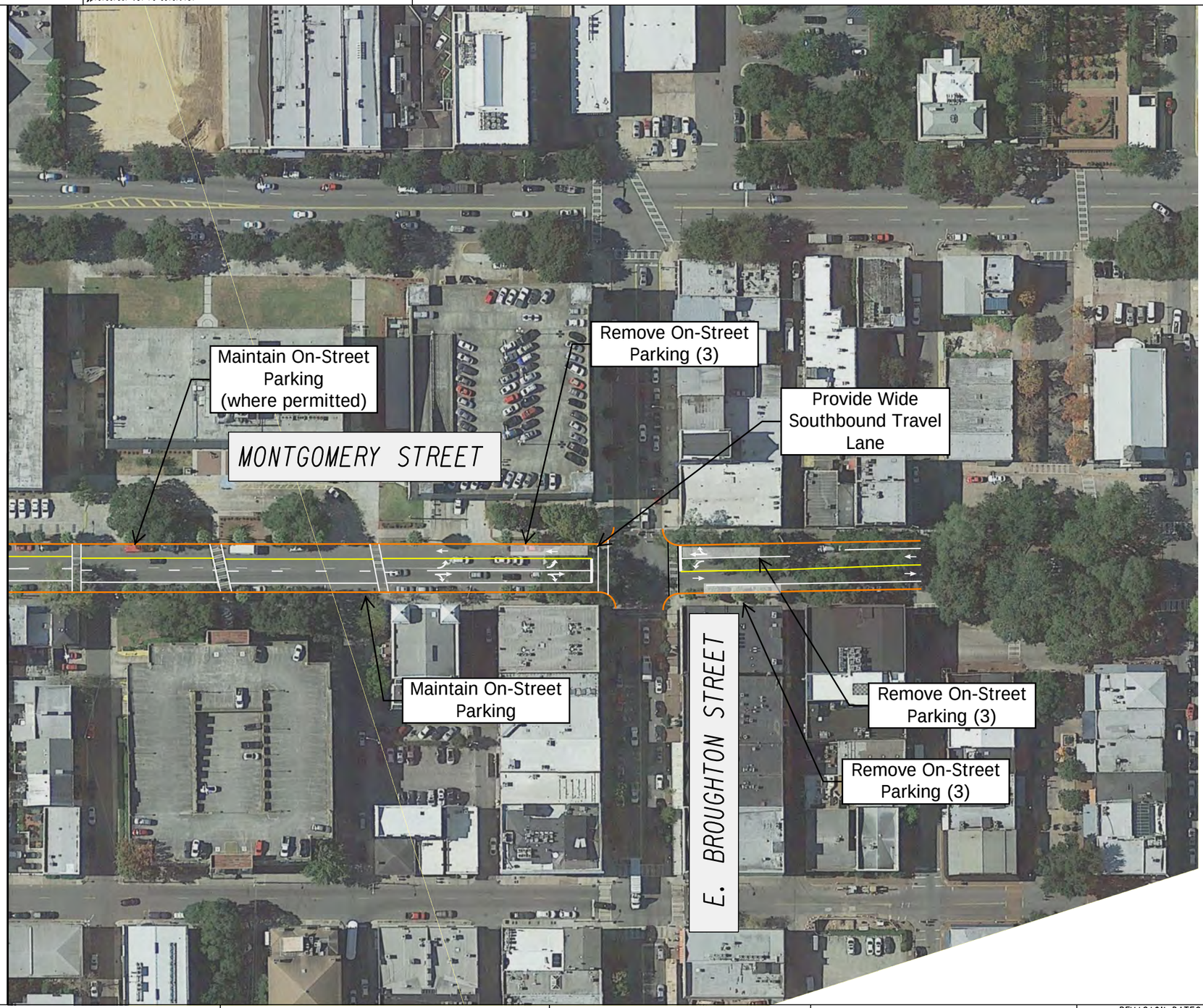
SCALE IN FEET
0 50 100 200

REVISION DATES		

MONTGOMERY STREET TRAFFIC STUDY
CONCEPT LAYOUT - ALTERNATE 1

CHECKED:		DATE:		DRAWING No.
BACKCHECKED:		DATE:		1 OF 2
CORRECTED:		DATE:		
VERIFIED:		DATE:		

SEE SHEET 1 OF 2



LEGEND

- Proposed No Parking
- Edge of Curb

JACOBS™

NOT FOR CONSTRUCTION

SCALE IN FEET
0 50 100 200

REVISION DATES

MONTGOMERY STREET TRAFFIC STUDY
CONCEPT LAYOUT - ALTERNATE 1

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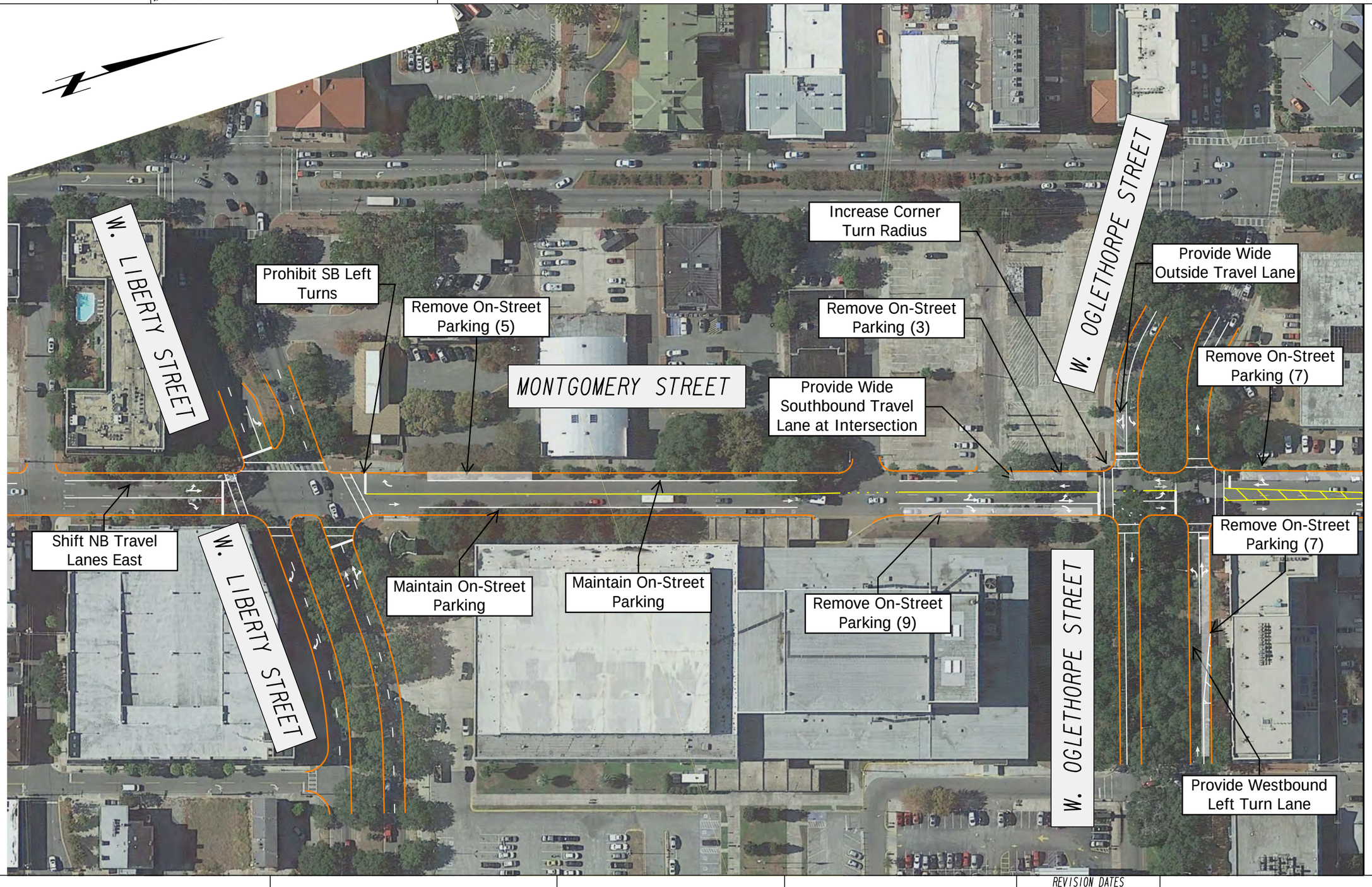
VERIFIED:		DATE:		



SEE SHEET 2 OF 2
MATCH LINE

LEGEND
- Proposed No Parking
- Edge of Curb

JACOBS™

NOT FOR CONSTRUCTION

SCALE IN FEET
0 50 100 200

REVISION DATES

MONTGOMERY STREET TRAFFIC STUDY
CONCEPT LAYOUT - ALTERNATE 2

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BACKCHECKED:		DATE:		1 OF 2
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VERIFIED:		DATE:		

SEE SHEET 1 OF 2

MATCH LINE

LEGEND

- Proposed No Parking
- Edge of Curb

JACOBS™

NOT FOR CONSTRUCTION

SCALE IN FEET
0 50 100 200

REVISION DATES

MONTGOMERY STREET TRAFFIC STUDY
CONCEPT LAYOUT - ALTERNATE 2

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BACKCHECKED:		DATE:		2 OF 2
CORRECTED:		DATE:		
VERIFIED:		DATE:		

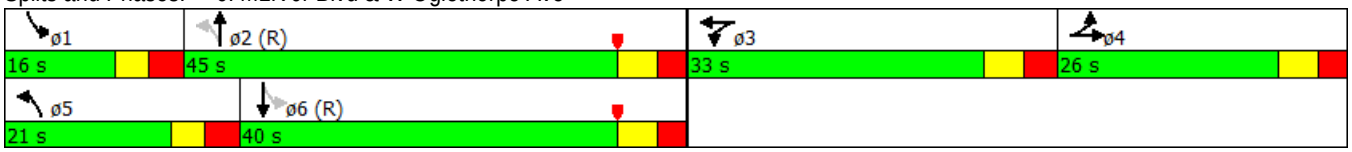
Appendix B. Synchro Outputs

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	82	210	190	215	159	318	62	350
Turn Type	Split	NA	Split	NA	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	3	3	5	2	1	6
Permitted Phases					2		6	
Detector Phase	4	4	3	3	5	2	1	6
Switch Phase								
Minimum Initial (s)	15.0	15.0	8.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	25.3	25.3	25.6	25.6	22.2	31.3	10.2	31.3
Total Split (s)	26.0	26.0	33.0	33.0	21.0	45.0	16.0	40.0
Total Split (%)	21.7%	21.7%	27.5%	27.5%	17.5%	37.5%	13.3%	33.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.7	2.7	3.0	3.0	3.2	2.7	3.2	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.6	6.6	6.2	6.3	6.2	6.3
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	19.7	19.7	26.4	26.4	54.2	43.3	43.5	36.0
Actuated g/C Ratio	0.16	0.16	0.22	0.22	0.45	0.36	0.36	0.30
v/c Ratio	0.37	0.68	0.52	0.51	0.56	0.38	0.20	0.55
Control Delay	49.4	43.1	56.5	51.7	33.7	25.6	16.1	31.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.4	43.1	56.5	51.7	33.7	25.6	16.1	31.0
LOS	D	D	E	D	C	C	B	C
Approach Delay		44.3		53.3		28.0		29.2
Approach LOS		D		D		C		C

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 35 (29%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay: 37.8 Intersection LOS: D
Intersection Capacity Utilization 67.1% ICU Level of Service C
Analysis Period (min) 15

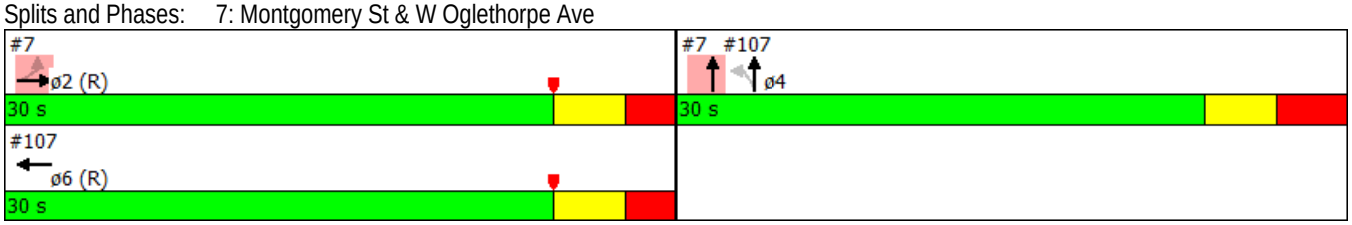
Splits and Phases: 6: MLK Jr Blvd & W Oglethorpe Ave



Lane Group	EBT	NBT	ø6
Lane Configurations			
Volume (vph)	274	455	
Turn Type	NA	NA	
Protected Phases	2	4	6
Permitted Phases			
Detector Phase	2	4	
Switch Phase			
Minimum Initial (s)	15.0	12.0	15.0
Minimum Split (s)	22.5	29.4	22.5
Total Split (s)	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50%
Yellow Time (s)	3.2	3.2	3.2
All-Red Time (s)	2.3	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	5.5	6.4	
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	C-Max
Act Effct Green (s)	27.0	21.1	
Actuated g/C Ratio	0.45	0.35	
v/c Ratio	0.49	0.66	
Control Delay	20.8	20.1	
Queue Delay	0.5	0.1	
Total Delay	21.3	20.2	
LOS	C	C	
Approach Delay	21.3	20.2	
Approach LOS	C	C	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 26 (43%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 20.6	Intersection LOS: C
Intersection Capacity Utilization 51.8%	ICU Level of Service A
Analysis Period (min) 15	

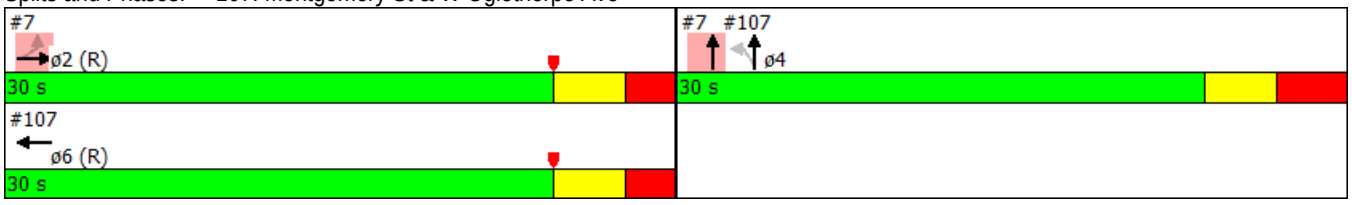
Splits and Phases: 7: Montgomery St & W Oglethorpe Ave



Lane Group	WBT	NBT	ø2
Lane Configurations			
Volume (vph)	390	455	
Turn Type	NA	NA	
Protected Phases	6	4	2
Permitted Phases			
Detector Phase	6	4	
Switch Phase			
Minimum Initial (s)	15.0	12.0	15.0
Minimum Split (s)	22.5	29.4	22.5
Total Split (s)	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50%
Yellow Time (s)	3.2	3.2	3.2
All-Red Time (s)	2.3	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	5.5	6.4	
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	C-Max
Act Effct Green (s)	27.0	21.1	
Actuated g/C Ratio	0.45	0.35	
v/c Ratio	0.77	0.49	
Control Delay	25.4	7.2	
Queue Delay	0.0	0.0	
Total Delay	25.4	7.2	
LOS	C	A	
Approach Delay	25.4	7.2	
Approach LOS	C	A	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 26 (43%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 15.8	Intersection LOS: B
Intersection Capacity Utilization 53.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 107: Montgomery St & W Oglethorpe Ave

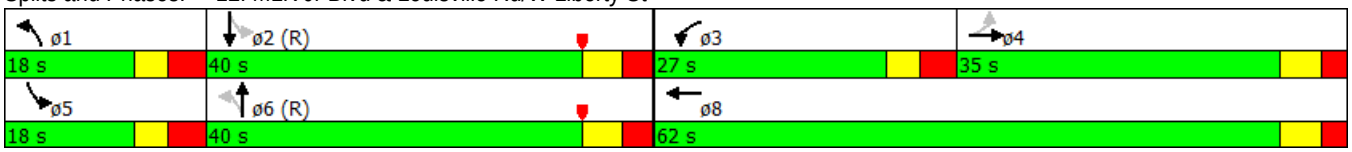


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	57	140	206	143	64	470	82	637
Turn Type	Perm	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases		4	3	8	1	6	5	2
Permitted Phases	4				6		2	
Detector Phase	4	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	27.1	27.1	10.3	27.1	10.5	24.5	10.5	29.5
Total Split (s)	35.0	35.0	27.0	62.0	18.0	40.0	18.0	40.0
Total Split (%)	29.2%	29.2%	22.5%	51.7%	15.0%	33.3%	15.0%	33.3%
Yellow Time (s)	3.6	3.6	3.0	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.5	2.5	3.3	2.5	3.5	2.9	3.5	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	6.1	6.3	6.1	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	22.6	22.6	13.6	42.5	59.0	52.9	60.4	53.6
Actuated g/C Ratio	0.19	0.19	0.11	0.35	0.49	0.44	0.50	0.45
v/c Ratio	0.32	0.73	0.61	0.44	0.20	0.44	0.23	0.50
Control Delay	44.5	54.1	69.5	21.1	17.8	26.7	22.0	31.2
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0
Total Delay	44.5	54.1	69.5	21.3	17.8	26.7	22.0	31.2
LOS	D	D	E	C	B	C	C	C
Approach Delay		52.1		43.2		25.8		30.1
Approach LOS		D		D		C		C

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 35 (29%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.73
Intersection Signal Delay: 34.4 Intersection LOS: C
Intersection Capacity Utilization 69.4% ICU Level of Service C
Analysis Period (min) 15

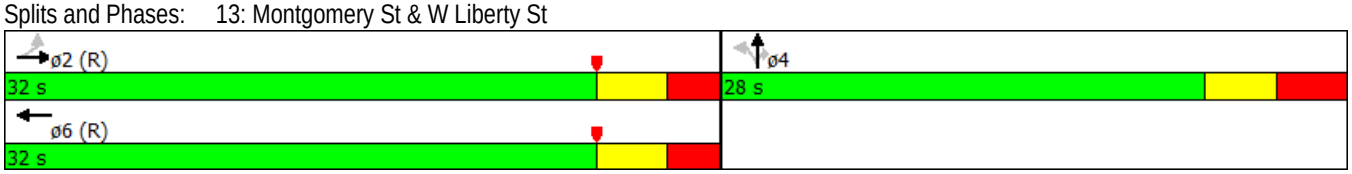
Splits and Phases: 12: MLK Jr Blvd & Louisville Rd/W Liberty St



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Configurations						
Volume (vph)	40	307	387	58	717	538
Turn Type	Perm	NA	NA	Perm	NA	Perm
Protected Phases		2	6		4	
Permitted Phases	2			4		4
Detector Phase	2	2	6	4	4	4
Switch Phase						
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	25.6	25.6	25.6	35.4	35.4	35.4
Total Split (s)	32.0	32.0	32.0	28.0	28.0	28.0
Total Split (%)	53.3%	53.3%	53.3%	46.7%	46.7%	46.7%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.4	2.4	2.4	3.2	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	5.6	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	26.4	26.4	26.4	21.6	21.6	21.6
Actuated g/C Ratio	0.44	0.44	0.44	0.36	0.36	0.36
v/c Ratio	0.13	0.39	0.36	0.11	0.69	0.92
Control Delay	11.9	13.3	11.3	13.5	20.1	34.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.9	13.3	11.3	13.5	20.1	34.2
LOS	B	B	B	B	C	C
Approach Delay		13.1	11.3		25.6	
Approach LOS		B	B		C	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 21 (35%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 20.5	Intersection LOS: C
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

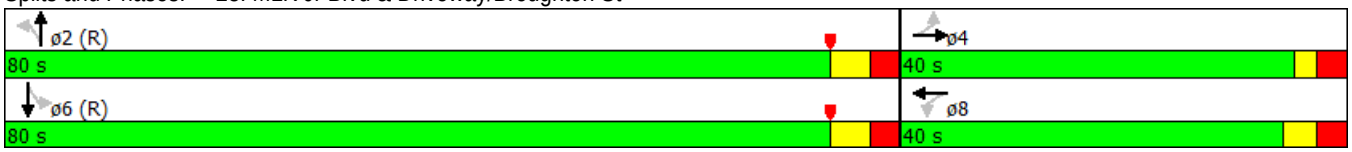
Splits and Phases: 13: Montgomery St & W Liberty St



Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	ø4
Lane Configurations							
Volume (vph)	158	0	4	387	30	379	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		8		2		6	4
Permitted Phases	8		2		6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	15.0	8.0
Minimum Split (s)	28.8	28.8	23.3	23.3	22.3	22.3	26.8
Total Split (s)	40.0	40.0	80.0	80.0	80.0	80.0	40.0
Total Split (%)	33.3%	33.3%	66.7%	66.7%	66.7%	66.7%	33%
Yellow Time (s)	3.0	3.0	3.6	3.6	3.6	3.6	2.0
All-Red Time (s)	2.8	2.8	2.7	2.7	2.7	2.7	2.8
Lost Time Adjust (s)		0.0		0.0		0.0	
Total Lost Time (s)		5.8		6.3		6.3	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		25.9		82.0		82.0	
Actuated g/C Ratio		0.22		0.68		0.68	
v/c Ratio		0.84		0.27		0.24	
Control Delay		62.8		4.0		8.4	
Queue Delay		0.7		0.0		0.0	
Total Delay		63.5		4.0		8.4	
LOS		E		A		A	
Approach Delay		63.5		4.0		8.4	
Approach LOS		E		A		A	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 57 (48%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.84	
Intersection Signal Delay: 17.6	Intersection LOS: B
Intersection Capacity Utilization 57.1%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 28: MLK Jr Blvd & Driveway/Broughton St

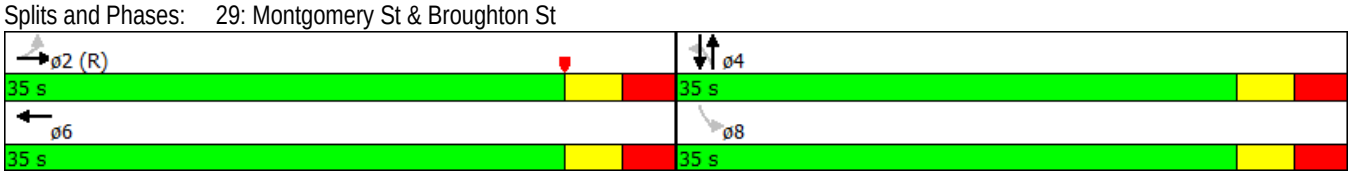


Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	2	115	142	88	119	13	0
Turn Type	Perm	NA	NA	Perm	NA	custom	NA
Protected Phases		2	6		4		4
Permitted Phases	2			4		8	
Detector Phase	2	2	6	4	4	8	4
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Total Split (s)	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.8	5.8	5.8	5.8		5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		29.2	29.2	29.2	29.2		29.2
Actuated g/C Ratio		0.42	0.42	0.42	0.42		0.42
v/c Ratio		0.18	0.25	0.17	0.35		0.05
Control Delay		13.8	13.4	14.0	10.4		2.4
Queue Delay		0.0	0.0	0.0	0.0		0.0
Total Delay		13.8	13.4	14.0	10.4		2.4
LOS		B	B	B	B		A
Approach Delay		13.8	13.4		11.3		2.4
Approach LOS		B	B		B		A

Intersection Summary

Cycle Length: 70
Actuated Cycle Length: 70
Offset: 10 (14%), Referenced to phase 2:EBTL, Start of Yellow
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.35
Intersection Signal Delay: 12.0 Intersection LOS: B
Intersection Capacity Utilization 34.6% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 29: Montgomery St & Broughton St

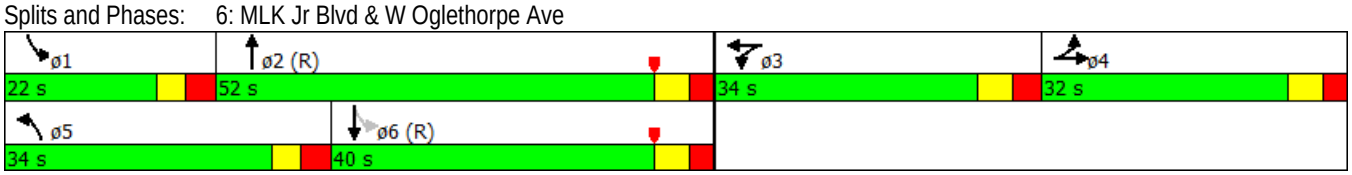


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	68	303	262	236	206	342	122	604
Turn Type	Split	NA	Split	NA	Prot	NA	pm+pt	NA
Protected Phases	4	4	3	3	5	2	1	6
Permitted Phases							6	
Detector Phase	4	4	3	3	5	2	1	6
Switch Phase								
Minimum Initial (s)	15.0	15.0	8.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	25.3	25.3	25.6	25.6	22.2	31.3	10.2	31.3
Total Split (s)	32.0	32.0	34.0	34.0	34.0	52.0	22.0	40.0
Total Split (%)	22.9%	22.9%	24.3%	24.3%	24.3%	37.1%	15.7%	28.6%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.7	2.7	3.0	3.0	3.2	2.7	3.2	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.6	6.6	6.2	6.3	6.2	6.3
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	None	C-Max	None	C-Max
Act Effct Green (s)	25.7	25.7	27.4	27.4	15.7	50.1	57.4	45.8
Actuated g/C Ratio	0.18	0.18	0.20	0.20	0.11	0.36	0.41	0.33
v/c Ratio	0.27	0.90	0.71	0.71	0.72	0.41	0.36	0.81
Control Delay	52.1	67.5	64.2	56.6	70.7	51.1	20.5	45.2
Queue Delay	0.0	0.0	1.4	0.8	0.0	0.0	0.0	0.0
Total Delay	52.1	67.5	65.6	57.4	70.7	51.1	20.5	45.2
LOS	D	E	E	E	E	D	C	D
Approach Delay		65.6		60.1		57.8		41.6
Approach LOS		E		E		E		D

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 84 (60%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 54.6 Intersection LOS: D
Intersection Capacity Utilization 77.4% ICU Level of Service D
Analysis Period (min) 15

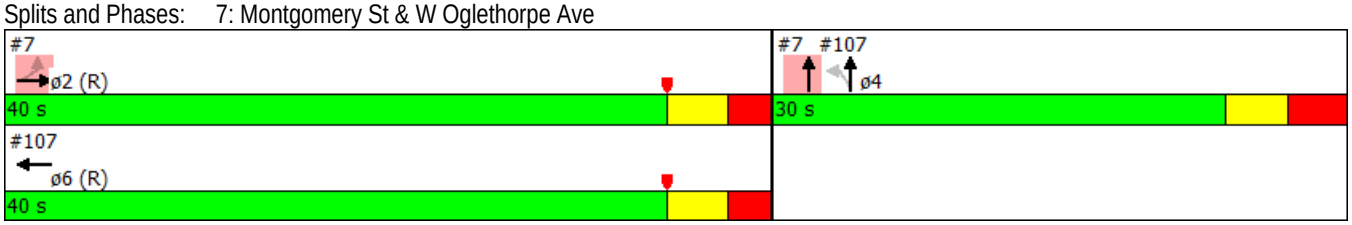
Splits and Phases: 6: MLK Jr Blvd & W Oglethorpe Ave



Lane Group	EBT	NBT	ø6
Lane Configurations			
Volume (vph)	452	311	
Turn Type	NA	NA	
Protected Phases	2	4	6
Permitted Phases			
Detector Phase	2	4	
Switch Phase			
Minimum Initial (s)	15.0	12.0	15.0
Minimum Split (s)	22.5	29.4	22.5
Total Split (s)	40.0	30.0	40.0
Total Split (%)	57.1%	42.9%	57%
Yellow Time (s)	3.2	3.2	3.2
All-Red Time (s)	2.3	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	5.5	6.4	
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	C-Max
Act Effct Green (s)	40.6	17.5	
Actuated g/C Ratio	0.58	0.25	
v/c Ratio	0.55	0.63	
Control Delay	27.7	11.1	
Queue Delay	0.0	0.0	
Total Delay	27.7	11.1	
LOS	C	B	
Approach Delay	27.7	11.1	
Approach LOS	C	B	

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 64 (91%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 19.3	Intersection LOS: B
Intersection Capacity Utilization 56.3%	ICU Level of Service B
Analysis Period (min) 15	

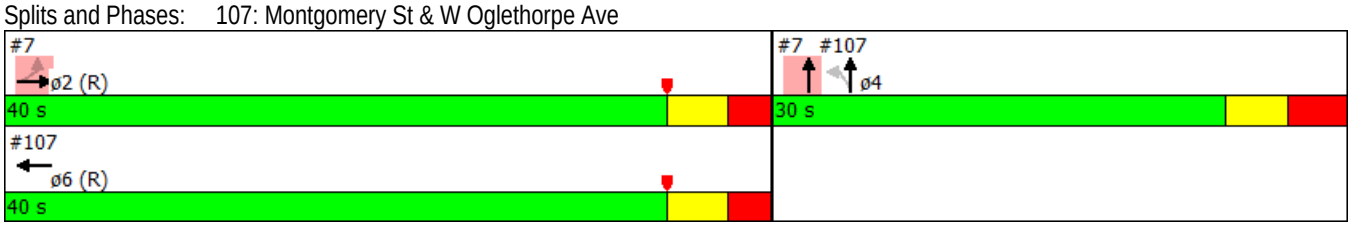
Splits and Phases: 7: Montgomery St & W Oglethorpe Ave



Lane Group	WBT	NBT	ø2
Lane Configurations			
Volume (vph)	483	249	
Turn Type	NA	NA	
Protected Phases	6	4	2
Permitted Phases			
Detector Phase	6	4	
Switch Phase			
Minimum Initial (s)	15.0	12.0	15.0
Minimum Split (s)	22.5	29.4	22.5
Total Split (s)	40.0	30.0	40.0
Total Split (%)	57.1%	42.9%	57%
Yellow Time (s)	3.2	3.2	3.2
All-Red Time (s)	2.3	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	5.5	6.4	
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	C-Max
Act Effct Green (s)	40.6	17.5	
Actuated g/C Ratio	0.58	0.25	
v/c Ratio	0.63	0.43	
Control Delay	15.5	5.9	
Queue Delay	0.1	0.0	
Total Delay	15.6	5.9	
LOS	B	A	
Approach Delay	15.6	5.9	
Approach LOS	B	A	

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 64 (91%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 11.7	Intersection LOS: B
Intersection Capacity Utilization 55.5%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 107: Montgomery St & W Oglethorpe Ave

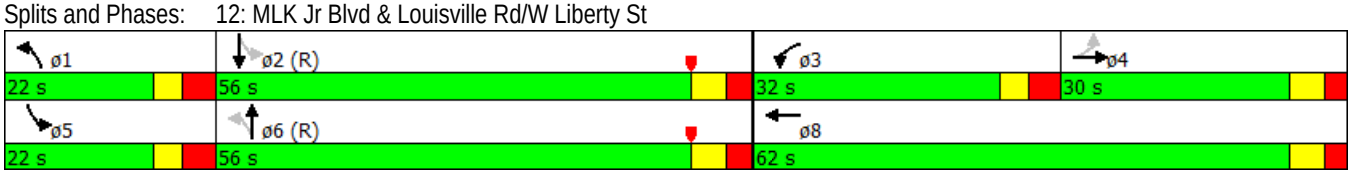


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	54	167	296	239	85	440	145	903
Turn Type	Perm	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases		4	3	8	1	6	5	2
Permitted Phases	4				6		2	
Detector Phase	4	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	27.1	27.1	10.3	27.1	10.5	24.5	10.5	29.5
Total Split (s)	30.0	30.0	32.0	62.0	22.0	56.0	22.0	56.0
Total Split (%)	21.4%	21.4%	22.9%	44.3%	15.7%	40.0%	15.7%	40.0%
Yellow Time (s)	3.6	3.6	3.0	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.5	2.5	3.3	2.5	3.5	2.9	3.5	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	6.1	6.3	6.1	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	27.0	27.0	19.2	52.5	65.5	57.1	71.3	60.0
Actuated g/C Ratio	0.19	0.19	0.14	0.38	0.47	0.41	0.51	0.43
v/c Ratio	0.32	0.82	0.73	0.56	0.39	0.42	0.38	0.71
Control Delay	54.1	71.7	80.8	25.7	22.8	31.2	15.3	26.7
Queue Delay	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0
Total Delay	54.1	71.7	80.8	26.9	22.8	31.2	15.3	26.7
LOS	D	E	F	C	C	C	B	C
Approach Delay		68.6		52.3		30.1		25.2
Approach LOS		E		D		C		C

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 125 (89%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 37.9 Intersection LOS: D
Intersection Capacity Utilization 83.2% ICU Level of Service E
Analysis Period (min) 15

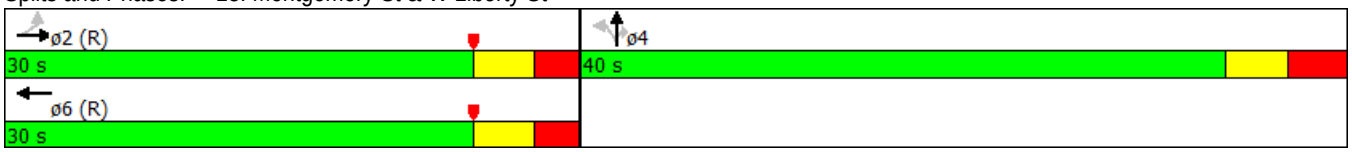
Splits and Phases: 12: MLK Jr Blvd & Louisville Rd/W Liberty St



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Configurations						
Volume (vph)	28	347	548	66	462	338
Turn Type	Perm	NA	NA	Perm	NA	Perm
Protected Phases		2	6		4	
Permitted Phases	2			4		4
Detector Phase	2	2	6	4	4	4
Switch Phase						
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	25.6	25.6	25.6	35.4	35.4	35.4
Total Split (s)	30.0	30.0	30.0	40.0	40.0	40.0
Total Split (%)	42.9%	42.9%	42.9%	57.1%	57.1%	57.1%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.4	2.4	2.4	3.2	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	5.6	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	24.4	24.4	24.4	33.6	33.6	33.6
Actuated g/C Ratio	0.35	0.35	0.35	0.48	0.48	0.48
v/c Ratio	0.18	0.56	0.63	0.10	0.34	0.56
Control Delay	19.1	22.3	21.8	10.4	12.2	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.1	22.3	21.8	10.4	12.2	12.5
LOS	B	C	C	B	B	B
Approach Delay		22.1	21.8		12.1	
Approach LOS		C	C		B	

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 37 (53%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.63	
Intersection Signal Delay: 17.3	Intersection LOS: B
Intersection Capacity Utilization 58.4%	ICU Level of Service B
Analysis Period (min) 15	

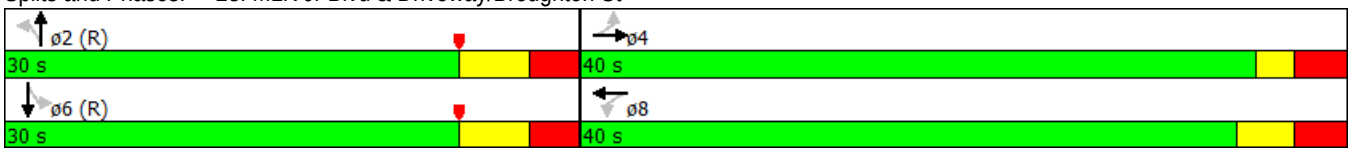
Splits and Phases: 13: Montgomery St & W Liberty St



Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	ø4
Lane Configurations							
Volume (vph)	253	4	3	430	30	510	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		8		2		6	4
Permitted Phases	8		2		6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	15.0	8.0
Minimum Split (s)	28.8	28.8	23.3	23.3	22.3	22.3	26.8
Total Split (s)	40.0	40.0	30.0	30.0	30.0	30.0	40.0
Total Split (%)	57.1%	57.1%	42.9%	42.9%	42.9%	42.9%	57%
Yellow Time (s)	3.0	3.0	3.6	3.6	3.6	3.6	2.0
All-Red Time (s)	2.8	2.8	2.7	2.7	2.7	2.7	2.8
Lost Time Adjust (s)		0.0		0.0		0.0	
Total Lost Time (s)		5.8		6.3		6.3	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		26.6		31.3		31.3	
Actuated g/C Ratio		0.38		0.45		0.45	
v/c Ratio		0.83		0.47		0.47	
Control Delay		30.6		13.3		17.0	
Queue Delay		0.5		0.0		0.0	
Total Delay		31.1		13.3		17.0	
LOS		C		B		B	
Approach Delay		31.1		13.3		17.0	
Approach LOS		C		B		B	

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 68 (97%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 19.3	Intersection LOS: B
Intersection Capacity Utilization 73.8%	ICU Level of Service D
Analysis Period (min) 15	

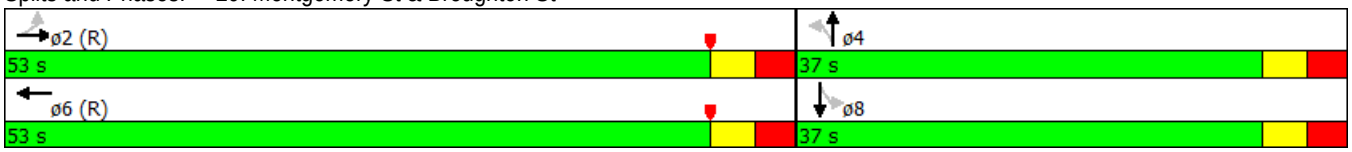
Splits and Phases: 28: MLK Jr Blvd & Driveway/Broughton St



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	5	170	225	139	33	16	0
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA
Protected Phases		2	6		4		8
Permitted Phases	2			4		8	
Detector Phase	2	2	6	4	4	8	8
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Total Split (s)	53.0	53.0	53.0	37.0	37.0	37.0	37.0
Total Split (%)	58.9%	58.9%	58.9%	41.1%	41.1%	41.1%	41.1%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.8	5.8	5.8	5.8		5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		47.2	47.2	31.2	31.2		31.2
Actuated g/C Ratio		0.52	0.52	0.35	0.35		0.35
v/c Ratio		0.21	0.34	0.33	0.28		0.09
Control Delay		12.3	12.8	24.5	7.3		9.6
Queue Delay		0.0	0.0	0.0	0.0		0.0
Total Delay		12.3	12.8	24.5	7.3		9.6
LOS		B	B	C	A		A
Approach Delay		12.3	12.8		15.2		9.6
Approach LOS		B	B		B		A

Intersection Summary	
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 29 (32%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow	
Natural Cycle: 55	
Control Type: Pretimed	
Maximum v/c Ratio: 0.34	
Intersection Signal Delay: 13.4	Intersection LOS: B
Intersection Capacity Utilization 45.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 29: Montgomery St & Broughton St

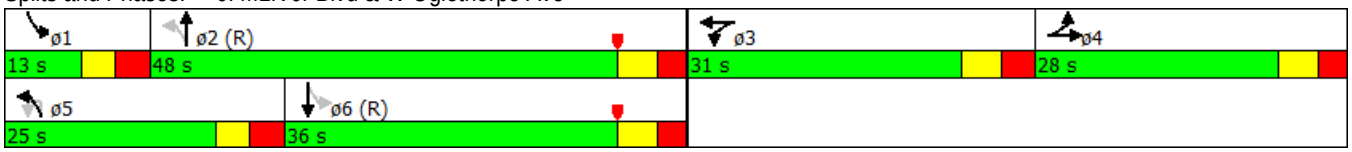


Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	85	217	217	223	90	184	350	65	363
Turn Type	Split	NA	Split	NA	custom	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					5	2		6	
Detector Phase	4	4	3	3	5	5	2	1	6
Switch Phase									
Minimum Initial (s)	15.0	15.0	8.0	8.0	4.0	4.0	15.0	4.0	15.0
Minimum Split (s)	25.3	25.3	25.6	25.6	22.2	22.2	31.3	10.2	31.3
Total Split (s)	28.0	28.0	31.0	31.0	25.0	25.0	48.0	13.0	36.0
Total Split (%)	23.3%	23.3%	25.8%	25.8%	20.8%	20.8%	40.0%	10.8%	30.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.0	3.0	3.6	3.0	3.6
All-Red Time (s)	2.7	2.7	3.0	3.0	3.2	3.2	2.7	3.2	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.6	6.6		6.2	6.3	6.2	6.3
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	None	None	C-Max	None	C-Max
Act Effct Green (s)	21.7	21.7	24.4	24.4		54.8	44.4	36.8	30.4
Actuated g/C Ratio	0.18	0.18	0.20	0.20		0.46	0.37	0.31	0.25
v/c Ratio	0.35	0.65	0.61	0.60		0.86	0.43	0.26	0.68
Control Delay	47.1	36.9	59.4	54.7		62.4	39.5	20.5	44.6
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	47.1	36.9	59.4	54.7		62.4	39.5	20.5	44.6
LOS	D	D	E	D		E	D	C	D
Approach Delay		38.8		56.3			48.4		41.7
Approach LOS		D		E			D		D

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 35 (29%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 46.5 Intersection LOS: D
Intersection Capacity Utilization 75.5% ICU Level of Service D
Analysis Period (min) 15

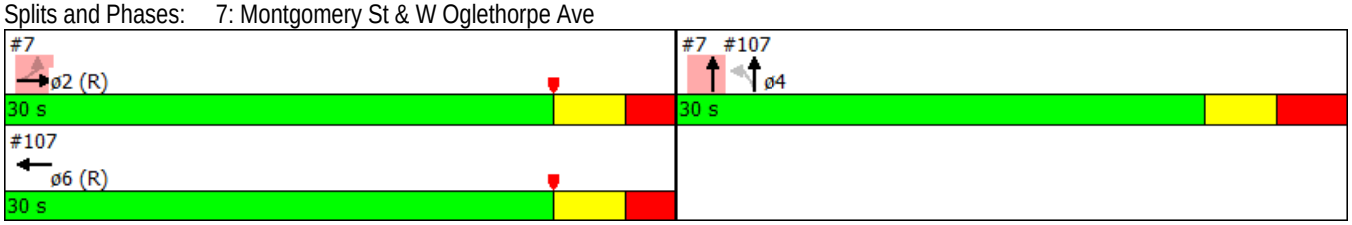
Splits and Phases: 6: MLK Jr Blvd & W Oglethorpe Ave



Lane Group	EBL	EBT	NBT	ø6
Lane Configurations				
Volume (vph)	61	304	536	
Turn Type	Perm	NA	NA	
Protected Phases		2	4	6
Permitted Phases	2			
Detector Phase	2	2	4	
Switch Phase				
Minimum Initial (s)	15.0	15.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	22.5
Total Split (s)	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50%
Yellow Time (s)	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	6.4	
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	C-Max	None	C-Max
Act Effct Green (s)	25.7	25.7	22.4	
Actuated g/C Ratio	0.43	0.43	0.37	
v/c Ratio	0.09	0.50	0.72	
Control Delay	6.2	18.3	19.3	
Queue Delay	0.0	0.0	0.2	
Total Delay	6.3	18.3	19.4	
LOS	A	B	B	
Approach Delay		16.3	19.4	
Approach LOS		B	B	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 26 (43%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 18.4	Intersection LOS: B
Intersection Capacity Utilization 52.8%	ICU Level of Service A
Analysis Period (min) 15	

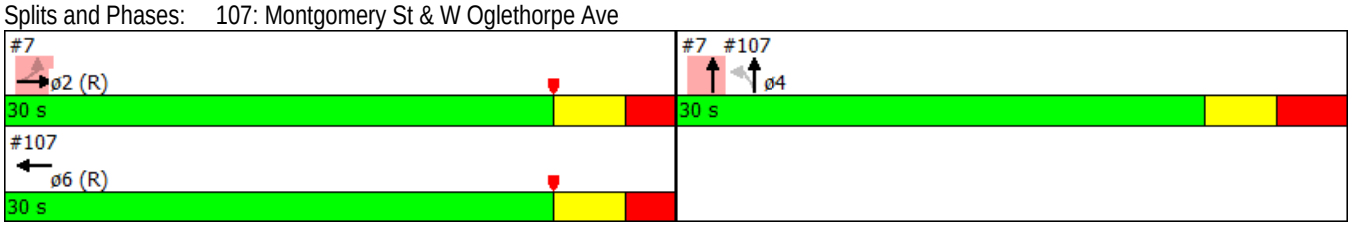
Splits and Phases: 7: Montgomery St & W Oglethorpe Ave



Lane Group	WBT	NBT	ø2
Lane Configurations			
Volume (vph)	424	533	
Turn Type	NA	NA	
Protected Phases	6	4	2
Permitted Phases			
Detector Phase	6	4	
Switch Phase			
Minimum Initial (s)	15.0	12.0	15.0
Minimum Split (s)	22.5	29.4	22.5
Total Split (s)	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50%
Yellow Time (s)	3.2	3.2	3.2
All-Red Time (s)	2.3	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	5.5	6.4	
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	C-Max
Act Effct Green (s)	25.7	22.4	
Actuated g/C Ratio	0.43	0.37	
v/c Ratio	0.89	0.54	
Control Delay	36.5	5.8	
Queue Delay	0.0	0.0	
Total Delay	36.5	5.8	
LOS	D	A	
Approach Delay	36.5	5.8	
Approach LOS	D	A	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 26 (43%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 19.8	Intersection LOS: B
Intersection Capacity Utilization 58.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 107: Montgomery St & W Oglethorpe Ave

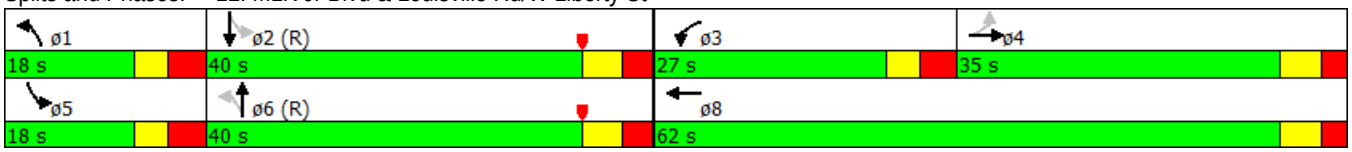


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	59	150	213	148	67	487	171	721
Turn Type	Perm	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases		4	3	8	1	6	5	2
Permitted Phases	4				6		2	
Detector Phase	4	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	27.1	27.1	10.3	27.1	10.5	24.5	10.5	29.5
Total Split (s)	35.0	35.0	27.0	62.0	18.0	40.0	18.0	40.0
Total Split (%)	29.2%	29.2%	22.5%	51.7%	15.0%	33.3%	15.0%	33.3%
Yellow Time (s)	3.6	3.6	3.0	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.5	2.5	3.3	2.5	3.5	2.9	3.5	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	6.1	6.3	6.1	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	23.7	23.7	13.9	43.9	53.6	46.4	61.2	52.0
Actuated g/C Ratio	0.20	0.20	0.12	0.37	0.45	0.39	0.51	0.43
v/c Ratio	0.32	0.74	0.62	0.44	0.24	0.54	0.51	0.58
Control Delay	43.5	54.3	48.9	24.5	19.4	31.4	21.8	27.5
Queue Delay	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
Total Delay	43.5	54.3	48.9	25.2	19.4	31.4	21.8	27.5
LOS	D	D	D	C	B	C	C	C
Approach Delay		52.1		35.9		30.3		26.4
Approach LOS		D		D		C		C

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 50 (42%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 32.6 Intersection LOS: C
Intersection Capacity Utilization 76.1% ICU Level of Service D
Analysis Period (min) 15

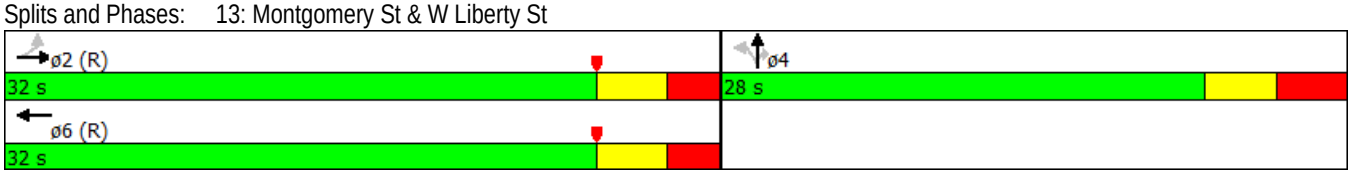
Splits and Phases: 12: MLK Jr Blvd & Louisville Rd/W Liberty St



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Configurations						
Volume (vph)	129	318	401	60	781	558
Turn Type	Perm	NA	NA	Perm	NA	Perm
Protected Phases		2	6		4	
Permitted Phases	2			4		4
Detector Phase	2	2	6	4	4	4
Switch Phase						
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	25.6	25.6	25.6	35.4	35.4	35.4
Total Split (s)	32.0	32.0	32.0	28.0	28.0	28.0
Total Split (%)	53.3%	53.3%	53.3%	46.7%	46.7%	46.7%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.4	2.4	2.4	3.2	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	5.6	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	26.4	26.4	26.4	21.6	21.6	21.6
Actuated g/C Ratio	0.44	0.44	0.44	0.36	0.36	0.36
v/c Ratio	0.45	0.41	0.40	0.11	0.75	0.96
Control Delay	20.2	16.8	12.0	13.6	21.8	42.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.2	16.8	12.0	13.6	21.8	42.7
LOS	C	B	B	B	C	D
Approach Delay		17.8	12.0		29.8	
Approach LOS		B	B		C	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 21 (35%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 23.8	Intersection LOS: C
Intersection Capacity Utilization 70.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 13: Montgomery St & W Liberty St

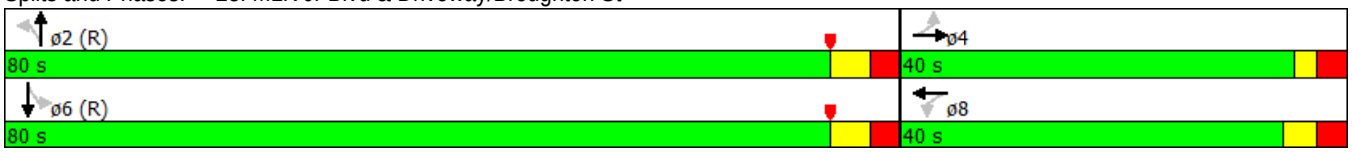


Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	ø4
Lane Configurations							
Volume (vph)	163	0	4	421	31	412	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		8		2		6	4
Permitted Phases	8		2		6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	15.0	8.0
Minimum Split (s)	28.8	28.8	23.3	23.3	22.3	22.3	26.8
Total Split (s)	40.0	40.0	80.0	80.0	80.0	80.0	40.0
Total Split (%)	33.3%	33.3%	66.7%	66.7%	66.7%	66.7%	33%
Yellow Time (s)	3.0	3.0	3.6	3.6	3.6	3.6	2.0
All-Red Time (s)	2.8	2.8	2.7	2.7	2.7	2.7	2.8
Lost Time Adjust (s)		0.0		0.0		0.0	
Total Lost Time (s)		5.8		6.3		6.3	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		26.4		81.5		81.5	
Actuated g/C Ratio		0.22		0.68		0.68	
v/c Ratio		0.85		0.29		0.26	
Control Delay		61.3		6.2		8.8	
Queue Delay		0.7		0.0		0.0	
Total Delay		62.0		6.2		8.8	
LOS		E		A		A	
Approach Delay		62.0		6.2		8.8	
Approach LOS		E		A		A	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 29 (24%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 18.0 Intersection LOS: B
Intersection Capacity Utilization 59.9% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 28: MLK Jr Blvd & Driveway/Broughton St

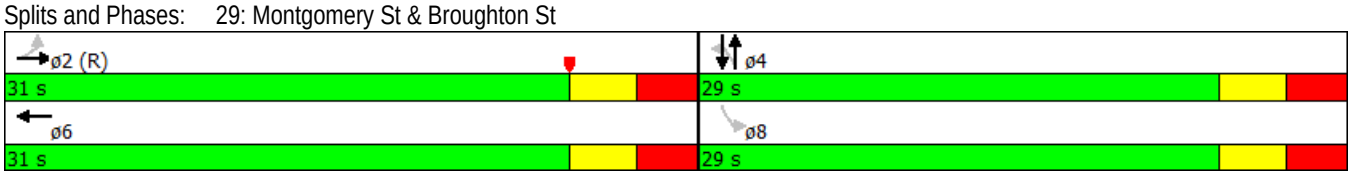


Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	2	119	147	101	123	14	0
Turn Type	Perm	NA	NA	Perm	NA	custom	NA
Protected Phases		2	6		4		4
Permitted Phases	2			4		8	
Detector Phase	2	2	6	4	4	8	4
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Total Split (s)	31.0	31.0	31.0	29.0	29.0	29.0	29.0
Total Split (%)	51.7%	51.7%	51.7%	48.3%	48.3%	48.3%	48.3%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.8	5.8	5.8	5.8		5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	Max	Max	Max	Max	Max
Act Effct Green (s)		25.2	25.2	23.2	23.2		23.2
Actuated g/C Ratio		0.42	0.42	0.39	0.39		0.39
v/c Ratio		0.18	0.25	0.21	0.40		0.05
Control Delay		18.4	11.5	18.3	16.0		2.2
Queue Delay		0.0	0.0	0.0	0.0		0.0
Total Delay		18.4	11.5	18.3	16.0		2.2
LOS		B	B	B	B		A
Approach Delay		18.4	11.5		16.6		2.2
Approach LOS		B	B		B		A

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 10 (17%), Referenced to phase 2:EBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.40
Intersection Signal Delay: 15.1 Intersection LOS: B
Intersection Capacity Utilization 36.1% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 29: Montgomery St & Broughton St

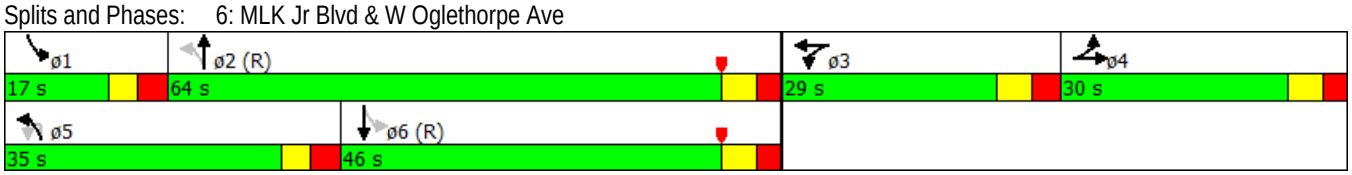


Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	70	314	291	245	90	234	374	126	646
Turn Type	Split	NA	Split	NA	custom	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					5	2		6	
Detector Phase	4	4	3	3	5	5	2	1	6
Switch Phase									
Minimum Initial (s)	15.0	15.0	8.0	8.0	4.0	4.0	15.0	4.0	15.0
Minimum Split (s)	25.3	25.3	25.6	25.6	22.2	22.2	31.3	10.2	31.3
Total Split (s)	30.0	30.0	29.0	29.0	35.0	35.0	64.0	17.0	46.0
Total Split (%)	21.4%	21.4%	20.7%	20.7%	25.0%	25.0%	45.7%	12.1%	32.9%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.0	3.0	3.6	3.0	3.6
All-Red Time (s)	2.7	2.7	3.0	3.0	3.2	3.2	2.7	3.2	2.7
Lost Time Adjust (s)	-2.3	-2.3	-2.6	-2.6		-2.2	-2.3	-2.2	-2.3
Total Lost Time (s)	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	None	None	C-Max	None	C-Max
Act Effct Green (s)	26.0	26.0	25.0	25.0		77.0	61.1	54.4	42.5
Actuated g/C Ratio	0.19	0.19	0.18	0.18		0.55	0.44	0.39	0.30
v/c Ratio	0.28	0.94	0.84	0.83		0.95	0.38	0.38	0.93
Control Delay	52.0	71.5	72.0	60.1		63.0	25.4	18.8	59.4
Queue Delay	0.0	0.0	0.4	0.3		0.0	0.0	0.0	0.0
Total Delay	52.0	71.5	72.5	60.4		63.0	25.4	18.8	59.4
LOS	D	E	E	E		E	C	B	E
Approach Delay		69.2		64.4			41.1		53.6
Approach LOS		E		E			D		D

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 40 (29%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.95
Intersection Signal Delay: 55.7 Intersection LOS: E
Intersection Capacity Utilization 86.6% ICU Level of Service E
Analysis Period (min) 15

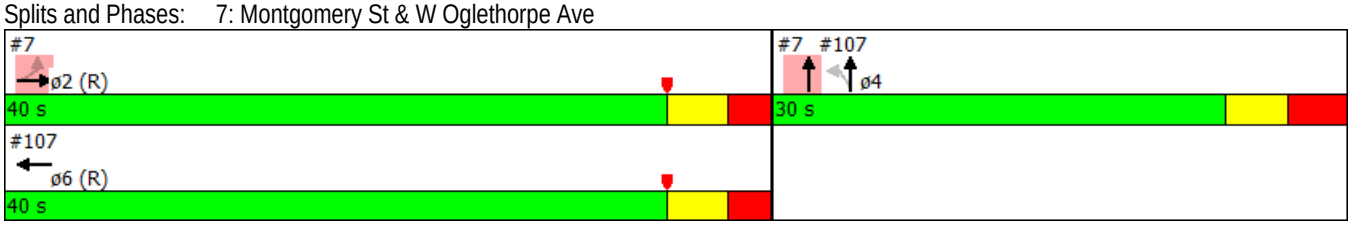
Splits and Phases: 6: MLK Jr Blvd & W Oglethorpe Ave



Lane Group	EBL	EBT	NBT	ø6
Lane Configurations				
Volume (vph)	28	489	322	
Turn Type	Perm	NA	NA	
Protected Phases		2	4	6
Permitted Phases	2			
Detector Phase	2	2	4	
Switch Phase				
Minimum Initial (s)	15.0	15.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	22.5
Total Split (s)	40.0	40.0	30.0	40.0
Total Split (%)	57.1%	57.1%	42.9%	57%
Yellow Time (s)	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	2.3
Lost Time Adjust (s)	-1.5	-1.5	-2.4	
Total Lost Time (s)	4.0	4.0	4.0	
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	C-Max	None	C-Max
Act Effct Green (s)	41.7	41.7	20.3	
Actuated g/C Ratio	0.60	0.60	0.29	
v/c Ratio	0.03	0.56	0.57	
Control Delay	1.6	15.5	11.1	
Queue Delay	0.0	0.0	0.0	
Total Delay	1.6	15.5	11.1	
LOS	A	B	B	
Approach Delay		14.7	11.1	
Approach LOS		B	B	

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 64 (91%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 12.9	Intersection LOS: B
Intersection Capacity Utilization 53.8%	ICU Level of Service A
Analysis Period (min) 15	

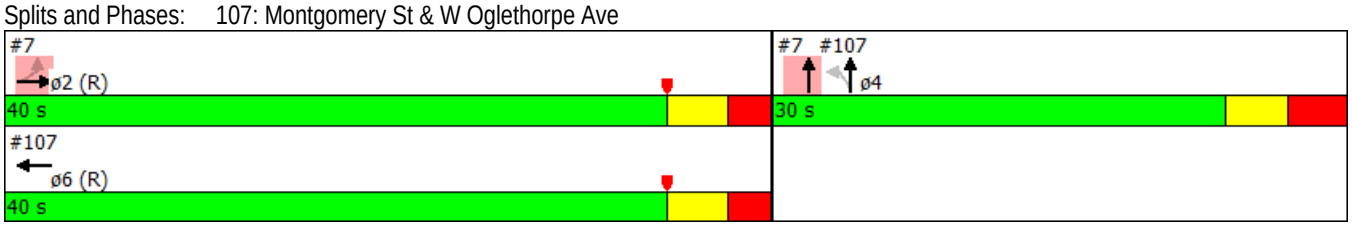
Splits and Phases: 7: Montgomery St & W Oglethorpe Ave



Lane Group	WBT	NBT	ø2
Lane Configurations			
Volume (vph)	520	258	
Turn Type	NA	NA	
Protected Phases	6	4	2
Permitted Phases			
Detector Phase	6	4	
Switch Phase			
Minimum Initial (s)	15.0	12.0	15.0
Minimum Split (s)	22.5	29.4	22.5
Total Split (s)	40.0	30.0	40.0
Total Split (%)	57.1%	42.9%	57%
Yellow Time (s)	3.2	3.2	3.2
All-Red Time (s)	2.3	3.2	2.3
Lost Time Adjust (s)	-1.5	-2.4	
Total Lost Time (s)	4.0	4.0	
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	C-Max
Act Effct Green (s)	41.7	20.3	
Actuated g/C Ratio	0.60	0.29	
v/c Ratio	0.66	0.39	
Control Delay	15.7	4.9	
Queue Delay	0.1	0.0	
Total Delay	15.8	4.9	
LOS	B	A	
Approach Delay	15.8	4.9	
Approach LOS	B	A	

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 64 (91%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 11.6	Intersection LOS: B
Intersection Capacity Utilization 54.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 107: Montgomery St & W Oglethorpe Ave

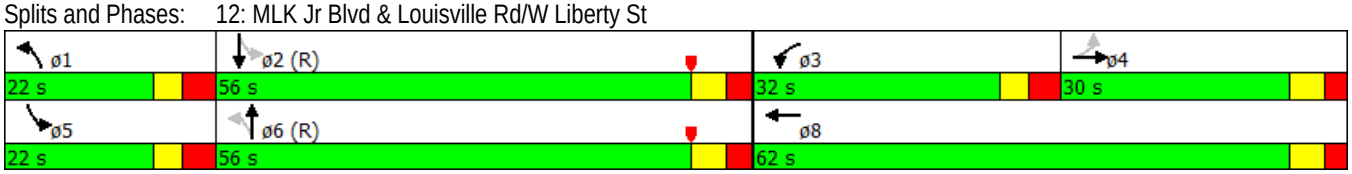


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	56	178	306	248	88	456	237	936
Turn Type	Perm	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases		4	3	8	1	6	5	2
Permitted Phases	4				6		2	
Detector Phase	4	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	27.1	27.1	10.3	27.1	10.5	24.5	10.5	29.5
Total Split (s)	30.0	30.0	32.0	62.0	22.0	56.0	22.0	56.0
Total Split (%)	21.4%	21.4%	22.9%	44.3%	15.7%	40.0%	15.7%	40.0%
Yellow Time (s)	3.6	3.6	3.0	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.5	2.5	3.3	2.5	3.5	2.9	3.5	2.9
Lost Time Adjust (s)	-2.1	-2.1	-2.3	-2.1	-2.5	-2.5	-2.5	-2.5
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	29.0	29.0	21.9	54.9	67.6	56.7	77.1	62.3
Actuated g/C Ratio	0.21	0.21	0.16	0.39	0.48	0.40	0.55	0.44
v/c Ratio	0.31	0.82	0.66	0.55	0.37	0.46	0.58	0.71
Control Delay	52.3	69.3	69.0	24.6	20.7	31.7	16.4	32.6
Queue Delay	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0
Total Delay	52.3	69.3	69.0	27.0	20.7	31.7	16.4	32.6
LOS	D	E	E	C	C	C	B	C
Approach Delay		66.4		46.8		30.2		29.4
Approach LOS		E		D		C		C

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 125 (89%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 37.8 Intersection LOS: D
Intersection Capacity Utilization 77.5% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 12: MLK Jr Blvd & Louisville Rd/W Liberty St

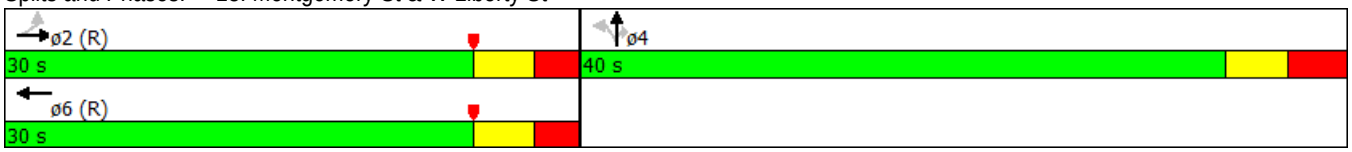


Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Configurations						
Volume (vph)	117	359	568	69	517	350
Turn Type	Perm	NA	NA	Perm	NA	Perm
Protected Phases		2	6		4	
Permitted Phases	2			4		4
Detector Phase	2	2	6	4	4	4
Switch Phase						
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	25.6	25.6	25.6	35.4	35.4	35.4
Total Split (s)	30.0	30.0	30.0	40.0	40.0	40.0
Total Split (%)	42.9%	42.9%	42.9%	57.1%	57.1%	57.1%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.4	2.4	2.4	3.2	3.2	3.2
Lost Time Adjust (s)	-1.6	-1.6	-1.6	-2.4	-2.4	-2.4
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	26.0	26.0	26.0	36.0	36.0	36.0
Actuated g/C Ratio	0.37	0.37	0.37	0.51	0.51	0.51
v/c Ratio	0.80	0.55	0.64	0.10	0.36	0.55
Control Delay	54.6	20.7	20.7	9.1	10.9	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.6	20.7	20.7	9.1	10.9	11.0
LOS	D	C	C	A	B	B
Approach Delay		29.0	20.7		10.8	
Approach LOS		C	C		B	

Intersection Summary

Cycle Length: 70
Actuated Cycle Length: 70
Offset: 46 (66%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 18.1 Intersection LOS: B
Intersection Capacity Utilization 63.5% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 13: Montgomery St & W Liberty St

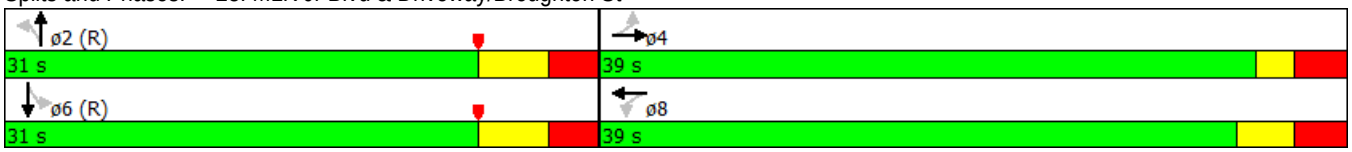


Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	ø4
Lane Configurations							
Volume (vph)	272	4	3	465	31	539	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		8		2		6	4
Permitted Phases	8		2		6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	15.0	8.0
Minimum Split (s)	28.8	28.8	23.3	23.3	22.3	22.3	26.8
Total Split (s)	39.0	39.0	31.0	31.0	31.0	31.0	39.0
Total Split (%)	55.7%	55.7%	44.3%	44.3%	44.3%	44.3%	56%
Yellow Time (s)	3.0	3.0	3.6	3.6	3.6	3.6	2.0
All-Red Time (s)	2.8	2.8	2.7	2.7	2.7	2.7	2.8
Lost Time Adjust (s)		-1.8		-2.3		-2.3	
Total Lost Time (s)		4.0		4.0		4.0	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		29.0		33.0		33.0	
Actuated g/C Ratio		0.41		0.47		0.47	
v/c Ratio		0.81		0.47		0.47	
Control Delay		28.6		11.6		15.6	
Queue Delay		0.5		0.0		0.0	
Total Delay		29.1		11.6		15.6	
LOS		C		B		B	
Approach Delay		29.1		11.6		15.6	
Approach LOS		C		B		B	

Intersection Summary

Cycle Length: 70
Actuated Cycle Length: 70
Offset: 41 (59%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 17.6 Intersection LOS: B
Intersection Capacity Utilization 72.0% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 28: MLK Jr Blvd & Driveway/Broughton St

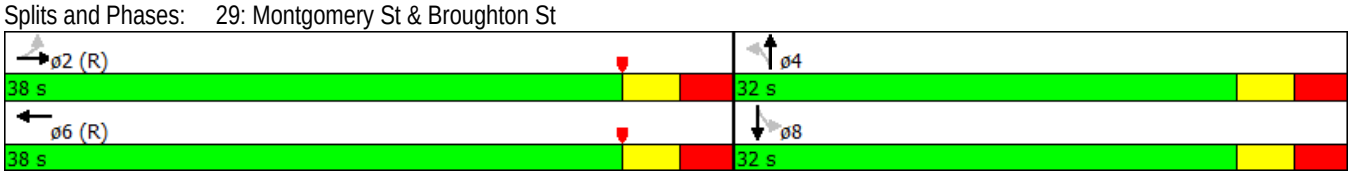


Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	5	184	240	152	102	17	0
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA
Protected Phases		2	6		4		8
Permitted Phases	2			4		8	
Detector Phase	2	2	6	4	4	8	8
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Total Split (s)	38.0	38.0	38.0	32.0	32.0	32.0	32.0
Total Split (%)	54.3%	54.3%	54.3%	45.7%	45.7%	45.7%	45.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)		-1.8	-1.8	-1.8	-1.8		-1.8
Total Lost Time (s)		4.0	4.0	4.0	4.0		4.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)		34.0	34.0	28.0	28.0		28.0
Actuated g/C Ratio		0.49	0.49	0.40	0.40		0.40
v/c Ratio		0.25	0.38	0.32	0.37		0.09
Control Delay		12.8	12.3	9.8	3.3		5.3
Queue Delay		0.0	0.1	0.0	0.0		0.0
Total Delay		12.8	12.4	9.8	3.3		5.3
LOS		B	B	A	A		A
Approach Delay		12.8	12.4		5.8		5.3
Approach LOS		B	B		A		A

Intersection Summary

Cycle Length: 70
Actuated Cycle Length: 70
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.38
Intersection Signal Delay: 9.3 Intersection LOS: A
Intersection Capacity Utilization 44.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 29: Montgomery St & Broughton St

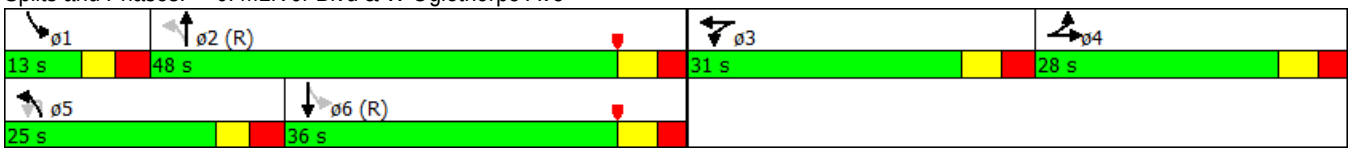


Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	102	260	256	267	90	214	415	78	454
Turn Type	Split	NA	Split	NA	custom	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					5	2		6	
Detector Phase	4	4	3	3	5	5	2	1	6
Switch Phase									
Minimum Initial (s)	15.0	15.0	8.0	8.0	4.0	4.0	15.0	4.0	15.0
Minimum Split (s)	25.3	25.3	25.6	25.6	22.2	22.2	31.3	10.2	31.3
Total Split (s)	28.0	28.0	31.0	31.0	25.0	25.0	48.0	13.0	36.0
Total Split (%)	23.3%	23.3%	25.8%	25.8%	20.8%	20.8%	40.0%	10.8%	30.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.0	3.0	3.6	3.0	3.6
All-Red Time (s)	2.7	2.7	3.0	3.0	3.2	3.2	2.7	3.2	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.6	6.6		6.2	6.3	6.2	6.3
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	None	None	C-Max	None	C-Max
Act Effct Green (s)	21.7	21.7	24.4	24.4		54.8	42.0	36.3	29.7
Actuated g/C Ratio	0.18	0.18	0.20	0.20		0.46	0.35	0.30	0.25
v/c Ratio	0.42	0.78	0.71	0.72		1.07	0.53	0.33	0.86
Control Delay	48.8	45.2	52.3	46.5		95.2	35.1	17.9	44.5
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	48.8	45.2	52.3	46.5		95.2	35.1	17.9	44.5
LOS	D	D	D	D		F	D	B	D
Approach Delay		45.9		48.4			57.7		41.3
Approach LOS		D		D			E		D

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.07
Intersection Signal Delay: 48.9 Intersection LOS: D
Intersection Capacity Utilization 84.4% ICU Level of Service E
Analysis Period (min) 15

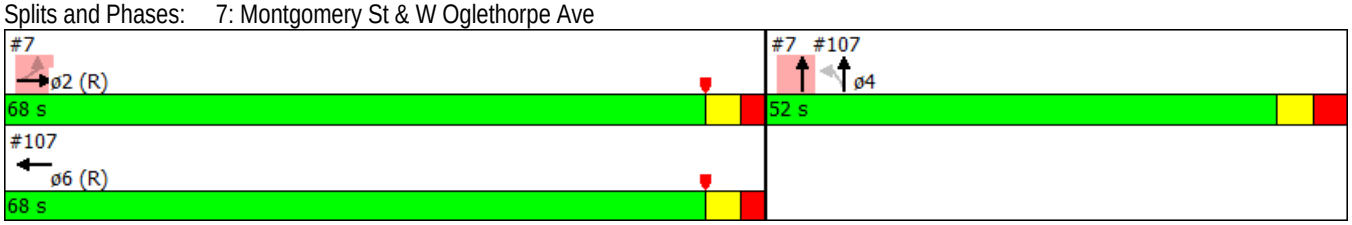
Splits and Phases: 6: MLK Jr Blvd & W Oglethorpe Ave



Lane Group	EBL	EBT	NBT	ø6
Lane Configurations				
Volume (vph)	73	360	642	
Turn Type	Perm	NA	NA	
Protected Phases		2	4	6
Permitted Phases	2			
Detector Phase	2	2	4	
Switch Phase				
Minimum Initial (s)	15.0	15.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	22.5
Total Split (s)	68.0	68.0	52.0	68.0
Total Split (%)	56.7%	56.7%	43.3%	57%
Yellow Time (s)	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	6.4	
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	C-Max	None	C-Max
Act Effct Green (s)	63.1	63.1	45.0	
Actuated g/C Ratio	0.53	0.53	0.38	
v/c Ratio	0.09	0.48	0.90	
Control Delay	3.4	20.7	32.6	
Queue Delay	0.1	0.0	1.4	
Total Delay	3.4	20.7	33.9	
LOS	A	C	C	
Approach Delay		17.8	33.9	
Approach LOS		B	C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 28.8	Intersection LOS: C
Intersection Capacity Utilization 61.0%	ICU Level of Service B
Analysis Period (min) 15	

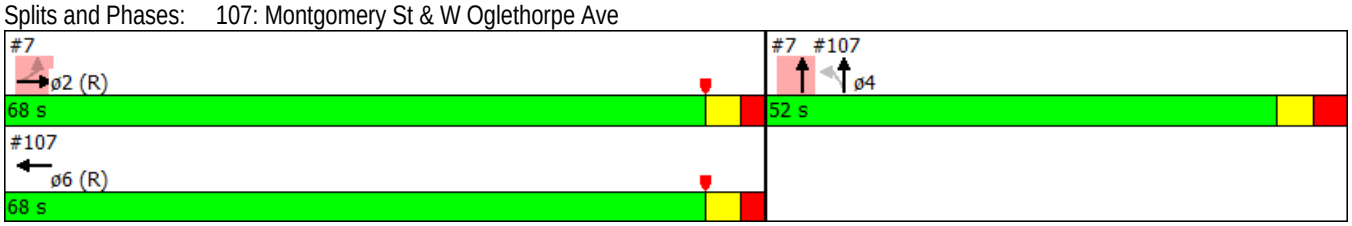
Splits and Phases: 7: Montgomery St & W Oglethorpe Ave



Lane Group	WBT	NBT	ø2
Lane Configurations			
Volume (vph)	503	565	
Turn Type	NA	NA	
Protected Phases	6	4	2
Permitted Phases			
Detector Phase	6	4	
Switch Phase			
Minimum Initial (s)	15.0	12.0	15.0
Minimum Split (s)	22.5	29.4	22.5
Total Split (s)	68.0	52.0	68.0
Total Split (%)	56.7%	43.3%	57%
Yellow Time (s)	3.2	3.2	3.2
All-Red Time (s)	2.3	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	5.5	6.4	
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	C-Max
Act Effct Green (s)	63.1	45.0	
Actuated g/C Ratio	0.53	0.38	
v/c Ratio	0.85	0.59	
Control Delay	36.9	6.2	
Queue Delay	0.0	0.1	
Total Delay	36.9	6.3	
LOS	D	A	
Approach Delay	36.9	6.3	
Approach LOS	D	A	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 21.1	Intersection LOS: C
Intersection Capacity Utilization 65.7%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 107: Montgomery St & W Oglethorpe Ave

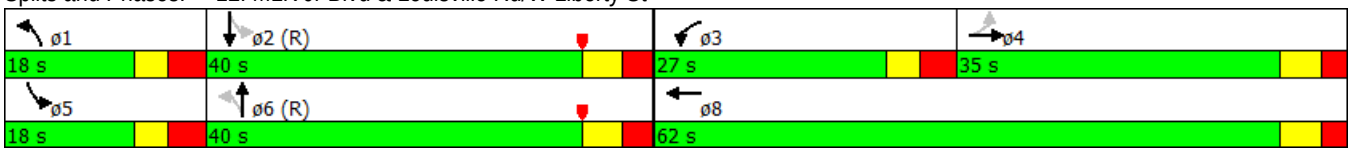


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	71	178	255	177	80	583	188	851
Turn Type	Perm	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases		4	3	8	1	6	5	2
Permitted Phases	4				6		2	
Detector Phase	4	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	27.1	27.1	10.3	27.1	10.5	24.5	10.5	29.5
Total Split (s)	35.0	35.0	27.0	62.0	18.0	40.0	18.0	40.0
Total Split (%)	29.2%	29.2%	22.5%	51.7%	15.0%	33.3%	15.0%	33.3%
Yellow Time (s)	3.6	3.6	3.0	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.5	2.5	3.3	2.5	3.5	2.9	3.5	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	6.1	6.3	6.1	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	26.0	26.0	15.6	47.9	49.0	41.0	57.4	47.3
Actuated g/C Ratio	0.22	0.22	0.13	0.40	0.41	0.34	0.48	0.39
v/c Ratio	0.36	0.81	0.66	0.49	0.37	0.72	0.68	0.75
Control Delay	43.9	58.3	78.6	26.7	24.1	39.6	28.3	28.5
Queue Delay	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
Total Delay	43.9	58.3	78.6	27.3	24.1	39.6	28.3	28.5
LOS	D	E	E	C	C	D	C	C
Approach Delay		55.4		50.5		38.1		28.4
Approach LOS		E		D		D		C

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 45 (38%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 39.0 Intersection LOS: D
Intersection Capacity Utilization 84.1% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 12: MLK Jr Blvd & Louisville Rd/W Liberty St

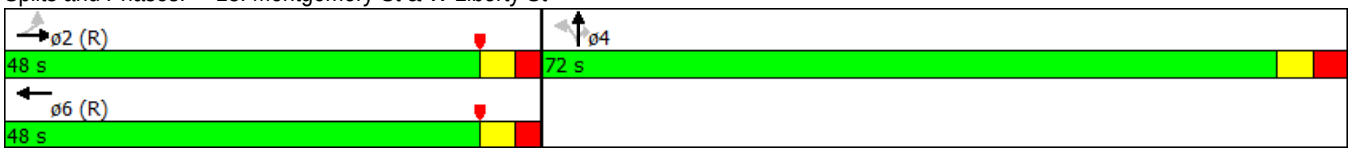


Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Configurations						
Volume (vph)	137	380	480	72	927	668
Turn Type	Perm	NA	NA	Perm	NA	Perm
Protected Phases		2	6		4	
Permitted Phases	2			4		4
Detector Phase	2	2	6	4	4	4
Switch Phase						
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	25.6	25.6	25.6	35.4	35.4	35.4
Total Split (s)	48.0	48.0	48.0	72.0	72.0	72.0
Total Split (%)	40.0%	40.0%	40.0%	60.0%	60.0%	60.0%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.4	2.4	2.4	3.2	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	5.6	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	None	None	None
Act Effct Green (s)	42.4	42.4	42.4	65.6	65.6	65.6
Actuated g/C Ratio	0.35	0.35	0.35	0.55	0.55	0.55
v/c Ratio	0.90	0.61	0.59	0.09	0.59	0.98
Control Delay	84.2	42.0	33.3	13.4	19.8	50.9
Queue Delay	0.0	0.4	0.0	0.0	0.0	0.0
Total Delay	84.2	42.4	33.3	13.4	19.8	50.9
LOS	F	D	C	B	B	D
Approach Delay		53.5	33.3		32.0	
Approach LOS		D	C		C	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 36.3 Intersection LOS: D
Intersection Capacity Utilization 77.8% ICU Level of Service D
Analysis Period (min) 15

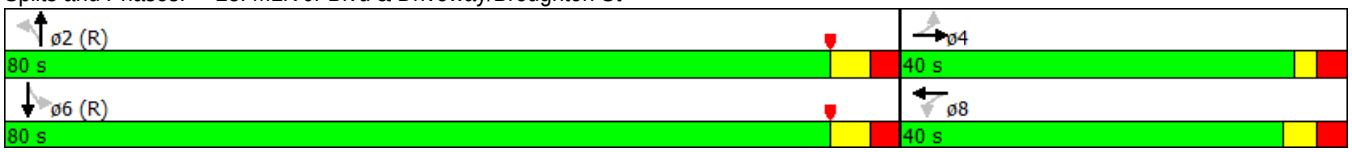
Splits and Phases: 13: Montgomery St & W Liberty St



Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	ø4
Lane Configurations							
Volume (vph)	195	0	5	480	37	469	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		8		2		6	4
Permitted Phases	8		2		6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	15.0	8.0
Minimum Split (s)	28.8	28.8	23.3	23.3	22.3	22.3	26.8
Total Split (s)	40.0	40.0	80.0	80.0	80.0	80.0	40.0
Total Split (%)	33.3%	33.3%	66.7%	66.7%	66.7%	66.7%	33%
Yellow Time (s)	3.0	3.0	3.6	3.6	3.6	3.6	2.0
All-Red Time (s)	2.8	2.8	2.7	2.7	2.7	2.7	2.8
Lost Time Adjust (s)		0.0		0.0		0.0	
Total Lost Time (s)		5.8		6.3		6.3	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		30.2		77.7		77.7	
Actuated g/C Ratio		0.25		0.65		0.65	
v/c Ratio		0.90		0.35		0.32	
Control Delay		65.1		5.3		10.6	
Queue Delay		3.3		0.0		0.0	
Total Delay		68.3		5.3		10.6	
LOS		E		A		B	
Approach Delay		68.3		5.3		10.6	
Approach LOS		E		A		B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 29 (24%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 19.9	Intersection LOS: B
Intersection Capacity Utilization 67.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 28: MLK Jr Blvd & Driveway/Broughton St

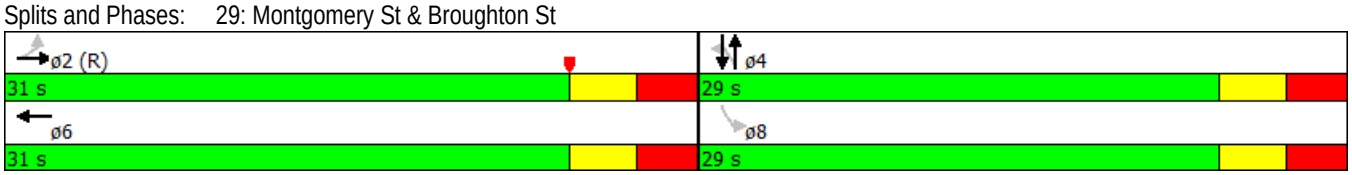


Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	2	142	176	109	147	17	0
Turn Type	Perm	NA	NA	Perm	NA	custom	NA
Protected Phases		2	6		4		4
Permitted Phases	2			4		8	
Detector Phase	2	2	6	4	4	8	4
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Total Split (s)	31.0	31.0	31.0	29.0	29.0	29.0	29.0
Total Split (%)	51.7%	51.7%	51.7%	48.3%	48.3%	48.3%	48.3%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.8	5.8	5.8	5.8		5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		25.2	25.2	23.2	23.2		23.2
Actuated g/C Ratio		0.42	0.42	0.39	0.39		0.39
v/c Ratio		0.22	0.30	0.23	0.46		0.07
Control Delay		11.1	12.2	14.8	12.8		3.2
Queue Delay		0.0	0.0	0.0	0.0		0.0
Total Delay		11.1	12.2	14.9	12.8		3.2
LOS		B	B	B	B		A
Approach Delay		11.1	12.2		13.3		3.2
Approach LOS		B	B		B		A

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 10 (17%), Referenced to phase 2:EBTL, Start of Yellow
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.46
Intersection Signal Delay: 12.2 Intersection LOS: B
Intersection Capacity Utilization 40.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 29: Montgomery St & Broughton St



Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	84	376	344	293	90	275	443	151	769
Turn Type	Split	NA	Split	NA	custom	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					5	2		6	
Detector Phase	4	4	3	3	5	5	2	1	6
Switch Phase									
Minimum Initial (s)	15.0	15.0	8.0	8.0	4.0	4.0	15.0	4.0	15.0
Minimum Split (s)	25.3	25.3	25.6	25.6	22.2	22.2	31.3	10.2	31.3
Total Split (s)	30.0	30.0	28.0	28.0	33.0	33.0	62.0	20.0	49.0
Total Split (%)	21.4%	21.4%	20.0%	20.0%	23.6%	23.6%	44.3%	14.3%	35.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.0	3.0	3.6	3.0	3.6
All-Red Time (s)	2.7	2.7	3.0	3.0	3.2	3.2	2.7	3.2	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.6	6.6		6.2	6.3	6.2	6.3
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	None	None	C-Max	None	C-Max
Act Effct Green (s)	23.7	23.7	21.4	21.4		75.8	57.8	54.5	42.7
Actuated g/C Ratio	0.17	0.17	0.15	0.15		0.54	0.41	0.39	0.30
v/c Ratio	0.36	1.22	1.15	1.16		1.22	0.48	0.49	1.10
Control Delay	56.1	156.0	143.9	132.5		157.7	44.3	17.8	97.6
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	56.1	156.0	143.9	132.5		157.7	44.3	17.8	97.6
LOS	E	F	F	F		F	D	B	F
Approach Delay		144.0		136.2			90.4		86.3
Approach LOS		F		F			F		F

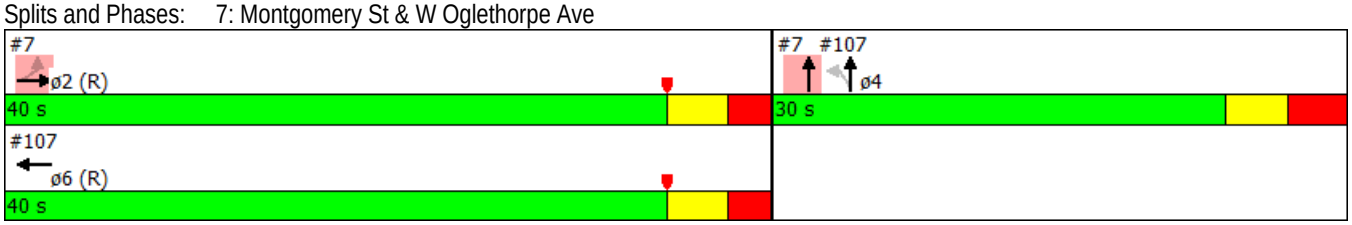
Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.22	
Intersection Signal Delay: 109.8	Intersection LOS: F
Intersection Capacity Utilization 107.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 6: MLK Jr Blvd & W Oglethorpe Ave

Lane Group	EBL	EBT	NBT	ø6
Lane Configurations				
Volume (vph)	33	581	385	
Turn Type	Perm	NA	NA	
Protected Phases		2	4	6
Permitted Phases	2			
Detector Phase	2	2	4	
Switch Phase				
Minimum Initial (s)	15.0	15.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	22.5
Total Split (s)	40.0	40.0	30.0	40.0
Total Split (%)	57.1%	57.1%	42.9%	57%
Yellow Time (s)	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	6.4	
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	C-Max	C-Max	None	C-Max
Act Effct Green (s)	38.1	38.1	20.0	
Actuated g/C Ratio	0.54	0.54	0.29	
v/c Ratio	0.04	0.73	0.70	
Control Delay	0.6	17.1	19.5	
Queue Delay	0.0	0.0	0.0	
Total Delay	0.6	17.1	19.5	
LOS	A	B	B	
Approach Delay		16.2	19.5	
Approach LOS		B	B	

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 14 (20%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 17.9	Intersection LOS: B
Intersection Capacity Utilization 64.5%	ICU Level of Service C
Analysis Period (min) 15	

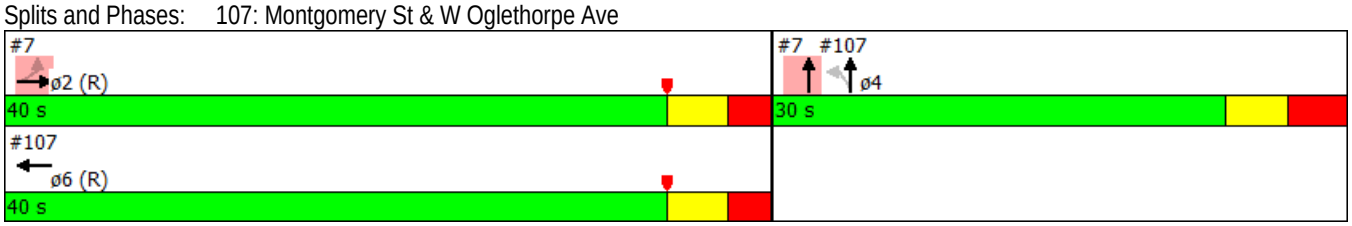
Splits and Phases: 7: Montgomery St & W Oglethorpe Ave



Lane Group	WBT	NBT	ø2
Lane Configurations			
Volume (vph)	618	275	
Turn Type	NA	NA	
Protected Phases	6	4	2
Permitted Phases			
Detector Phase	6	4	
Switch Phase			
Minimum Initial (s)	15.0	12.0	15.0
Minimum Split (s)	22.5	29.4	22.5
Total Split (s)	40.0	30.0	40.0
Total Split (%)	57.1%	42.9%	57%
Yellow Time (s)	3.2	3.2	3.2
All-Red Time (s)	2.3	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	5.5	6.4	
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode	C-Max	None	C-Max
Act Effct Green (s)	38.1	20.0	
Actuated g/C Ratio	0.54	0.29	
v/c Ratio	0.86	0.43	
Control Delay	29.1	3.9	
Queue Delay	0.0	0.0	
Total Delay	29.1	3.9	
LOS	C	A	
Approach Delay	29.1	3.9	
Approach LOS	C	A	

Intersection Summary	
Cycle Length: 70	
Actuated Cycle Length: 70	
Offset: 14 (20%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 19.6	Intersection LOS: B
Intersection Capacity Utilization 64.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 107: Montgomery St & W Oglethorpe Ave

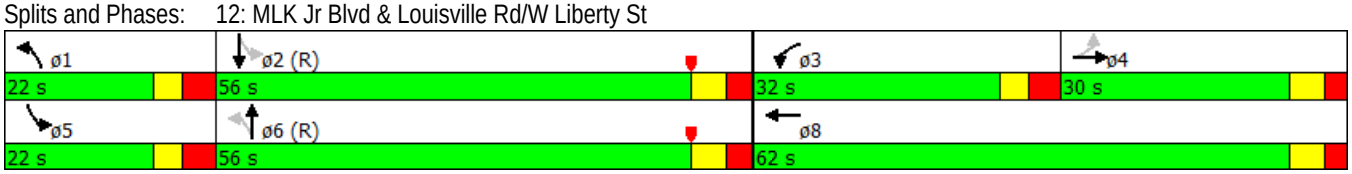


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	67	212	366	297	105	545	267	1180
Turn Type	Perm	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases		4	3	8	1	6	5	2
Permitted Phases	4				6		2	
Detector Phase	4	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	27.1	27.1	10.3	27.1	10.5	24.5	10.5	29.5
Total Split (s)	30.0	30.0	32.0	62.0	22.0	56.0	22.0	56.0
Total Split (%)	21.4%	21.4%	22.9%	44.3%	15.7%	40.0%	15.7%	40.0%
Yellow Time (s)	3.6	3.6	3.0	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.5	2.5	3.3	2.5	3.5	2.9	3.5	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	6.1	6.3	6.1	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	27.7	27.7	21.9	55.9	60.0	49.9	69.6	54.9
Actuated g/C Ratio	0.20	0.20	0.16	0.40	0.43	0.36	0.50	0.39
v/c Ratio	0.41	1.02	0.79	0.65	0.65	0.62	0.83	1.02
Control Delay	59.4	106.2	50.9	49.5	44.2	38.9	33.2	53.9
Queue Delay	0.0	0.0	0.2	58.1	0.0	0.0	0.1	0.0
Total Delay	59.4	106.2	51.1	107.6	44.2	38.9	33.3	53.9
LOS	E	F	D	F	D	D	C	D
Approach Delay		98.0		81.0		39.7		50.2
Approach LOS		F		F		D		D

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 40 (29%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.02
Intersection Signal Delay: 60.2 Intersection LOS: E
Intersection Capacity Utilization 98.2% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 12: MLK Jr Blvd & Louisville Rd/W Liberty St

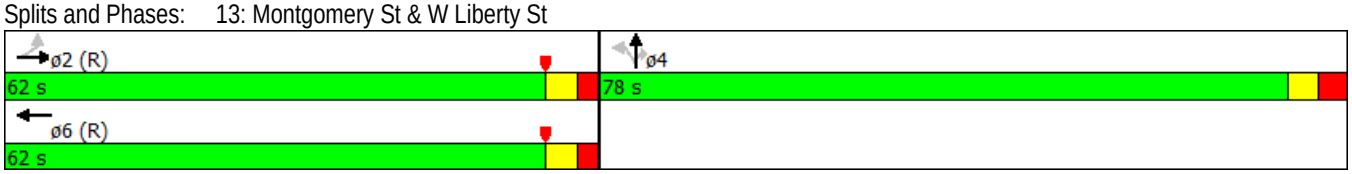


Lane Group	EBL	EBT	WBT	NBL	NBT	NBR
Lane Configurations						
Volume (vph)	35	429	679	83	611	419
Turn Type	Perm	NA	NA	Perm	NA	Perm
Protected Phases		2	6		4	
Permitted Phases	2			4		4
Detector Phase	2	2	6	4	4	4
Switch Phase						
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	25.6	25.6	25.6	35.4	35.4	35.4
Total Split (s)	62.0	62.0	62.0	78.0	78.0	78.0
Total Split (%)	44.3%	44.3%	44.3%	55.7%	55.7%	55.7%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.4	2.4	2.4	3.2	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	5.6	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	56.4	56.4	56.4	71.6	71.6	71.6
Actuated g/C Ratio	0.40	0.40	0.40	0.51	0.51	0.51
v/c Ratio	0.28	0.60	0.72	0.11	0.43	0.72
Control Delay	20.6	23.2	38.6	18.3	22.4	26.4
Queue Delay	0.0	1.8	8.2	0.0	0.0	0.0
Total Delay	20.6	25.0	46.8	18.3	22.4	26.4
LOS	C	C	D	B	C	C
Approach Delay		24.6	46.8		23.6	
Approach LOS		C	D		C	

Intersection Summary

Cycle Length: 140
Actuated Cycle Length: 140
Offset: 41 (29%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.72
Intersection Signal Delay: 31.4 Intersection LOS: C
Intersection Capacity Utilization 64.8% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 13: Montgomery St & W Liberty St

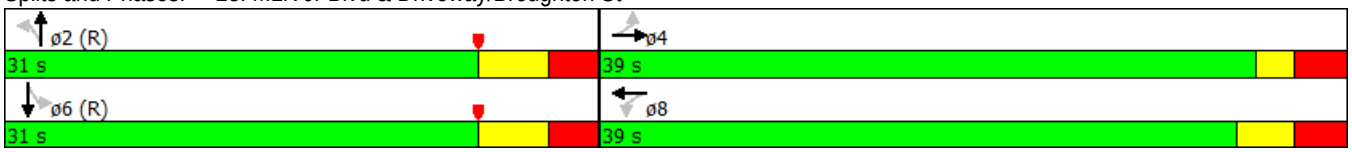


Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	ø4
Lane Configurations							
Volume (vph)	323	5	4	542	37	643	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		8		2		6	4
Permitted Phases	8		2		6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	15.0	8.0
Minimum Split (s)	28.8	28.8	23.3	23.3	22.3	22.3	26.8
Total Split (s)	39.0	39.0	31.0	31.0	31.0	31.0	39.0
Total Split (%)	55.7%	55.7%	44.3%	44.3%	44.3%	44.3%	56%
Yellow Time (s)	3.0	3.0	3.6	3.6	3.6	3.6	2.0
All-Red Time (s)	2.8	2.8	2.7	2.7	2.7	2.7	2.8
Lost Time Adjust (s)		0.0		0.0		0.0	
Total Lost Time (s)		5.8		6.3		6.3	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		30.7		27.2		27.2	
Actuated g/C Ratio		0.44		0.39		0.39	
v/c Ratio		0.92		0.68		0.71	
Control Delay		35.6		15.1		23.7	
Queue Delay		0.9		0.0		0.0	
Total Delay		36.4		15.1		23.7	
LOS		D		B		C	
Approach Delay		36.4		15.1		23.7	
Approach LOS		D		B		C	

Intersection Summary

Cycle Length: 70
Actuated Cycle Length: 70
Offset: 55 (79%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 23.7 Intersection LOS: C
Intersection Capacity Utilization 89.3% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 28: MLK Jr Blvd & Driveway/Broughton St

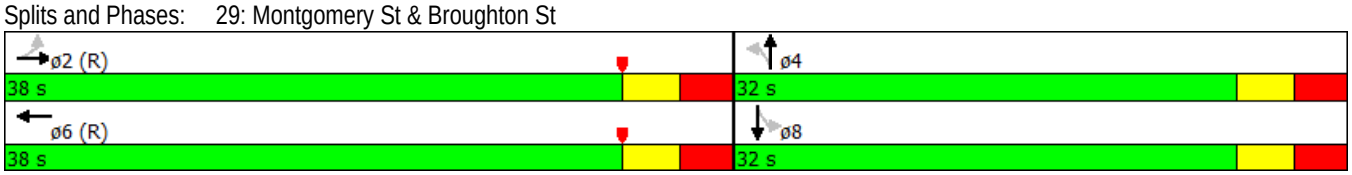


Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	6	218	285	180	122	20	0
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA
Protected Phases		2	6		4		8
Permitted Phases	2			4		8	
Detector Phase	2	2	6	4	4	8	8
Switch Phase							
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Total Split (s)	38.0	38.0	38.0	32.0	32.0	32.0	32.0
Total Split (%)	54.3%	54.3%	54.3%	45.7%	45.7%	45.7%	45.7%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)		0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)		5.8	5.8	5.8	5.8		5.8
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)		32.2	32.2	26.2	26.2		26.2
Actuated g/C Ratio		0.46	0.46	0.37	0.37		0.37
v/c Ratio		0.31	0.48	0.41	0.46		0.11
Control Delay		2.7	14.9	27.6	20.8		6.9
Queue Delay		0.0	0.2	0.1	0.0		0.0
Total Delay		2.7	15.1	27.8	20.8		6.9
LOS		A	B	C	C		A
Approach Delay		2.7	15.1		23.4		6.9
Approach LOS		A	B		C		A

Intersection Summary

Cycle Length: 70
Actuated Cycle Length: 70
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.48
Intersection Signal Delay: 15.8 Intersection LOS: B
Intersection Capacity Utilization 54.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 29: Montgomery St & Broughton St

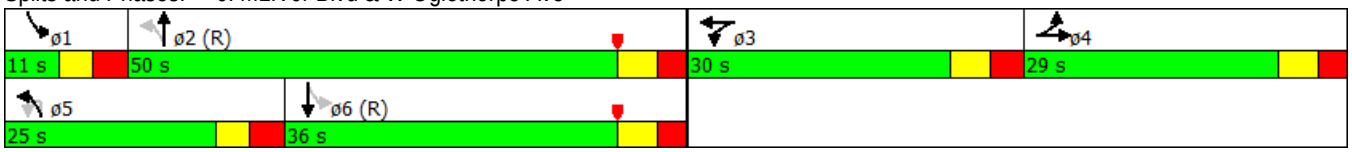


Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	84	250	171	225	60	183	347	80	333
Turn Type	Split	NA	Split	NA	custom	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					5	2		6	
Detector Phase	4	4	3	3	5	5	2	1	6
Switch Phase									
Minimum Initial (s)	15.0	15.0	8.0	8.0	4.0	4.0	15.0	4.0	15.0
Minimum Split (s)	25.3	25.3	25.6	25.6	22.2	22.2	31.3	10.2	31.3
Total Split (s)	29.0	29.0	30.0	30.0	25.0	25.0	50.0	11.0	36.0
Total Split (%)	24.2%	24.2%	25.0%	25.0%	20.8%	20.8%	41.7%	9.2%	30.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.0	3.0	3.6	3.0	3.6
All-Red Time (s)	2.7	2.7	3.0	3.0	3.2	3.2	2.7	3.2	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.6	6.6		6.2	6.3	6.2	6.3
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	None	None	C-Max	None	C-Max
Act Effct Green (s)	22.7	22.7	23.4	23.4		54.8	43.7	36.4	31.5
Actuated g/C Ratio	0.19	0.19	0.20	0.20		0.46	0.36	0.30	0.26
v/c Ratio	0.33	0.68	0.57	0.57		0.76	0.46	0.34	0.61
Control Delay	45.7	45.6	43.0	38.0		51.0	37.7	25.6	40.4
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	45.7	45.6	43.0	38.0		51.0	37.7	25.6	40.4
LOS	D	D	D	D		D	D	C	D
Approach Delay		45.6		39.6			42.3		38.1
Approach LOS		D		D			D		D

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 41.4 Intersection LOS: D
Intersection Capacity Utilization 71.7% ICU Level of Service C
Analysis Period (min) 15

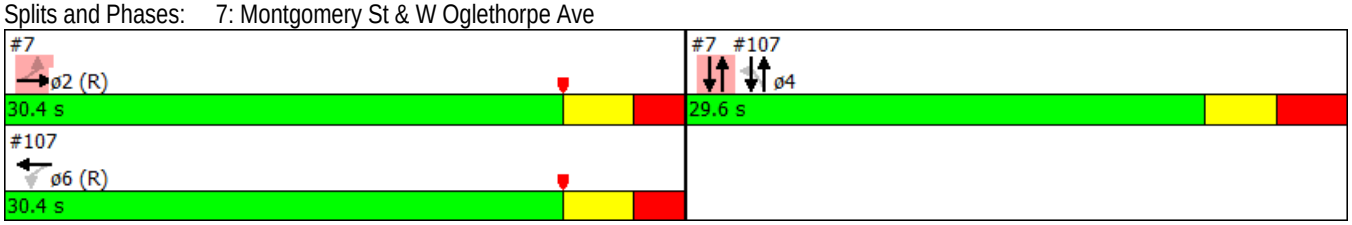
Splits and Phases: 6: MLK Jr Blvd & W Oglethorpe Ave



Lane Group	EBL	EBT	NBT	SBT	ø6
Lane Configurations					
Volume (vph)	61	302	531	96	
Turn Type	Perm	NA	NA	NA	
Protected Phases		2	4	4	6
Permitted Phases	2				
Detector Phase	2	2	4	4	
Switch Phase					
Minimum Initial (s)	15.0	15.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	22.5
Total Split (s)	30.4	30.4	29.6	29.6	30.4
Total Split (%)	50.7%	50.7%	49.3%	49.3%	51%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	6.4	6.4	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	C-Max	C-Max	None	None	C-Max
Act Effct Green (s)	26.0	26.0	22.1	22.1	
Actuated g/C Ratio	0.43	0.43	0.37	0.37	
v/c Ratio	0.09	0.59	0.74	0.17	
Control Delay	9.1	15.7	12.7	14.3	
Queue Delay	0.2	0.0	0.6	0.0	
Total Delay	9.3	15.7	13.3	14.3	
LOS	A	B	B	B	
Approach Delay		14.8	13.3	14.3	
Approach LOS		B	B	B	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 40 (67%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 13.8	Intersection LOS: B
Intersection Capacity Utilization 57.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: Montgomery St & W Oglethorpe Ave

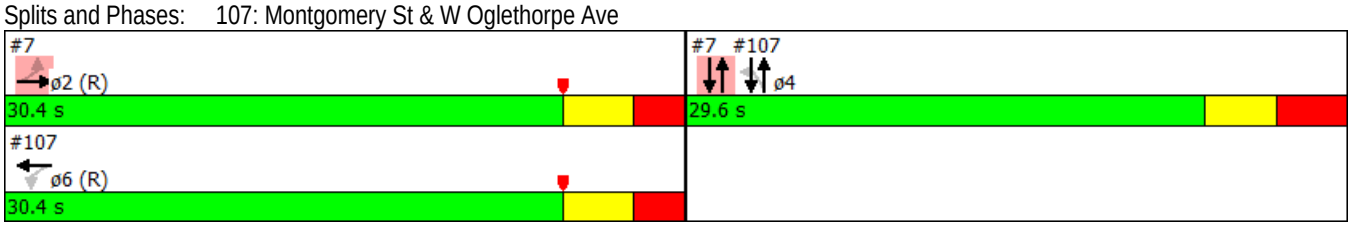


Lane Group	WBL	WBT	NBL	NBT	SBT	ø2
Lane Configurations						
Volume (vph)	48	373	63	529	48	
Turn Type	Perm	NA	Perm	NA	NA	
Protected Phases		6		4	4	2
Permitted Phases	6		4			
Detector Phase	6	6	4	4	4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	12.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	29.4	22.5
Total Split (s)	30.4	30.4	29.6	29.6	29.6	30.4
Total Split (%)	50.7%	50.7%	49.3%	49.3%	49.3%	51%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5		6.4	6.4	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	C-Max
Act Effct Green (s)	26.0	26.0		22.1	22.1	
Actuated g/C Ratio	0.43	0.43		0.37	0.37	
v/c Ratio	0.07	0.77		0.61	0.10	
Control Delay	11.1	25.4		8.1	6.4	
Queue Delay	0.1	0.0		0.0	0.0	
Total Delay	11.1	25.4		8.1	6.4	
LOS	B	C		A	A	
Approach Delay		24.1		8.1	6.4	
Approach LOS		C		A	A	

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 40 (67%), Referenced to phase 2:EBTL and 6:, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 15.0 Intersection LOS: B
Intersection Capacity Utilization 58.7% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 107: Montgomery St & W Oglethorpe Ave

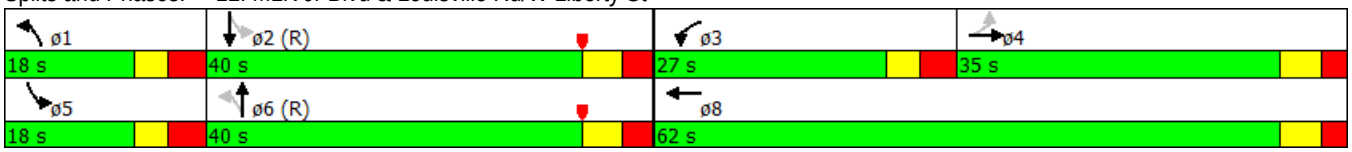


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	59	149	242	148	66	482	109	684
Turn Type	Perm	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases		4	3	8	1	6	5	2
Permitted Phases	4				6		2	
Detector Phase	4	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	27.1	27.1	10.3	27.1	10.5	24.5	10.5	29.5
Total Split (s)	35.0	35.0	27.0	62.0	18.0	40.0	18.0	40.0
Total Split (%)	29.2%	29.2%	22.5%	51.7%	15.0%	33.3%	15.0%	33.3%
Yellow Time (s)	3.6	3.6	3.0	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.5	2.5	3.3	2.5	3.5	2.9	3.5	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	6.1	6.3	6.1	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	23.3	23.3	15.0	44.6	54.8	47.6	58.9	51.3
Actuated g/C Ratio	0.19	0.19	0.12	0.37	0.46	0.40	0.49	0.43
v/c Ratio	0.32	0.75	0.65	0.43	0.23	0.52	0.34	0.55
Control Delay	44.2	55.1	60.9	45.3	19.4	30.3	18.3	25.7
Queue Delay	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0
Total Delay	44.2	55.1	60.9	46.5	19.4	30.3	18.3	25.7
LOS	D	E	E	D	B	C	B	C
Approach Delay		52.9		53.5		29.3		24.8
Approach LOS		D		D		C		C

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 34 (28%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 35.9 Intersection LOS: D
Intersection Capacity Utilization 72.0% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 12: MLK Jr Blvd & Louisville Rd/W Liberty St

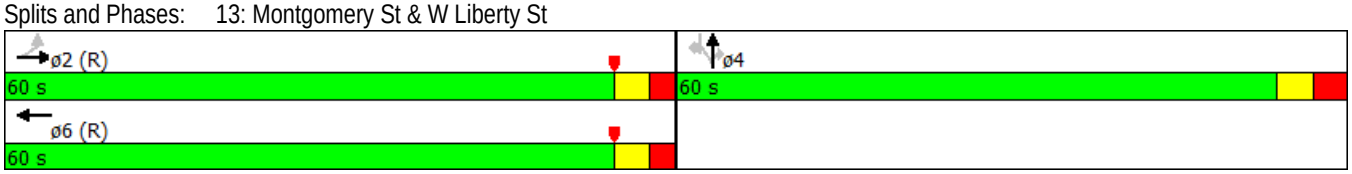


Lane Group	EBL	EBT	WBT	NBT	NBR	SBR
Lane Configurations						
Volume (vph)	93	341	397	775	553	32
Turn Type	Perm	NA	NA	NA	Perm	Perm
Protected Phases		2	6	4		
Permitted Phases	2				4	4
Detector Phase	2	2	6	4	4	4
Switch Phase						
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	25.6	25.6	25.6	35.4	35.4	35.4
Total Split (s)	60.0	60.0	60.0	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.4	2.4	2.4	3.2	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	5.6	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	54.4	54.4	54.4	53.6	53.6	53.6
Actuated g/C Ratio	0.45	0.45	0.45	0.45	0.45	0.45
v/c Ratio	0.35	0.42	0.39	0.65	0.87	0.05
Control Delay	23.1	21.1	21.5	28.5	33.1	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.1	21.1	21.5	28.5	33.1	0.5
LOS	C	C	C	C	C	A
Approach Delay		21.6	21.5	30.3		
Approach LOS		C	C	C		

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 21 (18%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 26.5 Intersection LOS: C
Intersection Capacity Utilization 69.8% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 13: Montgomery St & W Liberty St

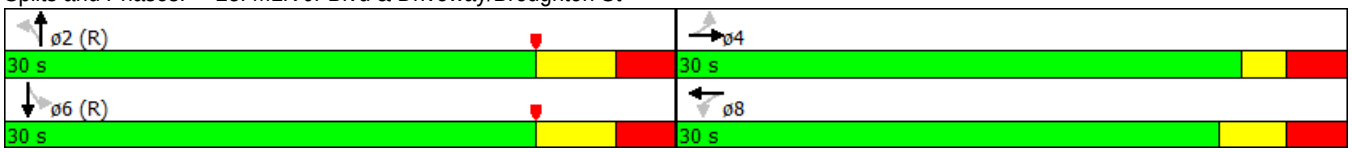


Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	ø4
Lane Configurations							
Volume (vph)	146	0	4	417	39	391	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		8		2		6	4
Permitted Phases	8		2		6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	15.0	8.0
Minimum Split (s)	28.8	28.8	23.3	23.3	22.3	22.3	26.8
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50%
Yellow Time (s)	3.0	3.0	3.6	3.6	3.6	3.6	2.0
All-Red Time (s)	2.8	2.8	2.7	2.7	2.7	2.7	2.8
Lost Time Adjust (s)		0.0		0.0		0.0	
Total Lost Time (s)		5.8		6.3		6.3	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		14.3		33.6		33.6	
Actuated g/C Ratio		0.24		0.56		0.56	
v/c Ratio		0.68		0.35		0.31	
Control Delay		23.8		11.3		8.9	
Queue Delay		0.0		0.0		0.0	
Total Delay		23.8		11.3		8.9	
LOS		C		B		A	
Approach Delay		23.8		11.3		8.9	
Approach LOS		C		B		A	

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay: 12.7 Intersection LOS: B
Intersection Capacity Utilization 58.2% ICU Level of Service B
Analysis Period (min) 15

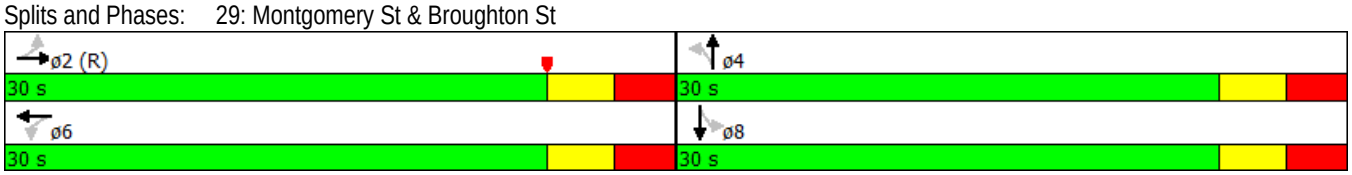
Splits and Phases: 28: MLK Jr Blvd & Driveway/Broughton St



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	2	118	27	129	100	122	14	7
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)		5.8		5.8	5.8	5.8		5.8
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		24.2		24.2	24.2	24.2		24.2
Actuated g/C Ratio		0.40		0.40	0.40	0.40		0.40
v/c Ratio		0.22		0.29	0.21	0.38		0.07
Control Delay		8.1		12.7	4.0	1.7		8.3
Queue Delay		0.0		0.0	0.0	0.0		0.0
Total Delay		8.1		12.7	4.0	1.7		8.3
LOS		A		B	A	A		A
Approach Delay		8.1		12.7		2.3		8.3
Approach LOS		A		B		A		A

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.38	
Intersection Signal Delay: 6.3	Intersection LOS: A
Intersection Capacity Utilization 49.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 29: Montgomery St & Broughton St

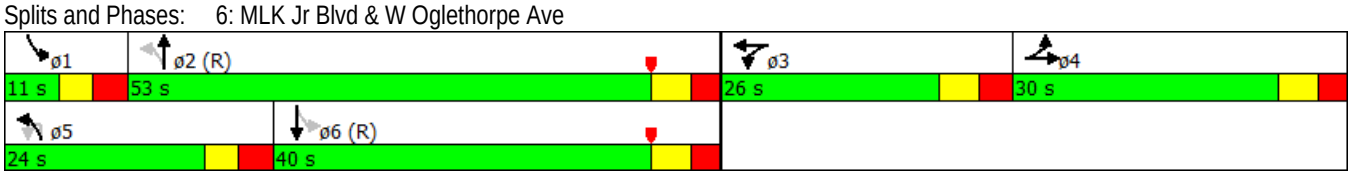


Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	69	330	222	257	60	232	371	133	576
Turn Type	Split	NA	Split	NA	custom	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					5	2		6	
Detector Phase	4	4	3	3	5	5	2	1	6
Switch Phase									
Minimum Initial (s)	15.0	15.0	8.0	8.0	4.0	4.0	15.0	4.0	15.0
Minimum Split (s)	25.3	25.3	25.6	25.6	22.2	22.2	31.3	10.2	31.3
Total Split (s)	30.0	30.0	26.0	26.0	24.0	24.0	53.0	11.0	40.0
Total Split (%)	25.0%	25.0%	21.7%	21.7%	20.0%	20.0%	44.2%	9.2%	33.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.0	3.0	3.6	3.0	3.6
All-Red Time (s)	2.7	2.7	3.0	3.0	3.2	3.2	2.7	3.2	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.6	6.6		6.2	6.3	6.2	6.3
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	None	None	C-Max	None	C-Max
Act Effct Green (s)	23.7	23.7	19.4	19.4		57.8	46.7	38.6	33.7
Actuated g/C Ratio	0.20	0.20	0.16	0.16		0.48	0.39	0.32	0.28
v/c Ratio	0.26	0.90	0.83	0.82		1.12	0.45	0.54	0.91
Control Delay	43.4	58.9	70.8	57.5		130.3	22.9	31.6	53.5
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	43.4	58.9	70.8	57.5		130.3	22.9	31.6	53.5
LOS	D	E	E	E		F	C	C	D
Approach Delay		57.0		61.9			63.9		50.0
Approach LOS		E		E			E		D

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.12
Intersection Signal Delay: 57.7 Intersection LOS: E
Intersection Capacity Utilization 88.8% ICU Level of Service E
Analysis Period (min) 15

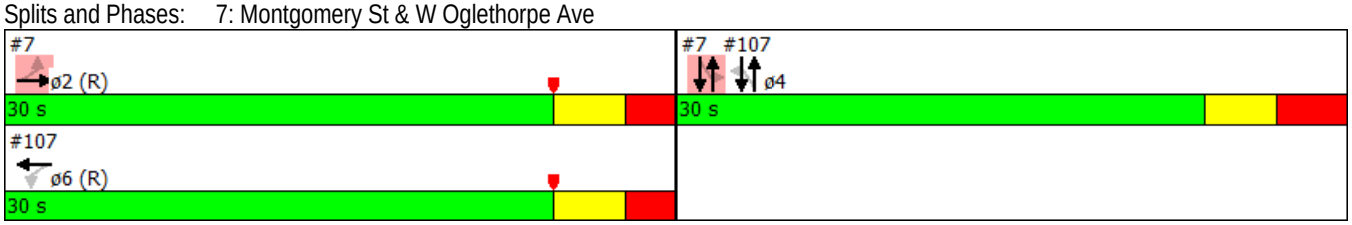
Splits and Phases: 6: MLK Jr Blvd & W Oglethorpe Ave



Lane Group	EBL	EBT	NBT	SBT	ø6
Lane Configurations					
Volume (vph)	27	546	319	161	
Turn Type	Perm	NA	NA	NA	
Protected Phases		2	4	4	6
Permitted Phases	2				
Detector Phase	2	2	4	4	
Switch Phase					
Minimum Initial (s)	15.0	15.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	22.5
Total Split (s)	30.0	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	6.4	6.4	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	C-Max	C-Max	None	None	C-Max
Act Effct Green (s)	29.0	29.0	19.1	19.1	
Actuated g/C Ratio	0.48	0.48	0.32	0.32	
v/c Ratio	0.04	0.87	0.57	0.31	
Control Delay	5.8	25.3	14.1	18.0	
Queue Delay	0.0	0.0	0.1	0.0	
Total Delay	5.8	25.3	14.1	18.0	
LOS	A	C	B	B	
Approach Delay		24.4	14.1	18.0	
Approach LOS		C	B	B	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 8 (13%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 19.6	Intersection LOS: B
Intersection Capacity Utilization 65.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: Montgomery St & W Oglethorpe Ave

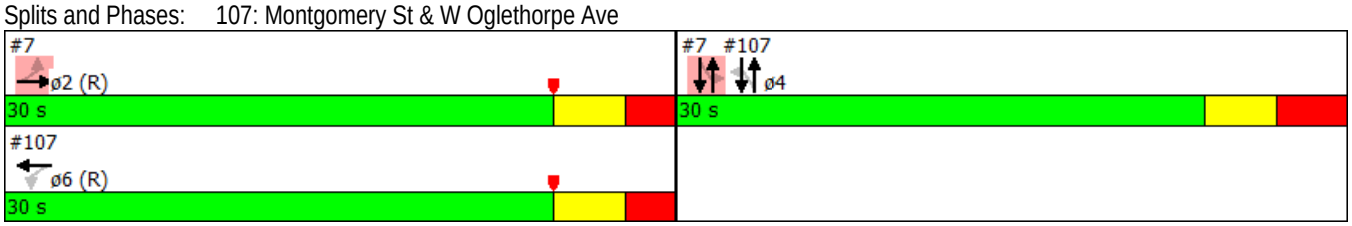


Lane Group	WBL	WBT	NBL	NBT	SBT	ø2
Lane Configurations						
Volume (vph)	84	432	91	255	77	
Turn Type	Perm	NA	Perm	NA	NA	
Protected Phases		6		4	4	2
Permitted Phases	6		4			
Detector Phase	6	6	4	4	4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	12.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	29.4	22.5
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5		6.4	6.4	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	C-Max
Act Effct Green (s)	29.0	29.0		19.1	19.1	
Actuated g/C Ratio	0.48	0.48		0.32	0.32	
v/c Ratio	0.12	0.68		0.44	0.21	
Control Delay	11.0	20.7		8.9	9.1	
Queue Delay	3.7	0.0		0.0	0.0	
Total Delay	14.7	20.7		8.9	9.1	
LOS	B	C		A	A	
Approach Delay		19.8		8.9	9.1	
Approach LOS		B		A	A	

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 8 (13%), Referenced to phase 2:EBTL and 6:, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 14.8 Intersection LOS: B
Intersection Capacity Utilization 53.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 107: Montgomery St & W Oglethorpe Ave

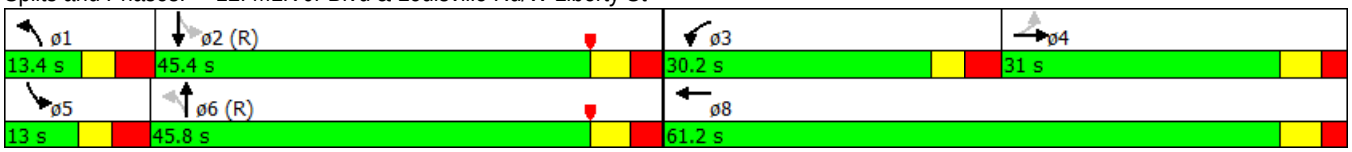


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	56	176	456	250	87	452	200	872
Turn Type	Perm	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases		4	3	8	1	6	5	2
Permitted Phases	4				6		2	
Detector Phase	4	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	27.1	27.1	10.3	27.1	10.5	24.5	10.5	29.5
Total Split (s)	31.0	31.0	30.2	61.2	13.4	45.8	13.0	45.4
Total Split (%)	25.8%	25.8%	25.2%	51.0%	11.2%	38.2%	10.8%	37.8%
Yellow Time (s)	3.6	3.6	3.0	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.5	2.5	3.3	2.5	3.5	2.9	3.5	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	6.1	6.3	6.1	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	23.2	23.2	22.1	51.6	48.0	41.4	50.6	42.7
Actuated g/C Ratio	0.19	0.19	0.18	0.43	0.40	0.34	0.42	0.36
v/c Ratio	0.33	0.85	0.84	0.50	0.50	0.53	0.67	0.83
Control Delay	46.8	67.0	60.1	21.6	29.9	32.9	42.3	50.0
Queue Delay	0.0	0.0	0.1	1.9	0.0	0.0	0.0	0.0
Total Delay	46.8	67.0	60.2	23.6	29.9	32.9	42.3	50.0
LOS	D	E	E	C	C	C	D	D
Approach Delay		63.4		44.4		32.5		48.6
Approach LOS		E		D		C		D

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 45.4 Intersection LOS: D
Intersection Capacity Utilization 84.6% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 12: MLK Jr Blvd & Louisville Rd/W Liberty St

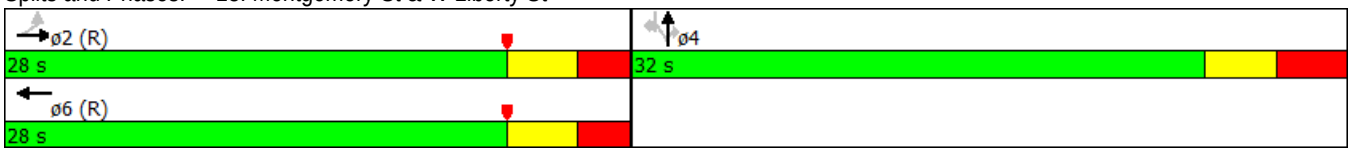


Lane Group	EBL	EBT	WBT	NBT	NBR	SBR
Lane Configurations						
Volume (vph)	77	386	563	513	347	156
Turn Type	Perm	NA	NA	NA	Perm	Perm
Protected Phases		2	6	4		
Permitted Phases	2				4	4
Detector Phase	2	2	6	4	4	4
Switch Phase						
Minimum Initial (s)	11.0	11.0	11.0	11.0	11.0	11.0
Minimum Split (s)	25.6	25.6	25.6	35.4	35.4	35.4
Total Split (s)	28.0	28.0	28.0	32.0	32.0	32.0
Total Split (%)	46.7%	46.7%	46.7%	53.3%	53.3%	53.3%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.4	2.4	2.4	3.2	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	5.6	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	22.4	22.4	22.4	25.6	25.6	25.6
Actuated g/C Ratio	0.37	0.37	0.37	0.43	0.43	0.43
v/c Ratio	0.45	0.58	0.63	0.49	0.63	0.26
Control Delay	20.7	17.6	17.8	14.0	14.5	16.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.7	17.6	17.8	14.1	14.5	16.6
LOS	C	B	B	B	B	B
Approach Delay		18.1	17.8	14.3		
Approach LOS		B	B	B		

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.63
Intersection Signal Delay: 16.3 Intersection LOS: B
Intersection Capacity Utilization 71.1% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 13: Montgomery St & W Liberty St

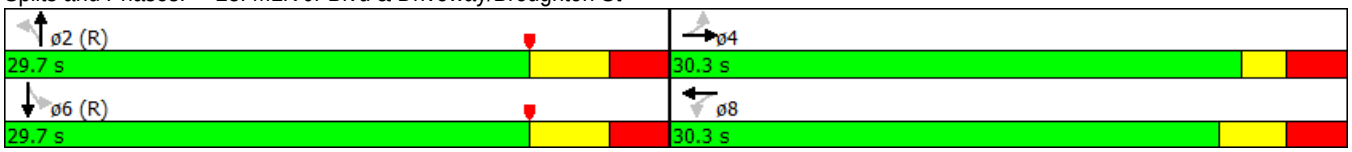


Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	ø4
Lane Configurations							
Volume (vph)	238	4	3	461	37	513	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		8		2		6	4
Permitted Phases	8		2		6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	15.0	8.0
Minimum Split (s)	28.8	28.8	23.3	23.3	22.3	22.3	26.8
Total Split (s)	30.3	30.3	29.7	29.7	29.7	29.7	30.3
Total Split (%)	50.5%	50.5%	49.5%	49.5%	49.5%	49.5%	51%
Yellow Time (s)	3.0	3.0	3.6	3.6	3.6	3.6	2.0
All-Red Time (s)	2.8	2.8	2.7	2.7	2.7	2.7	2.8
Lost Time Adjust (s)		0.0		0.0		0.0	
Total Lost Time (s)		5.8		6.3		6.3	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		21.0		26.9		26.9	
Actuated g/C Ratio		0.35		0.45		0.45	
v/c Ratio		0.85		0.49		0.49	
Control Delay		28.8		11.9		14.5	
Queue Delay		0.1		0.0		0.0	
Total Delay		28.8		11.9		14.5	
LOS		C		B		B	
Approach Delay		28.8		11.9		14.5	
Approach LOS		C		B		B	

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 17.0 Intersection LOS: B
Intersection Capacity Utilization 74.4% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 28: MLK Jr Blvd & Driveway/Broughton St

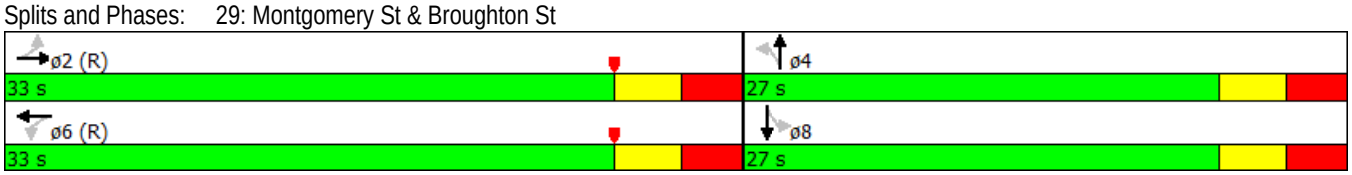


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	5	174	37	207	153	102	17	31
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Total Split (s)	33.0	33.0	33.0	33.0	27.0	27.0	27.0	27.0
Total Split (%)	55.0%	55.0%	55.0%	55.0%	45.0%	45.0%	45.0%	45.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)		5.8		5.8	5.8	5.8		5.8
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)		27.2		27.2	21.2	21.2		21.2
Actuated g/C Ratio		0.45		0.45	0.35	0.35		0.35
v/c Ratio		0.30		0.44	0.37	0.40		0.15
Control Delay		5.2		12.7	27.0	18.9		10.6
Queue Delay		0.0		0.0	0.3	0.0		0.1
Total Delay		5.2		12.7	27.3	18.9		10.7
LOS		A		B	C	B		B
Approach Delay		5.2		12.7		22.1		10.7
Approach LOS		A		B		C		B

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.44
Intersection Signal Delay: 14.8 Intersection LOS: B
Intersection Capacity Utilization 65.7% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 29: Montgomery St & Broughton St

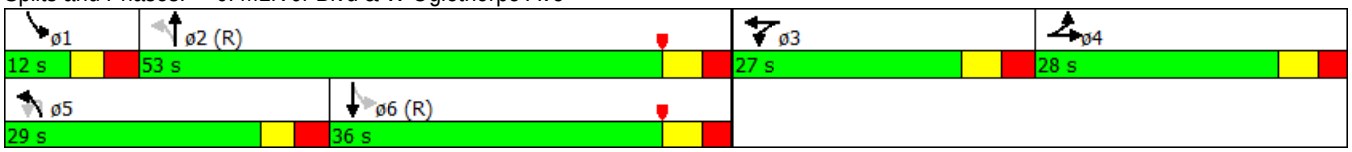


Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	100	295	205	269	60	216	411	92	398
Turn Type	Split	NA	Split	NA	custom	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					5	2		6	
Detector Phase	4	4	3	3	5	5	2	1	6
Switch Phase									
Minimum Initial (s)	15.0	15.0	8.0	8.0	4.0	4.0	15.0	4.0	15.0
Minimum Split (s)	25.3	25.3	25.6	25.6	22.2	22.2	31.3	10.2	31.3
Total Split (s)	28.0	28.0	27.0	27.0	29.0	29.0	53.0	12.0	36.0
Total Split (%)	23.3%	23.3%	22.5%	22.5%	24.2%	24.2%	44.2%	10.0%	30.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.0	3.0	3.6	3.0	3.6
All-Red Time (s)	2.7	2.7	3.0	3.0	3.2	3.2	2.7	3.2	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.6	6.6		6.2	6.3	6.2	6.3
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	None	None	C-Max	None	C-Max
Act Effct Green (s)	21.7	21.7	20.4	20.4		58.8	46.7	38.5	32.6
Actuated g/C Ratio	0.18	0.18	0.17	0.17		0.49	0.39	0.32	0.27
v/c Ratio	0.40	0.84	0.78	0.78		0.84	0.50	0.38	0.70
Control Delay	48.5	56.0	73.6	64.1		52.4	19.4	23.1	42.2
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	48.5	56.0	73.6	64.1		52.4	19.4	23.1	42.2
LOS	D	E	E	E		D	B	C	D
Approach Delay		54.6		67.2			30.8		39.3
Approach LOS		D		E			C		D

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 25 (21%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 45.8 Intersection LOS: D
Intersection Capacity Utilization 79.6% ICU Level of Service D
Analysis Period (min) 15

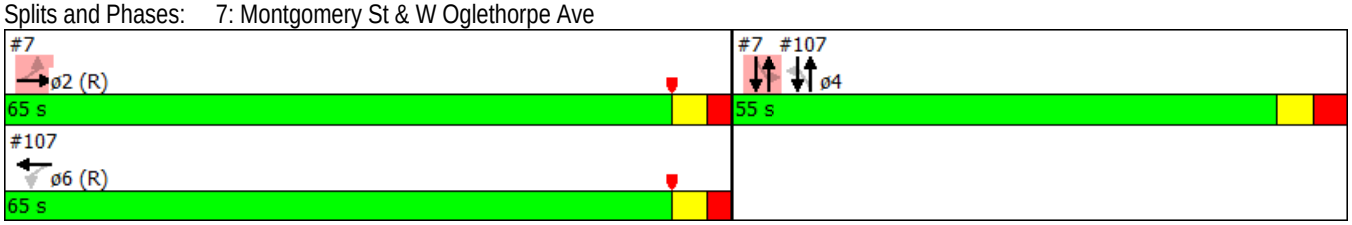
Splits and Phases: 6: MLK Jr Blvd & W Oglethorpe Ave



Lane Group	EBL	EBT	NBT	SBT	ø6
Lane Configurations					
Volume (vph)	73	357	635	100	
Turn Type	Perm	NA	NA	NA	
Protected Phases		2	4	4	6
Permitted Phases	2				
Detector Phase	2	2	4	4	
Switch Phase					
Minimum Initial (s)	15.0	15.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	22.5
Total Split (s)	65.0	65.0	55.0	55.0	65.0
Total Split (%)	54.2%	54.2%	45.8%	45.8%	54%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	6.4	6.4	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	C-Max	C-Max	None	None	C-Max
Act Effct Green (s)	60.3	60.3	47.8	47.8	
Actuated g/C Ratio	0.50	0.50	0.40	0.40	
v/c Ratio	0.10	0.59	0.86	0.16	
Control Delay	11.1	15.4	48.2	31.9	
Queue Delay	3.5	0.0	1.4	0.0	
Total Delay	14.6	15.4	49.7	31.9	
LOS	B	B	D	C	
Approach Delay		15.3	49.7	31.9	
Approach LOS		B	D	C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 37.5	Intersection LOS: D
Intersection Capacity Utilization 66.1%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: Montgomery St & W Oglethorpe Ave

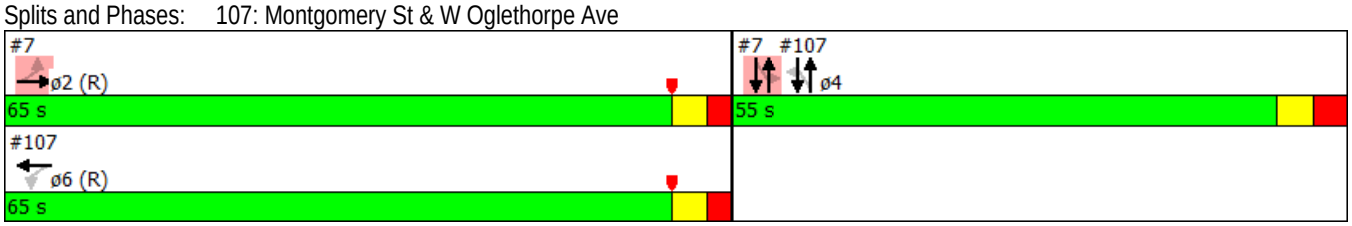


Lane Group	WBL	WBT	NBL	NBT	SBT	ø2
Lane Configurations						
Volume (vph)	53	446	75	633	47	
Turn Type	Perm	NA	Perm	NA	NA	
Protected Phases		6		4	4	2
Permitted Phases	6		4			
Detector Phase	6	6	4	4	4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	12.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	29.4	22.5
Total Split (s)	65.0	65.0	55.0	55.0	55.0	65.0
Total Split (%)	54.2%	54.2%	45.8%	45.8%	45.8%	54%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5		6.4	6.4	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	C-Max
Act Effct Green (s)	60.3	60.3		47.8	47.8	
Actuated g/C Ratio	0.50	0.50		0.40	0.40	
v/c Ratio	0.07	0.81		0.67	0.09	
Control Delay	16.2	35.1		10.9	31.3	
Queue Delay	105.3	0.0		0.0	0.0	
Total Delay	121.5	35.1		10.9	31.3	
LOS	F	D		B	C	
Approach Delay		42.9		10.9	31.3	
Approach LOS		D		B	C	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 25.7 Intersection LOS: C
Intersection Capacity Utilization 67.7% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 107: Montgomery St & W Oglethorpe Ave

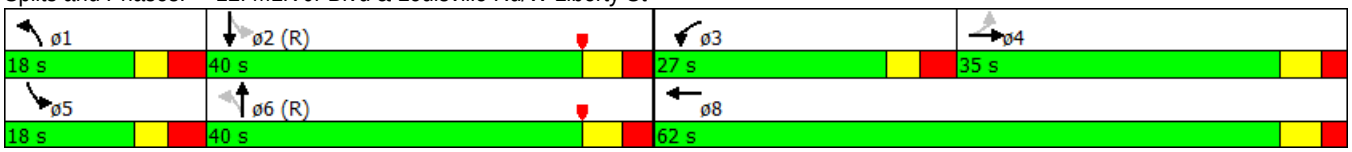


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	71	177	333	179	79	577	33	763
Turn Type	Perm	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases		4	3	8	1	6	5	2
Permitted Phases	4				6		2	
Detector Phase	4	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	27.1	27.1	10.3	27.1	10.5	24.5	10.5	29.5
Total Split (s)	35.0	35.0	27.0	62.0	18.0	40.0	18.0	40.0
Total Split (%)	29.2%	29.2%	22.5%	51.7%	15.0%	33.3%	15.0%	33.3%
Yellow Time (s)	3.6	3.6	3.0	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.5	2.5	3.3	2.5	3.5	2.9	3.5	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	6.1	6.3	6.1	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	25.2	25.2	18.0	49.6	55.5	49.9	50.8	45.7
Actuated g/C Ratio	0.21	0.21	0.15	0.41	0.46	0.42	0.42	0.38
v/c Ratio	0.37	0.82	0.75	0.47	0.34	0.59	0.14	0.70
Control Delay	45.2	60.7	37.5	14.4	23.2	31.3	26.6	47.7
Queue Delay	0.0	0.0	0.0	3.5	0.0	0.0	0.0	0.0
Total Delay	45.2	60.7	37.5	17.9	23.2	31.3	26.6	47.7
LOS	D	E	D	B	C	C	C	D
Approach Delay		57.6		28.1		30.5		46.9
Approach LOS		E		C		C		D

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 6 (5%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 38.6 Intersection LOS: D
Intersection Capacity Utilization 78.4% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 12: MLK Jr Blvd & Louisville Rd/W Liberty St



Lane Group	EBL	EBT	WBT	NBT	NBR	SBR
Lane Configurations						
Volume (vph)	106	408	475	920	662	84
Turn Type	Perm	NA	NA	NA	Perm	Perm
Protected Phases		2	6	4		
Permitted Phases	2				4	4
Detector Phase	2	2	6	4	4	4
Switch Phase						
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	25.6	25.6	25.6	35.4	35.4	35.4
Total Split (s)	40.0	40.0	40.0	80.0	80.0	80.0
Total Split (%)	33.3%	33.3%	33.3%	66.7%	66.7%	66.7%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.4	2.4	2.4	3.2	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	5.6	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	34.4	34.4	34.4	73.6	73.6	73.6
Actuated g/C Ratio	0.29	0.29	0.29	0.61	0.61	0.61
v/c Ratio	1.03	0.80	0.72	0.56	0.91	0.10
Control Delay	131.5	51.0	42.7	15.1	35.5	3.8
Queue Delay	0.0	0.0	0.3	0.0	0.0	0.0
Total Delay	131.5	51.0	43.0	15.1	35.5	3.8
LOS	F	D	D	B	D	A
Approach Delay		67.6	43.0	23.2		
Approach LOS		E	D	C		

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 21 (18%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 34.7 Intersection LOS: C
Intersection Capacity Utilization 77.3% ICU Level of Service D
Analysis Period (min) 15

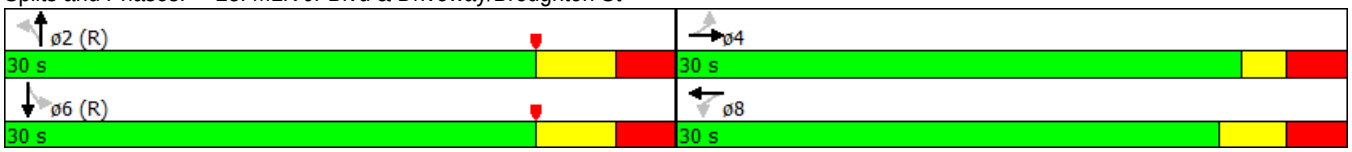
Splits and Phases: 13: Montgomery St & W Liberty St

Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	ø4
Lane Configurations							
Volume (vph)	175	0	5	495	47	464	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		8		2		6	4
Permitted Phases	8		2		6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	15.0	8.0
Minimum Split (s)	28.8	28.8	23.3	23.3	22.3	22.3	26.8
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50%
Yellow Time (s)	3.0	3.0	3.6	3.6	3.6	3.6	2.0
All-Red Time (s)	2.8	2.8	2.7	2.7	2.7	2.7	2.8
Lost Time Adjust (s)		0.0		0.0		0.0	
Total Lost Time (s)		5.8		6.3		6.3	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		16.2		31.7		31.7	
Actuated g/C Ratio		0.27		0.53		0.53	
v/c Ratio		0.73		0.43		0.40	
Control Delay		24.3		15.1		11.1	
Queue Delay		0.0		0.0		0.0	
Total Delay		24.3		15.1		11.1	
LOS		C		B		B	
Approach Delay		24.3		15.1		11.1	
Approach LOS		C		B		B	

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.73
Intersection Signal Delay: 15.3 Intersection LOS: B
Intersection Capacity Utilization 66.4% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 28: MLK Jr Blvd & Driveway/Broughton St

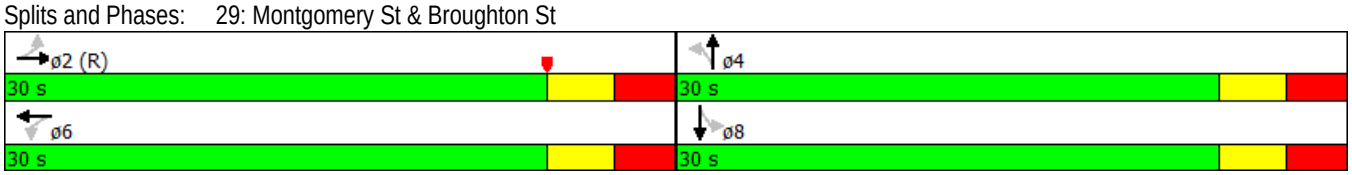


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	2	141	30	154	118	146	17	8
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)		5.8		5.8	5.8	5.8		5.8
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		24.2		24.2	24.2	24.2		24.2
Actuated g/C Ratio		0.40		0.40	0.40	0.40		0.40
v/c Ratio		0.25		0.34	0.25	0.45		0.09
Control Delay		7.4		13.5	18.8	17.5		8.2
Queue Delay		0.0		0.0	0.0	0.0		0.0
Total Delay		7.4		13.5	18.8	17.5		8.2
LOS		A		B	B	B		A
Approach Delay		7.4		13.5		17.9		8.2
Approach LOS		A		B		B		A

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.45
Intersection Signal Delay: 14.3 Intersection LOS: B
Intersection Capacity Utilization 56.1% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 29: Montgomery St & Broughton St

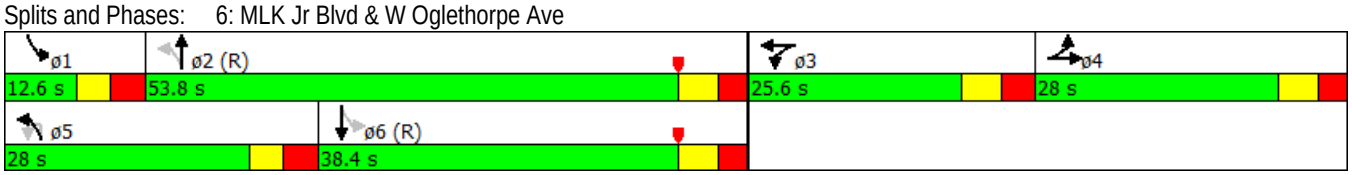


Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	83	391	266	307	60	273	440	155	689
Turn Type	Split	NA	Split	NA	custom	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					5	2		6	
Detector Phase	4	4	3	3	5	5	2	1	6
Switch Phase									
Minimum Initial (s)	15.0	15.0	8.0	8.0	4.0	4.0	15.0	4.0	15.0
Minimum Split (s)	25.3	25.3	25.6	25.6	22.2	22.2	31.3	10.2	31.3
Total Split (s)	28.0	28.0	25.6	25.6	28.0	28.0	53.8	12.6	38.4
Total Split (%)	23.3%	23.3%	21.3%	21.3%	23.3%	23.3%	44.8%	10.5%	32.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.0	3.0	3.6	3.0	3.6
All-Red Time (s)	2.7	2.7	3.0	3.0	3.2	3.2	2.7	3.2	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.6	6.6		6.2	6.3	6.2	6.3
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	None	None	C-Max	None	C-Max
Act Effct Green (s)	21.7	21.7	19.0	19.0		60.2	47.5	38.6	32.1
Actuated g/C Ratio	0.18	0.18	0.16	0.16		0.50	0.40	0.32	0.27
v/c Ratio	0.34	1.15	1.02	1.00		1.15	0.52	0.64	1.14
Control Delay	46.8	126.2	116.1	95.1		139.2	19.1	29.3	112.5
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	46.8	126.2	116.1	95.1		139.2	19.1	29.3	112.5
LOS	D	F	F	F		F	B	C	F
Approach Delay		116.7		102.0			64.2		99.4
Approach LOS		F		F			E		F

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 20 (17%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.15
Intersection Signal Delay: 93.9 Intersection LOS: F
Intersection Capacity Utilization 100.9% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 6: MLK Jr Blvd & W Oglethorpe Ave

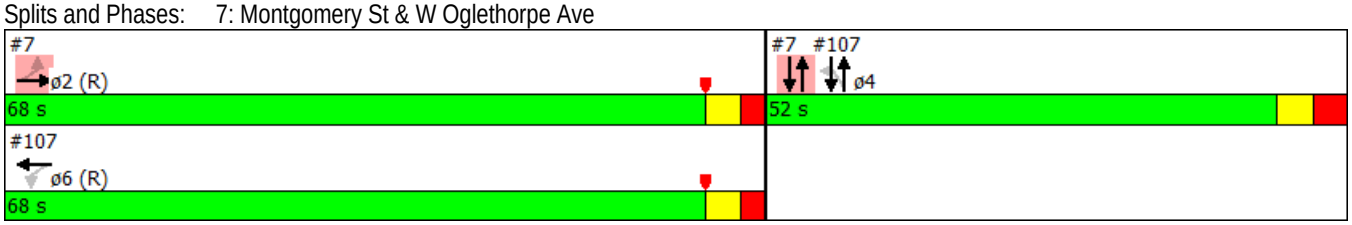


Lane Group	EBL	EBT	NBT	SBT	ø6
Lane Configurations					
Volume (vph)	32	649	382	189	
Turn Type	Perm	NA	NA	NA	
Protected Phases		2	4	4	6
Permitted Phases	2				
Detector Phase	2	2	4	4	
Switch Phase					
Minimum Initial (s)	15.0	15.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	22.5
Total Split (s)	68.0	68.0	52.0	52.0	68.0
Total Split (%)	56.7%	56.7%	43.3%	43.3%	57%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	6.4	6.4	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	C-Max	C-Max	None	None	C-Max
Act Effct Green (s)	70.8	70.8	37.3	37.3	
Actuated g/C Ratio	0.59	0.59	0.31	0.31	
v/c Ratio	0.04	0.84	0.70	0.38	
Control Delay	10.2	23.8	24.7	35.6	
Queue Delay	0.1	0.0	0.2	0.0	
Total Delay	10.2	23.8	24.9	35.6	
LOS	B	C	C	D	
Approach Delay		23.2	24.9	35.6	
Approach LOS		C	C	D	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 25.4 Intersection LOS: C
Intersection Capacity Utilization 73.8% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 7: Montgomery St & W Oglethorpe Ave

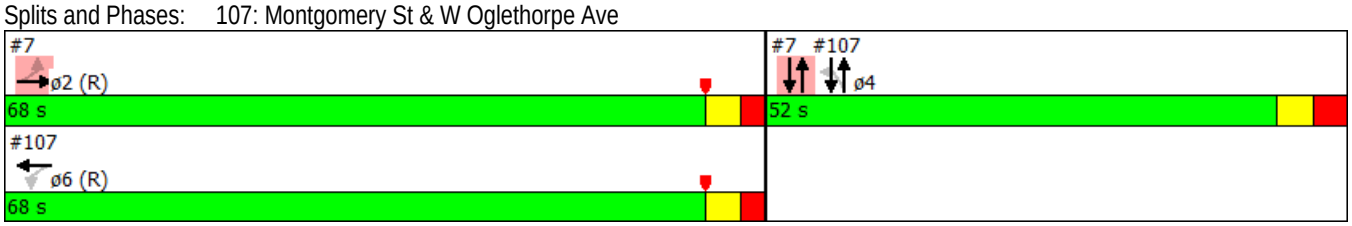


Lane Group	WBL	WBT	NBL	NBT	SBT	ø2
Lane Configurations						
Volume (vph)	97	517	109	305	92	
Turn Type	Perm	NA	Perm	NA	NA	
Protected Phases		6		4	4	2
Permitted Phases	6		4			
Detector Phase	6	6	4	4	4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	12.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	29.4	22.5
Total Split (s)	68.0	68.0	52.0	52.0	52.0	68.0
Total Split (%)	56.7%	56.7%	43.3%	43.3%	43.3%	57%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5		6.4	6.4	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	C-Max
Act Effct Green (s)	70.8	70.8		37.3	37.3	
Actuated g/C Ratio	0.59	0.59		0.31	0.31	
v/c Ratio	0.12	0.67		0.55	0.26	
Control Delay	13.2	23.4		14.0	30.9	
Queue Delay	87.0	0.0		0.0	0.0	
Total Delay	100.2	23.4		14.0	31.0	
LOS	F	C		B	C	
Approach Delay		35.0		14.0	31.0	
Approach LOS		D		B	C	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 27.2 Intersection LOS: C
Intersection Capacity Utilization 74.0% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 107: Montgomery St & W Oglethorpe Ave

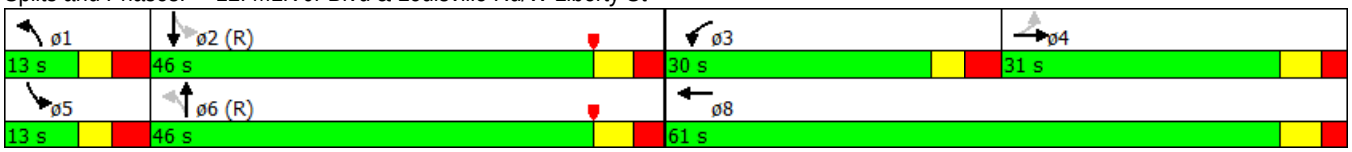


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	67	210	545	298	104	541	239	988
Turn Type	Perm	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases		4	3	8	1	6	5	2
Permitted Phases	4				6		2	
Detector Phase	4	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	27.1	27.1	10.3	27.1	10.5	24.5	10.5	29.5
Total Split (s)	31.0	31.0	30.0	61.0	13.0	46.0	13.0	46.0
Total Split (%)	25.8%	25.8%	25.0%	50.8%	10.8%	38.3%	10.8%	38.3%
Yellow Time (s)	3.6	3.6	3.0	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.5	2.5	3.3	2.5	3.5	2.9	3.5	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	6.1	6.3	6.1	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	24.9	24.9	23.5	54.7	46.0	39.5	46.3	39.7
Actuated g/C Ratio	0.21	0.21	0.20	0.46	0.38	0.33	0.39	0.33
v/c Ratio	0.39	0.95	0.94	0.57	0.74	0.66	1.05	1.01
Control Delay	48.9	81.7	62.6	37.6	52.4	36.9	91.6	75.9
Queue Delay	0.0	0.0	0.8	20.7	0.0	0.0	3.0	0.0
Total Delay	48.9	81.7	63.4	58.3	52.4	37.0	94.7	75.9
LOS	D	F	E	E	D	D	F	E
Approach Delay		75.9		61.2		39.1		79.5
Approach LOS		E		E		D		E

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 10 (8%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.05
Intersection Signal Delay: 64.6 Intersection LOS: E
Intersection Capacity Utilization 95.3% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 12: MLK Jr Blvd & Louisville Rd/W Liberty St

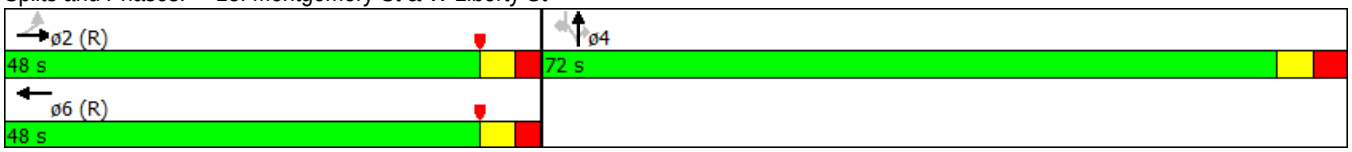


Lane Group	EBL	EBT	WBT	NBT	NBR	SBR
Lane Configurations						
Volume (vph)	87	462	673	606	415	187
Turn Type	Perm	NA	NA	NA	Perm	Perm
Protected Phases		2	6	4		
Permitted Phases	2				4	4
Detector Phase	2	2	6	4	4	4
Switch Phase						
Minimum Initial (s)	11.0	11.0	11.0	11.0	11.0	11.0
Minimum Split (s)	25.6	25.6	25.6	35.4	35.4	35.4
Total Split (s)	48.0	48.0	48.0	72.0	72.0	72.0
Total Split (%)	40.0%	40.0%	40.0%	60.0%	60.0%	60.0%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.4	2.4	2.4	3.2	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	5.6	6.4	6.4	6.4
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max
Act Effct Green (s)	42.4	42.4	42.4	65.6	65.6	65.6
Actuated g/C Ratio	0.35	0.35	0.35	0.55	0.55	0.55
v/c Ratio	0.94	0.74	0.81	0.45	0.67	0.25
Control Delay	74.6	24.4	41.6	17.4	21.7	6.8
Queue Delay	0.0	1.1	1.0	0.1	0.0	0.1
Total Delay	74.6	25.5	42.6	17.6	21.7	6.9
LOS	E	C	D	B	C	A
Approach Delay		33.3	42.6	19.1		
Approach LOS		C	D	B		

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.94
Intersection Signal Delay: 28.1 Intersection LOS: C
Intersection Capacity Utilization 76.9% ICU Level of Service D
Analysis Period (min) 15

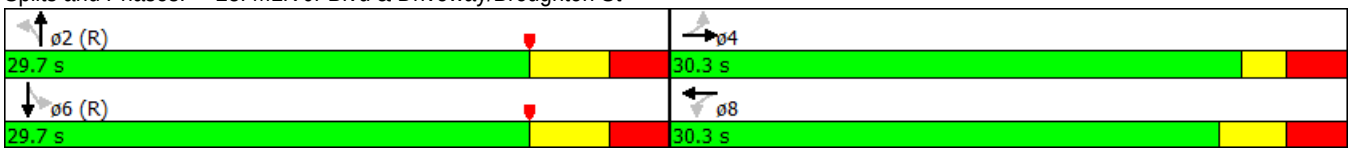
Splits and Phases: 13: Montgomery St & W Liberty St



Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	ø4
Lane Configurations							
Volume (vph)	285	5	4	548	44	610	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		8		2		6	4
Permitted Phases	8		2		6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	15.0	8.0
Minimum Split (s)	28.8	28.8	23.3	23.3	22.3	22.3	26.8
Total Split (s)	30.3	30.3	29.7	29.7	29.7	29.7	30.3
Total Split (%)	50.5%	50.5%	49.5%	49.5%	49.5%	49.5%	51%
Yellow Time (s)	3.0	3.0	3.6	3.6	3.6	3.6	2.0
All-Red Time (s)	2.8	2.8	2.7	2.7	2.7	2.7	2.8
Lost Time Adjust (s)		0.0		0.0		0.0	
Total Lost Time (s)		5.8		6.3		6.3	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		23.4		24.5		24.5	
Actuated g/C Ratio		0.39		0.41		0.41	
v/c Ratio		0.93		0.64		0.66	
Control Delay		43.6		15.6		18.5	
Queue Delay		0.3		0.0		0.0	
Total Delay		44.0		15.6		18.5	
LOS		D		B		B	
Approach Delay		44.0		15.6		18.5	
Approach LOS		D		B		B	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 23.7	Intersection LOS: C
Intersection Capacity Utilization 85.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 28: MLK Jr Blvd & Driveway/Broughton St

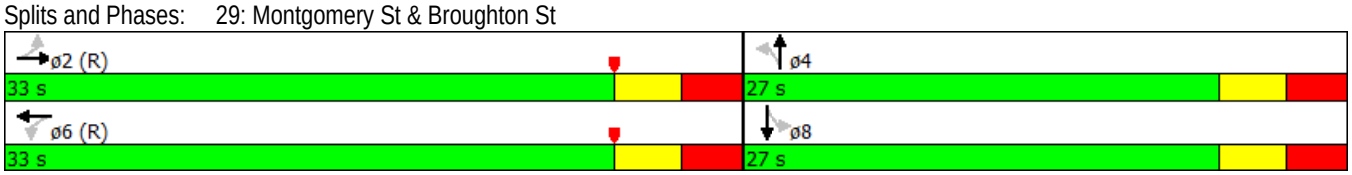


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	6	208	42	248	181	122	20	37
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Total Split (s)	33.0	33.0	33.0	33.0	27.0	27.0	27.0	27.0
Total Split (%)	55.0%	55.0%	55.0%	55.0%	45.0%	45.0%	45.0%	45.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)		0.0		0.0	0.0	0.0		0.0
Total Lost Time (s)		5.8		5.8	5.8	5.8		5.8
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)		27.2		27.2	21.2	21.2		21.2
Actuated g/C Ratio		0.45		0.45	0.35	0.35		0.35
v/c Ratio		0.35		0.53	0.45	0.48		0.17
Control Delay		8.9		14.3	25.5	18.6		10.8
Queue Delay		0.0		0.0	2.8	0.0		0.3
Total Delay		8.9		14.3	28.3	18.6		11.1
LOS		A		B	C	B		B
Approach Delay		8.9		14.3		22.3		11.1
Approach LOS		A		B		C		B

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.53
Intersection Signal Delay: 16.2 Intersection LOS: B
Intersection Capacity Utilization 75.2% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 29: Montgomery St & Broughton St

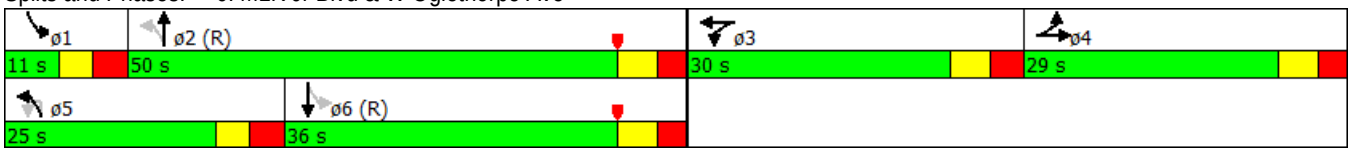


Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	69	330	222	257	60	232	371	133	576
Turn Type	Split	NA	Split	NA	custom	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					5	2		6	
Detector Phase	4	4	3	3	5	5	2	1	6
Switch Phase									
Minimum Initial (s)	15.0	15.0	8.0	8.0	4.0	4.0	15.0	4.0	15.0
Minimum Split (s)	25.3	25.3	25.6	25.6	22.2	22.2	31.3	10.2	31.3
Total Split (s)	29.0	29.0	30.0	30.0	25.0	25.0	50.0	11.0	36.0
Total Split (%)	24.2%	24.2%	25.0%	25.0%	20.8%	20.8%	41.7%	9.2%	30.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.0	3.0	3.6	3.0	3.6
All-Red Time (s)	2.7	2.7	3.0	3.0	3.2	3.2	2.7	3.2	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.6	6.6		6.2	6.3	6.2	6.3
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	None	None	C-Max	None	C-Max
Act Effct Green (s)	22.7	22.7	23.4	23.4		54.8	43.7	34.6	29.7
Actuated g/C Ratio	0.19	0.19	0.20	0.20		0.46	0.36	0.29	0.25
v/c Ratio	0.27	0.93	0.69	0.68		1.14	0.48	0.59	1.03
Control Delay	44.5	65.0	54.1	46.7		118.2	29.3	35.9	80.1
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	44.5	65.0	54.1	46.7		118.2	29.3	35.9	80.1
LOS	D	E	D	D		F	C	D	F
Approach Delay		62.5		49.1			63.3		73.0
Approach LOS		E		D			E		E

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.14
Intersection Signal Delay: 63.4 Intersection LOS: E
Intersection Capacity Utilization 88.8% ICU Level of Service E
Analysis Period (min) 15

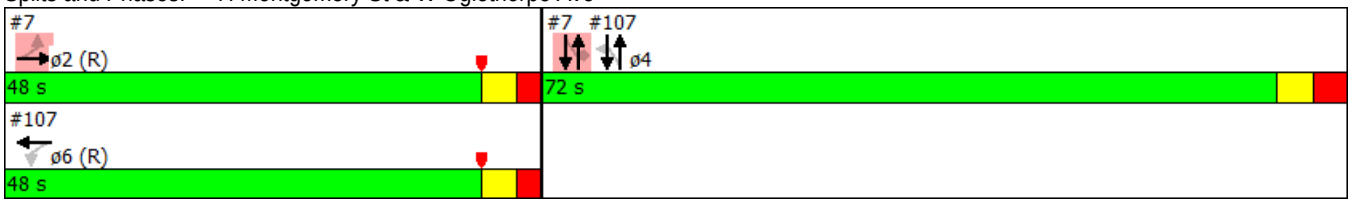
Splits and Phases: 6: MLK Jr Blvd & W Oglethorpe Ave



Lane Group	EBL	EBT	NBT	NBR	SBT	ø6
Lane Configurations						
Volume (vph)	27	546	319	202	161	
Turn Type	Perm	NA	NA	Perm	NA	
Protected Phases		2	4		4	6
Permitted Phases	2			4		
Detector Phase	2	2	4	4	4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	12.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	29.4	22.5
Total Split (s)	48.0	48.0	72.0	72.0	72.0	48.0
Total Split (%)	40.0%	40.0%	60.0%	60.0%	60.0%	40%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	6.4	6.4	6.4	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	C-Max
Act Effct Green (s)	63.8	63.8	44.3	44.3	44.3	
Actuated g/C Ratio	0.53	0.53	0.37	0.37	0.37	
v/c Ratio	0.03	0.81	0.62	0.36	0.28	
Control Delay	11.3	26.8	26.3	6.4	33.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	11.3	26.8	26.3	6.4	33.1	
LOS	B	C	C	A	C	
Approach Delay		26.1	18.6		33.1	
Approach LOS		C	B		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 24.0	Intersection LOS: C
Intersection Capacity Utilization 75.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 7: Montgomery St & W Oglethorpe Ave

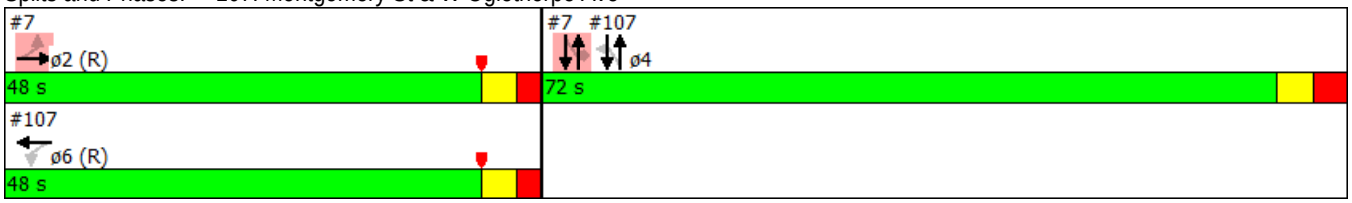


Lane Group	WBL	WBT	NBL	NBT	SBT	ø2
Lane Configurations						
Volume (vph)	84	432	91	255	77	
Turn Type	Perm	NA	Perm	NA	NA	
Protected Phases		6		4	4	2
Permitted Phases	6		4			
Detector Phase	6	6	4	4	4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	12.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	29.4	22.5
Total Split (s)	48.0	48.0	72.0	72.0	72.0	48.0
Total Split (%)	40.0%	40.0%	60.0%	60.0%	60.0%	40%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5		6.4	6.4	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	C-Max
Act Effct Green (s)	63.8	63.8		44.3	44.3	
Actuated g/C Ratio	0.53	0.53		0.37	0.37	
v/c Ratio	0.11	0.64		0.71	0.19	
Control Delay	18.0	27.8		13.1	18.0	
Queue Delay	29.3	0.0		0.0	0.0	
Total Delay	47.2	27.8		13.1	18.0	
LOS	D	C		B	B	
Approach Delay		30.8		13.1	18.0	
Approach LOS		C		B	B	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 23.3 Intersection LOS: C
Intersection Capacity Utilization 63.8% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 107: Montgomery St & W Oglethorpe Ave

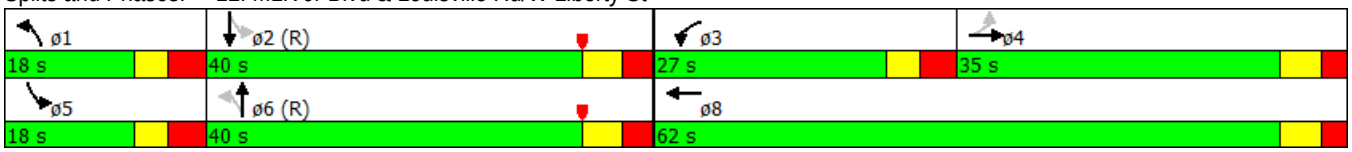


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	56	176	456	250	87	452	200	872
Turn Type	Perm	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases		4	3	8	1	6	5	2
Permitted Phases	4				6		2	
Detector Phase	4	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	27.1	27.1	10.3	27.1	10.5	24.5	10.5	29.5
Total Split (s)	35.0	35.0	27.0	62.0	18.0	40.0	18.0	40.0
Total Split (%)	29.2%	29.2%	22.5%	51.7%	15.0%	33.3%	15.0%	33.3%
Yellow Time (s)	3.6	3.6	3.0	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.5	2.5	3.3	2.5	3.5	2.9	3.5	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	6.1	6.3	6.1	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	24.6	24.6	20.3	51.3	46.5	38.2	52.8	41.3
Actuated g/C Ratio	0.20	0.20	0.17	0.43	0.39	0.32	0.44	0.34
v/c Ratio	0.32	0.80	0.91	0.51	0.46	0.58	0.63	0.86
Control Delay	43.8	59.7	95.6	12.8	28.0	36.7	23.1	40.2
Queue Delay	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0
Total Delay	43.8	59.7	95.6	13.3	28.0	36.7	23.1	40.2
LOS	D	E	F	B	C	D	C	D
Approach Delay		56.9		60.1		35.5		37.1
Approach LOS		E		E		D		D

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 68.5 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 45.4 Intersection LOS: D
Intersection Capacity Utilization 84.6% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 12: MLK Jr Blvd & Louisville Rd/W Liberty St



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations							
Volume (vph)	77	386	563	68	513	347	156
Turn Type	Perm	NA	NA	Perm	NA	Perm	Perm
Protected Phases		2	6		4		
Permitted Phases	2			4		4	4
Detector Phase	2	2	6	4	4	4	4
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	25.6	25.6	25.6	35.4	35.4	35.4	35.4
Total Split (s)	36.0	36.0	36.0	84.0	84.0	84.0	84.0
Total Split (%)	30.0%	30.0%	30.0%	70.0%	70.0%	70.0%	70.0%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.4	2.4	2.4	3.2	3.2	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	5.6	6.4	6.4	6.4	6.4
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	30.4	30.4	30.4	77.6	77.6	77.6	77.6
Actuated g/C Ratio	0.25	0.25	0.25	0.65	0.65	0.65	0.65
v/c Ratio	1.34	0.86	0.92	0.07	0.52	0.46	0.18
Control Delay	258.9	67.2	61.0	8.1	13.4	11.1	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	258.9	67.2	61.0	8.1	13.4	11.1	4.8
LOS	F	E	E	A	B	B	A
Approach Delay		99.2	61.0		12.1		
Approach LOS		F	E		B		

Intersection Summary

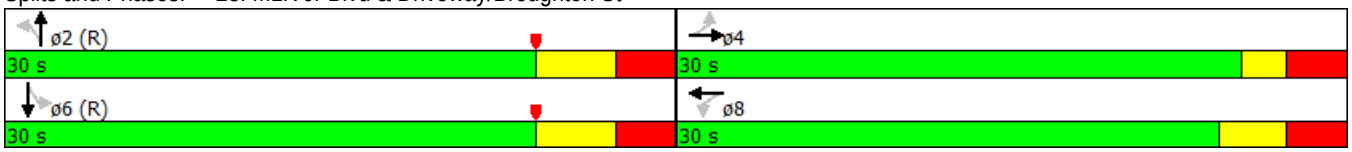
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 1.34
Intersection Signal Delay: 44.4 Intersection LOS: D
Intersection Capacity Utilization 75.4% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 13: Montgomery St & W Liberty St

Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	ø4
Lane Configurations							
Volume (vph)	238	4	3	461	37	513	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		8		2		6	4
Permitted Phases	8		2		6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	15.0	8.0
Minimum Split (s)	28.8	28.8	23.3	23.3	22.3	22.3	26.8
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50%
Yellow Time (s)	3.0	3.0	3.6	3.6	3.6	3.6	2.0
All-Red Time (s)	2.8	2.8	2.7	2.7	2.7	2.7	2.8
Lost Time Adjust (s)		0.0		0.0		0.0	
Total Lost Time (s)		5.8		6.3		6.3	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		20.9		27.0		27.0	
Actuated g/C Ratio		0.35		0.45		0.45	
v/c Ratio		0.86		0.49		0.49	
Control Delay		32.5		5.4		14.4	
Queue Delay		0.0		0.0		0.0	
Total Delay		32.6		5.4		14.4	
LOS		C		A		B	
Approach Delay		32.6		5.4		14.4	
Approach LOS		C		A		B	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 55	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 15.4	Intersection LOS: B
Intersection Capacity Utilization 74.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 28: MLK Jr Blvd & Driveway/Broughton St

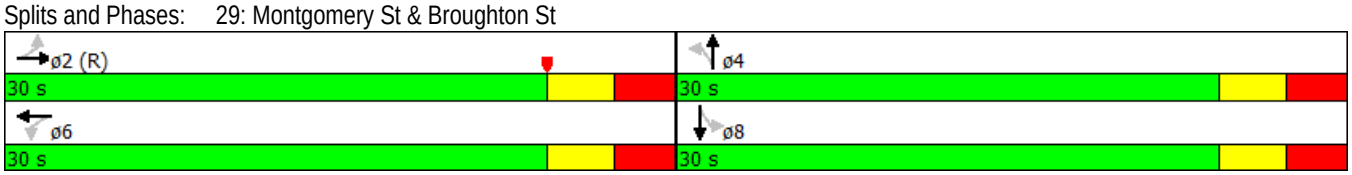


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	5	174	37	207	153	102	17	31
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.8		5.8		5.8		5.8
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		24.2		24.2		24.2		24.2
Actuated g/C Ratio		0.40		0.40		0.40		0.40
v/c Ratio		0.33		0.49		0.71		0.13
Control Delay		8.6		15.7		29.3		9.0
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		8.6		15.7		29.3		9.0
LOS		A		B		C		A
Approach Delay		8.6		15.7		29.3		9.0
Approach LOS		A		B		C		A

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Yellow
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 19.2 Intersection LOS: B
Intersection Capacity Utilization 76.9% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 29: Montgomery St & Broughton St

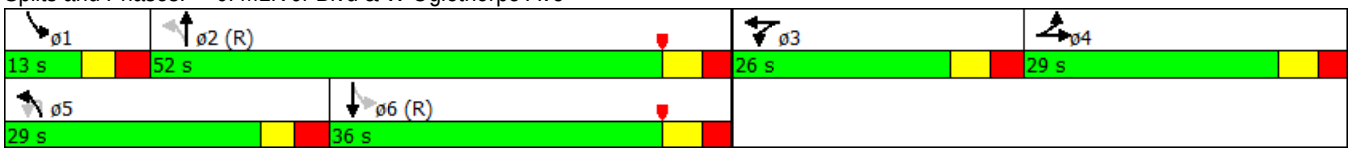


Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	69	330	222	257	60	232	371	133	576
Turn Type	Split	NA	Split	NA	custom	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					5	2		6	
Detector Phase	4	4	3	3	5	5	2	1	6
Switch Phase									
Minimum Initial (s)	15.0	15.0	8.0	8.0	4.0	4.0	15.0	4.0	15.0
Minimum Split (s)	25.3	25.3	25.6	25.6	22.2	22.2	31.3	10.2	31.3
Total Split (s)	29.0	29.0	26.0	26.0	29.0	29.0	52.0	13.0	36.0
Total Split (%)	24.2%	24.2%	21.7%	21.7%	24.2%	24.2%	43.3%	10.8%	30.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.0	3.0	3.6	3.0	3.6
All-Red Time (s)	2.7	2.7	3.0	3.0	3.2	3.2	2.7	3.2	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.6	6.6		6.2	6.3	6.2	6.3
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	None	None	C-Max	None	C-Max
Act Effct Green (s)	22.7	22.7	19.4	19.4		58.8	45.7	36.7	29.8
Actuated g/C Ratio	0.19	0.19	0.16	0.16		0.49	0.38	0.31	0.25
v/c Ratio	0.27	0.93	0.83	0.82		0.97	0.46	0.54	1.03
Control Delay	44.5	65.0	73.4	60.6		88.3	24.2	29.0	79.9
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	44.5	65.0	73.4	60.6		88.3	24.2	29.0	79.9
LOS	D	E	E	E		F	C	C	E
Approach Delay		62.5		64.8			48.7		71.7
Approach LOS		E		E			D		E

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.03
Intersection Signal Delay: 61.9 Intersection LOS: E
Intersection Capacity Utilization 88.8% ICU Level of Service E
Analysis Period (min) 15

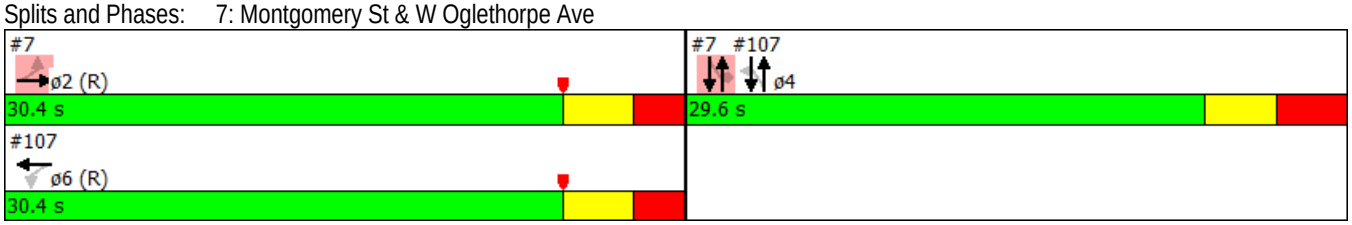
Splits and Phases: 6: MLK Jr Blvd & W Oglethorpe Ave



Lane Group	EBL	EBT	NBT	NBR	SBT	ø6
Lane Configurations						
Volume (vph)	27	546	319	202	161	
Turn Type	Perm	NA	NA	Perm	NA	
Protected Phases		2	4		4	6
Permitted Phases	2			4		
Detector Phase	2	2	4	4	4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	12.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	29.4	22.5
Total Split (s)	30.4	30.4	29.6	29.6	29.6	30.4
Total Split (%)	50.7%	50.7%	49.3%	49.3%	49.3%	51%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	6.4	6.4	6.4	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	C-Max
Act Effct Green (s)	27.6	27.6	20.5	20.5	20.5	
Actuated g/C Ratio	0.46	0.46	0.34	0.34	0.34	
v/c Ratio	0.04	0.91	0.67	0.39	0.29	
Control Delay	8.3	31.1	29.1	12.1	17.0	
Queue Delay	0.0	0.0	0.1	0.0	0.0	
Total Delay	8.3	31.1	29.3	12.1	17.0	
LOS	A	C	C	B	B	
Approach Delay		30.1	22.6		17.0	
Approach LOS		C	C		B	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 25.5	Intersection LOS: C
Intersection Capacity Utilization 80.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 7: Montgomery St & W Oglethorpe Ave

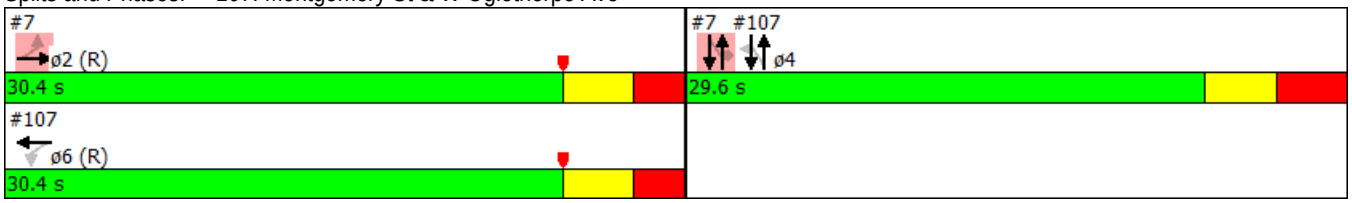


Lane Group	WBL	WBT	NBL	NBT	SBT	ø2
Lane Configurations						
Volume (vph)	84	432	91	255	77	
Turn Type	Perm	NA	Perm	NA	NA	
Protected Phases		6		4	4	2
Permitted Phases	6		4			
Detector Phase	6	6	4	4	4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	12.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	29.4	22.5
Total Split (s)	30.4	30.4	29.6	29.6	29.6	30.4
Total Split (%)	50.7%	50.7%	49.3%	49.3%	49.3%	51%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5		6.4	6.4	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	C-Max
Act Effct Green (s)	27.6	27.6		20.5	20.5	
Actuated g/C Ratio	0.46	0.46		0.34	0.34	
v/c Ratio	0.13	0.71		0.75	0.20	
Control Delay	11.4	22.5		12.8	5.1	
Queue Delay	7.5	0.0		0.0	0.0	
Total Delay	18.9	22.5		12.8	5.2	
LOS	B	C		B	A	
Approach Delay		21.9		12.8	5.2	
Approach LOS		C		B	A	

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 16.9 Intersection LOS: B
Intersection Capacity Utilization 63.8% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 107: Montgomery St & W Oglethorpe Ave

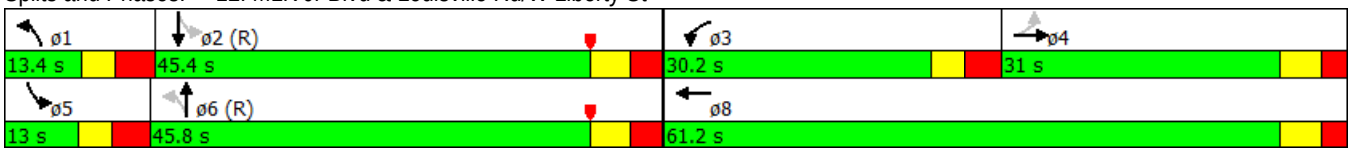


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	56	176	456	250	87	452	200	872
Turn Type	Perm	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases		4	3	8	1	6	5	2
Permitted Phases	4				6		2	
Detector Phase	4	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	27.1	27.1	10.3	27.1	10.5	24.5	10.5	29.5
Total Split (s)	31.0	31.0	30.2	61.2	13.4	45.8	13.0	45.4
Total Split (%)	25.8%	25.8%	25.2%	51.0%	11.2%	38.2%	10.8%	37.8%
Yellow Time (s)	3.6	3.6	3.0	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.5	2.5	3.3	2.5	3.5	2.9	3.5	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	6.1	6.3	6.1	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	23.2	23.2	22.1	51.6	48.0	41.4	50.6	42.7
Actuated g/C Ratio	0.19	0.19	0.18	0.43	0.40	0.34	0.42	0.36
v/c Ratio	0.33	0.85	0.84	0.50	0.50	0.53	0.67	0.83
Control Delay	46.8	67.0	50.3	32.3	29.9	32.9	45.4	54.3
Queue Delay	0.0	0.0	0.1	7.2	0.0	0.0	0.0	0.0
Total Delay	46.8	67.0	50.4	39.5	29.9	32.9	45.4	54.3
LOS	D	E	D	D	C	C	D	D
Approach Delay		63.4		45.6		32.5		52.6
Approach LOS		E		D		C		D

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 47.3 Intersection LOS: D
Intersection Capacity Utilization 84.6% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 12: MLK Jr Blvd & Louisville Rd/W Liberty St

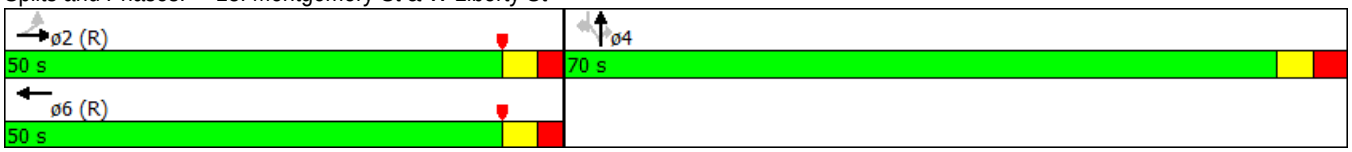


Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations							
Volume (vph)	77	386	563	68	513	347	156
Turn Type	Perm	NA	NA	Perm	NA	Perm	Perm
Protected Phases		2	6		4		
Permitted Phases	2			4		4	4
Detector Phase	2	2	6	4	4	4	4
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	25.6	25.6	25.6	35.4	35.4	35.4	35.4
Total Split (s)	50.0	50.0	50.0	70.0	70.0	70.0	70.0
Total Split (%)	41.7%	41.7%	41.7%	58.3%	58.3%	58.3%	58.3%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.4	2.4	2.4	3.2	3.2	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	5.6	6.4	6.4	6.4	6.4
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)	44.4	44.4	44.4	63.6	63.6	63.6	63.6
Actuated g/C Ratio	0.37	0.37	0.37	0.53	0.53	0.53	0.53
v/c Ratio	0.57	0.59	0.66	0.09	0.66	0.56	0.21
Control Delay	31.4	22.0	34.3	14.4	24.9	16.4	13.1
Queue Delay	0.0	0.4	0.2	0.0	0.0	0.0	0.1
Total Delay	31.4	22.4	34.5	14.4	24.9	16.4	13.1
LOS	C	C	C	B	C	B	B
Approach Delay		23.9	34.5		21.0		
Approach LOS		C	C		C		

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 25.0 Intersection LOS: C
Intersection Capacity Utilization 75.5% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 13: Montgomery St & W Liberty St

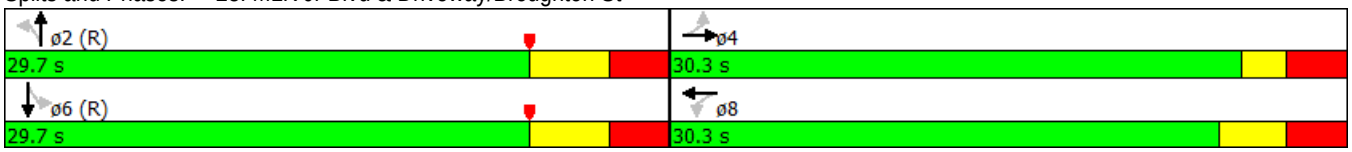


Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	ø4
Lane Configurations							
Volume (vph)	238	4	3	461	37	513	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		8		2		6	4
Permitted Phases	8		2		6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	15.0	8.0
Minimum Split (s)	28.8	28.8	23.3	23.3	22.3	22.3	26.8
Total Split (s)	30.3	30.3	29.7	29.7	29.7	29.7	30.3
Total Split (%)	50.5%	50.5%	49.5%	49.5%	49.5%	49.5%	51%
Yellow Time (s)	3.0	3.0	3.6	3.6	3.6	3.6	2.0
All-Red Time (s)	2.8	2.8	2.7	2.7	2.7	2.7	2.8
Lost Time Adjust (s)		0.0		0.0		0.0	
Total Lost Time (s)		5.8		6.3		6.3	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		21.0		26.9		26.9	
Actuated g/C Ratio		0.35		0.45		0.45	
v/c Ratio		0.85		0.49		0.49	
Control Delay		31.8		11.5		14.5	
Queue Delay		0.0		0.0		0.0	
Total Delay		31.8		11.5		14.5	
LOS		C		B		B	
Approach Delay		31.8		11.5		14.5	
Approach LOS		C		B		B	

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 17.6 Intersection LOS: B
Intersection Capacity Utilization 74.4% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 28: MLK Jr Blvd & Driveway/Broughton St

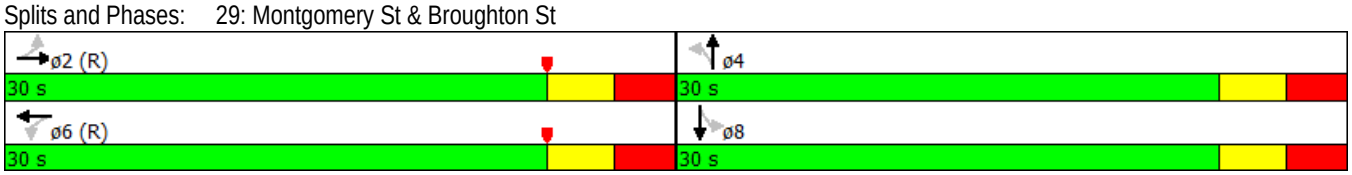


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	5	174	37	207	153	102	17	31
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.8		5.8		5.8		5.8
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)		24.2		24.2		24.2		24.2
Actuated g/C Ratio		0.40		0.40		0.40		0.40
v/c Ratio		0.33		0.49		0.71		0.13
Control Delay		6.2		15.7		23.0		9.0
Queue Delay		0.0		0.0		0.8		0.0
Total Delay		6.2		15.7		23.8		9.1
LOS		A		B		C		A
Approach Delay		6.2		15.7		23.8		9.1
Approach LOS		A		B		C		A

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 16.5 Intersection LOS: B
Intersection Capacity Utilization 76.9% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 29: Montgomery St & Broughton St

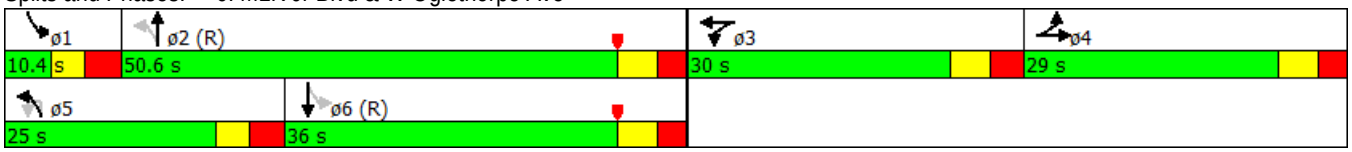


Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	100	295	205	269	60	216	411	92	398
Turn Type	Split	NA	Split	NA	custom	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					5	2		6	
Detector Phase	4	4	3	3	5	5	2	1	6
Switch Phase									
Minimum Initial (s)	15.0	15.0	8.0	8.0	4.0	4.0	15.0	4.0	15.0
Minimum Split (s)	25.3	25.3	25.6	25.6	22.2	22.2	31.3	10.2	31.3
Total Split (s)	29.0	29.0	30.0	30.0	25.0	25.0	50.6	10.4	36.0
Total Split (%)	24.2%	24.2%	25.0%	25.0%	20.8%	20.8%	42.2%	8.7%	30.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.0	3.0	3.6	3.0	3.6
All-Red Time (s)	2.7	2.7	3.0	3.0	3.2	3.2	2.7	3.2	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.6	6.6		6.2	6.3	6.2	6.3
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	None	None	C-Max	None	C-Max
Act Effct Green (s)	22.7	22.7	23.4	23.4		54.8	44.3	34.2	29.9
Actuated g/C Ratio	0.19	0.19	0.20	0.20		0.46	0.37	0.28	0.25
v/c Ratio	0.39	0.80	0.68	0.68		0.92	0.53	0.44	0.77
Control Delay	47.2	52.4	32.0	26.9		59.8	32.8	29.5	44.0
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	47.2	52.4	32.0	26.9		59.8	32.8	29.5	44.0
LOS	D	D	C	C		E	C	C	D
Approach Delay		51.4		28.6			42.1		41.8
Approach LOS		D		C			D		D

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 105
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 41.2 Intersection LOS: D
Intersection Capacity Utilization 79.6% ICU Level of Service D
Analysis Period (min) 15

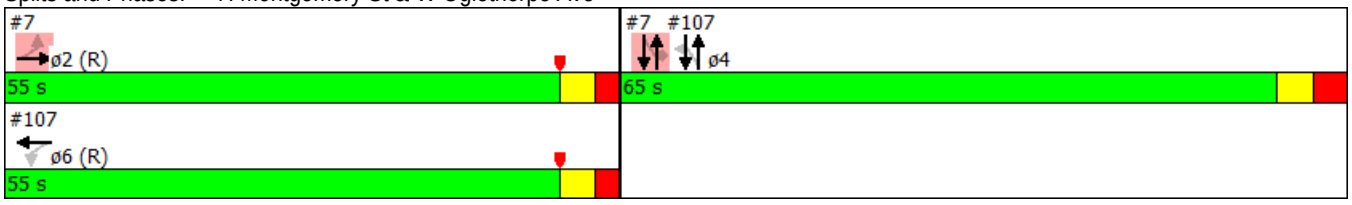
Splits and Phases: 6: MLK Jr Blvd & W Oglethorpe Ave



Lane Group	EBL	EBT	NBT	NBR	SBT	ø6
Lane Configurations						
Volume (vph)	73	357	635	316	100	
Turn Type	Perm	NA	NA	Perm	NA	
Protected Phases		2	4		4	6
Permitted Phases	2			4		
Detector Phase	2	2	4	4	4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	12.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	29.4	22.5
Total Split (s)	55.0	55.0	65.0	65.0	65.0	55.0
Total Split (%)	45.8%	45.8%	54.2%	54.2%	54.2%	46%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	6.4	6.4	6.4	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	C-Max
Act Effct Green (s)	49.5	49.5	58.6	58.6	58.6	
Actuated g/C Ratio	0.41	0.41	0.49	0.49	0.49	
v/c Ratio	0.12	0.72	0.94	0.44	0.13	
Control Delay	29.0	46.9	34.1	6.9	26.8	
Queue Delay	143.1	0.0	1.9	0.0	0.0	
Total Delay	172.2	46.9	36.1	6.9	26.8	
LOS	F	D	D	A	C	
Approach Delay		65.2	26.4		26.8	
Approach LOS		E	C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 26 (22%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 38.9	Intersection LOS: D
Intersection Capacity Utilization 72.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 7: Montgomery St & W Oglethorpe Ave

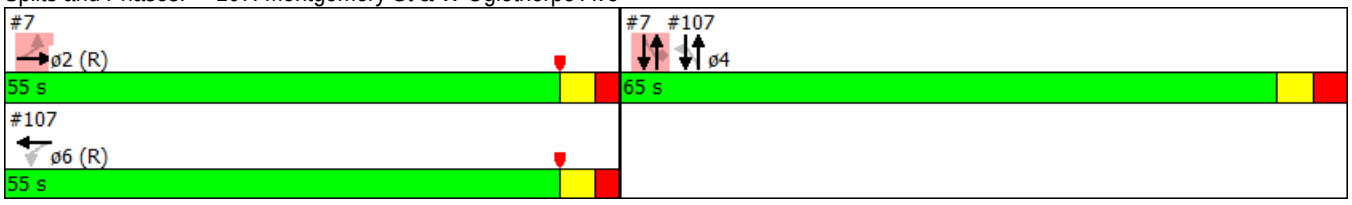


Lane Group	WBL	WBT	NBL	NBT	SBT	ø2
Lane Configurations						
Volume (vph)	53	446	75	633	47	
Turn Type	Perm	NA	Perm	NA	NA	
Protected Phases		6		4	4	2
Permitted Phases	6		4			
Detector Phase	6	6	4	4	4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	12.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	29.4	22.5
Total Split (s)	55.0	55.0	65.0	65.0	65.0	55.0
Total Split (%)	45.8%	45.8%	54.2%	54.2%	54.2%	46%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5		6.4	6.4	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	C-Max
Act Effct Green (s)	49.5	49.5		58.6	58.6	
Actuated g/C Ratio	0.41	0.41		0.49	0.49	
v/c Ratio	0.09	0.98		0.99	0.07	
Control Delay	22.0	67.4		32.8	14.0	
Queue Delay	119.5	0.0		0.0	0.0	
Total Delay	141.5	67.4		32.8	14.0	
LOS	F	E		C	B	
Approach Delay		74.1		32.8	14.0	
Approach LOS		E		C	B	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 26 (22%), Referenced to phase 2:EBTL and 6:, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.99
Intersection Signal Delay: 50.1 Intersection LOS: D
Intersection Capacity Utilization 90.8% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 107: Montgomery St & W Oglethorpe Ave

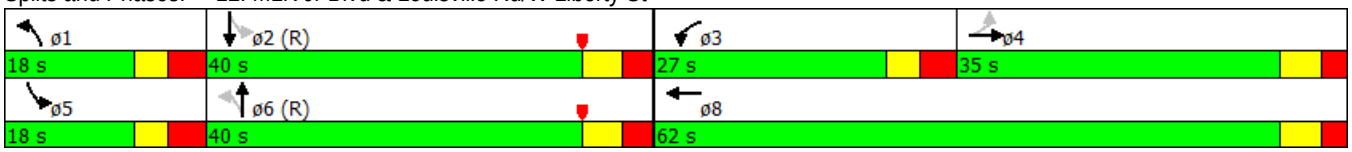


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	71	177	333	179	79	577	33	763
Turn Type	Perm	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases		4	3	8	1	6	5	2
Permitted Phases	4				6		2	
Detector Phase	4	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	27.1	27.1	10.3	27.1	10.5	24.5	10.5	29.5
Total Split (s)	35.0	35.0	27.0	62.0	18.0	40.0	18.0	40.0
Total Split (%)	29.2%	29.2%	22.5%	51.7%	15.0%	33.3%	15.0%	33.3%
Yellow Time (s)	3.6	3.6	3.0	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.5	2.5	3.3	2.5	3.5	2.9	3.5	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	6.1	6.3	6.1	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	25.2	25.2	18.0	49.6	55.5	49.9	50.8	45.7
Actuated g/C Ratio	0.21	0.21	0.15	0.41	0.46	0.42	0.42	0.38
v/c Ratio	0.37	0.82	0.75	0.47	0.34	0.59	0.14	0.70
Control Delay	45.2	60.7	86.6	9.1	23.2	31.3	15.0	32.7
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Total Delay	45.2	60.7	86.6	9.4	23.2	31.3	15.0	32.7
LOS	D	E	F	A	C	C	B	C
Approach Delay		57.6		49.4		30.5		32.0
Approach LOS		E		D		C		C

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 68.5 (57%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 39.1 Intersection LOS: D
Intersection Capacity Utilization 78.4% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 12: MLK Jr Blvd & Louisville Rd/W Liberty St



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations							
Volume (vph)	106	408	475	72	920	662	84
Turn Type	Perm	NA	NA	Perm	NA	Perm	Perm
Protected Phases		2	6		4		
Permitted Phases	2			4		4	4
Detector Phase	2	2	6	4	4	4	4
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	25.6	25.6	25.6	35.4	35.4	35.4	35.4
Total Split (s)	36.0	36.0	36.0	84.0	84.0	84.0	84.0
Total Split (%)	30.0%	30.0%	30.0%	70.0%	70.0%	70.0%	70.0%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.4	2.4	2.4	3.2	3.2	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	5.6	6.4	6.4	6.4	6.4
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	30.4	30.4	30.4	77.6	77.6	77.6	77.6
Actuated g/C Ratio	0.25	0.25	0.25	0.65	0.65	0.65	0.65
v/c Ratio	1.39	0.91	0.83	0.08	0.93	0.87	0.10
Control Delay	265.2	67.8	51.5	8.1	35.5	29.6	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	265.2	67.8	51.5	8.1	35.5	29.6	2.2
LOS	F	E	D	A	D	C	A
Approach Delay		108.6	51.5		31.9		
Approach LOS		F	D		C		

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 1.39
Intersection Signal Delay: 49.0 Intersection LOS: D
Intersection Capacity Utilization 97.4% ICU Level of Service F
Analysis Period (min) 15

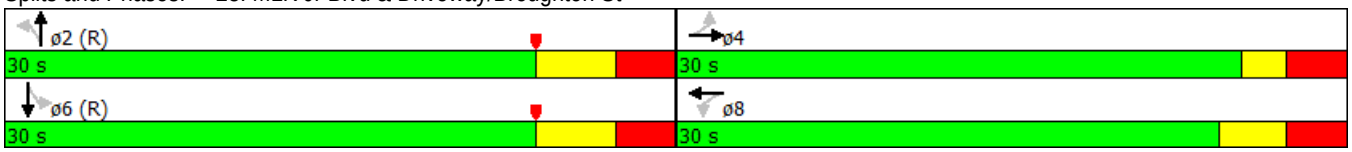
Splits and Phases: 13: Montgomery St & W Liberty St

Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	ø4
Lane Configurations							
Volume (vph)	175	0	5	495	47	464	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		8		2		6	4
Permitted Phases	8		2		6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	15.0	8.0
Minimum Split (s)	28.8	28.8	23.3	23.3	22.3	22.3	26.8
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50%
Yellow Time (s)	3.0	3.0	3.6	3.6	3.6	3.6	2.0
All-Red Time (s)	2.8	2.8	2.7	2.7	2.7	2.7	2.8
Lost Time Adjust (s)		0.0		0.0		0.0	
Total Lost Time (s)		5.8		6.3		6.3	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		16.2		31.7		31.7	
Actuated g/C Ratio		0.27		0.53		0.53	
v/c Ratio		0.73		0.43		0.40	
Control Delay		26.1		4.8		11.1	
Queue Delay		0.0		0.0		0.0	
Total Delay		26.1		4.8		11.1	
LOS		C		A		B	
Approach Delay		26.1		4.8		11.1	
Approach LOS		C		A		B	

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.73
Intersection Signal Delay: 11.1 Intersection LOS: B
Intersection Capacity Utilization 66.4% ICU Level of Service C
Analysis Period (min) 15

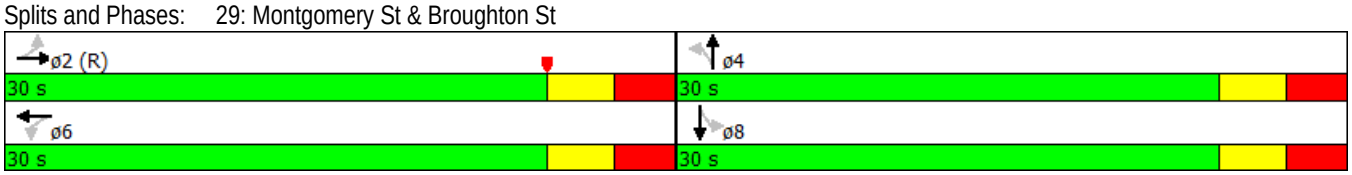
Splits and Phases: 28: MLK Jr Blvd & Driveway/Broughton St



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	2	141	30	154	118	146	17	8
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.8		5.8		5.8		5.8
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		24.2		24.2		24.2		24.2
Actuated g/C Ratio		0.40		0.40		0.40		0.40
v/c Ratio		0.25		0.34		0.71		0.09
Control Delay		7.2		13.5		16.0		8.2
Queue Delay		0.0		0.0		0.0		0.0
Total Delay		7.2		13.5		16.0		8.2
LOS		A		B		B		A
Approach Delay		7.2		13.5		16.0		8.2
Approach LOS		A		B		B		A

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 13.3	Intersection LOS: B
Intersection Capacity Utilization 67.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 29: Montgomery St & Broughton St

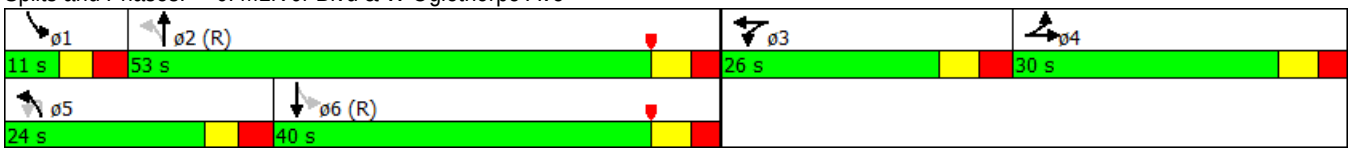


Lane Group	EBL	EBT	WBL	WBT	NBU	NBL	NBT	SBL	SBT
Lane Configurations									
Volume (vph)	83	391	266	307	60	273	440	155	689
Turn Type	Split	NA	Split	NA	custom	pm+pt	NA	pm+pt	NA
Protected Phases	4	4	3	3		5	2	1	6
Permitted Phases					5	2		6	
Detector Phase	4	4	3	3	5	5	2	1	6
Switch Phase									
Minimum Initial (s)	15.0	15.0	8.0	8.0	4.0	4.0	15.0	4.0	15.0
Minimum Split (s)	25.3	25.3	25.6	25.6	22.2	22.2	31.3	10.2	31.3
Total Split (s)	30.0	30.0	26.0	26.0	24.0	24.0	53.0	11.0	40.0
Total Split (%)	25.0%	25.0%	21.7%	21.7%	20.0%	20.0%	44.2%	9.2%	33.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.0	3.0	3.6	3.0	3.6
All-Red Time (s)	2.7	2.7	3.0	3.0	3.2	3.2	2.7	3.2	2.7
Lost Time Adjust (s)	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Lost Time (s)	6.3	6.3	6.6	6.6		6.2	6.3	6.2	6.3
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	None	None	C-Max	None	C-Max
Act Effct Green (s)	23.7	23.7	19.4	19.4		57.8	46.7	38.6	33.7
Actuated g/C Ratio	0.20	0.20	0.16	0.16		0.48	0.39	0.32	0.28
v/c Ratio	0.31	1.07	1.00	0.98		1.36	0.53	0.67	1.09
Control Delay	44.5	94.9	96.3	76.4		217.5	28.1	39.7	94.2
Queue Delay	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	44.5	94.9	96.3	76.4		217.5	28.1	39.7	94.2
LOS	D	F	F	E		F	C	D	F
Approach Delay		88.9		83.0			99.2		85.6
Approach LOS		F		F			F		F

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.36
Intersection Signal Delay: 89.6 Intersection LOS: F
Intersection Capacity Utilization 100.9% ICU Level of Service G
Analysis Period (min) 15

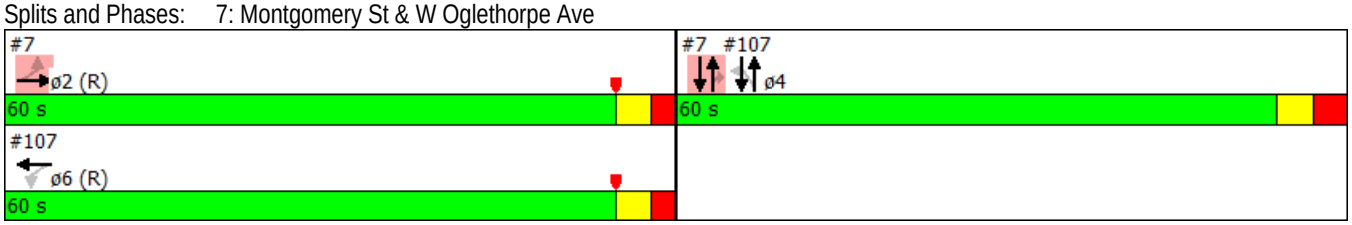
Splits and Phases: 6: MLK Jr Blvd & W Oglethorpe Ave



Lane Group	EBL	EBT	NBT	NBR	SBT	ø6
Lane Configurations						
Volume (vph)	32	649	414	242	189	
Turn Type	Perm	NA	NA	Perm	NA	
Protected Phases		2	4		4	6
Permitted Phases	2			4		
Detector Phase	2	2	4	4	4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	12.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	29.4	22.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.5	5.5	6.4	6.4	6.4	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	C-Max
Act Effct Green (s)	61.0	61.0	47.1	47.1	47.1	
Actuated g/C Ratio	0.51	0.51	0.39	0.39	0.39	
v/c Ratio	0.04	0.97	0.80	0.44	0.30	
Control Delay	12.8	45.9	36.9	14.4	32.2	
Queue Delay	0.2	0.0	0.2	0.0	0.0	
Total Delay	13.0	45.9	37.1	14.4	32.2	
LOS	B	D	D	B	C	
Approach Delay		44.5	28.7		32.2	
Approach LOS		D	C		C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 36.5	Intersection LOS: D
Intersection Capacity Utilization 76.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 7: Montgomery St & W Oglethorpe Ave

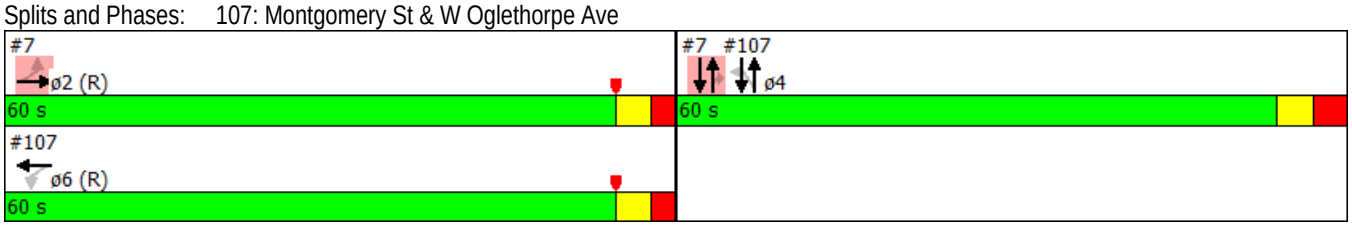


Lane Group	WBL	WBT	NBL	NBT	SBT	ø2
Lane Configurations						
Volume (vph)	97	517	109	305	92	
Turn Type	Perm	NA	Perm	NA	NA	
Protected Phases		6		4	4	2
Permitted Phases	6		4			
Detector Phase	6	6	4	4	4	
Switch Phase						
Minimum Initial (s)	15.0	15.0	12.0	12.0	12.0	15.0
Minimum Split (s)	22.5	22.5	29.4	29.4	29.4	22.5
Total Split (s)	60.0	60.0	60.0	60.0	60.0	60.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.3	2.3	3.2	3.2	3.2	2.3
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	
Total Lost Time (s)	5.5	5.5		6.4	6.4	
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	C-Max	C-Max	None	None	None	C-Max
Act Effct Green (s)	61.3	61.3		46.8	46.8	
Actuated g/C Ratio	0.51	0.51		0.39	0.39	
v/c Ratio	0.14	0.80		0.79	0.21	
Control Delay	18.2	36.5		15.5	22.5	
Queue Delay	84.1	0.0		0.0	0.0	
Total Delay	102.3	36.5		15.5	22.6	
LOS	F	D		B	C	
Approach Delay		46.5		15.5	22.6	
Approach LOS		D		B	C	

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 33.0 Intersection LOS: C
Intersection Capacity Utilization 81.7% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 107: Montgomery St & W Oglethorpe Ave

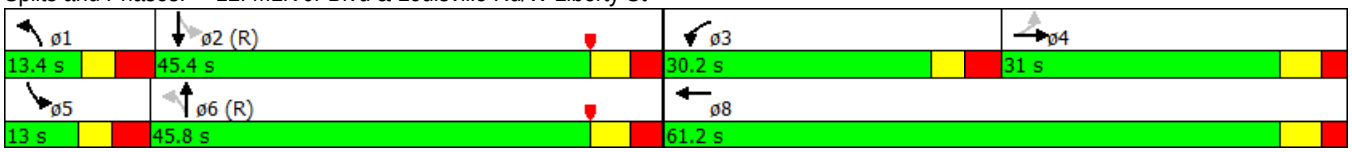


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	67	210	545	298	104	541	239	988
Turn Type	Perm	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases		4	3	8	1	6	5	2
Permitted Phases	4				6		2	
Detector Phase	4	4	3	8	1	6	5	2
Switch Phase								
Minimum Initial (s)	10.0	10.0	4.0	8.0	4.0	15.0	4.0	15.0
Minimum Split (s)	27.1	27.1	10.3	27.1	10.5	24.5	10.5	29.5
Total Split (s)	31.0	31.0	30.2	61.2	13.4	45.8	13.0	45.4
Total Split (%)	25.8%	25.8%	25.2%	51.0%	11.2%	38.2%	10.8%	37.8%
Yellow Time (s)	3.6	3.6	3.0	3.6	3.0	3.6	3.0	3.6
All-Red Time (s)	2.5	2.5	3.3	2.5	3.5	2.9	3.5	2.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	6.1	6.3	6.1	6.5	6.5	6.5	6.5
Lead/Lag	Lag	Lag	Lead		Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	24.9	24.9	23.6	54.8	46.1	39.3	46.0	39.3
Actuated g/C Ratio	0.21	0.21	0.20	0.46	0.38	0.33	0.38	0.33
v/c Ratio	0.39	0.95	0.93	0.57	0.72	0.67	1.05	1.02
Control Delay	48.9	81.7	61.9	31.3	49.2	37.2	88.7	71.7
Queue Delay	0.0	0.0	1.2	19.7	0.0	0.0	0.0	0.0
Total Delay	48.9	81.7	63.1	51.0	49.2	37.2	88.7	71.7
LOS	D	F	E	D	D	D	F	E
Approach Delay		75.9		57.9		38.8		74.9
Approach LOS		E		E		D		E

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.05
Intersection Signal Delay: 61.9 Intersection LOS: E
Intersection Capacity Utilization 95.3% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 12: MLK Jr Blvd & Louisville Rd/W Liberty St

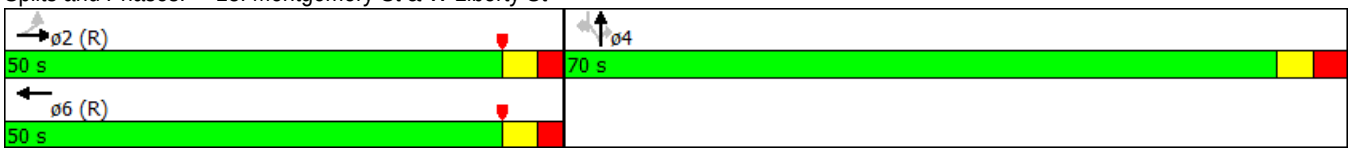


Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBR
Lane Configurations							
Volume (vph)	87	462	673	81	606	415	187
Turn Type	Perm	NA	NA	Perm	NA	Perm	Perm
Protected Phases		2	6		4		
Permitted Phases	2			4		4	4
Detector Phase	2	2	6	4	4	4	4
Switch Phase							
Minimum Initial (s)	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Minimum Split (s)	25.6	25.6	25.6	35.4	35.4	35.4	35.4
Total Split (s)	50.0	50.0	50.0	70.0	70.0	70.0	70.0
Total Split (%)	41.7%	41.7%	41.7%	58.3%	58.3%	58.3%	58.3%
Yellow Time (s)	3.2	3.2	3.2	3.2	3.2	3.2	3.2
All-Red Time (s)	2.4	2.4	2.4	3.2	3.2	3.2	3.2
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	5.6	6.4	6.4	6.4	6.4
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)	44.4	44.4	44.4	63.6	63.6	63.6	63.6
Actuated g/C Ratio	0.37	0.37	0.37	0.53	0.53	0.53	0.53
v/c Ratio	0.86	0.70	0.78	0.11	0.78	0.69	0.26
Control Delay	54.5	21.6	39.0	14.5	30.2	23.1	6.9
Queue Delay	0.0	1.1	0.9	0.0	0.0	0.0	0.1
Total Delay	54.5	22.7	39.9	14.6	30.2	23.1	7.0
LOS	D	C	D	B	C	C	A
Approach Delay		27.8	39.9		26.4		
Approach LOS		C	D		C		

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBT, Start of Yellow
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 29.2 Intersection LOS: C
Intersection Capacity Utilization 84.7% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 13: Montgomery St & W Liberty St

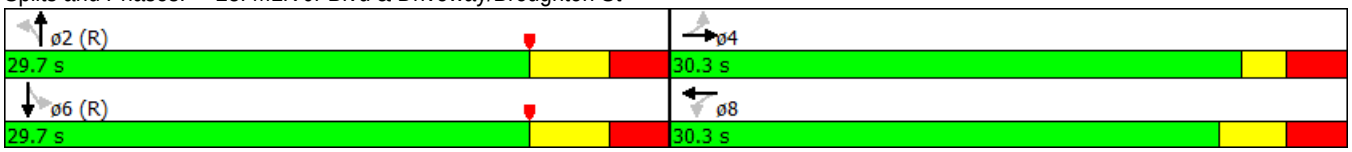


Lane Group	WBL	WBT	NBL	NBT	SBL	SBT	ø4
Lane Configurations							
Volume (vph)	285	5	4	548	44	610	
Turn Type	Perm	NA	Perm	NA	Perm	NA	
Protected Phases		8		2		6	4
Permitted Phases	8		2		6		
Detector Phase	8	8	2	2	6	6	
Switch Phase							
Minimum Initial (s)	8.0	8.0	15.0	15.0	15.0	15.0	8.0
Minimum Split (s)	28.8	28.8	23.3	23.3	22.3	22.3	26.8
Total Split (s)	30.3	30.3	29.7	29.7	29.7	29.7	30.3
Total Split (%)	50.5%	50.5%	49.5%	49.5%	49.5%	49.5%	51%
Yellow Time (s)	3.0	3.0	3.6	3.6	3.6	3.6	2.0
All-Red Time (s)	2.8	2.8	2.7	2.7	2.7	2.7	2.8
Lost Time Adjust (s)		0.0		0.0		0.0	
Total Lost Time (s)		5.8		6.3		6.3	
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max	None
Act Effct Green (s)		23.4		24.5		24.5	
Actuated g/C Ratio		0.39		0.41		0.41	
v/c Ratio		0.93		0.64		0.66	
Control Delay		38.7		14.7		18.5	
Queue Delay		0.0		0.0		0.0	
Total Delay		38.7		14.7		18.5	
LOS		D		B		B	
Approach Delay		38.7		14.7		18.5	
Approach LOS		D		B		B	

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 22.0 Intersection LOS: C
Intersection Capacity Utilization 85.9% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 28: MLK Jr Blvd & Driveway/Broughton St

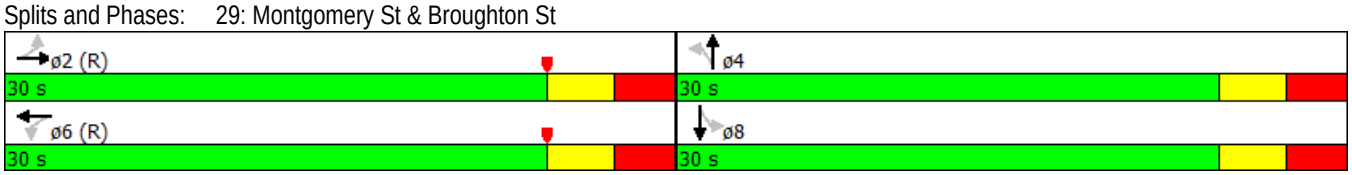


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Volume (vph)	6	208	42	248	181	122	20	37
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA
Protected Phases		2		6		4		8
Permitted Phases	2		6		4		8	
Detector Phase	2	2	6	6	4	4	8	8
Switch Phase								
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	25.8	25.8	25.8	25.8	25.8	25.8	25.8	25.8
Total Split (s)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
Total Split (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Lost Time Adjust (s)		0.0		0.0		0.0		0.0
Total Lost Time (s)		5.8		5.8		5.8		5.8
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	C-Max	C-Max	C-Max	C-Max	Max	Max	Max	Max
Act Effct Green (s)		24.2		24.2		24.2		24.2
Actuated g/C Ratio		0.40		0.40		0.40		0.40
v/c Ratio		0.39		0.59		0.85		0.16
Control Delay		7.4		17.9		40.1		9.2
Queue Delay		0.0		0.0		17.9		0.1
Total Delay		7.4		17.9		58.0		9.2
LOS		A		B		E		A
Approach Delay		7.4		17.9		58.0		9.2
Approach LOS		A		B		E		A

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 31.4 Intersection LOS: C
Intersection Capacity Utilization 87.3% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 29: Montgomery St & Broughton St



Appendix C. Cost Estimates

Alternate 1, 1-SB, 2 - NB, 1-P				
Mill and Inlay				
Item Description	Quantity	Unit	Unit Price	Total
Traffic Control	1	LS	$20,100.00	$20,100.00
Asphalt Patching	150	TN	$100.00	$15,000.00
Asphalt Top Layer	800	SY	$100.00	$80,000.00
Asphalt Milling 1.5"	70	TN	$4.22	$295.40
Signing and Marking - Signs	0.4	LM	$75,000.00	$30,000.00
Signing and Marking - 5" Double Yellow	3600	LF	$0.69	$2,484.00
Signing and Marking - 5" Single White	1800	LF	$0.67	$1,206.00
Signing and Marking - 5" Skip White	2700	GLF	$0.58	$1,566.00
Signing and Marking - 8" Solid White	7480	LF	$1.86	$13,912.80
Signing and Marking - 24" Solid White	1520	LF	$7.21	$10,959.20
Signing and Marking - White Hatching	1540	SY	$3.90	$6,006.00
W. Oglethorpe Corner Radius Modification	1	1	$13,000.00	$13,000.00
Signal Upgrade (W. Oglethorpe)	1	LS	$170,000.00	$170,000.00
Signal Upgrade (W. Liberty)	1	LS	$170,000.00	$170,000.00

Subtotal:	$534,529.40
Contengency (20%):	$106,905.88
Alternate total:	$641,435.28

Alternate 2, 1-SB, 1 - NB, 2-P				
Mill and Inlay				
Item Description	Quantity	Unit	Unit Price	Total
Traffic Control	1	LS	$20,100.00	$20,100.00
Asphalt Patching	150	TN	$100.00	$15,000.00
Asphalt Top Layer	800	SY	$100.00	$80,000.00
Asphalt Milling 1.5"	70	TN	$4.22	$295.40
Signing and Marking - Signs	0.4	LM	$75,000.00	$30,000.00
Signing and Marking - 5" Double Yellow	3600	LF	$0.69	$2,484.00
Signing and Marking - 5" Single White	1800	LF	$0.67	$1,206.00
Signing and Marking - 5" Skip White	900	GLF	$0.58	$522.00
Signing and Marking - 8" Solid White	7480	LF	$1.86	$13,912.80
Signing and Marking - 24" Solid White	1520	LF	$7.21	$10,959.20
Signing and Marking - White Hatching	1540	SY	$3.90	$6,006.00
W. Oglethorpe Corner Radius Modification	1	1	$13,000.00	$13,000.00
Signal Upgrade (W. Oglethorpe)	1	LS	$170,000.00	$170,000.00
Signal Upgrade (W. Liberty)	1	LS	$170,000.00	$170,000.00

Subtotal:	$533,485.40
Contengency (20%):	$106,697.08
Alternate total:	$640,182.48